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TREATISE

ON THE

ADMINISTRATION AND ORGANIZATION

OF THE

BRITISH ARMY

TREATISE

ON THE

ADMINISTRATION AND ORGANIZATION

OF THE

BRITISH ARMY,

WITH ESPECIAL REFERENCE TO

FINANCE AND SUPPLY.

BY

EDWARD BARRINGTON DE FONBLANQUE,

ASSISTANT COMMISSARY-GENERAL.

" Les ignorants appellent l'Administration Militaire un Métier; ceux qui la connaissent savent qu'elle est une Science."—*Audouin, Histoire de l'Administration Militaire.*

LONDON:
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TO

THE RIGHT HON. LORD PANMURE, K.T.,

LATE PRINCIPAL SECRETARY OF STATE FOR WAR,

THIS WORK,

COMMENCED UNDER HIS LORDSHIP'S AUSPICES,

IS GRATEFULLY INSCRIBED BY

THE AUTHOR.

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PREFACE.

Ours is, perhaps, the only Army in Europe which does not possess at least one work of recognized authority on the science of Military Administration. France has its Odier, Andoin, Vauchelle, and others to attest how highly this subject is appreciated and how thoroughly its details have been studied in that country. Austria and Prussia, Sardinia, Belgium, and even Spain, have contributed works more or less valuable to this important branch of Military literature. England alone has remained silent and indifferent upon a subject in which the efficiency of the army, the happiness of the soldier, and the economy of the public resources are alike involved; and the student of the art of war, when he has exhausted the theory of strategy, tactics, fortification, and gunnery, looks in vain upon the shelves of our military libraries for a solitary volume descriptive of the mechanism by means of which those sciences are reduced to practice, and the various units which compose an army maintained in cohesion and moved into united action.

Lieutenant-Colonel Lefroy, the Inspector-General of Army Schools, called the notice of Lord Panmure to this reproachful gap in our military literature, and I was, upon his recommendation,

selected to supply the want. The following pages are the result of my labors.

Upon submitting my work, on its completion, to the War Department, it was intimated to me that it could not be published under official authority unless I would consent to eliminate from it the passages involving criticism, discussion, or censure of existing institutions. As my original instructions had been framed in a different spirit, and did not in any way limit the scope of my work, and as, moreover, the proposed censorship would have destroyed one of the chief objects I had in view, and reduced the book to a meagre and unconnected record of our military establishments, I declined to accede to the proposal, and accepted the alternative allowed to me, of publishing my opinions upon my personal responsibility.

I submit my work to the public accordingly, with a full sense of all its sins of omission and commission. Those who have themselves labored in a new field of literature will be able to appreciate the difficulties of my task in the search for materials and authorities, and allow these to plead in extenuation of my errors. Another circumstance entitling my shortcomings to consideration, is the transition state of our present war administration. As these pages were passing through the press many changes of an important character were being effected in the several branches of the service, and I have probably failed in some instances to keep up with these alterations. I believe, however, that the book will be found to represent a fair record of our past and present military institutions.

Should the public so far approve of my efforts as to encourage a second edition of this work, I shall start with greater advantages than I have hitherto possessed. The suggestions of friends, the opinions of general readers, and even the censorious corrections of unfriendly critics, will enable me to make a future volume more worthy of public acceptance. I need hardly say that I shall be glad to receive any communications made with this object in view.

If I conclude these preliminary remarks with a conventional form of thanks to those who have most assisted me in my task, it is with a deeper sense of obligation than is commonly felt in the use of stereotyped expressions of acknowledgment.

To Sir Charles Trevelyan and Lieutenant-Colonel Lefroy, who in the midst of their important labors never begrudged me their help and advice, to whom I never applied in vain when in difficulty, and who added tenfold to the value of their assistance by the kindly manner in which it was afforded, I must express my sense of gratitude. To them is due the larger share of whatever merit this volume may be found to possess.

EDW. B. DE FONBLANQUÉ.

Spring Gardens, London,
October 1858.

INTRODUCTORY CHAPTER.

ON MILITARY ADMINISTRATION GENERALLY.

Military administration defined;

MILITARY administration is the machinery through the agency of which armies are raised, organized, maintained, and governed. It has for its object the efficiency of the military force, and for its means the powers, privileges, and resources which the State places at the disposal of those charged with the direction and command of the army.

and classified.

Military administration may be classified under two main heads: command and supply. The former comprising functions of a purely military nature, such as the training, the instruction, the evolutions, and the conduct of troops, and the knowledge and use of those military sciences which compose the art of war, and the skilful application of which enables a commander to say "I have won this battle," with as much justice as an architect should say, "I have built this house."* The latter embracing that wide field of duties connected with the supply of the soldier's wants, duties which, although they essentially contribute to the discipline of armies and the success of warlike operations, do not involve the exercise of military command.

Upon the combined action of these two services,—so distinct in their functions yet so identical in their objects

* See Guichard, Mémoires Militaires.

and results,—hinges the efficiency of the military body, and as a consequence the honor, the safety, and the welfare of the State.

The term to be understood in its limited sense.

The term "military administration" thus comprises the entire range of duties connected with the government of armies, but the subjects falling under the head of "command" are beyond the province of this work. When, therefore, in the absence of a more precise and appropriate term, the word "administration" is used, it should be understood in its French* and limited sense, as expressing the various services which comprise what are with us somewhat vaguely called "the civil departments of the army."

Importance of administrative duties.

Any one who will carefully consider the organization and constitution of a military force, and reflect upon the ever varying position of an army, must recognize the vital importance of an effective system for the supply of the soldier's wants; and when it is further considered that the military administrator has always a double duty to perform, the one towards the army, the other towards the state; that he has to maintain a judicious balance between the just wants of the soldier and the interests of the public,—keeping in view the necessities of the one and the capacities of the other,—it will be allowed that this branch of the public service is deserving of more appreciation, and calls for a higher degree of attention and study on the part of military officers, than has hitherto been bestowed upon it in this country.

Subjection of the soldier to the influence of administration.

A glance at a soldier's life will show how in every stage of his career he is brought under the immediate

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* In France the term "Administration Militaire" expresses the whole range of duties which fall within the jurisdiction of the "Intendance," but is not applicable to purely military services.

influence of administration; how it adopts him for its own from the hour he enlists as a recruit to the last moment of his military existence; it trains him in youth, it supports him in manhood, it comforts him in age; it watches over him at home and abroad, in peace and in war, and follows him through the varied scenes of his life, in garrison and in camp, on the march and in the bivouac, on the battle field and in the hospital. To the cares of administration he owes the clothing he wears and the food he eats, the arms he wields, and the bed he sleeps on; administration at length conducts the maimed and worn-out soldier into his peaceful and honorable retirement, and performs the last offices over his grave.

Be the agent what he will, a cabinet minister or a clerk, a general or a commissary, each has his allotted task, and each performs his function in the great military machinery, upon the proper working of which the efficiency of the army and the comfort of the soldier so materially depend.*

Not sufficiently appreciated.

And yet, while administrative labors pervade every portion of the military body, presiding at its birth, watching its growth, maintaining its health and strength, facilitating its movements, supporting its operations, ever active, vigilant, and provident, they are so unobtrusive in their nature, as to be scarcely noticed amid the brilliancy of military action; and few are able to recognize in the pageantry of peaceful armies, or through the smoke and glare of battle and amid the shouts of triumph, the silent workings of administration, or to

* "*War* tries the strength of the military framework; it is in *peace* the framework itself must be formed; otherwise barbarians would be the leading soldiers of the world. *A perfect army can only be made by civil institutions.*"—Napier's Peninsular War.

mark how materially they have contributed to the success of arms and to the fruits of victory.

Causes and effect of the want of appreciation.

This inability to appreciate the value of administrative services is more prevalent in our army than in any other, and this arises in some measure from the spirit of individualism which forms so striking a feature in the English character, and is perhaps most prominent in the army. Who has not observed the complete isolation of each arm of our service? the want of sympathy between infantry, cavalry, and artillery;* each zealously fulfilling its allotted task in its immediate sphere, but ignorant of, and indifferent to, the action of its neighbour? And if such a feeling be found to exist among combatants whose union and co-operation with one another is so obviously indispensable to their success, can we wonder to find indifference displayed towards a service, the functions of which appeal so far less directly to military sympathies?

The injustice towards individuals which is the result of this want of appreciation is its least serious effect. It is the army itself which is the greatest sufferer, for in proportion as administration is neglected and despised, so will the zeal and energy of its members become deadened and a sense of mutual injury continually create fresh barriers between two classes of public servants, who should for their own benefit and for the good of their common service, work hand in hand in harmony and good fellowship.

Examples of attention paid to administrative duties by generals.

Certainly examples are not wanting to satisfy our military officers that so far from a study of administrative duties being beyond the province or beneath the

* A ludicrous example of this "individualism" was furnished by the remark of a cavalry officer, who, when the expedition for the Crimea was in course of preparation, seriously inquired, "Are the infantry to accompany us?"

notice of a soldier, it is a branch of knowledge which cannot fail to prove useful to him in any position in which he may be placed, and that it is essentially requisite for those who aspire to the command of troops or the conduct of military operations on an extended scale, that they should not only understand the principles, but be familiar with the details of the duties connected with the finance, the supply, and the account of the army. An inefficient commissariat may frustrate the best military projects; but a general ignorant of commissariat duties may equally destroy the most admirable administrative arrangements by his inability to estimate the difficulties or facilities attending them; at one time expecting impossibilities, at another exaggerating obstacles; rash and timid by turns, and always incapable of appreciating at their proper value the extent and the effect of administrative exertions.

Cæsar, Napoleon, and Wellington,—three names identified with ancient and modern military genius,—have left us in their writings many proofs of their indefatigable devotion to administrative duties. Cæsar's genius supported by unlimited political and military power, overcame difficulties which to modern armies would perhaps appear insuperable; Napoleon, though his despatches show the vital importance which he attached to a well-organized administrative department, and how anxiously he labored to create such a body, did not live to bring his plans to maturity, but left it to his successors to construct from his materials the most perfect system of military administration which can be found in Europe; Wellington did perhaps more than either, for with limited powers, and in the midst of all the confusion of a stupendous war, he improvised out of the most incongruous materials an administrative service which became the envy, and, in some respects, the model

of his adversary; and there was no portion of this machinery which was not the result of his study and practical experience.*

The Duke of Wellington during the Peninsular War.

The knowledge so acquired was never forgotten, nor did he ever, as many general officers do, consider the minutiæ of administrative duties beneath the notice of a soldier; on the contrary, there was no detail too complicated or too trivial for the grasp of his great mind. He had mastered alike the highest questions of finance and the simplest arrangements connected with the distribution of supplies; and while conducting one of the most important wars on record and personally performing the diplomatic, military, and political duties which it

---

* During his Indian career the Duke of Wellington had already commenced to trust to his own administrative skill, and on more than one occasion he employed himself in the practical performance of commissariat duties. In 1799, for instance, he writes:—

"The fact is that when I went to the army there was not a grain of rice to be got in the country; I bustled through the difficulty, and in a short time had plenty in my camp; and not only I took nothing from the public stores, but if what I desired had been done, I should have thrown a large supply into them which I did not want; and, notwithstanding all opposition, I did form a small store, which, if they had known how to use it, would have been of essential consequence in the moment of difficulty and scarcity. Besides that I paid a sum of money into the General's hands for the public service which other officers had always heretofore taken to themselves.

"The General expressed his approbation of what I had done, and adopted as his own all the orders and regulations I had made, and then said that he should mention his approbation publicly, only that he was afraid others would be displeased and jealous. One of these others, General Floyd, had been in a similar situation with mine, but his army was starving. He had been supplied from the public stores at Madras, Vellore, and Arnee, and latterly by me from my own camp."

involved, he could find time to deliberate on intricate financial negotiations and to decide upon the composition of a ration.*

Such examples are surely worthy of imitation. No soldier can find it uninteresting to trace the steps which led our great generals to victory; he will find those steps not alone upon the broad road of military prowess, but often in the silent and unobtrusive paths and bye-ways of administration; he will learn to appreciate these services as he finds how intimately they are connected with that spirit of discipline which is the best guarantee for military success; and convinced of this truth, he will study with interest the means by which armies are maintained in efficiency, health, and comfort, and enabled to meet the ever-varying contingencies incident to military service.

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* Mr. D'Israeli, in his speech in the House of Commons on the Duke of Wellington's death, dwelt eloquently upon the extraordinary capacity possessed by that great man for grasping at once the most extensive and the most minute features of a subject. The striking resemblance borne by this oration to a speech delivered in the French Chamber of Deputies by M. Thiers, on the death of Marshal St. Cyr, published in the Moniteur, November 1830, may be classed among the curiosities of public speaking.

BOOK I.

HISTORICAL SKETCH OF MILITARY ADMINISTRATION.

CHAPTER I.

ADMINISTRATION OF THE ARMIES OF THE ANCIENTS AND OF THE MIDDLE AGES.

General obligation of military service in the rude ages,

THE maintenance of an armed force for the preservation of domestic order, and for purposes of defence against foreign aggression, must be considered an indispensable condition of every state of society. In the most primitive ages, under the rudest forms of government, before those inequalities of fortune existed which enable one man to exempt himself from labor by the purchase of the services of another, all were alike called upon to contribute personally to the defence of their common country, and every member of the community was compelled to leave his home and his occupations, his flocks unguarded, and his field untilled, to repel an attack or join in an invasion.

modified with advancing civilization.

But the progress of civilization, nay, the natural growth of society, leads inevitably to a division of labor; and even in periods so remote that it is difficult to distinguish between the truth and fable of their history, we can already discern a tendency to that separation of the military element from the civil body of the State which forms the groundwork of the system of armies.

Administration indispensable to an organized military force,

The more distinct and defined this separation becomes, the greater is also the obligation on the part of the State to provide for the maintenance of its military force; for it is evident that a governing body when it accepts or exacts the undivided service of an individual, and thus deprives him of the power of self-support and free action, assumes the responsibility of providing for his wants. Time, climate, the habits and the character of nations, of governments, and of individuals vary and modify these wants; but the laws of nature are invariable, and those of society hardly less imperative. The supply of the necessaries of life, in kind or in money, has therefore always been an indispensable condition between employers and employed; and as in the progress of society artificial wants arise, "the salutary compact of food and labor"* ceases to suffice, and the process of regulating the price of service and estimating the value of free action becomes more complicated and difficult. It is now that the necessity arises for administration, to stand as umpire between master and servant, to define the service, to regulate the reward, and to strike the balance between the rights and duties of both. The less an army is organized upon strictly military principles, the less is there a necessity for the intervention of administration. A militia, required to act only on the defensive and within certain territorial limits, can provide for most of its own wants. A standing army, on the contrary, which represents the highest state of military organization, is entirely dependent upon the cares of administration. Where there is no free will there cannot be foresight; and the complaint occasionally heard of the soldier's "helplessness" is somewhat unreasonable, since

* Gibbon.

helplessness is a necessary condition of military service; and the greater the discipline that is enforced, that is to say, the more that the individual is merged in the mass, the less becomes his power of thinking and acting for himself, and the greater the obligation of the military administrator to supply his wants.

to act as agent between the soldier and the State.

Wherever, then, a mass of men has assumed that degree of organization which can entitle it to be called an army, an agency is requisite to establish the conditions of service, to regulate the extent and to ensure the payment of remuneration, and to act as a mediator between the employer and the employed.

Supply duties reduced to a system in the earliest times.

There is no period however remote, no state of society however rude, in which the subsistence of an army must not have demanded administrative arrangement. Homer speaks, as of a distinct class, of "the agents who were the dispensers of the soldier's food;"* and though the records of those early times, while they minutely describe warlike deeds, rarely refer to the details of military economy, we may infer from occasional allusions that military supply duties were already reduced to some kind of system, and that so important a feature in warlike operations was not left altogether dependent upon the chances of victory or the hopes of pillage.

Female commissaries.

Thus Arrian, though far from explicit on these subjects, occasionally refers to the method adopted for supplying armies, and, among other things, alludes to the "priests and women" who were charged with providing food for the Persian troops; and it is on his authority that Rollin† relates how one of these female commissaries in the army of Crœsus had a golden statue erected in her honor in the temple of Apollo in Delphi, in con-

* Iliad, Book XIX. † Histoire Ancienne, vol. i.

sequence of her having rejected a bribe offered her by the enemy to poison the bread of the soldiers.

A doubtful tradition.

These women, however, were probably the *preparers* rather than the *purveyors* of food, for Herodotus* speaks of the women who accompanied the armies of Xerxes to *bake* their bread; the theory of a female commissariat may therefore be classed with that of an army of Amazons.

Attention paid to supply duties by Xerxes,

Xerxes was, it appears, by no means unmindful of administrative arrangements in his wars, and is said by Herodotus to have occupied himself for four years previous to his invasion of Greece in transporting grain and other articles of food to the borders, besides having prepared so enormous a train for the conveyance of stores that on the march his column of *impedimenta* extended a length of seven miles; notwithstanding, however, these preparations, he did not altogether rely upon them, for we find him, during his advance, encouraging his troops with the assurance that they were going to a cultivated country where they would find abundance of grain.*

It may, indeed, be doubted whether any degree of human providence or fertility of soil could, under the most favorable circumstances, have enabled an army computed at five millions † to have existed; and it is quite credible that, after the defeat at Salamis, three-fourths of the Persian host was annihilated by famine.

but too generally neglected by the Asiatic

A rash reliance upon victory or conquest seems too often among the Asiatic and African armies to have

---

* Herod., lib. vii.

† Inclusive of camp followers, who probably exceeded the number of fighting men; the Persian corps d'elite, the "Invincibles," according to Herodotus (lib. vii. 43), carried their wives, slaves, and concubines into the field.

superseded administrative forethought and arrangement, and we continually find the barbarian arms checked, even in the midst of their most successful campaigns, by the want of provisions, and utterly destroyed from the consequences of a defeat. and African armies.

Hannibal's famed passage of the Alps affords a striking example of this disregard of foresight, which military success may palliate, but which neither prudence nor humanity can justify; and the loss of one-half, or, according to the more interested testimony of his enemies, of two-thirds of his army, was the result of his temerity. Rashness of Hannibal.

Indeed, throughout the wars of the ancients, we cannot fail to be struck with the cruel indifference to human life and suffering, when weighed in the balance with the projects of a general or the ambition of a monarch.

In the armies of the Greeks, and more especially in those of the Spartans, we find a better system of administration; ephori, armed with supreme powers, directed the finance and superintended the supply duties of the troops, the details of which were carried out by treasurers and purveyors acting under their orders. The merchants, who are frequently alluded to as accompanying these armies, were probably contractors engaged to supply provisions as required.† Improved system in the Greek armies.

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* See the Address of Fabius to his army, Livy, xxii.

† These merchants and contractors have been frequently confounded with commissaries; thus two great historical characters, George of Cappadocia and Mahomet, have been described as having been "commissaries of provisions," while, in fact, they were contractors or the agents of contractors; the characters of both, while engaged in this capacity, were so bad that the modern commissariat may dispense with the honor of claiming professional connection with either the Saint or the Prophet.

Medical administration.

The employment of surgeons with troops in the field dates back to a very early period. Xenophon* states that it was the first care of Cyrus to provide the Persian armies with professors of the healing art. The Egyptians likewise had surgeons in their pay, and strictly prohibited them from receiving money from the soldiers whom they treated. Alexander, according to Plutarch, held the professors of medicine responsible for the lives of his troops, and on the death of Hephaestion, Glaucus, his surgeon, was sentenced to death.† Hannibal, himself a student of medicine, was accompanied in his wars by Synadus; and we have repeated proofs of the estimation in which medical science was held, and of the efforts made to render it applicable to the alleviation of the casualties of war.

Administration and discipline of the Romans.

The Romans, even at a very early period of their history, seem to have recognized the importance of sound administrative arrangements, as tending to the preservation of military discipline; and were there no other indications of the existence of an organized commissariat, we might infer it from the stringent regulations against pillage,‡ which could never have been established or enforced had not the means existed of supplying the soldier's wants by a more lawful and less precarious process, and from that strict spirit of discipline which could

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* De institutione Cyri, lib. 8.

† Audouin, vol. 1, page 80.

‡ The Emperor Aurelius, while præfectus of a legion, forbade his soldiers to demand from the persons on whom they were quartered even such trifling articles as oil, wood, or salt, stating that their public allowance should suffice for all their wants; and Marcus Scaurus relates how a legion, being encamped in an orchard, departed without having plucked one of the tempting fruits within their reach.

only have been the result of an entire confidence in the governing power, of which administration is so important an element.

Guichard remarks in his *Mémoires Militaires*,—

"On admire avec raison l'ordre, la discipline, et le détail du service des Romains, de même que leur attention à instruire si bien leurs soldats, *que depuis le tribun jusqu'au factionnaire chacun savait précisément ce qui était de son dévoir dans toutes les différentes occasions.*"

Here we have a true picture of a complete military organization, and we must conclude that the machine was perfect in all its parts, in order to produce so high a state of discipline. True, we may see subordination survive in spite of inefficient administrative arrangements, as we have seen the courage of the soldier successful in spite of the incapacity of the general; but, as a rule, we may infer the existence of a good administration wherever we find a high degree of discipline and military efficiency.

The civil Government favorable to military administration.

The machinery of the civil government of the Roman empire was undoubtedly calculated to facilitate the supply duties of the army. At a very early period the State had assumed the responsibility of providing the mass of the people with the necessaries of life, and, with this end, stored and distributed grain in large quantities, which was disposed of during periods of scarcity at a fixed moderate price, and on extraordinary occasions as a free gift. Magazines of marvellous dimensions* were erected, not only in Rome, but throughout the empire and the provinces, and even private dwellings were constructed

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Gibbon states that Constantine, when contemplating an attack upon Julian, formed two magazines, each of which contained 600,000 quarters of grain.

with reference to these arrangements, and provided with large underground cellars capable of containing grain.

However opposed such a practice may now be considered to every just principle of political economy, it must have afforded the means of a regular and certain supply of food for the army in the event of any sudden emergency; and the construction of those magnificent roads traces of which still exist to excite our wonder and admiration, flanked at certain distances with well-filled magazines, must further have facilitated the subsistence of the troops.†

Roads and magazines.

The custody of the civil storehouses was intrusted to highly considered functionaries, called "comites horreorum." The maintenance of the army, both as regarded money and provisions, devolved upon the quæstors. Although occasionally accompanying armies into the field, these were civil functionaries of high rank. At first they were only two in number; they were subsequently increased to four; and when conquest had extended the dominion of Rome, they were appointed not only to the provinces, but to the different legions in the field.

Quæstors.

In the earlier periods we find subordinate officers attached to the army for the performance of various administrative duties. The præfecti ærarii were the treasurers, who drew their funds for paying the troops from the quæstors, much as our regimental paymasters draw theirs from the commissariat; and the præfecti

Subordinate agents of administration.

Tacitus.

† The soldiers themselves assisted in the construction of these roads, the more laborious work being performed by slaves and prisoners of war. Might not our own troops, who so often find time hang heavy from the want of occupation, be employed in public works and other productive labor, with profit to themselves and benefit to the country?

annonæ,* the frumentarii, and the mensores acted as the agents of the quæstors for the purpose of subsisting, housing, and camping the troops.

Duties of the quæstors.

The quæstor with an army occupied a position in many respects analogous to that of a commissary-general in our service, or, rather perhaps, of an intendant-en-chef in the French army, for, unlike our commissary-general, he was armed with a power commensurate with the importance of his duties and the extent of his responsibility. The quæstorship, eagerly coveted as a necessary step to the senate, was equally a qualification for military command. Cæsar acquired his knowledge of military affairs while quæstor in Spain;† and Cicero

* So called after the tithes of grain (annonæ) contributed by the people for the army; under the Empire the contributions from the Provinces were very large; Egypt supplying twenty and Africa forty millions modii of grain annually.

† The student of military administration is referred to the work of Lieutenant Sonnklar, of the Austrian army, from which the following quotation descriptive of the functions of the quæstor is taken; though of most modest pretensions, this little work is characterised by an earnest and truthful tone, and a spirit of laborious research truly German.

"The quæstor was charged with the subsistence, clothing, equipment, and pay of the army; his functions comprised those of the modern commissary-general, paymaster-general, and inspector of arms and of musters; he received the monies placed at the general's disposal by the senate, issued the pay, had the chief control of all magazines, made requisitions in the enemy's country, led foraging parties, established depôts and magazines, took charge of prizes and arranged their distribution, &c. His duties thus were most important and extensive, and to the large powers entrusted to him in all matters connected with the supply of the troops, may be attributed the success which attended the administrative arrangements of the Roman armies, the excellent care taken of the soldier, and indirectly the innumerable victories of the Romans."—"Die Heeres Verwaltung der alten Römer, von Lieutenant Karl Sonnklar von Innstädten; Innspruck, 1847." Page 40.

boasts that his habits of business were acquired while filling the same post in Sicily.*

Consideration in which they were held.

It is evident that the administrators of the Roman armies were highly considered;† indeed, it is observable throughout the history of that people that, while military services were the most highly distinguished and rewarded, everything that contributed even indirectly to military success was duly appreciated; and we have the authority of the great English historian of Rome for believing that "every office was deemed honorable that contributed to the care of the health and the happiness of the soldier."

Independence of Roman soldiers of administrative aid.

Yet, notwithstanding the soundness of the administrative system, and the advantages of good roads and depôts, the Roman soldier was required to render himself as independent as possible of extraneous aid, and to carry, from fifteen to thirty days' provisions of grain, in addition to his armor, his weapons, his handmill and cooking utensils, and his pallisade; yet Cicero tells us how little the men were embarrassed on the march by the weights they carried.‡

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* See his amusingly egotistical account of himself while so employed, under the impression that the eyes of the world were upon him: "ut omnium oculos in me unum conjectos arbitrarer."—Cicero in Verrem, Lib. xiv. 35.

† The Emperor Pertinax furnishes a curious illustration of the career of a Roman soldier. Commencing life as captain of an ala or squadron of horse, he was promoted to be a commissary of provisions (præfectus annonæ); he next became quæstor of the British legion, then admiral of the fleet, then quæstor of Rome, and ultimately, previously to his elevation to the throne, proconsul of Africa.—Gibbon.

‡ Ferre plus dimidiati mensis cibaria; ferre si quid ad usum velint; ferre vallum; nam scutum, gladium, galeam in onere nostri milites non plus numerant quam humeros lacertos, manus.—Cicero, Tuscul. Lib. ii. 37.

Excellence of the Roman supply system,

It is worthy of remark, too, that while the Roman soldiery were not without their grievances, which they occasionally proclaimed with more eloquence than subordination, complaints of insufficient or bad food are not to be traced among the causes of their discontent. It is true that their frugal and temperate habits, and the powers of endurance which they cultivated as a military virtue,* must have rendered their subsistence a matter of less difficulty than is the case with modern armies, and more especially with our own; but the entire absence of complaint on the score of food, not only during one campaign, but during the successive centuries of Rome's greatness, justifies us in inferring the existence of a thoroughly organized commissariat, conducted with great ability and probity.

and medical arrangements.

The Romans were not neglectful of the treatment of their sick and wounded soldiers. In the absence of an organized body of medical attendants, generals themselves set the example to the army of tending the wounded. Audouin says, speaking of Julius Cæsar:—

"After his battles the Dictator in person visited the tents of the wounded soldiers and assured himself of their proper treatment. Administration was not in a sufficiently advanced stage to have rendered it possible to Cæsar to establish military hospitals; nevertheless, it appears that the idea of such establishments had occurred to him, and that he did as much as was practicable towards carrying it into effect. I hazard this assertion on the strength of Cæsar's statement that during the night preceding the battle he ordered the sick and wounded to be conveyed into the nearest town;† this precaution of removing the sick from the camp and collecting them in a town, where they could enjoy repose and the best assistance, is surely the principle of the institution of military hospitals."

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* "Angustam amici pauperiem pati
Robustus acri militiâ puer
Condiscat."—Horace, Lib. iii. ode 2.

† De Bello Africano, Lib. iii. cap. 2.

Care of the sick.

Subsequently the senate exempted military surgeons from the payment of all taxes; and from a letter still in existence, addressed by the Emperor Antonine to "the surgeon of the second legion," it may be inferred that a medical establishment had been organized throughout the army. Severus, according to Cœlius Lampidius, (Vita Alexandri Severi) ordered that chariots should follow the army on the march, for the conveyance of the wounded, who were subsequently placed in charge of private families, who were paid by the state for their care and outlay. These are the first ambulances on record.

First ambulances.

The wars of Julius Cæsar afford frequent proofs of the attention which that general paid to the subsistence of his armies, and to the duties of administration generally. Under him the soldiers' pay was more regularly issued, and doubled in amount, transport was more thoroughly organized, and depôts were formed on an extensive scale throughout the provinces; he, too, is always found to recognize the necessity of consulting the capacities of administration in the execution of military projects, and, turning aside frequently from his high position personally to direct and superintend the simplest details of supply duties. Under such a leader a bad commissariat was hardly possible, and a good one must have become perfect.

Cæsar's attention to administrative duties.

During his African campaigns the difficulties of ensuring a regular supply were very great; Sardinia and Sicily were then his principal magazines, and upon these he was entirely dependent until his victories gave him a permanent foothold on the Continent of Africa.

His position in Africa compared with that of the English army in the Crimea.

The space which, with his army of 30,000 men, he occupied on his first invasion of Africa, did not actually exceed the extent of ground occupied by the allied forces in the Crimea during the siege of Sevastopol. Let us for a moment contrast the two positions.—Our ports

of supply were within easy reach, we possessed the undisputed command of the waters, and the incalculable advantage of steam navigation; while Cæsar's depôts were at a considerable distance, and he was not only dependent for the daily food of his troops upon wind and waves, but liable to have it intercepted by a powerful and active fleet, which scoured the seas and jealously guarded the coasts. To attempt an invasion under such circumstances was a hazardous experiment which success alone could have justified; Cæsar did succeed however, and his troops suffered less than our own under circumstances so much more favorable.* Good fortune was, no doubt, on his side, but something more than fortune must have been there to enable him to hold his ground on a hostile coast surrounded by overwhelming numbers of the enemy, and to maintain his army in that degree of vigor and discipline which enabled him to advance step by step till victory and conquest were secured.

His admirable arrangements of supply and distribution.

But his was one of those great minds ever fertile of expedients, which difficulties strengthen rather than dismay. When supplies from without ran short, he headed his foraging parties in person; when the enemy's provisions were seized, they were at once entrenched and fortified like a citadel, and when the forage for his horses failed, he caused seaweed washed in fresh water to be substituted. By such means, a judicious use of his slender resources, and a well arranged system of distribution, he was enabled to overcome difficulties under which an ordinary man must have succumbed.

In making this admission, let it not, however, be forgotten that not only are modern troops rendered more dependent upon extraneous aid, but that modern warfare requires a degree of *materiel* unknown to the ancients, and which absorbs an enormous proportion of the labor and the resources of administration.

Cato's march through Lybia.

Cato's march through the desert of Lybia was another bold undertaking which a modern army would hesitate to risk; a thirty days' march through a tract of land yielding neither grass, grain, wood, nor water, must have required a formidable commissariat to support it; yet it was accomplished with trifling loss, each man carrying and preparing his own supplies, and their leader marching at their head, laden like a common soldier, and whilst sharing their hardships, encouraging them by his example.*

It may be objected that a soldiery carrying its own supplies is independent of a commissariat, but this would be a mere verbal distinction; so long as administration accomplished its great task, the supply of the soldiers' wants, without waste or extravagance, the means are a mere question of convenience and arrangement; it is not the *personnel,* but the *morale,* upon which a sound administrative system hinges.

Decline of administration and discipline in the Roman armies.

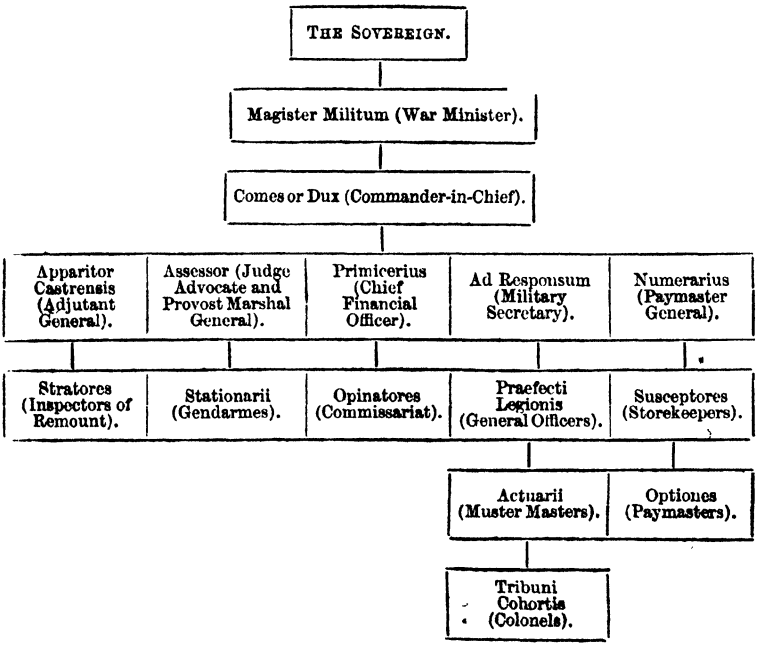
This epoch was perhaps the culminating point of Roman military organization. In the course of time, luxury, overconfidence, and corruption undermined that high spirit of discipline which had once bound victory to the Roman eagles, and attached to the legions the attributes of divinity. Patriotism and public spirit were no longer proof against temptations of avarice and self-interest. Peculation crept into all departments of the government. The simplicity of the administrative system of the army, based upon the personal integrity of its agents, no longer sufficed to protect the public interests. The general no longer had at his right hand an officer armed with the power and the means of supporting him in his operations. The functions and responsibilities of the quæstor were divided among numerous officials, and the administration of the

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"Ipse manu sua pila gerens, præcedit anheli
Militis ora pedes."—Lucan, ix., 587.

army devolved upon a central bureaucracy,* clumsy, corrupt and expensive, and calculated as little to protect the interests of the public as to ensure the efficiency of the troops. The inevitable result followed; discipline gave way; a discipline that might long have withstood the inroads of the savage hordes, which, sweeping in successive waves over civilized Europe, carried before them by their sheer weight the enervated and demoralized descendants of Cæsar's soldiery. Among these barbarians there was a dauntless courage and an irresistible impulse to conquer, but no attempt at military art in any of its branches; they followed war as an instinct, not as a science, and the terrible losses which from time

* Sonnklar thus illustrates the administrative machinery of the army during the latter period of the Empire; the author has added the offices in modern administration most nearly corresponding with the Roman functionaries.



Absence of administrative arrangements among the Goths and Vandals,

to time they sustained, prove the entire absence of the administrative element in their warfare. Attila, indeed, boasted that where once his horse had trod grass never grew again; ruin and destruction, ravaged districts, and burning villages marked the progress of his hordes; the produce of cultivated lands, the pillage of conquered, the tribute of submissive cities, afforded them abundant means of subsistence while successful; but, as must ever be the case where there is no system, the waste was far greater than the consumption, and it was only an uninterrupted course of advance and victory which could enable them to exist. To such an army delay was ruin, retreat famine, defeat annihilation.

Advancing onwards we do not find the administrative science of armies keeping pace with the progress of the art of war generally, and the results may be traced in the demoralization and the sufferings of the troops.

and during the feudal system.

Under the feudal system, the maintenance and equipment of soldiers devolved upon their immediate chiefs, and as a natural consequence there could be no uniform arrangements for supplying their wants. When stipendiary troops were employed, it was usual for the State to enter into a contract with individuals to supply, for a certain rate of pay per head, a given number of men; these contractors brought their soldiers into the field in complete fighting condition; there, their responsibility ceased. The soldier on his part drew his stipulated pay, or as much of it as he could obtain, and with that, and more commonly by plunder and rapine, supported himself during his term of service. But the most fertile theatre of war must become exhausted under such a system. Administration is as essentially productive as pillage is the reverse; and human life was sacrificed to an almost incredible extent for the want of the most ordinary arrangements of precaution and foresight.

Nowhere was this more remarkable than in the wars of the Crusaders. Prudence and humanity seem to have been lost in the fanaticism of the time, and we may read without surprise of five hundred men dying daily of hunger on the march, or that, out of an enormous army, (if we may dignify it by such a term,) only one tenth reached their destination.* The crusades.

It is, nevertheless, to this period that we can trace the first attempts at the establishment of military hospitals, and a more systematic treatment of the sick. To defend the helpless, to succour the sick and wounded, was held as great an honor in the crusades as to fight the infidel; and many a gallant knight who had escaped the dangers of the field of battle, fell victim to disease while performing the humblest offices of an hospital nurse among his plague-stricken comrades. It is true that nothing deserving the name of an organized body of medical attendants existed during the crusades. The art of surgery was at its lowest ebb. While the science of destruction had made rapid strides, that of preservation had retrograded, and the unskilled devotion of individuals could do little to assuage the horrors of famine, pestilence, and the sword; yet the example had been set of providing an asylum for the victims of war; the claims of the suffering soldier had been recognized; the virtue of humanity had been reduced to practice, and a precedent had been established of which future generations derived the benefit. First military hospitals. Low state of medical science.

But the armies of Europe had to pass through a stage

* See the History of the Crusades by Mills. The Greeks even then enjoyed an unenviable notoriety for their fraudulent practices, and the French soldiers complained bitterly of the quantity of chalk baked with their bread by Greek contractors; on the other hand the French princes were notoriously "bad pay," and their followers terrible robbers.

Inhumanity of governments towards the soldier.

of severe suffering before the value of human life was duly estimated by princes and generals. The soldier was bought to be sacrificed. He was used while in health, and when sick or wounded left to die. He does not appear to have received the ordinary care which a prudent proprietor would take of his horses or his cattle.

Sufferings of armies for want of food.

The Spanish armies in Italy and in the Netherlands continually broke into mutiny from actual want of food. In Germany whole principalities were pillaged again and again to supply starving soldiers with the necessaries of life, and we are told that Jules, the father of Catherine de Medici, hopeless of providing subsistence for his armies, resorted to the plan of offering prizes to such of his Venetian troops as should longest abstain from food. When one of the competitors for this honor died after a twenty days' fast, the Prince seriously lamented the loss of so invaluable a soldier, and regretted that he could not raise a whole army composed of men capable of equal powers of abstinence.*

Pillage the principal resource.

The only principle, indeed, which seems to have been recognized in these times was based upon the convenient doctrine, that "war should support war," and it mattered little whether the scene of operations were friendly, hostile, or neutral; submission to the most oppressive requisitions was yielded as the only escape from rapine; and again and again do we find great military combinations defeated, and the wisest plans abandoned, because the theatre of war had been too much ravaged to afford further support to the armies that infested it.

The feudal system opposed to a proper administrative method.

The feudal system was, perhaps, in itself opposed to administrative arrangement. Armies were now less a powerful engine of the State than the followers and retainers of a number of independent chieftains; who,

* Audouin.

while they flocked to one general standard, yet looked to their immediate leaders for the direction of their energies, and the supply of their wants. Scotland, as late as in the last century affords an illustration of this state of things. The history of the rebellion of '45 is in great part only a record of the bickerings, jealousies, and treacheries of the chiefs of clans, and proves how difficult it must ever be to reduce the independent or conflicting interests of a number of petty chiefs to an uniform system of military organization under one supreme command. At the same time, while a clan would obey only its immediate chief, it looked not beyond him for the supply of its wants; while he, on his part, exacting the personal allegiance of his adherents, held himself responsible for their subsistence. Pillage, which must ever be the alternative of administration, was the most convenient method for supplying the soldiers' wants; and while cattle-lifting was one of the principal aims of military operations, and the conquest of a flock of sheep or a herd of cows was considered a glorious achievement, there was little room or necessity for a commissariat. But such a system soon destroys itself; and wherever we turn during the feudal ages we find armies nearly as great a scourge to the country they were supposed to defend as to that which they invaded as enemies, and waste, rapine, and confusion, with their invariable attendants — disorganization and misery — characterising the wars of that period.

CHAPTER II.

GROWTH AND PROGRESS OF MILITARY ADMINISTRATION.

French and English attempts at organizing administrative services.

THE French claim the credit of having been the first to organize in modern armies an official body to direct the civil administration of the military force upon fixed principles. As early as in the reign of Henri II. measures were taken to enable the state to exercise some control over army expenditure and supply, by the institution of commissaires des vivres, with élèves du trésor, and commis des vivres, acting on behalf of the war minister in in the field. This experiment does not, however, appear to have been successful; and it is not until towards the end of the sixteenth century that we can trace anything deserving the name of administrative organization in the French army. It was then, under the vigorous administration of Sully, war minister to Henri IV., that a body

Intendants.

of intendants was first created, and the duties of these officers were in many respects the same as those now performed by the intendants militaires. They are described by Audouin as "Military magistrates charged with the police and discipline of troops, and responsible for compliance with military laws and regulations; they superintended the delivery of supplies, inspected and verified the public magazines and hospitals, mustered the troops,

Arrayers and commissaries of musters.

and issued pay." Long before this period, however, in the very commencement of the fifteenth century, we find in our own country "arrayers" and "commissaries of musters" appointed to the English army under the commission of King Henry the Fifth; there were two of these functionaries appointed to each county, and the

following instructions appear in "the Ordinances of War" of that period :—

"Every captain of our army, without any fraud or reserve whatsoever, shall make a muster, and show his soldiers before us, or our commissaries, as often as our said captains shall by us, or our said commissaries, be duly and legally required. We moreover direct and command, that all our commissaries in the aforesaid musters do diligently inquire after and see that the soldiers show their proper arms without fraud ; and, if necessary, it is our will that on this article our commissaries may compel the captain or master to answer upon oath."*

Military administration under Queen Elizabeth.

About the same period that Sully introduced his intendants, Essex was organizing the staff of Queen Elizabeth's armies, and we now find the following officers borne upon the establishment for the direction of military administration :—

Treasurer at War,
Proviant Master,
Waggon Master General.

The Treasurer at War, his duties and position.

The duties of the Treasurer at War are thus described :*—

"He is the King's counsel, especially that you tearme martial, and is to give his opinion in all proceedings of the army, *and sometimes may deny disbursements, though the general command the same.* He is also to conferre with the master of the ordinance about the spending of powder and provision of munition, yea all inferior officers, as the provost master, commissaries, undertakers for victuall and apparel, paymasters, carriage masters, and such like, all subject to his particular examination by way of placing and displacing as he seeth just occasion."

The proviant master.

The proviant master is thus described by Sir James Turner :—

"Since money is generally scarce in the warres, insomuch that soldiers cannot receive their wages duly, let us see what allowance of meat and drink, ordinarily called 'proviant,'

* Grose, Antiquities of the English Army.

princes allow their soldiery; to furnish which, every army should have a general proviant master, and truly I conceive him to be as necessary and useful, if not more so, in the field, where mostly our modern armies are entertained with proviant, as either a general, a commissary,* or a treasurer. His charge is to provide victuals, corn, flesh, wine, bread, and beer. He hath the inspection of them, and should see them equally and proportionately divided to the regiments according to their several strengths, for which purpose he should have all the rolls and lists by him, which his secretaries should carefully dress. He hath no power to sell any proviant without the general's express warrant. All mills are under his protection; he hath the ordering of all the magazines for victuals, and to him belongs the care of seeing the garrison and fortified places sufficiently provided with such meats and drinks as are most fit to preserve. The general proviant master hath under him a lieutenant, a secretary, a clerk, a waggon master, and several officers who are called directors."

The carriage master.

The carriage master general, or as he was also called baggage master, (probably from the Roman "impedimentorum magister,")† had the direction of every description of transport attached to the army, and had moreover the yet more difficult charge of the women who followed the army.‡

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* This refers to commissaries of musters.

† The chief officer in charge of the transport in the Roman army was latterly called "Præfectus bastagæ," his position was probably that of our "Director-General;" the impedimentorum magister being a subordinate officer attached to a legion.

‡ "Women who follow the army may be ordered (if they can be ordered) in these ranks, or rather in classes one below the other; the first shall be those who are ladies and are the wives of the generals and other principal commanders, who for the most part are carried in coaches; . . . the second class is of those who ride on horseback, and those must ride in no other places than where the baggage of the regiment marcheth; but they are very oft extravagant, gadding here and there, and therefore in some places they are put in companies and have one or more to command or oversee them, called in Germany

We have here the three branches of the commissariat service as now existing, duly represented by responsible officers, and it is worthy of notice that the Treasurer at War was even in those times placed in a sufficiently independent position to enable him to control the military authorities in matters of expenditure.

Insufficiency of the method of supply.

Whether from want of money or of arrangement, however, the armies do not appear to have been well supplied, and the complaints, occasionally swelling into mutiny, of the soldiers for want of pay and provisions, and the sums grudgingly voted from time to time to make up arrears, prove that the principles of administration were yet far too crude to ensure the soldier a regular supply of his wants.

Irregular issue of pay.

Irregularly as the pay was issued, it was yet further subjected to an unjust system of deductions for various purposes, in some cases for the benefit of the State, in others to eke out the incomes of officers, always to the prejudice of the soldier.* Sir John Smythe, writing in 1590, condemns the practice of issuing provisions to the troops as an abuse first introduced by "fantasied men of warre" of the auxiliary force sent by Queen Elizabeth to the Court of Holland. He complains that the soldiers, instead of receiving their pay, should be compelled to take "bread and cheese and other such victual of the best cheape, and basest sort," and that "their commanding officers did, contrarie to all military order, put the greatest part of the souldier's pay into their own purses, allowing them great scarcity of proviant, by which means it came to passe that diverse thousands of

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Hurewcibles, or rulers or marshals of the ——— ; the third class are those who walk on foot and are the wives of inferior officers or soldiers ; they must walk beside the baggage of the severall regiments."—Grose, Instruction to Waggon Masters.

* Grose, Antiquities of the Army.

these souldiers in those splendid countries, partly by hunger, partly by evil lodging, and altogether by the small care and mismanagement of our such men of warre, did perish."

Stoppages.

These illegal exactions from the small and hard-earned pay of the soldier seem to have continued up to the end of last century, since which time they have assumed the more lawful and limited, but by no means unobjectionable form of "ration stoppages."

Progress of military surgery.

Meanwhile little progress had been made in the art of military surgery. As late as in the earlier part of the 16th century, a young surgeon in the army of Francis the First was considered to have created a revolution in surgery when he condemned the use of boiling oil, at that time the universal remedy for gunshot wounds.* Nevertheless, the practice of attaching surgeons to the army was now universal. As early as in the reign of Edward the Second we find a "chirurgeon" with every 1,900 men. His pay was only 4*d.* a day, but he had the privilege of shaving the soldiers. Henry the Fifth engaged one surgeon and 12 assistants to accompany him on his continental wars. The pay was still trifling, but every soldier was required to contribute twopence a month as "regards" for the surgeon.† Under James the First we find the medical staff better organized. There were now two physicians with 6*s.* 8*d.* a day; two apothe-

Position and pay of surgeons.

* See "the Treasury of Ancient and Modern Times, 1619," in the British Museum.

† The estimation in which the professors of the noble science of surgery were at this time held, is sufficiently indicated by the wording of the military code drawn up by Henry V. at Manse, which classes the persons subject to the immediate control of the Provost-Marshal, in the following order :—

"Soldiers, shoemakers, taylors, barbers, physicians, and washerwomen."—Upton, de re Militari.

caries, with 3*s.* 4*d.*, and to every regiment of 1,800 men one surgeon, with the pay of 4*s.*, and twelve assistants, with 1*s.* a day. From that time we find a gradual improvement in the position and emoluments of army surgeons.*

Commissaries under Charles the First.

The troops in England under Charles the First were supplied by commissaries stationed in the different counties, and acting under local committees organized to levy the necessary supply of provisions. An Act of Parliament, of 29th November 1642, directs these provisions "to be delivered to the commissary for the victuals or his deputy, or such other officers of the army as may be charged with the same upon their accompt, who shall certifie the treasurer of the army in order that payment may be made." This seems to have been a very fair system, but "the fantasied men of warre" above referred to continued to practise their depredations upon the soldiers, who, what with the scarcity of money, and the filtering process it underwent after reaching the army, rarely received more than a small fraction of their pay.

* Ralph Smith, temp. Elizabeth, thus sums up the duties of surgeons :—

"Surgeons should be men of sobrietie, of good conscience and skillfull in that science, able to heal all soars and wounds, specially to take out a pellet of the same. All captaines must have such surgeons, and ought to see them to have all their oyles, balms, salves, and instruments and necessary stuff to them belonging, allowing and sparinge them carriadge for the same, and that every soldier at the paye-daye doe give unto the surgeon twopence as in times past hathe been accustomed to the augmentation of his wages, in consideration whereof he ought readilie to employ his industrie uppon the soar and wounded souldiers, not intermeddlinge with any other cures to them noysome. . . . . Such surgeons must weare their baldricke, whereby they may be knowne in time of slaughter ; it is their charter in the field."—Grose, Antiquities of the Army.

Irregular and dishonest practices in the French army under Louis XIV.

Similar practices prevailed to a far greater extent in the French army, and it was with the view of remedying this state of things, and of rendering the condition of the soldier more attractive, and at the same time of reducing the enormous military expenditure, which under Louis XIV. exceeded one-half of the entire revenue,* that Louvois, the minister of war, increased the powers of control of the intendants, and endeavoured to introduce a machinery by which malversation of the public money should be checked; but amid the universal corruption of that brilliant but false epoch of French history, the fair application of just principles of administration was impossible. While lucrative contracts, upon the efficient performance of which the very existence of an army might depend, were given away in payment of private debts, or of base services rendered to royal favorites, and the full protection of the Court was extended to these men when, as frequently occurred, their frauds or rapacity roused the anger of the army, it could hardly be expected that the government agents would exercise their authority with vigor and justice, or incur the displeasure of their superiors, simply for the sake of an unappreciated performance of duty. But it was not only professional speculators who thus enriched themselves at the cost of the soldier. General officers, emboldened by impunity and debased by example, did not scruple to enter into collusion with contractors;† their subordinates took bribes to remain blind to the sufferings of the troops, and while armies were wasting away with famine, and the best-concerted plans were rendered abortive from the want or the misapplication

* Yet the nominal pay of the soldier did not exceed 2½*d.* a day, with a ration of inferior bread, and small as this remuneration was it was most irregularly issued and subjected to various stoppages and deductions.

† Audouin, liv. 6.

of supplies and money, officers of all ranks trafficked in the lives of their soldiers and the honor of their country, conscious that, while corruption prevailed among all classes from the monarch on the throne, down to the meanest employé of the government, there was little fear of either punishment or disgrace overtaking them. No fraud was too bold or too mean for men prepared to sacrifice every feeling of honor and humanity to their personal enrichment; and we find the same individual who would dare to intercept the pay of a battalion descending to steal the brandy sent for the use of the sick,* or to sell the bread of his soldiers.

Attempts to check fraud defeated.

Under Louis XV. fresh efforts were made to check these abuses, but the same influences remained to counteract all measures of reform; on one occasion the Abbé Clermont having detected an organized scheme for defrauding the troops, in which the officers of an entire garrison were concerned, he broke them all on the spot; another time he ordered a contractor, convicted of frauds which had frustrated an important military arrangement, to be hanged; but Madame de Pompadour interfered, and saved her creature, assuring the military abbé, "qu'on ne pend point un homme qui peut donner cent mille écus."†

It must unfortunately be admitted that during this

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* Launay, in his "Traité des Subsistances Militaires," relates that when Le Blanc, in 1718, attempted to organize military hospitals, he found it necessary to order the introduction of colouring matter with the brandy furnished for the sick to prevent its appropriation by the officers of the army.

† Audouin; the same author relates that similar practices prevailed in the navy, and that Berryer, minister of marine under Louis XV., complained that he was so much occupied in punishing the thieves in his department that he had not time to fight the English.

Similar practices in the English armies.

period our own system of army administration was not much more honestly conducted than that of our neighbours. The pen of Macaulay has conferred an unenviable immortality upon the commissary-general of the army of William the Third in Ireland;* and however much we are indebted to the brilliant generalship of Marlborough in his continental campaigns, it must be allowed that his victories owed as little to his administrative morality as his adversary's defeats were attributable to non-attendance of mass.† The English armies in the Low Countries were subsisted by contractors, from whom Marlborough received a handsome per-centage, and it was hardly possible for him under such circumstances to exercise that control which would alone ensure justice being done to the troops. It is true that the morality of most public men in those days was very low, and that it is not fair to measure him by our present standard. But, making all allowance on this score, and for the exaggeration of his enemies, there is

* "A crowd of negligent or ravenous functionaries, formed under Charles and James, plundered, starved, and poisoned the armies and fleets of William. Of these men, the most important was Henry Shales, who, in the late reign had been commissary-general to the camp at Hounslow. It is difficult to blame the new government for continuing to employ him, for, in his own department his experience far surpassed that of any other Englishman; unfortunately in the same school in which he had acquired his experience he had learnt the whole art of peculation; the beef and brandy which he furnished were so bad that the troops turned from them with loathing—the tents were rotten—the clothing was scanty—the muskets broke in the handling."—History of England, chap. xiv.

† Madame de Pompadour complained, after one of Marlborough's victories, that God could not be expected to bless the arms of General de Catinat while he so seldom went to mass; "Croyez-vous donc, Madame," replied Vendome, "que M. Marlborough qui nous bât y aille plus souvent?"—Audouin.

still too much in his character and conduct to lay him open to the serious charge of sacrificing the comfort and lives of his soldiers to his insatiable avarice.

Throughout the first half of the eighteenth century military administration made no advances; the troops in the United Kingdom and in the garrisons abroad were supplied with money and provisions by means of contracts entered into in England, the agents appointed to ensure their performance being, though nominally Government officers, and in receipt of pay from the public, in many cases connected with, and always in the immediate interest of the contractors.* Commissaries acting as contractors.

In England and Scotland general officers commanding districts were responsible for the supply of rations to their troops, and they appointed their own commissaries to superintend this duty, but abroad the Treasury appointed its agents, who were borne on the strength of the "Foreign Garrison Establishment." Frequently these offices were sinecures, the duties of which were performed, if performed at all, by deputy; thus Viscount Irvin was commissary-general of stores at Gibraltar in 1750, with a salary of 800*l.* a year, while a clerk with 5*s.* a day did his work; and Mr. Courtenay, who held the same office in Minorca, was not only a contractor at the same time, but continued to hold his office of commissary-general after he had failed and become bankrupt as a contractor.

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* Mr. Oswald, for instance, was a "commissary of bread and forage," and "superintendent of the English and Hessian waggon train," during the Seven Years' War; at the same time he was a contractor for bread and for waggons. Mr. Dundas, the founder of the Zetland family, was likewise a commissary and contractor during this war, and amassed a large fortune in that capacity.

No proper qualifications exacted from commissariat officers.

Fitness for the duty to be performed, or character to guarantee faithfulness, appear to have been the last considerations to influence the government in the choice of their agents; and the mode of appointment to these offices, together with the system allowed to prevail in the performance of the service, seem to have been admirably calculated to encourage every description of fraud, and to deprive the soldier of protection and security in obtaining his rights.

Advances of military surgery.

Meanwhile the art of surgery was making slow but gradual progress. In France, Ambroise Paré had successfully devoted himself to increase the usefulness and to raise the dignity of his profession, and in our own country Richard Wiseman had profited by the learning and example of "the father of military surgery." But although better treatment was thus secured to the soldier, the absence of administrative arrangement long continued to neutralize the skill of the surgeon. It was not until the beginning of the eighteenth century that military hospitals were established in England,* but the means of conducting and maintaining them long continued most imperfect. Indeed, it was only through the energy of influential individuals that these institutions afforded the most ordinary means of relief. Symes quotes the hospital established in the Low Countries in 1748, for the troops under the Duke of Cumberland, and directed by Mr. Middleton, as a model of medical administration. The patients had separate and clean beds, frequent changes of linen, and were attended by well-trained female nurses, while hospital storekeepers and clerks, acting under the surgeons, furnished every requisite with prompt-

* The first military hospital established in Europe was erected by order of Richelieu, at Pignerole, in Piedmont, where the building still exists.

ness and regularity. About the same time hospital mates were attached to regiments, surgeon-majors and physicians exercising a general control and supervision over the professional treatment of the sick. From the circumstance of a lengthy correspondence having taken place between the Duke of Cumberland and the home authorities with reference to the expenditure incurred in maintaining this establishment, we may infer that its comforts were beyond those usually extended to the sick soldiers. Humanity had not yet become an element in our military economy.

Treasury reforms.

It was not until the second half of the eighteenth century, and after repeated complaints as to the prevalent abuses, that the Treasury began to assume a more direct and active, though still very imperfect, supervision over the supply duties of the army.*

In 1760 the following Treasury minute appears :—

"The Duke of Newcastle acquaints the Lords that he had proposed to His Majesty to appoint a person of credit and consequence to attend the army in Germany, in order to inspect the conduct of the commissaries and to report thereon to the Treasury. His Majesty was pleased to approve thereof as a fit measure *to remedy the mischief complained of in the administration of the extraordinary services of the army*, and that His Majesty has been further pleased to approve of Colonel Richard Pierson for the execution of this office."

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* "My Lords reminded His Grace of the absolute necessity of practising a better economy than was used in the course of the last war."—Treasury Minute, 10 July 1758.

This reprimand is addressed to the young Duke of Marlborough, who commanded the British forces on the continent, and seems to have inherited all his grandfather's contempt for administrative economy, for we find him strongly objecting to a proposal made by the Treasury to invite tenders for army supplies by public advertisement, instead of leaving it to military commanders to purchase provisions.

Commissariat arrangements in Germany.

Colonel Pierson's first act after his arrival at the head quarters of Prince Ferdinand of Brunswick was to report the utter inefficiency of the commissariat with the army, and to urge the appointment of a certain number of experienced officers to act under his orders. In reply he was informed by the Treasury that "one superior commissary" should be sent to him, but that any other assistance he might require should be obtained on the spot. Somewhat later we find the Treasury adopting the system (resorted to again as recently as during the late war with Russia) of appointing employés in the different public offices to act as commissaries in the field;* but as there were neither trained officers nor established instructions to guide those temporarily employed in commissariat duties, we cannot wonder at the complaints made as to the inefficiency of the department.

The following entry occurs in the Treasury minutes of 28 April 1761:—

Complaints of Prince Ferdinand of Brunswick.

"Read extract from a letter from Prince Ferdinand to the Earl of Holderness, dated at Thalen, 30 March 1761, in which his Serene Highness declares that he had no cause to be satisfied with the operations of the commissariat, and the rather because if the want of subsistence had not tyed his hands and fettered him more than he could express, he could have acted in a very different manner, and given quite another face to affairs in that country."

In a subsequent communication Prince Ferdinand disavows any intention of blaming individuals, but says that "the commissariat wanted some improvement and alteration for the more easy and effectual carrying on the business."

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* "Give Mr. Ross, an officer in the commissariat in Germany, a further leave of absence from his post in the Tax Office."—Treasury Minute, 23 April 1761.

There is another entry which more fully describes the defects of the commissariat.

His criticism on the commissariat and suggestions for reform.

"Read a letter from Prince Ferdinand to the Duke of Newcastle of 20 April 1761, representing the great obstructions he had met with last year by the difficulty, if not impossibility, of subsisting his army, which difficulty proceeded from more than one source; that the country being entirely eat up, subsistence was necessarily brought from a distance, which could only be done either by the Weser or by land carriage; that the Weser having been unnavigable for near eight months, their whole resource had been reduced to land carriage; and this had failed, whether by the impracticability of the roads, rendered impassable by the rains, or by the failure of the country in giving all the assistance that might, perhaps, be in their power. Yet, if the disappointment of his measures had been owing to natural impediments, yet is was likewise in some degree to be imputed to other causes which were capable of remedy, that is, *to the defects of the commissariat, which is not sufficient to fulfil its functions*, not that he hath the least reason to complain, either of Colonel Pierson or Mr. Hutton, to whom, on the contrary, he readily does all the justice that is due to them, *but the fault is in the internal construction of the commissariat*, which is not framed in such manner as to execute the vast work of collecting subsistence, bringing it to the army, and distributing it afterwards, *by making all the parts of the machine move with order and exactness;* that which among other causes stops the wheels most is, that the payments are not made so expeditiously as the service requires, not that this is owing to want of money, but to the mode of making the payments."

Here we have a general who thoroughly understands what a commissariat should be, and cannot only point out its defects, but suggest the remedy.

Mr. Hutton, the commissary-general, informed the Treasury, that—

Prussian commissariat.

"Prince Ferdinand had often wished the commissariat on another footing;" and that "the reason why he (Mr. Hutton) did not communicate this desire to the Treasury was that, the Prince's proposition tending to lodge in them the power of

money, he thought the mention of it could not decently come from them;" he added that "Prince Ferdinand hath always *wished to see the Prussian institutions adopted*, whereby all commissaries are trusted with the disposition of money."

This refers to the admirable commissariat established by Frederick the Great, which the French* had already copied in several important points, and which was now to become our model.

Military chest transferred to the commissariat.

The English forces in the Low Countries, during the seven years' war, amounted to above 20,000 men, and for the maintenance of this force, which was considerably scattered, and thus less easily supplied, there had hitherto been only nine commissariat officers of all ranks, including Colonel Pierson, the director. At the instigation of Prince Ferdinand however, Mr. Hutton submitted to the Treasury a project for a more effective and numerous establishment (*vide* Appendix A), and it was now formally proposed to transfer the payment of the extraordinaries of the army from the paymaster-general's department to the commissariat. The Treasury were, however, very cautious in sanctioning these changes. In

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* The French still kept up their character for bad pay, and Mr. Hutton states that the paper money issued by their armies was seldom redeemed, and being asked how *they* with paper procured supplies, while *we* with ready money often failed, he answered that they "used compulsion towards the country people."

It is truly remarkable how little disposed the French have at all times shown themselves to conciliate and gain the goodwill of the population of the countries occupied by their armies,—while we, perhaps, have fallen into the opposite extreme, and acted with a degree of forbearance and liberality, even in the enemy's territory, which has occasionally placed us at a disadvantage, both in a military and economical point of view; but the moral and political effect of our conciliatory system may well compensate for some sacrifices.

the first instance they appointed only seven additional "deputy commissaries," with the pay of 40*s.* a day, and determined to "consider further as to the proposal to intrust the commissaries with a military chest;" ultimately, this arrangement was acceded to as a temporary measure, but the custody of the military chest was not permanently intrusted to the commissariat until on the re-organization of the department under the Duke of Wellington in 1809.

On the 14th May 1751, we find the record of an attempt to introduce an element into the civil administration of the army, the necessity for which has been clearly demonstrated by recent experience, but with regard to which there appears to exist in the official mind some unaccountable apprehension.*

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* Sir Charles Trevelyan must be excepted, for he has repeatedly urged the creation of a superintending and controlling body of officers at the head of the civil administration of our army, on the plan, modified to suit our institutions, of the French Intendance. Mr. Godley, the Assistant Under-Secretary of State for War, likewise recommends such an institution; in his memorandum of 19th October 1855, on a proposed consolidation of army departments, he states:—

"It is worthy of consideration whether it may not be found necessary to attach to armies in the field, and to garrisons, officers corresponding with the 'intendants' of the French army, who may, in strict subordination, of course, to the Commander of the Forces, superintend and control the several Civil services connected with the army. In the last war this function was practically, in great part, discharged by the Commissary General, whose Department had the charge of all the duties which are now divided, or likely to be divided, among—

1st. The Storekeeper;
2nd. The Director of the Land Transport Corps;
3rd. The Commissary-General; and,
4th. The Treasury Accountant.

["It

Commissariat of control established.

"My Lords take into consideration the affairs of the commissariat in Germany, and are of opinion *that the commissaries of control for inspecting, examining, and reporting the true state of the extraordinaries for the service of the army are an essential part of the institutions of the commissariat,* and that their activity ought to be enforced and attended to; for which reason it is resolved to recommend to His Majesty the making of a sufficient number of *commissaries of control* to be confined altogether to their proper branch of business, and not taken from thence to attend the providing of the army or the keeping of accounts, unless in case of unavoidable necessity."

First director-general of the commissariat and organization of an efficient department.

General Howard was appointed director-general of this commissariat of control, with the pay of 10*l.* a day; Colonel Pierson was at the same time made "director-general" of the executive commissariat, with 8*l.* a day, and a greatly increased staff of officers and subordinates; and although Colonel Pierson and Sir James Cockburn, the deputy-commissary of cavalry, remonstrated against the powers assumed by this new body, the controllers appear to have done excellent service in introducing a more regular system of supply and accountability, and in abolishing some gross abuses which, in the absence of administrative supervision, had sprung up in the various military departments; Prince Ferdinand at last expressed himself thoroughly satisfied with the condition of his commissariat.

which was abruptly abolished on the conclusion of the war.

On the conclusion of the war, however, the department formed with so much deliberation, trained carefully to a systematic performance of its duties, and organized with especial views to the protection of the public interests, was hastily abolished; and the outbreak of

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"It is more than questionable whether the common subordination of these officers to the Commander of the Forces be sufficient *to insure that unity of action and mutual co-operation* among them which are essential to the success and safety of the army."

the revolutionary war in America found the country once more completely unprepared with any description of machinery for the supply of the forces proceeding to that continent.

Imperfect commissariat in America.

There were, it is true, at the principal military stations in America a few commissaries of stores,* commonly military officers, but these appear to have been insufficient even for the ordinary business in time of peace, for General Gage, writing to the Treasury in 1766, urges the appointment of additional commissaries in Canada. The duties of these officers could not, however, have been onerous or at all calculated to fit them for regular commissariat service. All financial transactions were carried on by the paymaster-general's department, or by the general commanding himself; and as most supplies continued to be forwarded from England, under contracts entered into by the Treasury with London merchants, who engaged to deliver on the spot, and issue, on the requisition of the commanding officers, the different articles of the soldiers' diet at a fixed rate per ration,† the functions of the commissaries would appear to have been limited to the inspection and perhaps the issue in detail of provisions; they were, in fact, storekeepers, not commissariat officers.

Contracts.

The system of supplying the troops in the Colonies by means of contracts entered into in England continued in force long after the local resources might have been made available, and it was with evident reluctance that in 1770 the Treasury assented to a proposal made by the

* In most cases appointed under the warrant of the governor or general commanding.

† The prices varied from 5½*d.* to 10*d.* per ration; Government, in most instances, paying insurance or providing convoys; occasionally paying even the freight. The bestowal of these contracts was a valuable branch of Government patronage.

officer commanding the Illinois district in Canada, for allowing supplies to be contracted for on the spot, as a measure likely to prove a saving to the public, a convenience to the troops, and a benefit to the population of the colony.

Commissary-general sent out to organize the department in America.

During the progress of the American war of independence it was found necessary, in consequence of the extravagance and inefficiency of the mode of supply adopted, which in fact gave to military commanders the entire control of the public monies, and allowed each officer commanding a corps to use his own discretion in rationing his force, to send out a responsible Treasury officer to assume the superintendence of the civil administration of the army, and Mr. Brook Watson was accordingly appointed "commissary-general of stores and provisions,"* with ample powers, but absolutely without instructions.

His difficulties and reforms.

In 1782 this officer complains that "he has still received no formal instructions for his conduct in office, and he understands that none were given to his predecessors." He does not, however, appear to have been afraid of responsibility, or to have suffered from that moral cowardice which experience of official life is too apt to foster; he set to work boldly to introduce order and economy; abolished some of the most prominent abuses; established an excellent system of checks; caused all accounts to be rendered upon an uniform system; exercised a strict control over military expenditure; took steps to ensure the soldier a more regular supply of provisions, and made general and other commanding officers his bitter enemies.†

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* A misnomer, considering that the supply of stores and provisions formed but a very small, and in point of fact the least important of his duties.

† It should be remembered that military officers at this time were allowed a fixed sum of money to "supply" their men, in the same way as was to a very recent period allowed for

The Treasury appreciated his services, however, for—

"My Lords are persuaded that he will not be stopped in necessary reforms by the murmurs or complaints of those persons in public departments who have long enjoyed emoluments improperly derived from their situations."—*Treasury Minutes*, 1782.

Financial operations insufficiently controlled.

Still the direct control of the Treasury over public expenditure continued to be very imperfect; in raising money, for example, no matter how favourable the rate of exchange upon England, the public was rarely credited with the premium, but, on the contrary, frequently subjected to heavy losses by the negotiation of its bills. From the following Minute, referring to a communication from the general officer commanding at Quebec in 1783, it appears that my Lords were not disposed to submit patiently to these practices:—

"His proceedings (the general's) have excited their surprise, and merited their strongest disapprobation, as money could be raised on the spot without turning the exchange to the disadvantage of the public, if the person drawing conduct himself with common prudence or caution."

Abolition of the commissariat on the close of the American war.

With the restoration of peace in America the commissariat organized by Mr. Brook Watson was virtually abolished, and on the recommendation of the comptrollers of army accounts the establishment was in 1786 fixed at two officers for Canada, two for Nova Scotia, and one for each of the West India islands; their rate of pay was reduced, and under the provisions of a regulation made in that year, by which all civil officers were excluded from the receipt of allowances, they received neither rations nor quarters. To make up for the insufficiency

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"clothing;" and it was quite understood that the savings (called "off-reckonings" in the latter case) which they could effect were for their own benefit. It is quite natural that they should have felt aggrieved at being deprived of these emoluments.

Position of commissariat officers.

of their public incomes, however, the contractors were in the habit of allowing them a commission on the stores received by them; and this reprehensible practice continued until the abuses naturally resulting from it became so glaring, that an order prohibiting commissaries to accept money from contractors was formally promulgated.

Central contracts.

The system of central contracts still obtained, and in 1787 we find one London house holding the contract for supplying provisions to the troops in Canada, Nova Scotia, and the West Indies. The commissariat officers were placed in far too subordinate and uninfluential a position to be able to exercise any effectual control over these contractors, and the complaints of bad or insufficient supplies were frequent, and apparently without remedy.*

No permanent commissariat establishments.

It will be observed that up to this time it was only during a period of war that it was thought necessary to attempt the organization of a regular commissariat, acting upon an uniform plan, and armed with powers of control over expenditure; even then efficiency depended far more upon the ability or energy of the individuals employed than upon any general principle established for their guidance. Military administration had not yet been recognized as a science.

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* In 1787 Mr. Walker, assistant commissary at St. Vincent's, complains to the Treasury that there were only six days' provisions in store, and that they were of bad quality; also that he had no copy of the contract, and was ignorant of its conditions. The Treasury minute relating to this complaint is limited to directing Mr. Walker to be furnished with a copy of the contract.

CHAPTER III.

MODERN MILITARY ADMINISTRATION.

In 1793 the commissariat in the United Kingdom* was placed under the charge of a Commissary-General (Bisset), whose principal duties consisted in the superintendence of the contracts entered into by the Treasury for the supply of provisions and forage to the troops; no money was intrusted to him, nor was he a store accountant — the delivery of supplies being a direct transaction between regiments and contractors. In 1797 commissaries were appointed to the different districts, and required to enter into local contracts for the supply of bread, wood, and forage. During this year a Select Committee of the House of Commons recommended some important changes in the civil departments of the army, and a series of revolutions in military administration now commenced. In 1805 the home commissariat was organized on an extensive scale by Sir Brook Watson, lately Commissary-General in America; the establishment consisted of—

Position of the commissariat towards the end of the last century.

Organization.

1 commissary-general,
19 deputy commissaries,
25 assistant do.
12 acting do. do.
43 central do.

with a large staff of subordinates, among whom there were no less than 87 storekeepers.

The duties of this department were confined to the supply of troops in camp under local contracts, and the superintendence of the Treasury contracts for the troops

Duties.

* On this subject the author has largely availed himself of the 18th Report of the Committee of Military Inquiry, 1812.

in barracks; the commissaries received imprests for the payment of contractors and incidental charges, for which they accounted to the Treasury; but the supply of barrack, ordnance, and quartermaster-general's stores, as well as of articles for the medical department, was not at this time a branch of commissariat duty, but was conducted under the direction of the Secretary-at-War and the Master-General of the Ordnance, payment being made direct by the Paymaster-General.

Cost.

Considering the limited nature of its duties, the commissariat appears to have been at this time excessive in numbers, and the cost of the home establishment actually exceeded that of the present commissariat throughout every portion of the empire.

Irish commissariat.

The Irish commissariat,* as well as that in the Colonies, continued perfectly distinct from the home branch, both as regarded its organization and the mode of conducting the duties.

Excellent suggestions of General Don.

With regard to the foreign commissariat, General Don offered some valuable suggestions in his evidence before the Commission of Inquiry in 1806. He states, and his remarks are applicable and instructive even after the lapse of half a century:—

"The officers of this department require training and instruction as well as those of any other, *and the business of the commissariat ought to form one of the branches of military education.*

"A system should be established, and detailed instructions given for every individual of the department.

"Great attention should be paid to the choice of storekeepers and all other inferior persons of the department, such as those

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* This department, which was formed in 1798, was borne on the Irish army establishment, and was under the direct control of the Lord Lieutenant, who made all appointments and promotions. It was transferred to the Treasury and consolidated with the English commissariat in 1822.

appointed for receiving, inspecting, and issuing supplies, and *the procuring this class of people should not be left to chance;* they ought to be appointed at home, trained in the business of the department, and promoted in it according to their ability and conduct.

"*The supplying of troops at home ought to be done as much as possible on the same principle as practised on actual service. By this means a school for the commissariat staff and all the inferior persons belonging to the department would be established,* and consequently, even at home, they would learn how they should act in the field."

Unheeded.

These and other excellent suggestions, the result of much practical experience acquired during a long and distinguished service, do not appear to have been acted upon; indeed, it is evident that up to the present day their truth has not been fully recognized.

Medical department.

The medical department of the army had undergone a re-organization in 1773, when the daily pay of surgeons was raised to 6*s.*, the contributions from the soldier for attendance discontinued, and the practice which had prevailed of buying and selling military surgeoncies strictly prohibited.* In 1804 the constitution of the medical department was again changed, and established by royal warrant upon much the same footing as at present, although the emoluments have from time to time been increased.†

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* Treasury minute, 6th October 1773.

† Military surgery and the institutions connected with it, form so important an element in the administration of armies, that notwithstanding a full sense of his incompetency to do justice to a subject so far beyond his pretensions, the author has ventured to introduce such imperfect and scanty information as he has been able to collect; however valueless this may be in itself, it may serve to remind members of the medical service of the army, that the history of British military surgery,—than which few subjects would prove more interesting to the profession and to the army—remains to be written.

Charges of the commissariat reduced.

In 1808 Mr. Coffin, who had in the interim succeeded to the charge of the commissariat department in England, made extensive changes, abolished altogether the central commissaries and the subordinate staff, and reduced the cost of the establishment from 41,000*l.* to 17,000*l.* a year.

Sir John Moore's opinion of his commissariat.

Sir John Moore, in his despatches to Lord Castlereagh of 18th October and 24th November 1808, quoted by Sir Francis Head in his work on "The Defences of Great Britain," after reporting that "in no department is there any want of zeal, but in some most important ones there is much want of experience," added that "nothing but abundance of money and prompt payment will compensate when we begin to move for the want of experience and ability in our commissariat," which he subsequently describes as "*extremely zealous*, but quite new and inexperienced in the important duties which it now falls to their lot to execute."

Sir Willoughby Gordon, Commissary-in-Chief.

In the following year Colonel Gordon, Military Secretary to the Duke of York (better known as Sir Willoughby Gordon, and afterwards Quartermaster-General), was appointed Commissary-in-Chief, with the entire charge of the department at home and abroad (Ireland and the East Indies excepted), and now, for the first time, a general code of instructions, defining the duties of each class of officers, was promulgated.

His powers and duties.

The Commissary-in-Chief was intrusted with ample powers for the performance of his responsible duties; his instructions were to furnish bread, forage, fuel, and light for the troops in barracks, quarters, or cantonments in the United Kingdom, to provide for the supply of all barrack stores (hitherto the duty of the Barrack-master-General), of Quartermaster-General's stores, and those of the Inspector-General of Hospitals; to collect by means of his officers and to compile accurate reports of the

resources of the country, as well with reference to provisions as to the means of communication; to provide all such supplies as might be required for the use of armies abroad, and to exercise a complete control and supervision over the commissariat on foreign stations. Lastly, he was required to assimilate as much as possible the instructions, duties, and accounts of the home and foreign commissariat, in order to render the officers of the former (hitherto considered local) available for service abroad.

His organization of the department.

Colonel Gordon at once recognized the necessity of proper regulations for the admission and advancement of commissariat officers, and accordingly established the gradations of rank which exist at present, affixing to each grade a relative army rank, a fixed rate of pay, and a prescribed term of service. The most objectionable feature of this plan was the necessity for every one entering as a clerk,* a condition which the Commissioners of Inquiry apprehend may "prevent persons of sufficient education and respectably connected" from joining the service, and which Colonel Gordon himself proposed to replace by a probationary service as a "cadet;" indeed, within two years after the introduction of this constitution, Colonel Gordon admitted its imperfection, and recommended that a strictly military organization should be given to the commissariat; this however the Treasury opposed.

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* This objection will not perhaps be intelligible to civilians, who are generally little aware of the wide difference between a "clerk" in the army and the same nominal position in a public office; but military men know how subordinate and inferior a status is implied by that title, and it is obviously unfair to impose upon an individual the duties and responsibilities of an officer, giving him at the same time a rank that does not secure him the ordinary respect of a common soldier.

Want of uniformity.

A great want of uniformity continued to exist for some time in the pay of commissariat officers; Colonel Gordon himself drew 7*l.* a day, with military allowances, and many of the officers received, in addition to their Treasury pay, a daily allowance from the War Office, and in some cases an additional rate from the Colonial Governments; thus deputy-commissaries-general received 50*s.*, 30*s.*, and 20*s.* a day, according to the station at which they served; and assistants and deputy-assistants drew various rates, from 10*s.* to 30*s.* daily. Certain ranks not recognized under the new constitution also continued to exist for some time, such as "principal commissaries" and "deputy commissaries."

Commissariat of accounts.

The commissariat of accounts, though a distinct branch, was likewise under the orders of the Commissary-in-Chief. It was first established in 1793, and continued to exist in a more or less modified form until 1848, when it was incorporated with the general commissariat.

Cost of the department.

The annual cost of the establishment under Colonel Gordon amounted to 220,000*l.*;* the charge for the commissariat in the Colonies only, in 1809 (and this does not include any portion of the establishment in the field) amounted to no less than 110,000*l.*, and this at a time when our Colonial possessions were far less extensive than at present; the estimate for the foreign commissariat for 1857–58 amounts only to 36,900*l.*, or less than one-third of the charge of fifty years ago.

Inefficiency of the commissariat formed for the Duke of Wellington's campaign.

Of the utter want of training and organization of the commissariat which in the commencement of the Peninsular war was hurriedly collected and despatched to the army, the Duke of Wellington's despatches afford the

* This includes half-pay, and applies to a period of war; but the cost of the commissariat during the late war with Russia did not amount to anything like one-half of that sum.

most ample proofs; the blame for this neglect to provide for so essential a branch of the army during war must not rest altogether on the Treasury; the military authorities in England seem completely to have overlooked the necessity for a commissariat, and it is curious to observe that while the Commander-in-Chief's instructions to the Duke of Wellington on his appointment to the command of the army in Portugal in 1808, contain the most ample details with regard to the composition and the capabilities of his general staff, there is not even a passing allusion to the commissariat.

His measures for organizing the department.

The Duke, however, was no sooner at his post than he began to apply the full vigor of his great mind and his extraordinary powers of organization, to create order out of the chaotic materials placed at his disposal. It may be conceived that on a sudden call for a number of men to form a department, there was not much time for preliminary training, or opportunity of exacting the requisite tests as to capacity, education, or character; if men fit for their duties were obtained, it was by chance; by the same chance, many, not only incompetent, but too often open to even more serious objections, were admitted; and it need not be a matter of surprise that men notorious for want of principle in their own country, and whose antecedents ought to have rendered their employment impossible, should, when placed in a position of responsibility at a distance, and intrusted with the command of money, with very slender checks upon its application, have betrayed their trust, and disgraced, not only themselves, but the service of which they were unworthy members.* Some are, indeed, said to have owed

* Considering the number of officers employed throughout the Peninsular war, and the opportunities they possessed of misapplying part of the enormous expenditure of that war, the cases of peculation were very few; still they sufficed to attach

their appointments to even more questionable motives than official carelessness, and in one instance, a commission to a superior grade in the commissariat is said to have been bestowed in payment of a gambling debt.

What the genius of Wellington might have made of better materials it would not be difficult to surmise; as it was, the very best men were new to their work, and had been for the greater part trained in habits of mind and body which did not particularly fit them for their position. In a despatch to Lord Castlereagh, dated from Portugal in August 1808, the Duke writes,—"I have had the greatest difficulty in organizing my commissariat for the march, and that department is very incompetent; the department deserves your serious attention; *the existence of the army depends upon it, yet the people who manage it are incapable of managing anything out of a counting house;*" and again in the following year he complains, "our commissariat is *very bad*, but it is new, and will improve I hope;" and he certainly spared no exertion to bring about the desired improvements; discriminating and rewarding talent, exposing and punishing misconduct, superseding incapacity, and encouraging exertion, he succeeded in making the most of his materials; and in the course of a few years the English commissariat was, though far from perfect, admittedly very superior to that of the French.

His exertions to organize an efficient service of administration.

Successful.

Napoleon's commissariat.

Napoleon, during the earlier periods of his career, had already made attempts to organize an effective administrative corps; but he seems to have been beset by difficulties; the Directory, in this as in many other

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a stigma to the whole service, the large majority of which proved to be men of incorruptible integrity.

matters, obstructed military operations by their injudicious interference, and were ever disposed to provide for a friend or to get rid of an enemy by conferring upon him a lucrative appointment at a distance from home; thus, at one time there were no less than 1,100 commissaires de guerre with the army, almost all equally useless and incompetent.

He urges that commissaries should be military officers.

"Envoyez moi, donc," writes Napoleon from Italy to the Directory in 1795, "un ordonnateur habile, distingué, homme de génie; je n'ai que des pygmées qui me font mourir de faim dans le plus beau pays du monde." And in the following year he urges the necessity of a military organization for his commissariat, and after pointing out the defects of the existing system, he proceeds,—"Tel est citoyens directeurs, l'inconvénient de la loi qui veut que les commissaires des guerres ne soient que des agents civils, tandis qu'il leur faut plus de courage et d'habitudes militaires qu'aux officiers mêmes; le courage qui leur est necessaire doit être tout moral; il n'est jamais le fruit que de l'habitude des dangers;"* and he concludes by strongly urging that the "commissaires de guerre" should be taken exclusively from among military officers who had seen active service.

Without admitting that it is only the habit of encountering danger which can create moral courage, there can be no doubt that such duties as devolve upon commissariat officers serving with an army in the field cannot be efficiently performed by men ignorant of military usages; and that, not only from his being accustomed to intercourse with soldiers, but also from the peculiar character formed by habits of discipline,—the habit of command as well as subordination,—the

* Vauchelle.

military officer will always have an advantage over the civilian as an army administrator.*

His efforts frustrated by the predilection for pillage of his armies.

It is probable that the marshals of Napoleon's army were unwilling to submit to that control which must always be exercised by an official administrative body, and that they found their advantage in a system which afforded few checks upon their expenditure. Whatever the causes may have been, it is certain that Napoleon, with far greater powers than his adversary, never succeeded in forming a good commissariat; that money and provisions were irregularly furnished and ill accounted for; and to this defect, coupled with the national propensity before alluded to, may be attributed the wholesale system of pillage and rapine which distinguished the French armies wherever they appeared,† and incurred for them the bitter hatred of every population among which they were thrown. That this was one of the causes contributing to their ultimate expulsion from the Peninsula cannot be doubted, and we have here another illustration of the vital importance of a well-organized administration to military success.

Reduction and gradual decay of the English commissariat.

To the last, Napoleon is said to have expressed his admiration of the commissariat arrangements of the Duke of Wellington,‡ and his determination to institute

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* The French Intendance is now recruited exclusively from captains in the staff corps.

† Even the rigid discipline maintained by Marshal Soult, who, according to the testimony of his adversaries, forms an honorable exception to the heartless rapacity of the French Generals in the Peninsula, was unable altogether to repress the national predilection for indiscriminate pillage.

‡ "It was a trite saying of Marshal Saxe that 'avec une armée il faut commencer avec le ventre;' and General Foy gives it as his opinion that 'the subsistence of troops in the field is often more difficult than commanding them.' The

a department based upon similar principles, though with a military organization; but Waterloo put a stop to this among other of his schemes; and in the course of a few years more the English commissariat had dwindled into a small body of Colonial agents and Treasury accountants, and the great majority of its members were left to idle away the rest of their days on half pay, or to seek in other pursuits a more hopeful and congenial field for their abilities.*

Sir Francis Head, in the work above quoted, and writing in 1850, thus describes the effect of these reductions:—

"At the conclusion of the Duke's campaigns this well-organized system of officers and subordinates thoroughly instructed and acquainted with the principle and practice of obtaining and of distributing, under severe responsibility, the enormous amount of provisions and forage necessary for the movement of a combined army, was disbanded, the consequence of which was that at the present moment a field commissariat, *the life blood of every movement in a campaign*, is not in existence in the British service."

During the latter portion of the Peninsular war the

Abbé de Pradt, in a pamphlet written towards the close of the late war, observes that 'a portion of the Duke of Wellington's success was to be attributed to the exertions of his commissariat in the management of their supplies and financial credit which enabled him to wait for the favourable moment of action;" but he forgot to add that it was under the auspices and instructions of this great man (the Duke of Wellington) that they had acquired their experience. It never could derogate from the glory of Cæsar to know that he had an able officer under his orders, who could maintain his army in position until his judgment and foresight determined their advance."—Sir Randolph Routh's Commissariat Field Service, page 100.

* Sir Charles Trevelyan, in a memorandum on the civil administration of the army, written in 1855, concludes with

duties of the commissariat had been more strictly defined and considerably extended, and the three great elements of army administration, money, transport, and provisions, were placed exclusively under its direction and responsibility. These arrangements were not disturbed on the restoration of peace, but by degrees various other duties were added, until in our Colonies there was hardly a branch of the public service in which the officers of the commissariat were not required, directly or indirectly, to take a part.

No change was made, however, in the constitution of the department, and with the exception of a reduction of the pay in all ranks (which with great injustice was made a retrospective measure), the grades and emoluments of the service remained as established by Sir Willoughby Gordon

Reductions continued to take place; the establishments in Great Britain and Ireland were abolished, the supply of the troops being conducted under regimental contracts or by the Board of Ordnance, and year by

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these words :—"The Duke of Wellington found our military administrative system at the commencement of the Peninsular war in a more imperfect state than it is now, but by a vigorous course of practical reform he raised its reputation so high, that on the restoration of peace Baron Dupin was sent by the French Government to inquire into the arrangements which had proved so productive of military efficiency ; since that we have for more than one generation applied ourselves to the arts of peace, to the entire neglect of military science, and it has now become our turn to learn from the French."

* This officer was succeeded in 1812 by Mr. Herries (afterwards Chancellor of the Exchequer), and in 1816 the office of commissary-in-chief was finally abolished, and the department placed under an officer of the Treasury bearing the title of Agent of Commissariat Supplies.

year the functions and character of the commissariat diverged more and more from the original purpose.

In 1840 Sir Charles Trevelyan was appointed assistant secretary to the Treasury, and assumed the immediate direction of the commissariat. Under his vigorous administration fresh vitality was infused into the moribund body; he made himself acquainted with the services and capacities of the officers, regulated appointments and promotions, and promulgated a general and intelligible code of instructions. The duties of the department were now summed up as follows:— Its revival under Sir Charles Trevelyan.

1. To raise, keep, imprest, and disburse funds for the service of the Crown in our Colonial possessions. Duties,
2. To provide, by means of contracts or otherwise, to keep in store and to issue all provisions, forage, fuel, and light for the use of the land forces abroad.
3. To purchase and contract for all supplies and stores required to be provided for the use of the several departments of the army abroad, and if necessary for the naval service also.
4. To provide all transport by land and inland navigation, and in the absence of a naval agent to engage passages by sea and hire vessels.*

In addition to these various and extensive duties, involving a high degree of pecuniary responsibility, intricate accounts, and a large correspondence, the officers of the commissariat were charged with various and training.

* It will be seen that the word "commissariat," by which we commonly understand the duties involved in providing food for the army, conveys a very imperfect description of the varied and extensive functions of our commissariat department, of which purveying is but one branch, and by no means the one requiring the highest qualifications.

local duties, most of which were altogether beyond the province of their profession; thus they conducted the cash and store arrangements of the convict establishments, were paymasters of pensioners, distributed presents to Indian tribes; acted as naval agents, colonial treasurers, ordnance storekeepers, and barrack-masters, sometimes as magistrates, and occasionally even as chaplains.

Not calculated to make good officers for field service.

This certainly was hardly the kind of training required to fit commissariat officers for active service with an army in the field, but the Treasury may claim the credit of having, at a time when military departments were allowed to fall into decay, urged the expediency of having a reserve of commissariat officers available for any emergency that might arise.

Commissariat employed during the Irish famine.

In 1846 a number of commissariat officers, under the orders of Sir Randolph Routh, were employed upon an unusual and painful, but most important duty. A famine fell upon Ireland, and it became the task of the British government to endeavour to mitigate by all human means the terrible visitation with which it had pleased Providence to afflict the land.

The training, the organization, and the well-tried integrity of the commissariat, pointed to it as a body of most useful auxiliaries for the emergency. And now commenced a series of the most extensive commissariat operations that the world had yet witnessed. For a time it was attempted to provide the destitute people with work, but the calamity was too widely spread to admit of such a remedy, and in the commencement of 1847 the system of direct relief by the distribution of food was adopted. Some idea may be formed of the extent of this relief by the fact that during the month of

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* On the Western Coast of Africa.

March, and again in the July following, upwards of *three millions* of men, women, and children were in the daily receipt of public rations. Truly might Sir John Burgoyne write that "this enterprise was the grandest attempt ever made to grapple with famine over a whole country." He might have added "and the most successful."

Operations performed.

The author of "*The Irish Crisis*"* says, "organized armies amounting altogether to some hundreds of thousands, had been rationed before, but neither ancient nor modern history can furnish a parallel to the fact that upwards of three millions of persons were fed every day in the neighbourhood of their own homes by administrative arrangements, emanating from and controlled by one central office."

No disallowance on their large expenditure.

The officers of the commissariat acquitted themselves by universal consent with the highest credit, and so correct were they in their pecuniary transactions, that the accounts of that period, intricate as they necessarily were, passed the ordeal of the audit office without a single objection or disallowance.†

We have here another proof of the expediency of retaining at all times a reserve of trained commissariat officers, available for any emergency that may arise.

In his evidence before the Committee on Army and Ordnance Expenditure, in 1850, page 491, Sir Charles Trevelyan states:—

Necessity for maintaining a commissariat as a reserve to meet emergencies.

"As a necessity may at any time arise for active military preparations, either at home or abroad, it is very desirable that the government should have a small number of commis-

* An interesting description of the circumstances connected with the measures of relief adopted during the famine; originally published in the Edinburgh Review, January 1848, and republished by Longman and Co.

† See the Report on the Army and Ordnance Expenditure, page 1062 of the Appendix.

sariat officers at its disposal in this country ready to despatch to any quarter where their services might be required; and it must not be forgotten, that the commissariat, although it is as necessary for the equipment of a force as the artillery or engineers, furnishes the only direct means possessed by the government of controlling the extra expenditure which swells to so large an amount on those occasions."

Further reductions.

And in pages 1043–4 and 1167 (*vide* Appendix B.) he yet more strongly urges the necessity of such a reserve; but the committee, under the influence probably of the clamor for economy then so prevalent, so far from yielding to these suggestions, recommended the reduction of the few officers still employed in Ireland, and virtually the entire abolition of the commissariat as a permanent army establishment.* This recommendation was promptly acted upon, as far as was practicable; the Irish commissariat was abolished, and in the Colonies the number of commissariat officers was reduced so low that the illness of one individual frequently brought the service to a standstill. How much further reduction would have been carried had not war intervened, it is difficult to say; but when in the beginning of 1854 it was

Effect of these measures on the breaking out of war.

* The following is the recommendation of the Committee on this point :—"1. That there is no necessity whatever for creating a commissariat department in Great Britain, and they recommend that the officers and establishment in Ireland should be immediately withdrawn. 2. That it appears to your Committee that it would be desirable to regulate the supply of food to the troops on one system throughout the United Kingdom; and as that of regimental contract appears by the evidence to be most approved, they recommend its adoption. After so many years of peace, it appears to your Committee that the arrangement of the commissariat department are all based upon a state of war, which seems to be unnecessary, inasmuch as it appears on the highest evidence *that no training in time of peace will fit a commissary for his duties in the field during war.*"

found that the army in the East would require a commissariat to supply its wants, and to control the public expenditure, then the authorities began to feel that they had acted unwisely in thus depriving the public of the most efficient and least expensive agents for protecting its interests; in other words in economising their means of economy.

Exertions of the Treasury to improvise a commissariat,

But the emergency had to be met, and the Treasury set to work, resorting to the only means which were now left to them. The Colonies were denuded of their commissariat. From the Mediterranean to the Pacific, from Canada to China, every available officer was hurriedly summoned to join the army in the East; the Half-pay List was ransacked for its least effete members, and old officers who had settled down years before to pass the rest of their lives in honorable retirement were suddenly required to take the field and to study the new code of regulations; but still the number of working hands fell far below the requirements of the occasion, and volunteers were sought in the Public Offices in London and in the Irish Constabulary Force;* while the subordinate staff,

* Sir Charles Trevelyan thus describes the position in which the Treasury was found on the outbreak of the war:—"The difficulties of the Treasury on this essential point were of the most embarrassing kind. No commissariat establishment existed in Great Britain. The establishment in Ireland had been recently abolished at the recommendation of the Select Committee on Army Expenditure, *notwithstanding the earnest representations of the Treasury that it ought to be maintained as a reserve to meet unexpected emergencies.* There were none of those subordinate executive departments which add so much to the efficiency of continental armies. As soon as the expedition had been resolved upon great exertions were made to collect as many commissariat officers as possible from the colonies, and the deficiency in their numbers was supplied by selecting officers of the Irish constabulary, and gentlemen,

that essential element in army administration, which is to the commissariat what non-commissioned officers are to the army generally, were got together wherever they were to be found—in the police and the custom house,—in shops and warehouses,—without time or means of testing their capacity or characters, until the head quarters of the army was glutted with useless, expensive, and troublesome civilians, ignorant of their duties, incapable of bearing the effects of climate and exposure, and unwilling to submit to the most ordinary laws of discipline and subordination; the cry for economy had died away—men and money were voted with lavish profusion; but blood and treasure failed to cement the hurried fabric, and once more sad experience proclaimed the impossibility of improvising at a moment's notice the complicated machinery of military administration.*

and the result.

Individual ability unable to overcome the defects of the system.

The zeal, the energy, and the intelligence of the majority of commissariat officers has been sufficiently established by the testimony of various authorities. The regularity and correctness with which they accounted for an enormous expenditure, amounting during the late war to above twenty millions, in all its intricate details is universally admitted, and their strict and scrupulous integrity† in their dealings excited the surprise and

employed in the public offices in this country, whose experience, public character, and trustworthiness appeared to be most analogous to the qualifications possessed by the regularly trained officers of the department."

* A quarter of a century ago Sir William Napier wrote as follows:—"In the beginning of each war, England has to seek in blood the knowledge necessary to ensure success, and, like the fiend's progress towards Eden, her conquering course is through chaos, followed by death."—History of the Peninsular War.

† The Treasury, in the Minute of 22 December 1854, by which the commissariat was transferred to the War Office,

admiration of a people little used to meet with such treatment, and has contributed in no slight degree to raise the national character in the opinion of the Eastern commercial world; but neither zeal, ability, nor honor could counteract the defects of a vicious system and the absence of practical experience and professional training. Extravagance and waste, mismanagement and confusion, misery, sickness, and death were the inevitable consequences of the want of unity, and the undefined nature of the responsibility in the functions of the various departments of the army. The commissariat was directly dependent for the merest details of its duties upon various other branches of the service. The Quartermaster-General, the Naval Transport Agents, the Land Transport Corps, the military authorities, each and all had in turn to be applied to for means and co-operation, and each was in a position to evade the duty required, and to disclaim its responsibility.

Waste and extravagance.

Want of unity of action in the different departments.

With a view to remedying these evils and introducing greater uniformity in our military administration, the commissariat was in 1854 transferred from the Treasury to the direction of the War Department; the management of the land transport, an inseparable branch of the commissariat, was removed from its control, and placed

Transfer of the commissariat to the War Office.

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does only bare justice to the department in the following words:—"The custody of large sums of public money has always been found to be full of temptation, and in this case the danger is enhanced by the remoteness of the scene, and the emergent circumstances under which the service often has to be conducted. No money security is taken from the commissariat, because it is considered that no amount that could be required would cover the pecuniary responsibility; nevertheless, many years have elapsed since a trained officer of the department has been guilty of malversation, and the whole body of officers is animated by a spirit of fidelity and economy which is of the greatest public value."

under the direction of a military officer, with carte blanche as to money, men, and material, and in a short time the number of officers employed in this corps alone equalled those of the entire commissariat, while, instead of a rabble of Turkish and Crimean peasants, a small army of enlisted and drilled soldiers was organized to conduct the duties. Ordnance storekeepers were appointed to take charge of clothing and camp equipage; an army works corps was formed; and neither labor nor money was spared to provide against the repetition of past disasters; but the crowding events of active warfare leave but little room for the consolidation of economical and administrative details, and although, as the war proceeded, our establishments were placed on a more solid footing, and the experience acquired at such a terrible cost began to tell, the introduction of the most essential element,—a superintending department to control and direct all services not of a strictly military nature—was not even attempted. Still every day brought its improvement, and an extension of the war would doubtless have suggested yet greater reforms, when peace was unexpectedly concluded, and the country, hanging up the sword, was left once more to pursue its peaceful labours, to meditate upon the past, and to profit by its lessons.

Reforms in the administrative departments.

The peace.

BOOK II.

ON THE CONSTITUTION, CENTRAL ADMINISTRATION, AND ORGANIZATION OF THE ARMY.

CHAPTER I.

ON THE CONSTITUTION OF THE BRITISH ARMY AND ITS CENTRAL ADMINISTRATION.

Relation of standing armies to the State.

A STANDING army is in the present day admittedly an indispensable part of political institutions, and the means of creating and maintaining it becomes a question full of interest and importance to all who have their country's welfare at heart. There is, indeed, no branch of the Government involving such serious considerations as that connected with the administration of armies; for while the governing power,—be it expressed by the will of an irresponsible monarch, or the voice of a free people,—is required to organize a force capable of maintaining its domestic laws and repelling foreign aggression, it has equally to consider the liberties and interests of the people, and to consult the capacity of the country to bear the drain in men or in money, which the exaction of military service necessitates.

Proportions between cost of military establishment and revenue to be observed.

The contribution which a country furnishes towards the maintenance of its military force may be compared to the premiums of insurance, by means of which prudent men secure themselves against loss; no one should begrudge to pay a fair per-centage on the value of his property in order to ensure it against the various risks to which it may be exposed; but when the rate of premium demanded ceases to bear a just proportion to the value of the property itself, the risk is not considered equal to the sacrifice, and insurance upon such terms becomes folly.

The effects of excessive military establishments.

In like manner, an army ceases to be a benefit to the people as soon as its numbers and its cost become disproportionate to the population or the revenues of the country. There are, it is true, times and circumstances which justify extraordinary sacrifices; and when freedom, honor, home, and family are threatened with danger, all minor considerations must give way: but in the usual course of things, the military force should maintain its strict proportion with regard to the capacities of the nation, and when it exceeds this, commerce and agriculture become paralyzed, productive labour becomes scarce and dear, liberty itself is endangered, and the just balance between government and people is destroyed.

Proportions between military force and population.

The actual proportion to be observed depends so materially upon the political and geographical position of a country, the form of government, the spirit and the habits of the people, and many other circumstances, that it is not possible to lay down fixed rules admitting of general application to the widely differing conditions of the various political societies throughout the world. Adam Smith states, that not more than one-hundredth part of the population of any civilized country can be employed as soldiers without ruin to the nation which pays the expense of their service,* and the extent of military establishments maintained throughout the states of Europe, with reference to their population and revenue, will serve to afford a tolerably accurate criterion of the measure of liberty and prosperity enjoyed by them.

Illustrated.

The following Table, compiled from different sources, though probably not entirely exact, is sufficiently correct to represent a fair average of the proportion between soldiers and inhabitants, and between revenue and military expenditure, in the principal countries of Europe.

* "Wealth of Nations," Book v., Chapter 1.

	Population.	Military Force (Standing Army only).	Proportions of Soldiers to Inhabitants.		Revenue in Millions.	Cost of Military Establishments in Millions.	Per-centage of Military Expenditure to Revenue.	Average Annual Cost of each Soldier to the State.
			Soldiers.	Inhabitants.				£ s.
England - -	28,000,000	220,000	1	128	£66	£11½	17	52 0
France - -	36,000,000	378,000	1	95	1171 Francs.	436 Francs.	30	36 0
Russia - -	65,000,000	900,000	1	72	275 Sil. Roubles.	71 Sil. Roubles.	22	13 5
Austria - -	40,000,000	587,000	1	68	273 Florins.	109 Francs.	39	18 10
Prussia - -	17,000,000	211,000	1	80	120 Thalers.	29 Thalers.	24	31 0
Spain - -	17,000,000	142,000	1	119	1562 Reals.	?	?	?
Belgium - -	4,500,000	39,000	1	115	139 Francs.	32 Francs.	23	38 0
Sardinia - -	5,000,000	42,500	1	119	136 Francs.	33 Francs.	24	32 10
Turkey - -	15,000,000	203,000	1	74	790 Piastres.	250 Piastres.	30	10 15

The foregoing Table shows the number of men of the regular army *actually under arms*, and does not include the large "reserve," formed by soldiers, in foreign states, who are exempted from duty, but subject at any moment to be called upon to rejoin the army; the liability of large bodies of men to be suddenly withdrawn from their civil pursuits to serve as soldiers must seriously interfere with the formation of industrious and settled habits.

England favorably contrasted with other countries.

It will thus be seen that notwithstanding the extent of our colonial empire, from which but a very trifling number of recruits is drawn, while it absorbs a very considerable portion of the army, the ratio of soldiers to inhabitants is smaller in England than in any other state in Europe, and that the cost of our military establishments in proportion to the revenue falls considerably below that of all continental armies.

Advantages of voluntary enlistment.

But it is not alone in this respect that our insular position and the spirit of our institutions enables us to present a favourable contrast with continental states; the means by which our armies are raised are perfectly free from injustice or oppression; while elsewhere, military service is compulsory upon all citizens, with exception of a few privileged classes and those who exempt themselves from personal service* by the purchase of a substitute, our army is recruited exclusively by volunteers, who, of their own free will, enter the ranks and receive the fair market price of wages for their services. In this respect we stand alone, and afford a salutary example to the rest of Europe.

Advantages of conscription.

There can be no doubt that conscription is a most powerful engine in the hands of a government, enabling it not only to command at all times a large and a cheap army, but to train the whole nation to the use of arms, creating thus a reserve, which, upon any emergency, may be made available for greatly and efficaciously increasing the military force.

Injurious effects of conscription.

On the other hand, conscription is a law which cannot be justified on principles of justice or of political eco-

* The sacrifices made in order to purchase exemption are not among the least of the evils of conscription; sums ranging from £50 to £150 are frequently raised among the different members of families of very moderate means to procure substitutes.

nomy; not only is it a power capable of being turned to the destruction of national liberty, and at all times opposed to individual freedom,* but it exercises an injurious effect upon the industry of the people; labor, like water, will find its level, and the gain to the army is met by a corresponding loss to other classes; every individual forcibly withdrawn from agricultural or other industrial pursuits is so much abstracted from the national wealth, and the facility of raising a large army at a comparatively small cost, must further have the effect of fostering a bellicose spirit in the government, which cannot fail to act injuriously upon the prosperity of a nation, and shake the stability of its commerce and credit.

Not tolerated or required in England.

Conscription has never formed a part of the law of England; and is, indeed, so thoroughly opposed to all our notions, that it may safely be asserted that it never could, under any circumstances, take root in this country; indeed, there is little inducement for any English Government to wish to resort to such a system, since, for ordinary purposes, the existing machinery suffices to furnish the means of recruiting our armies; and should an emergency arise, calling for greater sacrifices, we have

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* "The conscription, which is an institution of the most democratic kind, as it subjects all citizens to the same obligation, injures in a high degree personal liberty, inasmuch as it prevents a man from following the profession to which he desires to devote himself, and forces him to sacrifice to the trade of arms the best years of his youth."—Works of Louis Napoleon, vol. ii. Edition of 1855.

It may be doubted whether an institution can be called democratic which presses heavily on the poor, but enables the rich man to escape its influence by a trifling pecuniary sacrifice. As to its effects upon personal liberty there can be but one opinion.

the experience of the past to justify us in the confidence that, for the defence of our country and liberties, no compulsory means would be required to call the entire nation to arms.

Impressment.

It is true that, up to a comparatively recent period, the practice of impressment prevailed as a means of recruiting for the navy, and to some extent also for the army,* and that under this system many cruel and oppressive proceedings took place. Impressment was, indeed, a kind of capricious conscription, without any of its redeeming features; but the force of public opinion, and a more just appreciation of the individual rights of the people, has removed this reproach, and the improved discipline of both army and navy, even under a criminal code much relaxed in its severity, proves the superiority of voluntary over compulsory labour.

First standing armies.

The body-guards attached to the person of the sovereign were the first "regular" troops in England; and though no existing corps can trace its direct pedigree beyond Charles the Second's reign,—the Yeomen of the Guard and the Gentlemen Pensioners,† established during the reign of Richard the Third and Henry the Eighth, actually formed the foundation of our standing army, in as far as they were the first permanent stipendiary

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* As late as the commencement of the present century, all "rogues, vagrants, vagabonds, and sturdy beggars," (terms to which those interested might give a very wide and general application,) were, under an Act of Parliament of 1799, liable to be seized and drafted in the army. Balloting for the militia too is a species of conscription; but although still the law of the land it is not, nor has it been for many years past, enforced.

† The appointments in these corps were saleable; and to them we may probably trace the institution of "purchase," as now existing in the army.

troops governed under special and exceptional laws, and owing an extra national allegiance to the person of the sovereign; their numbers were too small, and their cost too trifling, to afford grounds for apprehension or complaint, which the employment of a larger permanent military force would have justified in a period when it was found sufficient to raise troops for the prosecution of war, and to disband them after their services were no longer required; but the right of the sovereign to raise and keep up a permanent military force, and to require the nation to maintain it, having thus been admitted, it was not long before the extension of the principle aroused the public jealousy. The precedent once established, however, it was found no easy matter to limit the power of the crown in so essential a privilege; and it was not until the reign of William the Third that the Parliament succeeded in securing to itself the control of the military force, and in imposing those restrictions which, known as *the Mutiny Act*, effectually guard the national liberties, and prevent the army from becoming the instrument of either anarchy or despotism.

The Mutiny Act.

The main object and principle of this statute is to render the existence of a standing army dependent upon the will of the people as expressed by Parliament; and its very first clause accordingly declares it to be illegal "to raise or keep up" a military force without the consent of the legislature. The Act fixes the precise number of troops to be maintained for one year, which number cannot be exceeded without a special vote; it authorizes and defines the penal code to be established for the trial of military offences, affixing to each crime its limited punishment; it regulates the laws of recruiting and enlistment, and enters into the various details connected with the position of the soldier towards the state —always with a view to prevent the possibility of the

Its object and principle.

military element infringing the civil laws of the country and the rights of individuals.

Powers of the sovereign with respect to the army.

But, while means are thus adopted to restrain the power of the army, the prerogative of the crown is not the less respected; and the Act annually confers upon the sovereign the right to convoke courts-martial, and to promulgate "the articles of war." These clauses, in point of fact, confer upon the sovereign *the legal power* of exercising the supreme command of the army, as the royal prerogative in itself confers *the abstract right;* and this admission of the royal supremacy over the military force, as by law established, is strengthened by the oath which every soldier is required to take, and which places him, during the period of his legal military service, under the unconditional obligation of fidelity and allegiance to *the person of the sovereign.*

National jealousy of a standing army.

We live under so happy a rule, and have been so long accustomed to the admirable discipline of our army, and to its habitual respect for the civil laws of the land, that any seriously expressed apprehension of its becoming an engine of danger to the people would be scouted as an absurdity; and yet, when it is considered what an immense power a large body of armed and disciplined men must possess, and how circumstances might arise to admit of its misapplication, we cannot but feel the necessity for that jealous guarding against *possibilities* which our legislature displays in its laws relating to the army, and admire the statutes which, while they allow the fullest development to the legal powers of the military force, afford, at the same time, every security for the interests and the liberties of the people.

Supreme command vested in the sovereign.

The supreme command of the army, then, is vested in the crown; but as "the sovereign can do no wrong," the introduction of an intermediate agency becomes necessary as the organ of responsibility.

The Secretary of State for War.

The Secretary of State for War is the Minister *responsible to the country* for the efficient maintenance of the military establishments, and the due appropriation of the supplies voted by Parliament; he exercises, in person or through his agents, the immediate direction of the administrative duties of the army at home and abroad, and although, as not holding a military position, he does not interfere in the details of military command, Parliament holds him responsible for the efficiency of the army and the conduct of warlike operations.

Inconveniences resulting from a number of independent departments connected with army administration.

Up to the commencement of the Russian war the Secretary of State for the Colonies was charged with the political and civil administration of the army, and the various branches of the military service were directed by a number of distinct and independent departments which rendered unity and promptness of action extremely difficult, and tended to break the chain of official responsibility. Thus the Commander-in-Chief's functions were purely military, and extended to cavalry and infantry only; the Master-General of the Ordnance superintended and commanded the artillery and engineer services; the Secretary-at-War conducted the finance; and the Treasury had charge of the commissariat.

Consolidation of military departments.

The inconvenience of carrying on a war at a distance from home by means of so complicated and disjointed a machine soon made itself evident, and a consolidation of departments under a responsible Minister was one of the happiest results of the late war; the Colonial Secretary now resigned his connexion with the army, the office of Master-General was abolished, and the Ordnance Corps were placed under the Commander-in-Chief; the ancient office of Secretary-at-War was absorbed in the new institutions, and the Commissariat was placed under the direction of the War Department.

THE WAR DEPARTMENT.

Organization of the War Department.

The principal officers of the Ministry of War, under the Secretary of State, are,—

The two Under-Secretaries of State;

The Assistant Under-Secretary;

The Secretary for Military Correspondence.

Among these the responsibility of the different branches of the War Department is distributed.

Under-Secretaries of State.

Of the Under-Secretaries one is a ministerial officer, and represents the War Department in the House of Commons;* his term of office is accordingly liable to cease on a change of ministry; the other Under-Secretary holds a permanent appointment, in order that political changes should not affect the ordinary routine of office business, and that the information of the department may be gathered up into a centre capable of supplying successive ministries with comprehensive statements of the system and condition of the business. The salaries of the Under-Secretaries are 2,000*l.* and 1,500*l.* a year.

Assistant Under-Secretary of State. Secretary for Military Correspondence.

The Assistant Under-Secretary of State and the Secretary for Military Correspondence hold permanent offices, with salaries of 1,500*l.* and 1,000*l.* a year respectively.

Private Secretaries.

The Secretary and Under-Secretaries of State have each a private secretary attached to them.

Division of duties.

The War Office is divided into seventeen branches or departments, each of which is under the immediate charge of a Director or other superior officer, responsible to one of the Secretaries.

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* Were the Minister of War to be a commoner, the ministerial Under-Secretary of State would probably be selected from the members of the House of Peers, in order that the Department might be represented in both Houses.

Since the above was written, this case has actually occurred; the Minister is a commoner, and the Under-Secretary a Peer.

These branches are as follow :—

Branch.	Duties.
1 *Military Correspondence.*	Correspondence of a political and confidential character, and business relating to military and professional subjects ; appointments, promotions, honors, and decorations, and distribution of forces and armaments.
2. *The Chief Clerk's Branch.*	Business, correspondence, and appointments connected with the militia, yeomanry, and volunteer corps, and preparation of parliamentary returns.
3. *The Assistant Chief Clerk's Branch.*	Non-effective services of every description and business connected with discharges, desertions, passages, billets, the Mutiny Act, registry, and custody of public documents, &c.
4. *The Estimate Branch*	Preparation of army estimates and supervision of application of parliamentary grants.
5. *Fortification Branch* -	Fortifications and defences at home and abroad, engineer and barrack expenditure, estimates, for these services, plans, surveys, &c.
6. *Artillery Branch* -	Matters connected with field and garrison armaments.
7. *Army Medical* - -	Direction of the medical staff at home and abroad ; appointments and promotions, hospital arrangements, &c.

Branch.	Duties.
8. *Pensioners' Branch* -	Organization, equipment, and payment of pensioners, with correspondence, accounts, and registry relating to the subject.
9. *Chaplain's Branch* -	Business connected with military chaplains at home and abroad.
10. *Military Schools* -	Supervision of military schools, libraries, and army education generally; inventions and scientific subjects, and military manufacturing branches.
11. *Stores and Clothing Branch.*	Issues and custody of military stores, examining accounts of military and barrack stores, ammunition, arms, accoutrements, and preparation of returns on these subjects, supply of regimental clothing and necessaries, and accounts relating thereto.
12. *Contracts Branch* -	Inviting and accepting tenders for army services and correspondence connected with this subject.
13. *Commissariat Branch*	Direction of Commissariat Staff, preparation of Commissariat estimates, and examination of Commissariat store accounts; also the furnishing of supplies for the Commissariat abroad.

Branch.	Duties.
14. *Accountant-General's Branch.*	Preparation of accounts for parliament, book-keeping of receipts and expenditure, examination and allowance of commissariat cash accounts abroad, and of all military payments, except regimental subsistence, travelling allowances, salaries of War Department, examination of regimental clothing and contingent accounts, and of all claims under contract for engineer works and repairs, and for supplies of stores, clothing, forage, fuel, and light, &c., also all matters connected with rents of buildings and allowances in lieu of public quarters.
15. *Assistant Accountant-General's Branch.*	Examination of regimental accounts, and accounts relating to pensioners, the medical staff, military savings' banks, regimental pay lists, and army agents, staff pay lists, and correspondence connected with these subjects.
16. *Legal Branch* - -	Legal business connected with the War Department.
17. *Topographical Branch.*	Ordnance surveys, maps, plans, &c.

Each branch is under the immediate direction of a superior officer with a salary ranging from 600*l.* to 1,500*l.* a year, and is again subdivided into "divisions," under the charge of clerks.

Clerks.

The number of clerks on the establishment for the current year is 344; they are classed as follows, their

salaries rising by annual increase from the minimum to the maximum rates :—

Their salaries.

		£	£
13 Clerks,	1st Class, 1st Section	-	670 to 800
33 „	1st Class, 2d Section	-	520 „ 650
80 „	2d Class -	-	315 „ 500
218 „	3d Class -	-	100 „ 300
Total 344			

Temporary clerks.

When a pressure of business occurs temporary clerks are employed in addition to the regular establishment; of these there are at present 132, with salaries averaging 110*l.* a year.

Messengers.

Lastly, there are 45 office-keepers and messengers, with salaries varying from 90*l.* to 200*l.* a year.

Charge of War Department.

The total annual charge for the Department of the Secretary of State for War, including servants' wages and contingencies, amounts to 161,000*l.*

OFFICE OF THE COMMANDER-IN-CHIEF.

The purely military duties connected with the administration of the army are placed under the direction of

Commander-in-Chief.

"the General Commanding-in-Chief," who is nominated by, and responsible to, the Crown, for the discipline and efficiency of the service, the conduct and capacity of general and other commanding officers, and the interior economy and organization of the army.

His duties.

He appoints to regimental commissions, and submits the lists of officers for promotion to the Sovereign, after which they are inserted in the "Gazette" by the Secretary of State. He appoints likewise to the staff, but obtains the concurrence of the Secretary of State in all appointments of superior rank. It is also to be understood that the selection of officers for the command in chief of

expeditionary forces is made by the Cabinet alone. He decides upon questions relating to the exchange and the retirement of officers; approves and confirms the findings of General Courts-martial; receives the reports of General Officers at home and abroad, and issues all regulations referring to the exercises, the arms, the dress, and other details of the interior economy of regiments.*

Horse Guards.

The office of the General Commanding-in-Chief is called "the Horse Guards," and the military staff attached to it is as follows:—

	Principal Duties.
† *One Military Secretary*, with three Civil Assistants and 21 Clerks - - -	Promotions, Exchanges, Retirements, &c.
† *One Adjutant General*, with four Military Staff Officers and 22 Clerks - -	Discipline, Promulgation of Orders, Leave of Absence, Reports, Clothing, &c.
† *One Quartermaster General*, with three Military Staff Officers and 12 Clerks - -	Movements and Quarters of Troops, Routes, Embarkations, Encampments, Surveys.
† *One Deputy Adjutant General of Artillery*, with two Military Staff Officers -	Staff Duties connected with their respective Corps.
† *One Deputy Adjutant General of Engineers*, with one Military Assistant -	

* The relative positions of the Minister for War and the Commander-in-Chief are not, perhaps, as clearly defined as is desirable for the efficient working of these two important departments, and it is probable that some changes will require to be made in order to bring them into more complete harmony.

† These officers, as likewise their military assistants, draw their regimental pay, half-pay, or unattached pay, in addition to their staff pay.

Cost of the central administration of

The entire annual cost of the central administration of the army* is as follows :—

Department of the Secretary of State for War, inclusive of Messengers, servants, and Contingencies - -		£161,013
Commander-in-Chief's Office, Military Staff - -	£15,262	
Civil Employés, including Servants and Contingencies - - - -	17,389	
		32,651
Total - - - -		£193,664†

* Exclusive of regimental emoluments drawn by military officers employed upon the establishment.

† The absorption into one central ministerial office of the several departments among which, up to 1854, the administration of the army was divided, was not effected without some increase of expense; but the new establishment was formed during a period of extraordinary pressure, and it cannot be doubted that many modifications and changes involving reduction of expenditure will, in course of time, suggest themselves, and perhaps bring the cost of the War Office to little more than it amounted to under the old clumsy system. The charges for the different military departments in 1851–52 were as follows :—

Office of the commander-in-chief -	£17,012
„ of adjutant-general - -	12,197
„ of quartermaster-general -	5,961
„ of secretary at war - -	53,579
„ of Ordnance - - -	75,950
„ of Commissariat Branch Treasury	5,000
	£ 169,699

The increase of the present establishment would thus appear to amount to about 24,000*l.* a year. If we take into account

Being about $1\frac{5}{8}$ per cent. on the amount of the Annual Army Estimates.* Per-centage.

The department of the Secretary of State for War may be considered to be still in a state of transition; in consolidating the different branches of the public service, among which the administration of the army was, until a few years ago, divided, so many difficulties had to be overcome,—so many conflicting interests to be reconciled, that although the great object of bringing the whole Remarks.

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the reductions effected in the Colonial and Audit Office by the transfer to the War Office of that portion of their establishments employed in military business, the excess of the present over the former War Office expenditure will be considerably reduced.

* A comparison with the expenses of the War Ministry in Paris may not be out of place here:—

The War Office is presided over as with us, by a minister of war, who, being a general officer however, exercises conjointly with his ministerial duties the actual command of the army. Considering the strength of the French army, the establishment which conducts its supreme administration is very moderate, consisting as it does of only 530 employés of all ranks; these are classed as directors, chief clerks, and clerks. The salary of the Minister of War is 5,200*l.* a year; that of the Directors about 800*l.*; the superior clerks from 250*l.* to 500*l.*; other clerks from 60*l.* to 200*l.* Military officers when employed at the War Office receive only the ordinary pay of their army rank. The total cost of the French War Department, which comprises the government of Algeria and the direction of the gendarmerie, does not amount to 100,000*l.* a year, inclusive of servants' wages and incidental office expenses, or about three-fourths per cent. on the total army expenditure. It must be borne in mind, however, that the French army, though so much larger than our own, is not scattered over the globe, and that many of the duties which in England devolve upon the War Office are in France performed by the Officers of the Intendance, who, in each military territorial division, act as the direct representatives of the minister of war.

army under the direct control of one responsible Minister has been attained, it need not be a matter of surprise that some of the office arrangements are yet immature, and that a complete harmony of action does not yet exist among the various subordinate departments; but the tendency of all measures emanating from the War Office is so obviously in the direction of further centralization, that the creation of a War Ministry will doubtless be found to result in great advantage both to the efficiency of the military establishments and to public economy.

CHAPTER II.

ON THE COMPOSITION OF THE ARMY.

General and Staff Officers.

A knowledge of the composition of the army necessary to administration.

Vauchelle says: "Pour administrer, comme pour com-
" mander une armée, il faut avant tout savoir comment
" elle est faite;" that the administration, like the command of an army, requires above all a knowledge of its composition. It will be the object of this and the two succeeding chapters to present a sketch of the military force, showing its component parts; the means by which they are organized and formed into a whole; and the hierarchical chain which extends from the highest to the lowest ranks, and while conferring upon each individual his peculiar duties and powers, produces and maintains that subordination and order which, under the name of discipline, gives cohesion, vitality, and strength to the entire body, and adds to its material force an irresistible moral influence.

Discipline, its objects,

The Duc de Rohan has defined discipline as "habitual
" obedience to lawful command reduced to a science, and
" enabling every man to know and to do his duty,
" whether by the orders of a superior, or by the force of
" circumstances." The Duke of Wellington gave much the same definition in more concise terms when he described discipline as the art of "knowing one's duty
" and doing it." To produce the highest possible degree of discipline is the first object of a well constituted army, and the entire machinery of military organization in all its details is constructed with a view to this end. Thus each individual forming a portion of the army, no matter how low or how high, has a certain defined rank, duty, and responsibility, which he cannot evade or exceed, and

he yields the same implicit obedience to those placed above him as he exacts from those who are under his command. This habit of obedience, called subordination, could alone enable the will of one individual to give an immediate and united impulse to the energies of thousands, and a commander to carry out his plans with mathematical precision and regularity.

and results.

Gradations of military rank.

The gradations of rank, by means of which military discipline is maintained and military command exercised, are less an artificial institution than the natural growth of order and method; and it is not a little curious to remark how few changes these have undergone from the time that the Greeks and the Romans first reduced war to a science, down to the present day;* while in our service almost every military grade now existing may be found in the records of our earliest military organization.

The agents through whose means military command is exercised and enforced may be classed as follows:—

General officers.
Staff officers.
Regimental officers.
Non-commissioned officers.

The two former classes comprise what is called the General Staff of the Army, and will form the subject of the present chapter.

General Officers.

General officers,

This rank is composed of generals, lieutenant-generals, and major-generals.† The highest rank in the army,

* See Guichard's "Mémoires Militaires," and compare the ancient and modern words of command.

† The rank of brigadier-general is occasionally conferred upon colonels when placed in command of a brigade or other superior duty in the field. It is, however, a local and temporary rank only.

that of Field-Marshal, cannot be looked upon as a grade of military rank, but rather as a distinguished honor conferred upon royal personages, and general officers who have rendered eminent services.

On active service, the command of an army or corps d'armée is usually conferred upon generals, that of divisions upon lieutenant-generals, and that of brigades upon major-generals. Their rank

General officers are also placed in command of military districts, camps of instruction, and garrisons and fortresses; they are responsible for the efficiency and discipline of all troops under their orders, and the security of the posts entrusted to them; they correspond directly with the Commander-in-Chief, and are required to make themselves intimately acquainted with the geography, the resources, and the local features of their respective commands; they inspect and review the forces, furnishing half-yearly confidential reports upon the qualifications and acquirements of commanding and other regimental officers, and the state of discipline, interior economy and general condition of each corps serving within the command. In some cases general officers combine with their military command the civil government of a foreign possession or colony; but more commonly they exercise no civil functions, but are, on the contrary, under the jurisdiction of the civil governor, who cannot, however, interfere in the details of military duties; this is but in accordance with the spirit of our institutions, which everywhere assert the supremacy of the civil laws. In the event of war or insurrection, however, martial law (which is a virtual abdication of civil government) is proclaimed, and the commander of the military force then acts independently of the civil power. and duties. Civil governments held by general officers. Martial law.

The establishment of general officers of guards, cavalry,

Establishment of general officers.

and infantry of the line, is fixed by Royal Warrant of 6th Oct. 1854, at the following numbers:—

50 generals,
70 lieutenant-generals,
114 major-generals.

Total 234*

Numbers actively employed.

Of this number forty-two† are actively employed on the staff of the army, either in command of districts or camps of instruction in the United Kingdom, on the head-quarter staff, or in the Colonies.

Reserve.

The remaining number form a reserve, from which vacancies are filled or sudden demands supplied; but as 158 officers out of the 234 are above sixty-five years of age, the actual number available for active service is probably very limited.‡

Staff Officers.

Organization of the staff.

The staff of our army is organized on a different system from that of any of the continental states. In most foreign armies the staff is formed on the regimental principle with the ordinary grades of military rank; every staff officer is required to undergo a prescribed

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* The establishment of the Ordnance Corps is fixed as follows by the Royal Warrant of November 1854:—

	Artillery.	Engineers.	Total.
Generals - - -	6	3	9
Lieutenant-generals -	10	5	15
Major-generals - -	16	8	24
	32	16	48

† Exclusive of those employed in the East Indies, who are taken on the strength of the Company's service.

‡ In the French service, the effective and non-effective list of all ranks is kept distinct; and it would appear very desirable to introduce a similar system into our service.

course of study,* and to pass a certain period of service with each arm, in order to acquire a practical knowledge of the duties of cavalry, infantry, and artillery; having completed this, the successful candidate is appointed to the staff corps, where he rises through the different grades, the subalterns serving as aides-de-camp, and the captains and field officers filling the higher staff employments.

Recent measures of reform.

Hitherto with us, regimental officers have been selected for staff appointments, without any peculiar qualification being exacted, and without being struck off the strength of the regiment to which they belong; but a recent regulation tends in the direction of the continental systems, and cannot fail to prove of the greatest benefit to the service; under this arrangement, the senior department of the Royal Military College at Sandhurst has been converted into a staff school, to which 30 officers of the army, of not less than three years' standing, will be admitted by competitive examination, conducted by the Military Council of Education; after a two years' course of study, comprising the higher branches of mathematics, fortification, gunnery, reconnaissance, military drawing, foreign languages, military history, geography, and administration, the most successful competitors will be recommended for staff employment. Before being appointed to the staff, however, every officer is further required to serve for six months with each arm to which he did not previously belong, after which he is eligible for staff employment as vacancies occur, and enters upon his duties with at least six years' experience, and with the prestige and benefit of superior acquirements and practical knowledge.†

Qualifications of staff officers.

* "Tout métier doit être appris; c'est un axiom; et l'officier de l'état major loin d'être affranchi de la règle commune y est plus qu'aucun autre soumis."—Odier, Cours d'études sur l'Administration Militaire.

† *See* the chapter on Educational Establishments.

These regulations are so great an improvement, and afford such strong encouragement to the more deserving officers of the army, that the question of forming a distinct staff corps on the model of the continental corps d'état major may safely be left to time.

Constitution of the staff.

Our staff as at present constituted is formed of the following classes:—

1. General staff
   - Chief of the Staff.
   - Adjutant-general.
   - Quarter-master general.
   - Brigade Major.
2. Personal staff
   - Military secretary.
   - Aide-de-camp.
3. Garrison staff
   - Commandant.
   - Town or fort major.
   - Town or fort adjutant.

1. General Staff.

Chief of the Staff.

This important office was first introduced into the British army during the late Russian war with a view to the concentration of business at military head-quarters; but as, at present, it exists only during a period of war it can scarcely be classed among the established staff appointments. In the French, and other foreign armies in which the staff is a distinct scientific corps organized upon regimental principles, the *chef de l'état major* occupies the position and bears the responsibility of a commanding officer with regard to his own corps, while at the same time acting as the mouthpiece of the general in chief command. With us, where the staff is composed of several distinct and independent bodies, derived from different sources, the power and duties of the chief of the

staff must depend more upon the disposition of the general commanding than upon the regulations laid down for his guidance. While an adjutant, or quartermaster-general, act independently of each other and of the chief of the staff, the presence of the latter, instead of centralizing, must complicate, business and responsibility; but if, as is now the case at the head-quarters of the army in India, the chief of the staff is actually, as his title implies, the responsible agent for the execution of the orders of his general, and the immediate commandant of all military departments acting with the army to which he is attached, then he forms a powerful and valuable link in the chain of military responsibility, and must most materially relieve the officer in supreme command from many duties of detail and direct supervision.

Adjutant-General.

Position and duties of Adjutant-General.

The office of Adjutant-General is one of considerable antiquity, although the title is of comparatively recent date. In the commencement of the 16th century we already find "serjeant-majors" on the staff of the army,* charged with the promulgation of the orders of the General and the maintenance of discipline; and from that date downwards we find the office gradually rising in importance. It is now one of the most distinguished posts in the army; the adjutant-general being on the personal staff of the Sovereign, and performing functions of the most important nature in the military administration of the army.

The adjutant-general is the channel of communication between general and commanding officers and the com-

* The duties of this officer are to be found in full detail in the Harleian collection of manuscripts, under the head of "The Order of a Campe or Army Royall."

mander-in-chief on all matters relating to the discipline of the army in all its branches, of which he represents the supreme police. He is charged with the direction of the recruiting, the exercises, the clothing, the arming, and the equipment of troops; he promulgates the orders of the commander-in-chief, as well as military warrants and regulations, and corresponds upon all questions connected with enlistment and discharge of soldiers, the appointment of staff officers, and leave of absence. The confidential reports which general officers in command of districts or other military divisions are required to furnish as to the state and condition of all corps within their jurisdiction, are also addressed to the adjutant-general.

and his staff.

Deputy and assistant adjutants-general are stationed in the principal military commands at home and abroad, and stand in the same relation to the generals in command as the adjutant-general does to the commander-in-chief. The number of officers employed in the adjutant-general's department is at present 36, viz.:—

Numbers.

1 adjutant-general,
9 deputy adjutants general,
22 assistant adjutants-general,
4 deputy-assistant adjutants-general.

But these numbers necessarily vary with circumstances.

Staff officers retained on full-pay or half-pay.

Officers appointed to the general staff of the army may continue to be borne upon the strength of their regiments while under the rank of field officers, and draw their regimental pay accordingly in addition to their staff pay. If above the rank of captain, however, they cannot continue in their regiments, but exchange upon half-pay or unattached pay.

Quartermaster-General's Department.

Origin of office of quarter-master-general.

This, too, is an office of considerable antiquity, and was probably copied in modern armies from the "mensores" of the Romans, who were charged with all arrangements connected with the encampment of troops. In our own army we find quartermasters-general in the early part of Queen Elizabeth's reign; they are also called "chief harbingers," and were not, until a comparatively recent period, invested with military command; their duties having been altogether of a civil nature, such as the selection of ground for camps, the allotment of quarters and billets, and the superintendence of the pitching of tents. They were also charged with the maintenance of order among sutlers and other camp followers. As late as in the time of Marlborough, we find general officers refusing to receive the orders of the Commander-in-Chief from Lord Cadogan, then the quartermaster-general, on the ground of his inferiority of rank.*

Its duties.

At present the office of quartermaster-general ranks only next to that of adjutant-general, and like him, he is on the personal staff of the Sovereign, and the direct medium of receiving reports and conveying the orders of the commander-in-chief on all matters connected with the quartering, the encampment, and the march of troops, as also their embarkation and disembarkation. An important branch of the quartermaster-general's duties is the surveying of the country with the view to military operations; and he is accordingly required to furnish information not alone on its geographical and natural features, but its population and resources, the state of its roads, passes, bridges, and its general adaptability for the passage, the maintenance, and the security of troops. The distribution of camp equipage, and reference and decision on matters connected with barrack

* Symes.

damages and allowances, devolve upon this department, as likewise all correspondence relating to military science geography, topography, maps and plans, &c.

Want of a clear definition of duties.

There is, however, a want of a clear and precise definition of the actual duties of the quartermaster-general's department, which during the late war led to inconvenient encroachment upon the responsibilities of other services, and imposed upon it functions quite beyond its legitimate sphere of action.

No apparent necessity for separation between adjutant and quartermaster-general's departments.

The necessity for separating this department from that of the adjutant-general is not very apparent, and it is probable that the general course of study to be pursued at the staff school will lead to the amalgamation of the two most important branches of the staff.

Numbers.

The number of officers now employed in the quartermaster-general's department is 29, viz.:—

1 quartermaster-general,
8 deputy quartermasters-general,
12 assistant quartermasters-general,
8 deputy-assistant quartermasters-general.*

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* Baron Dupin, in his excellent work on the military institutions of Great Britain, says very truly: "These appellations of deputy, assistant, and deputy assistant, which may be found in most branches of the British administration, are ridiculous and of unnecessary length; their origin itself may be traced to one of the most pernicious abuses, which time has produced in the public services in Great Britain; a number of important places being bestowed upon men, whose birth, connexions, intrigues, or political influences supplied their deficiency in talents and activity; they accepted the salary and emoluments of their employment, the duties of which they performed by a delegate called a deputy; afterwards it became customary to give the title of deputy to every person who served immediately under the orders of the head of a department."

It would be difficult to assign any sufficient reason why the officers of the staff should not be distinguished merely by the ordinary titles of military rank.

Brigade Majors.

Duties of brigade majors.

These staff officers stand in the same position towards a brigade that the adjutant-general does towards the army, the assistant adjutant-general to a division, or an adjutant to a regiment; he is responsible, under the officer commanding, for the discipline of the body of troops to which he is attached, and to which he conveys the orders of the general in command; he keeps the rollster of brigade duties, inspects guards and picquets, and is charged with the general direction of military exercises and evolutions. There is generally a brigade major with each major-general's command. There are now 30 officers holding this appointment; they must be regimental captains, and remain on the strength of their regiments while employed in these staff duties.

Numbers.

2. Personal Staff.

Military Secretary.

Position and duties of Military Secretary.

The Military Secretary is the administrative and financial adviser as well as the confidential secretary of the commander-in-chief. He is the medium of communication on all matters connected with the promotion, retirement, and exchanges of officers; indeed, on all subjects which do not fall within the province of the adjutant-general's or quartermaster-general's duties.

General officers in important chief commands are allowed a military secretary or assistant secretary, who conducts their correspondence and acts as financial adviser.

Origin of the office.

This office was originally a civil one. We find no mention made of military secretaries before the end of the seventeenth century, when there was a "secretary to the commander-in-chief" in King William's army in the Low Countries, with the pay of 10*s.* a day, but without military rank; indeed, as late as 1793, the secretary to

the commander-in-chief at the Horse Guards was a clerk with 10*s.* a day; since then, however, the appointment has become purely a military one, and is now held by a general officer, and from the important and confidential nature of its duties, it is highly considered. The military secretaries of general officers are usually regimental captains or field officers.

Knowledge of finance necessary, but seldom possessed.

Military finance, which forms an important part of the military secretary's duties, is a subject which is seldom sufficiently understood by the officers of the army, nor is it a branch of knowledge which can be mastered without much study and application. So rarely indeed are military officers found to possess the requisite knowledge of finance and account that it is usual, in large operations, to attach a commissariat officer to the headquarters of the army in the field, to perform this part of the military secretary's duties, and to relieve him and the general commanding from a responsibility which, partly from their time and attention being absorbed by their more immediate duties, and partly from want of the requisite training, they are seldom in a position to meet.*

Suggestion to appoint a financial secretary.

It would, perhaps, prove convenient to limit the duties of a military secretary to matters of military correspondence, and to appoint a commissariat or Treasury officer with the title of "financial secretary" to act as the adviser of the general commanding in questions involving expenditure, in all positions of sufficient importance to call for such an appointment.

Numbers.

There are at present six military secretaries and ten assistant military secretaries on the establishment.

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* In the navy the difficulty of finding executive officers possessed of the requisite knowledge is so obvious that the appointment of "secretary" to admirals and commodores is almost invariably conferred upon paymasters and pursers.

Aides-de-Camp.

Every general officer holding a command is entitled to a certain number of aides-de-camp, according to his rank, the commander-in-chief being allowed five, generals three, lieutenant-generals and major (or brigadier) generals, one each.*

Duties of aides-de-camp.

Their duties are to convey the orders of the general officers to whom they are attached, and which are to be obeyed as implicitly as if they proceeded directly from the mouth of the general.†

Position.

The position of an aide-de-camp towards his general is of the most confidential kind, as he lives with him rather as a member of his family than a subordinate officer.

Qualification.

Aides-de-camp must have served two years with their regiment before being eligible for staff duty; they may hold the rank of either captain or subaltern, and are continued on the strength of their regiments while on the staff.

Numbers.

The number at present on the establishment is 69; exclusive of the extra aides-de-camp whom general officers are allowed to place upon their staff, but who receive no staff pay.

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* Officers holding the rank of full colonel in the army may be appointed aides-de-camp to the Queen. This is an honor usually conferred for distinguished service, but does not involve the performance of any military duty.

† The duties of an aide-de-camp in the field are often most important. An order imperfectly understood or negligently conveyed may destroy the most skilful military combinations, while quickness of observation, a retentive memory, and general intelligence on the part of an aide-de-camp, may prove of the utmost value to the general. Symes, writing nearly a century ago, says: "The same qualifications" (professional knowledge) "are required in aides-de-camp, though but seldom to be found; for in general, to the great detriment of the service, they are filled by young officers without experience or capacity."

3. Garrison Staff.

Position and duties of garrison staff officers.

The main distinction between the general and the garrison staff is, that while the former consists of officers temporarily detached from regimental duty to hold staff appointments, the latter are permanently attached to forts and garrisons, and perform only local duties of supervision or detail.

These appointments are usually conferred upon old and deserving officers, or non-commissioned officers, as a reward for past services, and an honorable retirement from the more active duties of military life.

Commandants of fortresses or garrisons, who exercise the supreme command within their jurisdiction, in which even the presence of a superior officer would not supersede them. These are thirteen in number.

Town or Fort Majors, who perform the same functions with regard to garrison duty that brigade majors do with moveable bodies of troops. It is their duty to tell off the guards, and keep the rollster of all garrison duties. Applications for escorts, working parties, fatigue parties, &c., are addressed to the town majors. Of these there are fifteen now employed.

Town or Fort Adjutants are employed either under town or fort majors, or alone in less important posts, not requiring the presence of officers of the superior rank.

These appointments are commonly conferred upon non-commissioned officers, specially commissioned for the local duty, without necessarily holding the rank of a commissioned officer in the army. They are fifteen in number.

*Provost Marshals.**

In almost all the armies of the Continent there is a corps formed from the picked men of all arms who act as

* Grose gives a full and very amusing account of the duties and emoluments of provost marshals in earlier times; the

the police of the army on active service, and in time of peace perform garrison or ordinary constabulary duties in aid of the civil power. The nature of our institutions forbids the employment of a military body in the ordinary administration of the laws, and even the Irish constabulary, which in its organization approaches more nearly to the gendarmerie of the Continent, is rendered by its constitution perfectly distinct from the military force, and independent of military control. We have thus no organized police force to act with an army in the field, a want that is attended with very serious detriment to discipline and good order. When an army proceeds on active service, it is usual to commission a military officer as provost marshal, placing at his disposal a small number of non-commissioned officers and men; such an arrangement, though it perhaps ensures the more prompt punishment of glaring offences, cannot act as a sufficient restraint or prevention of crime, and there appears to be no good reason why the *cadre* of an efficient military police force might not at all times be kept up, and on the outbreak of a war enlarged to meet the requirements of its more extensive functions on service in the field.

Inconvenience of having no permanent military police force.

The duties of a provost marshal and his men are not such as can be well performed without preliminary training, entrusted as they are with almost unlimited power over criminals detected in the act. A high degree of temper, judgment, and intelligence are requisite, and it is not to be expected that these qualities will often be found united

Duties of provost marshal.

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office appears to have been a very lucrative and important, though by no means an agreeable, one. One of the principal sources of the marshal's income was a tax levied upon the "harlotts of the campe," a class of persons who appear to have formed a recognized part of the military establishments, and who were specially included in the Articles of War as subject to military law and discipline.

in the men who for the sake of a small additional rate of pay volunteer for an arduous and unpopular service.

The office of provost marshal is thus a temporary staff appointment, usually conferred upon a regimental subaltern, who remains upon the strength of his regiment while so employed.*

Recapitulation of numbers of staff officers.

The following are the numbers of military officers now employed upon the Staff of the Army :—†

General commanding-in-chief	1
Lieutenant-generals	9
Major-generals	32
Colonels	9
Adjutant-general's department	36
Quartermaster-general's department	29
Military secretary and assistant secretaries	16
Aides-de-camp	69
Brigade-majors	30
Commandants	13
Town or fort majors	16
Town, fort, or district adjutants	16
Garrison quartermasters	2
Total	278

* It is said to have been at one time in contemplation, during the late war, to attach a body of the Irish constabulary to the army, and there is no doubt that this admirably trained and disciplined force might have proved of great value in the field ; but, being a civil corps, it would have been difficult for it to have exercised the same authority over the troops that a force organized on military principles and forming a part of the army would have done. A considerable number of constabulary officers were attached to the Commissariat in the Crimea, and though they were necessarily ignorant of the departmental duties, their activity and intelligence proved of great use.

† Exclusive of the officers of the Queen's army serving on the staff in the East Indies.

CHAPTER III.

ON THE COMPOSITION OF THE ARMY.

Regimental Organization.

The three arms.

All armies are composed of three distinct classes of soldiery, technically called "arms," each of which has its peculiar tactics and organization, and performs one of the three main functions in military operations, united action in which is the vital principle of the art of war.

Infantry. Cavalry. Artillery.

The infantry as the most numerous body, and the one least limited in its powers of action, and most independent of extraneous support, is the main force, to which cavalry and artillery act as auxiliaries. For general operations, however, the co-operation of the three arms is indispensable to success; and the ordinary events of the shortest campaign, skirmishes, pitched battles, pursuit and retreat, sieges and sorties, demand in turn the peculiar action of each arm, either singly or united.*

Their proportions to each other, and peculiar wants.

As each of these portions of the army has its special functions, so each has its particular wants arising therefrom; the former fall within the province of the tactician, the latter are the business of the administrator, to whom it becomes important therefore to study the composition of armies, the proportions which its component parts bear to each other, and the nature of the requirements of each, in order that a military "state" may at a glance convey an approximate estimate of the supplies requisite for its efficiency, health, and comfort.

Thus, a commissariat officer placed in professional charge of an army, a division, or a brigade, should be

* The corps of engineers, though as indispensable as either artillery or cavalry, and more especially so in operations connected with the attack or defence of fortified places, is rather a scientific body of staff officers than an "arm" of the service.

able, on the most general description of the force to which he is attached, to form an opinion of its wants, and to be enabled to estimate the amount of money, transport, provisions, and forage which should be necessary for its subsistence, and thus to anticipate the demands to be made upon him; such an estimate may probably fall short, or, more frequently, exceed the actual requirements; but a knowledge of the usual proportions maintained between the different arms, and of the numbers in officers, men, and horses composing a given force, will, as a general rule, form an approximate base for administrative calculations, and not only effect a saving of time, but tend to train the administrator in habits of promptitude and foresight.

to be studied by military administrators.

A short sketch of the divisions and subdivisions of the proportions, and of the organization of the different branches of the army may not be out of place in a work having for its object the elucidation of the principles upon which military administration should be conducted.*

Infantry.

Infantry.

This arm, though it possesses neither the weight and rapidity of movement of cavalry, nor the science and destructive power of artillery, is the one upon which the success of all military operations on a large scale must mainly depend; in all armies accordingly it greatly outnumbers the other arms collectively; in our own, it forms about two-thirds of the entire military force.

* The following statement will show that a very considerable difference prevails in the proportions maintained in the armies of different nations:

	England.	France.	Russia.	Turkey.	Austria.	Prussia.	Spain.	Belgium.	Sardinia.
To every 100 Infantry, Cavalry . .	12	27	17	17	15	19	14	19	18
" " Artillery . .	18	15	8	13	10	13	12	17	14
" " Engineers .	4	4	5	2	3½	5	2	7	4

The infantry of the English army is composed of,—

1. Foot-guards.
2. Infantry of the line.

Classification into regiments and battalions.

The great distinctive classification of these corps is into regiments and battalions; a regiment may consist of several battalions, or of one only, and does not therefore represent any positive number of men. A battalion now consists of twelve companies, of which ten are called service companies and two depôt companies,* and its effective strength is one thousand men.

The foot guards.

1. *The foot-guards* consist of three regiments, called the brigade of guards, and forming altogether seven battalions; each regiment is commanded by its lieutenant-colonel, and the battalions are under the immediate command of majors, responsible to the regimental lieutenant-colonel. Officers in the guards enjoy one step of army rank superior to their regimental commission; thus, an ensign in that corps is a lieutenant, a lieutenant a captain, and a captain a lieutenant-colonel in the army; this extra rank conveys no privileges in the regiment, but officers of the guards, when doing duty in camp, in garrison, or on detachment *with other troops*, enjoy the benefit of their army rank; thus, a regimental captain of the guards is placed on the rollster for field-officer's duty, and a lieutenant in the guards could not be required to mount a quarter guard in camp, or to perform subaltern's duty out of his regiment. On exchanging into the line, officers of the guards have their army rank converted into regimental rank, and a captain of the guards may thus

* Several depôt companies are joined into battalions, under the command of a local commandant with the rank of lieutenant-colonel; but the companies of each distinct corps continue under the immediate command of their respective regimental officers.

exchange on equal terms with a lieutenant-colonel commanding a regiment of the line.*

Their numbers. The brigade of guards consists of 254 officers, 456 non-commissioned officers, and 5,600 men, giving about 5 officers and 8 non-commissioned officers to every 100 rank and file.

Infantry of the line. 2. *The infantry of the line* consists of 100 regiments, numbered in succession, and one "brigade" of rifles. The latter is composed of four battalions, and of the former twenty-five are composed of two and one of four battalions, making in all 133 battalions of infantry; some of these corps are distinguished as fusiliers, light infantry, Highlanders, rifles,† &c.; but they all bear the regimental number, which regulates their order of precedence, and these titular distinctions confer no additional emoluments or privileges.‡

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* Although so high a privilege gives rise to some jealousy in the army, the fact of the brigade of guards having always sought active service before the enemy, and there distinguished themselves by their brilliant courage and admirable discipline, has greatly tended to disarm the feeling of envy which so great a start in the military career would otherwise justify. Were these corps, as their name would imply, engaged only in the honorable but peaceful and agreable duties of furnishing guards of honor to the royal household, the privileges they enjoy would probably have long since been withdrawn in justice to the army, and in deference to public opinion; the practice lately established, of promoting officers of the line into the guards for distinguished service has further contributed in some degree to reconcile the army to the privileges of the household troops.

† 7 light infantry corps, 5 regiments of fusiliers, 8 of Highlanders, 1 rifle regiment, and the rifle brigade; during the Peninsular war the latter counted no less than eight battalions.

‡ The order of precedence as established by the Queen's regulations is as follows:—

1. Life guards and horse guards.
2. Horse artillery.

[3. Cavalry

When circumstances render an increase of the army necessary, it is usual to add battalions to existing regiments instead of forming new regiments; occasionally the requisite augmentation is effected by raising the number of companies of a regiment to *fourteen;* by this means the effective strength is increased without necessitating an additional regimental staff. Augmentation by means of second battalions.

The following is the effective strength of a battalion :— Composition of a battalion of infantry.

I. Regimental staff (officers)	1	lieutenant-colonel,	
	2	majors,	
	1	adjutant,	
	1	surgeon,	
	3	assistant surgeons,	
	1	paymaster,	
	1	quartermaster.	
Total	9	staff officers	9
II. Company officers	12	captains,	
	14	lieutenants,	
	10	ensigns.	
Total	36	company officers	36

Warrant officer, 1 schoolmaster.*

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3. Cavalry of the line.
4. Royal artillery.
5. Royal engineers.
6. Foot guards.
7. Veteran battalions.
8. Infantry of the line, in numerical order, with exception that the Royal Marines take rank next after the 49th, and the rifle brigade after the 93rd regiment of the line.

This order of precedence refers to parade only; on all other occasions the distribution of corps is regulated according to the disposition of the general or other officer commanding.

* This is a rank recently established, and the only warrant rank recognized in the army; in corps in which there is no

Regimental staff of non-commissioned officers.	1 serjeant major,	
	1 quartermaster serjeant,	
	1 paymaster serjeant,	
	1 orderly-room clerk,	
	1 armourer serjeant,*	
	1 hospital serjeant,	
	1 drum or bugle major.	
Total - -	7 staff serjeants	7
	Total - -	52

—	—	Serjeants.	Corporals.	Drummers.	Privates.	Total Non-commissioned Officers, Rank and File.
Companies, Non-commissioned Officers, Rank and File.	10 Service Companies - -	45	45	23	810	—
	2 Depôt Companies - -	5	5	2	90	—
	Total - -	50	50	25	900	1,025†

giving a total of all ranks of 1,077 as the effective strength of a battalion of infantry.†

Regimental Staff Officers.

Regimental staff lieutenant-colonel.

The *lieutenant-colonel* ‡ is the officer responsible for the discipline and efficiency of his battalion, and for all

schoolmaster, an assistant schoolmaster, with the rank of serjeant-major, is substituted. *See* "Educational Establishments."

* A school of training for armorer serjeants has recently been formed in London.

† Infantry battalions serving in India are increased by 2 officers, 10 non-commissioned officers, and 250 rank and file, making their total of all ranks amount to 1,339.

‡ Now that the "colonelcy" of a regiment is merely a nominal rank, involving no military duties or command, and

that appertains to its interior economy, its equipment, and organization.

His authority is immediately supported by two *majors*, who form an intermediate link between the regimental command and the captains of companies; when a regiment is divided, the command of a wing devolves upon the senior major. Major.

The *adjutant* is the regimental representative of his commanding officer; he is the medium of regimental correspondence, promulgates and conveys orders, receives and records reports and applications, keeps the rollster of regimental duties, exercises a general supervision over the discipline and the condition of the corps, and in all matters supports and enforces the authority of the lieutenant-colonel. The adjutant is always a regimental subaltern, and receives an additional rate of pay for the extra duty and responsibility imposed upon him.* Adjutant.

The *surgeons and assistant surgeons* direct the hospital and medical duties of the regiment; they are responsible in their professional capacity to the Director-General of the Medical Department and the principal medical officer on their station, and in their military capacity to the Surgeon and assistant-surgeon.

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conferred only as an honorable vehicle for a pension, the title of lieutenant-colonel, which originated in the practice of the colonels, who *owned* regiments, deputing their command to a subordinate, might with advantage be abolished, or substituted for that of major; this latter title still remaining, as in the Ordnance and Marine corps, merely a brevet distinction given to captains for long or meritorious service. There is the more reason for this change since a large proportion of the lieutenant-colonels commanding regiments have obtained the rank of colonel, under the Royal warrant of 6th October 1854.

* In most foreign armies, the adjutant is taken from among the captains; and it would, perhaps, be desirable that with us an officer performing such important functions in the regimental economy should hold a rank superior to that of a subaltern.

officer commanding the regiment. They are required to be present with their regiments under all circumstances, even in action, and in siege operations they accompany the troops into the trenches

Qualification. Five years' service is requisite to qualify an assistant-surgeon for promotion to the rank of regimental surgeon, and the latter must have served ten years in the army before being eligible for a superior rank. In cases of pre-eminent merit or distinguished service in the field, this rule, however, may be relaxed.

Position. Regimental medical officers, though belonging to the army medical staff generally, to which they return on promotion, form an integral part of regimental organization, and should identify themselves as much as possible with the corps to which they are attached, and to the efficiency and comfort of which their skill and labors must materially contribute.*

Paymaster. Duties and position. The *paymaster* draws, disburses, and accounts for the pay of officers and men; he is authorized to muster the regiment from time to time, and is financially responsible only to the Secretary of State for War, to whose office

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* The position of this class of officers, though greatly improved of late, is hardly yet appreciated at its true value in our army. In addition to the peculiar danger attending daily contact with every form of disease that can afflict the soldier, and exposure to all climates and the ordinary hardships of military service, the regimental surgeon shares with the combatant the more prominent dangers of the battle-field and of other warlike operations; and he is expected to display that high and rare courage which can enable him, without the aid of the excitement that must animate the soldier while in conflict with an enemy—with no incentive, indeed, beyond the sober sense of duty—to retain his coolness, judgment, and self-possession, and to devote himself to his peaceful professional duties in the face of the most imminent danger and in the midst of carnage.

his accounts are rendered quarterly. Paymasters are frequently chosen from among the subalterns of a regiment, who, in accepting the office, relinquish the line of military promotion; but they are not uncommonly civilians. Paymasters hold the relative rank of captain, and on retiring, after a certain period of service, they obtain the honorary rank of major. They are required to furnish a bond of security for 2,000*l.* before entering upon their duties.

Quartermasters.

Quartermasters are the stewards of the commanding officers, to whom they are responsible for the proper performance of their duties; these consist in receiving and distributing the provisions, forage, fuel and light, clothing, and necessaries of their regiments, and keeping accounts of the same. They are further charged with the supervision of barracks and other public buildings in the occupation of their regiment, and of every description of barrack furniture; they receive over the barracks on marching in, and deliver them back to the barrack-master on the marching out of troops; they accompany the barrack-master on his monthly inspections, and assist in the assessment of damages and deficiencies incurred by the troops; they are regimentally responsible for the cleanliness of quarters or camp, and have a corporal and twelve pioneers under their immediate orders. This post is bestowed almost invariably upon non-commissioned officers. Quartermasters hold the relative rank of ensign or lieutenant, and can retire after a certain period with the honorary rank of captain.

Duties.

Relative rank.

Company-Officers.

Company officers.

Each company of infantry is under the immediate command of a *captain*, responsible for the discipline, the exercises, the arms and clothing, and the accounts of his men; and upon the activity and attention of captains of

companies the efficiency of a regiment most materially depends.

Each captain is assisted by two *subalterns*; though distinguished by the ranks of *lieutenants* and *ensigns*, there is no difference in the duty or responsibility of these officers.

It is by means of the foregoing gradations of rank that the commands of the lieutenant-colonel of a corps are executed, his responsibility supported, and the various duties connected with the management of a military body conducted with regularity and precision. But in order to carry out the details of regimental command another element is employed; this consists of *non-commissioned officers*, who, living in constant and familiar intercourse with the common soldiers, form a valuable intermediate link between officers and men, and exercise an active supervision and control, which, without assuming the formality of the superior commands, exerts a powerful influence in the maintenance of good order and subordination, in restraining and instructing the soldier, and by warning and example inculcating habits of discipline.

Non-commissioned officers.

Their duties.

Serjeant-major. The *serjeant-major* is the chief of the regimental staff of non-commissioned officers, and holds a position which, if properly exercised, is of the greatest importance to the regiment; he is, in fact, a non-commissioned adjutant, and his rank is judiciously calculated to give him a full influence over the men, without at the same time withdrawing him from familiar contact with them.*

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* The French call their serjeant-major "adjutant," but from the practice which exists in that service of officers interfering more directly in the details of regimental duty than is the case with us, he is not in so influential a position; it would hardly be possible to increase the rank of our serjeant-majors

The duties and powers of the other classes of non-commissioned officers* are strictly defined, and thus the chain of responsibility and subordination extends, link by link, from the lieutenant-colonel downwards to the private soldier, and produces that cohesion and mechanical regularity of action which forms the first principle of the military system.

Three battalions of infantry ordinarily form a brigade, and two brigades a division. Brigades and divisions.

Although the nominal strength of a battalion in the field is 1,077 officers and men and 74 horses, including regimental baggage animals, the actual force under arms never amounts to these numbers, and a brigade of infantry on service seldom exceeds 2,500 men, with 200 horses; nor must it be imagined that this reduced number represents the effective military strength, since, in consequence of the want of proper administrative corps in our service, a regiment has to furnish a very large proportion of its men for the various non-combatant duties incident to a campaign. After each officer of the regiment has been provided with a servant, and some with several servants, the staff make their demand for bât men and orderlies, the hospital then requires attendants, the Nominal and effective strength of a military force.

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without detriment to their usefulness, but their position in other respects would appear capable of improvement.

* A regimental serjeant and twenty privates, enlisted for the purpose, are taken from the effective strength of a regiment to form the band, the public providing only the ordinary regimental pay, and the difference (for it would be impossible to secure the services of good musicians at the rate of pay given to the common soldier) is made up by stoppages from the officers on appointment and by annual subscriptions. In no other army is the regimental officer required to contribute to the maintenance of the band. In like manner a corporal and twelve privates are selected to act as pioneers; these men are under the direct command of the quartermaster.

commissariat must have guards, escorts, fatigue men, &c., and the actual fighting power of a regiment is thus greatly reduced, while the discipline of the corps is by no means improved by the withdrawal of a large number of men for employment in non-military duties.

A corps of workmen.

The establishment of a corps of workmen, whether as a distinct body or by an addition of a small number of men to existing regiments, to be withdrawn from their corps when wanted for service in the field, would remedy a defect in our system which has long been the subject of just complaint on the part of military officers, while it would be equally desirable as a measure of administration.

to avoid weakening the combatant force.

This weakening of the combatant force does not, however, effect the arrangement of supply duties, since the commissariat must compute, not the number of bayonets, but the number of mouths.

Numbers of infantry.

The entire force of the infantry of the line is estimated for the current year at 58 battalions on the East India Company's establishment* and 74 battalions on the British establishment, making a total of 6,165 officers, 11,315 non-commissioned officers, and 139,550 rank and file.

Cavalry.

Composition of the cavalry.

This arm consists of 28 regiments, viz. :—

1. Household cavalry. { 2 regiments of life-guards. / 1 „ horse-guards.
2. Cavalry of the line. { 10 regiments of heavy cavalry. / 5 „ lancers. / 5 „ light dragoons. / 5 „ hussars.

* The East India Company can by right of its charter claim military assistance from the British Government on condition of defraying the charges for pay, subsistence, and transport of all troops belonging to the Queen's army that may be placed at their disposal.

The regiments of the household cavalry are divided into 8 troops of 40 men each, and amount in all to 192* officers, 162 non-commissioned officers, 1,053 rank and file, and 825 horses.

These corps, which furnish royal escorts on all state occasions, are not generally employed on active or foreign service.

The ordinary strength of a regiment of cavalry of the line is six troops of 68 men, but on active service it is increased to ten troops; the *personnel* of a cavalry corps does not materially differ from that of an infantry regiment; the title of cornet is substituted for that of ensign; there are the additional ranks of riding-master and veterinary surgeon, and some trivial differences in the grades of non-commissioned officers.

Strength of a cavalry regiment.

The following is the effective strength of a cavalry regiment on service :—

	2	lieutenant-colonels,
	2	majors,
	10	captains,
	23	subalterns,
	1	paymaster,
	1	adjutant,
	1	quartermaster,
	1	surgeon,
	1	assistant surgeon,
	1	veterinary surgeon.
Total -	45	officers,
	71	non-commissioned officers,
	674	rank and file.
Total -	790,	with 703 horses.

* The officers of the household cavalry, like those of the foot-guards, have the benefit of one step of army rank, not

As in the infantry, three regiments of cavalry form a brigade, and two brigades a division; sometimes a regiment of cavalry is attached to an infantry division, but more commonly this arm is formed into independent brigades.

Our cavalry force consists of the following numbers:—

——	Officers.	Non-com'd Officers.	Rank and File.	Horses.
Household Cavalry -	99	162	1,053	825
Cavalry of the Line -	954	1,479	15,514	13,736
Total -	1,053	1,641	16,567	14,561

Supply Duties of cavalry corps.

A cavalry corps is, perhaps, more difficult to supply than any other military body. It is sometimes supposed that mounted men might be more independent of transport than infantry, and that thus one great difficulty in supply duties is met. But it must be remembered that the cavalry is required to perform rapid marches, which preclude it from carrying its own supplies, and that this very rapidity and facility of movement necessitates a corresponding activity on the part of the commissariat. Again, it is not only men who have to be fed, but horses too, and although the resources of most countries may to a certain extent be relied upon for the supply of forage, and every cavalry soldier should, if possible, be required to carry a portion with him, the chief reliance must still be on the commissariat, whose transport must be in a position to keep up with the rapid marches and the uncertain movements of a cavalry force.

throughout all grades, but in those of major and lieutenant-colonel, which carry respectively the army ranks of lieutenant-colonel and colonel.

ARTILLERY.*

The entire English artillery is called a "regiment," though, considering its constitution, such a term is not applicable to this force, which never does and never can act together in a body. It consists of 14 battalions, each of eight companies, of foot artillery, and one, of eight troops, of horse artillery. On active service in the field it is usual to attach two or more batteries of artillery to each infantry division, and one troop of horse artillery to each brigade of cavalry. Its organization.

A field battery consists of six guns, under the command of a first captain, assisted by a second captain and three subalterns, with 10 non-commissioned officers and about 220 rank and file; the *materiel* consists of 28 carriages, including store, medicine, forage, and water carts,† with 210 horses. The average strength of the Composition of batteries.

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* The military members of the various trains of Artillery which, up to that period, were organized anew for every military expedition, were first embodied and formed into a distinct and permanent corps under a Royal warrant by Queen Anne in 1705. Previously to this period infantry soldiers assisted to work the guns attached to their regiments, and sailors were employed as "gunners" in the seaports and garrisons. In 1727 the Artillery consisted of four companies, in 1755 it was raised to fourteen, and in the year following to sixteen companies. In the Army List of 1755 we find under the head of "Regiment of Artillery," 1 colonel commandant, 14 captains, 14 captain-lieutenants, and a number of lieutenant fireworkers; the rank and file were bombardiers, gunners, and matrosses.

† This is the regulated equipment (*vide* the "Handbook for Field Service," published by the Committee of the Royal Artillery Institution). But it rarely happens that in active operations the full number of carts is forthcoming; it would, for instance, be very unsafe to rely upon the aid of the artillery forage carts.

artillery attached to an infantry division may be quoted at 450 officers and men and 420 horses.

Composition of troops.

A troop of horse artillery likewise consists of 6 guns, with 259 officers and men, and 272 horses.

The regimental rank of major does not exist in the artillery. The captains are divided into two classes, and there is only one class of subalterns, lieutenants. A distinct medical staff is attached to the artillery under the direction of a deputy-inspector-general, four senior surgeons, and a staff of surgeons and assistant-surgeons sufficiently large to allow of one of the former and two of the latter, as also one veterinary surgeon, being attached to each battalion.

The non-commissioned ranks differ little from those of the line; the rank and file are distinguished as corporals, bombardiers, gunners and drivers.

Siege train.

The siege or battering train, comprising the grand depôt of artillery stores of all kinds, necessarily varies in extent with the nature of operations and the position of an army, and it would therefore be difficult to lay down any rules as to the composition of such a body, either in men or horses.

Supply duties.

As regards commissariat arrangements, the siege train generally forms a separate charge, and considering the vital importance of the means of furnishing ordnance and small arms ammunition to the whole army, too much attention cannot be bestowed upon the regular supply of forage for the horses attached to the train.

Artillery transport.

It is usual to attach to each division a certain quantity of transport for conveyance of reserve ammunition; and the duty of supplying the horses or other animals forming this body devolves upon the divisional commissariat officer.

A field train department, consisting of a chief commissary with a staff of assistant and deputy-assistant commissaries of ordnance, is charged with the custody and distribution of ordnance stores in the field; this corps is about to be absorbed in the military store department. Field train.

The strength of the Royal Artillery is as follows:—

——	Officers.	Non-com'd Officers.	Rank and File.	Horses.
Horse Brigade -	70	146	2,154	1,880
Foot Artillery -	811	1,495	19,433	4,374
Total - -	811	1,741	21,687	6,254

The remarks made with reference to the supply of cavalry apply also to the artillery, for although their carriages may help to relieve the commissariat transport, and every gun should on the march carry its three days' supply of forage, yet a sudden and rapid advance, bad roads, or the prospect of an action, might necessitate the carriages being disencumbered of their supplies; and the commissariat should always be prepared to provide against these and similar contingencies,* and should not place reliance upon any but its own resources. Supply duties.

The three main arms of the British army having thus

* On the advance towards Sevastopol, the author with some difficulty prevailed upon the artillery of the division to which he was attached to carry three days' forage, but the first gun fired at the Alma was the signal for disembarrassing the carriages of hay and oats, as it was for the infantry to throw away their blankets, kettles, and rations. The inability of the commissariat to provide a fresh supply of forage or provisions would have been ill excused by the fact of the previous issue; the responsibility of administration is unceasing, and circumstances, though they may lessen, can never remove it. Among its various functions, that of being always in a position to remedy the neglect, the carelessness, the improvidence, or the waste of the soldier is not the least difficult or the least frequent.

been reviewed, there remain to be noticed several other bodies, organized, more or less, on military principles:—

1. The Corps of Royal Engineers.
2. The Colonial Corps.
3. The Administrative Corps.*

The Engineers.†

Royal engineers.

This corps, until very recently, was composed of officers only, and had a separate body of sappers and miners attached to it; of late the two have been amalgamated into one corps, called the Royal Engineers. It consists of 8 colonels-commandant, 15 colonels, 37 lieutenant-colonels, 60 first captains, 60 second captains, and 180 subalterns, with 339 non-commissioned officers, and 3,448 rank and file.

Colonial Corps.

Colonial corps.

These are bodies of troops employed within certain localities, and formed either of English soldiers, or of the natives of their respective colonies. They consist of the following corps:—

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* This title is hardly recognized in the English service, but, as the functions of these corps are quite distinct from those of the combatant forces, and as they probably form the foundation of a more extensive and more thoroughly organized body for the performance of administrative duties, it may be admissible to class them under a name which conveys a tolerably accurate description of their character.

† As early as in 1639 we find "engineers" attached to armies in the field, but they were only employed on special duties, and not in the permanent service of the Government. In the year 1756 "engineers" were first taken upon the strength of our army establishment; they were then civilians, styled "Engineers in Ordinary, Engineers in Extraordinary, Sub-Engineers," and "Practical Engineers;" their chief officer was styled "Director;" they subsequently received titular and honorary army rank, but it was not until towards the end of the last century that their right to military command was recognized.

Where serving.	No.	Corps.	Composed of	Numbers.			
				Officers.	Non-commissioned Officers.	Rank and File.	Horses.
Western Coast of Africa and West India Islands.	3	West India Regiments	Natives of Africa or the West India Islands.	180	239	3,000	—
Ceylon - - -	1	Regiment, Rifles -	Natives of Ceylon -	79	106	1,400	—
Ditto - - -	1	Corps Invalids -	British - - -	4	6	153	—
Cape of Good Hope -	1	Regiment, Mounted Rifles.	Hottentots and Europeans.	48	76	960	900
Canada - - -	1	Regiment Rifles -	Volunteers from British Regiments.	39	67	1,000	—
St. Helena - -	1	Regiment - -	Ditto - - -	21	37	375	—
Malta - - -	1	Do. Fencibles - -	Maltese - - -	25	49	564	—
Gold Coast - -	1	Artillery Corps -	Africans - - -	17	22	312	—
Newfoundland -	1	Corps Veterans -	British - - -	9	20	200	—
Falkland Islands -	1	Corps - - -	Ditto - - -	1	4	32	—
Total - -	12			423	626	7,996	900

Colonial corps.

All these corps are officered by Englishmen, excepting the Maltese Fencibles, the officers of which, with the exception of the lieutenant-colonel commanding, are natives of Malta, and hold local rank only.

The organization of the Colonial corps differs little from that of the infantry of the line; they are almost entirely employed in Colonial garrison or police duties, and are not liable to be removed beyond the limits of their respective localities.

Administrative Corps.

These consist of two bodies, both of very recent creation, the Military Train and the Medical Staff Corps.

Military train.

The Military Train was first organized during the late war with Russia, under the name of the "Land Transport Corps," the duties belonging to which had up to that time been performed under the direction of the Commissariat. In the beginning of 1857 this body was re-organized as a cavalry corps. It now consists of a colonel-commandant, with 2 lieut.-colonels, 4 majors, 25 captains, 30 lieutenants, 12 ensigns, 7 paymasters, 7 quartermasters, 3 riding-masters, 7 surgeons, 7 veterinary surgeons, 216 non-commissioned officers, 1,426 rank and file, and 1,000 horses.

The military train is intended to provide every description of transport for the army, including that large portion required for commissariat purposes. The establishment now kept up is but the nucleus of the force requisite for extensive operations, and would be increased very greatly to meet the emergencies of a state of war. The subsistence of both men and horses would devolve

upon the commissariat, so that these two corps would, to a great extent, be dependent upon each other for their efficiency.*

The formation of the *Medical Staff Corps* is likewise of very recent date; it was created during the war to supply one of the greatest wants in our hospital arrangements; framed on the plan of the French "Compagnies d'infirmièrs militaires," it will always be found of the greatest use whenever an army takes the field, and even in garrison it furnishes a very valuable auxiliary staff to our medical officers. At present the force consists of 2 officers, 76 non-commissioned officers, and 958 rank and file. Medical staff corps.

The total regimental strength of the British army, as established for the current year (1858–9,) is as follows:— Strength of the army.

9,243 officers.
16,319 non-commissioned officers.
196,676 rank and file.

Total of all ranks, 222,238, with 22,825 horses.

Of this number, 3,470 officers, 6,567 non-commissioned officers, and 82,702 rank and file, with 10,181 horses,

* It remains to be proved whether it is practicable to conduct the supply duties of the army without making the military train, or at any rate that portion of it required for commissariat purposes, immediately subordinate to the commissariat department. The separation of supply and transport appears to create a division of responsibility for which the necessity is not apparent while the danger is obvious.

It may also be questioned whether any advantage is to be derived from the strictly military character given to this corps in organization and equipment.

making a total of 92,739 of all ranks,* are at present borne on the strength of the East India Company's Army Establishment, and the numbers in the pay of the British Government do not therefore exceed 129,499 officers, non-commissioned officers, and rank and file.†

Foreign legions.

There is yet another description of soldiery which a state of war renders it occasionally necessary to raise. This is a force composed of foreigners engaged to serve for a certain period, generally during the continuance of the war, and liable to be disbanded when their services are no longer required. Some popular prejudice attaches to the employment of foreign troops, although it is doubtful whether in a general war of any considerable duration the population of the United Kingdom would be able to bear the drain which a greatly increased recruitment would occasion.

The employment of foreign troops has been frequently resorted to by successive English governments, not only in those earlier times when few checks existed to control the Executive, but also since the maintenance of the military force has been placed under the direct control of Parliament. In Queen Anne's reign, for instance, the foreign corps amounted to forty thousand men, and during the Peninsular war we raised several foreign

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Vizt.:—11 regiments of cavalry.
58 battalions of infantry.
3 troops of horse artillery.
20 batteries of artillery.
4 companies of engineers.
4 troops military train.

† These numbers must not be understood to represent the effective strength of the army, which is variable, but the extent of the military force for which provision has been made by Parliament, for the current year.

legions, consisting of Germans, Swiss, Greeks, Sicilians, and even of Frenchmen (chiefly deserters); their numbers in 1813 amounted to above 30,000 men.

In the course of the late war with Russia this course became again necessary, in order to supply the losses caused by death and sickness in the army in the Crimea; these troops consisted of,*—

1. A Turkish Contingent, composed of subjects of the Porte, principally officered by Englishmen; this body numbered 2,045 officers, 20,290 non-commissioned officers and rank and file, and 5,470 horses.
2. A German Legion, composed principally of natives of the various States of Germany, officered by Englishmen and Germans; this force amounted to 9,300 men, and a portion of it is still employed, and forms a military settlement at the Cape of Good Hope. It consists of 59 officers (including a major-general), 44 cadets, 120 non-commissioned officers, and 2,138 rank and file.
3. An Italian Legion raised in Sardinia, and composed of natives of the various Italian States; the force was officered by Englishmen and Italians, the latter preponderating, and amounted to between 3,000 and 4,000 men.
4. A Swiss Legion, about 3,000 men.
5. A Polish Legion, about 1,500 men.

The abrupt termination of the war prevented the qualities of these foreign troops from being practically tested; but as a very large portion of our foreign legions was formed of the floating population of the Continental States, most of whom had been more or less trained in

* For particulars of this force, see Appendix, p. 434.

military habits,* and were of an age better calculated to withstand hardships and exposure than our young recruits, it may be presumed that they would have done good service and afforded a very excellent source for supplying to some extent the vacancies in our ranks, and lessening the strain upon our home population.†

Militia. The Militia, though not a portion of our army, yet forms so important and powerful an element as a defensive force, that in a review of our military establishments it might fairly claim its proper share of notice; but the limited scope of this work, and the fact that the militia only falls under the influence of military administration under exceptional circumstances, may form the excuse for its omission. When on extraordinary occasions the Militia, Yeomanry, and Volunteer Corps, which

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* It is computed that of the foreign troops raised during the late war, 75 per cent. had already served as soldiers, namely,—

7½ per cent. in the artillery,
12½ „ in the cavalry,
55 „ in the infantry.

The average age of these men was 26 years, and their average stature 5 feet 6 inches.

The French retain a foreign legion on their permanent army establishment, and many of their most distinguished generals commenced their career in this corps. Some further remarks on this subject will be found in the Appendix.

† In the wars of the last century the employment of mercenary troops was universal among all nations. The Duc de Choiseul, Minister of War to Louis XV., said that a "foreign legionary was worth three native soldiers,—the one you bought, the one you prevented the enemy from buying, and the one you left to agriculture."

It may be much questioned whether the present state of India may not necessitate the permanent employment of a proportion of foreign troops on that continent, as a more useful and less dangerous element than the native soldiery.

are at all times organized upon the model of the regular army, are employed on active service, they are placed in all respects upon a footing of equality as regards rank, pay, and allowances with the corresponding arm of the regular army.

The sum voted to defray the charges of the Embodied Militia and Volunteer Corps for the present year amounts to above 500,000*l.**

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* The object of the foregoing remarks having been rather to call the attention of those charged with administrative duties to the importance of their acquiring a practical knowledge of the composition and wants of the army in all its branches, than to attempt an analysis of the military force, they are necessarily very general in their character, and probably very imperfect; if the author has succeeded in his limited purpose, no difficulty will be experienced by the student of military administration in filling up the details of the outline.

CHAPTER IV.

PROMOTION AND HONORARY DISTINCTIONS.

System of promotion.

THE efficiency of every army must in a great measure depend upon the system established for regulating the rewards and advancement of its members, and that army will be best served in which personal merit is most exclusively made the passport to professional success.

Important to military efficiency.

Command and distinction are the legitimate objects of the soldier's ambition, and in proportion as the avenues leading to these are thrown open to merit, and closed to other influences, so will emulation be excited, and energy and talent developed, and so will the State secure to itself the most able and efficient servants.

Promotion by merit.

Constituted as our Government is, the claims of political supporters and adherents are so strong as to influence most powerfully the patronage of the executive, and although pre-eminent services might as a rule be recognized and rewarded, the claims of party would under ordinary circumstances assert themselves above all others, and in many cases supersede the superior claims of service.

Difficulties in our army.

This liability to the abuse of patronage, which arises less from the faults of our public men than from the nature of our institutions, operates as powerfully upon

the army as upon other branches of the public service, for although no military body is more free from political tendencies than our army, its supreme administration is dependent upon the ascendancy of party; and even were it possible for a Minister or a Commander-in-Chief to form a just estimate of the relative merits of some five or six thousand individuals scattered over the four quarters of the globe, his best intentions would be swayed, if not thwarted, by political pressure, or some of the various influences which directly or indirectly affect all our public institutions. So much, indeed, is this danger felt, that few public men would be found willing to assume a power which it would be almost impossible to exercise with fairness and impartiality.*

In other armies.

Merit, then, however much it should be allowed to weigh in the consideration of an officer's claims to professional advancement, cannot in our army be the sole or even the chief test; and it may be doubted whether, although in countries governed upon less popular principles military patronage is perhaps less liable to abuse than with us, a system of promotion by selection could be exclusively maintained in any army with beneficial effects.

Promotion by seniority.

A system of promotion by seniority, whether regimental or general, precludes even the show of partiality; it is open, however, to the obvious objection of affording no incentive for exertion. A man who knows that, provided he conduct himself with ordinary prudence and propriety, his professional prospects are

* See the evidence of His Royal Highness the Commander-in-Chief and of Lord Panmure on the Commission on Army Purchase.—Questions 3816 and 4194.

secured, and that, let him do as much or as little as he may, will neither be advanced nor retarded, is not, as a rule, likely to prove a zealous or energetic public servant. In many instances a sense of duty, a love of profession, or the hope of distinction may counteract this tendency, and it must be allowed that the arguments against the seniority system are greatly weakened by the actual results, as shown in our scientific corps, where it is established as the rule; but it cannot be doubted that its introduction into the army generally would not, unless accompanied by an extensive system of compulsory retirement, secure military efficiency, and that even if it did so, that it would fail to excite that spirit of emulation which is so desirable an element in the public service.

Objections.

Promotion by purchase.

There is a peculiar feature in our military economy which renders the subject of promotion very difficult to deal with, this is the ancient practice of the sale and purchase of commissions; a practice which, although generally condemned as vicious in principle, is yet too deeply rooted in the institutions of the army, and involves so many interests, that every proposal for its abolition is viewed with alarm, and the practicability of instituting a system which would upon the whole work equally well very much doubted by many whose opinions are entitled to the greatest respect.

Its abolition considered.

This would be no proper place for the introduction of a discussion on the propriety of a system sanctioned by existing regulations; but public opinion, both in and out of the army, has been strongly expressed upon this subject, and so strong appears now the desire in all quarters to place our military institutions upon a firm and solid basis, that hopes may be entertained of the gradual extinction

of a system the principles of which it is not attempted to defend. All our social and political reforms are conducted cautiously and by degrees, and there can be no reason why the practice of army purchase should not be abolished without the infliction of any injustice to individuals, or the slightest shock to our military system.

Mixed system of selection and seniority.

Were this object effected,—and the question has now reached that stage that every step tends towards the desired end, and the final extinction of the practice is only a question of time,—a mixed system of promotion by selection in cases of well-established merit (in support of which an efficient machinery of inspection would be required to be established), and by seniority, with the practical power of supersession in the case of marked demerit, would probably be found the best method which could be devised for regulating the advancement of our military officers.

Existing regulations regarding promotion.

The following is an outline of the existing regulations on the subject of appointments to military commissions, promotions, and retirements.

First appointments.

No regimental commission can be conferred but upon the recommendation of the Commander-in-Chief, the household troops alone excepted, in which the colonels commanding have the privilege of first appointments.

Periods of service.

No officer can enter the army (members of the Royal Family excepted) but in the lowest commissioned rank of the arm to which he is attached; and a certain period of service in that grade is prescribed before promotion to a higher rank can be obtained. Thus, an officer must have served two years before being eligible for promotion to a company, and six years before he can receive

the rank of major. The former period was reduced to twelve months during the late war.

An officer appointed to a commission by purchase is required to lodge the regulated price on or previous to his nomination.

Promotion is of three kinds :—

By purchase from the rank of subaltern to that of lieutenant-colonel.

By seniority in all ranks.

By selection.

By brevet above the rank of captain.

Promotion by purchase: its origin and progress.

Promotion by purchase is a system unknown out of the British army; it originated during the reign of Charles II., when the officers and men forming the body-guard of that sovereign were authorized to sell their appointments on retiring from the service. Under William III. this practice was strictly prohibited, but it revived on the accession of Queen Anne, and in the early part of the reign of George I., the prices at which commissions were authorized to be disposed of were established under royal warrant. Since then the system has undergone many changes and modifications, and certain abuses not contemplated by the original regulations have grown out of it; among others, that of "making up a purse," or, in other words, offering a sum above the regulation price to induce an officer to retire, which, although in direct contravention of the Queen's Regulations (article 36, page 61), continues to prevail throughout the purchasing corps of the army and is, according to the testimony of military officers, an inseparable part of the purchase system.

Conditions of.

The rule of promotion by purchase is that an officer retiring from his regiment may receive from an officer in the rank immediately below his own the regulated price

of his commission,* the latter obtaining the vacancy created by the retirement. The right of purchase is regulated strictly by regimental seniority, and the fitness of the purchasing officer for the superior grade must be

* The following are the prices for commissions now established :—

Rank.	Full Price of Commissions.		Difference in Value between the several Commissions in succession.	
	£	s.	£	s.
Life Guards.				
Lieutenant-Colonel	7,250	0	1,900	0
Major	5,350	0	1,850	0
Captain	3,500	0	1,715	0
Lieutenant	1,785	0	525	0
Cornet	1,260	0	—	
Royal Regiment of Horse Guards.				
Lieutenant-Colonel	7,250	0	1,900	0
Major	5,350	0	1,850	0
Captain	3,500	0	1,900	0
Lieutenant	1,600	0	400	0
Cornet	1,200	0	—	
Dragoon Guards and Dragoons.				
Lieutenant-Colonel	6,175	0	1,600	0
Major	4,575	0	1,350	0
Captain	3,225	0	2,035	0
Lieutenant	1,190	0	350	0
Cornet	840	0	—	
Foot Guards.				
Lieutenant-Colonel	9,000	0	700	0
Major, with rank of Colonel	8,300	0	3,500	0
Captain, with rank of Lieutenant-Colonel	4,800	0	2,750	0
Lieutenant, with rank of Captain	2,050	0	850	0
Ensign, with rank of Lieutenant	1,200	0	—	
Regiments of the Line.				
Lieutenant-Colonel	4,500	0	1,300	0
Major	3,200	0	1,400	0
Captain	1,800	0	1,100	0
Lieutenant	700	0	250	0
Ensign	450	0	—	
Fusilier Regiments and Rifle Corps.				
First Lieutenant	700	0	200	0
Second Lieutenant	500	0	—	

certified by the commanding officer and approved by the Commander-in-Chief.*

An officer promoted by purchase does not occupy the place vacated by the outgoing officer, but becomes the junior of the rank to which he is promoted.

No rank higher than that of regimental lieutenant-colonel can be obtained by purchase; all the superior grades being conferred according to seniority or by selection.

Promotion by purchase is the rule in all arms, the artillery and engineers excepted.

Promotion by seniority.

Promotion by seniority in the purchasing corps can only be obtained by death vacancies and augmentations; the former invariably fall in the regiment, provided qualified officers are found to fill them.

In the case of augmentations, a certain proportion of officers of long service in each rank are selected in the army generally for promotion.

In the case of an officer being dismissed, the step does not as a rule go in the regiment.

In the ordnance corps all vacancies, whether caused by casualties, augmentations, or retirement, are filled according to the strict rule of seniority in all ranks.

Brevet promotion.

Brevet promotion is an honorary distinction conferred upon regimental officers of and above the rank of captain; it confers no regimental privileges; a captain, for instance, holding the brevet rank of major or lieutenant-colonel, continues to perform the ordinary regimental duties with his company; but if serving with other troops in garrison or in camp, he is placed on the garrison,

* This regulation is a mere form; certificates of fitness are given as a matter of course, and it is to be doubted whether there is an instance on record of an officer in a condition to comply with the ordinary conditions of "purchase" being refused promotion on the grounds of incapacity.

brigade, or division rollster with field-officers, and performs his tour of duty with them.

Brevet rank is conferred for distinguished service in the field or for length of service.

Exchanges may be effected between regimental officers with the sanction of the officer commanding the corps, and the approval of the Commander-in-Chief. Exchanges.

A regimental officer may also exchange with one upon half-pay, either without consideration or receiving the estimated difference between the rates of full and half pay. In the latter case the officer exchanging on half pay becomes ineligible for future employment.

Exchanges can only be effected between officers of equal regimental rank, and each enters his new corps as the junior officer of his rank; no exchanges on full pay are permitted unless the officers certify that it is their bonâ fide intention to serve in the corps to which they desire to be appointed; after having joined that corps for a few months they may be permitted to retire.

Officers of the guards, the cavalry, and the infantry can exchange with one another; but no exchange is permitted between those arms and the corps of artillery and engineers, nor can the two latter exchange with each other.

Retirement is of several kinds, and may be effected,— Retirement.

1. By sale of commission.
2. By exchange to half pay.
3. By retirement on full pay.
4. By resignation.

1. An officer who has purchased one or several of his commissions is allowed to retire from the army after any period of service, receiving the value of the commissions actually purchased. An officer who has purchased all his commissions receives, on retirement, the full amount so expended, according to regulation prices. An officer Selling out.

who has not purchased at all,* is yet allowed to retire by the sale of his commission after twenty years' service, and if desirous of retiring before that term, he may receive 100*l.* for every year's service, in addition to any sum actually expended in the purchase of a commission.

Not permitted in dangerous illness.

Officers in immediate danger from ill health are not permitted to sell out, and the money expended by them on their commissions is, in the event of their death on service, lost to their families.

Refund of purchase money of officers killed in action.

In the case of officers killed in action, or dying of their wounds, a recent regulation provides that the sums actually expended by them in the purchase of commissions may be refunded to their families. This arrangement involves a relinquishment on the part of the widows of the pension and compassionate allowances.

Exchanging to half pay.

2. Officers exchanging to half pay, and receiving the difference, virtually retire from the service, and cannot, under any circumstances, claim repayment of sums expended by them in the purchase of commissions.

Retirement on full pay.

3. Retirement on full pay is authorized within a certain limit under several royal warrants; it affords an inducement to old and infirm officers to make room for their juniors. The total number of officers now upon the retired full pay amounts to 412. Officers so retiring cannot be restored to the service.

Resignation.

4. An officer can at any time resign his commission, and it is only in very extraordinary instances that such

* This applies to purchasing corps only; in the Ordnance corps officers cannot under any circumstances obtain value for the relinquishment of their commissions; but in some instances artillery and engineer officers have been allowed to commute their half pay for a sum of money on becoming settlers in the colonies.

The half pay retirement of these corps is, however, based on a more liberal scale than that of the purchasing portion of the army.

resignation would not be accepted; but no officer is permitted to leave his duty until the acceptance of his resignation shall have been notified. A breach of this regulation has led to "removal from the service," instead of "permission to retire."

In some instances officers are allowed to send in their resignations, instead of submitting to a trial by court-martial.

Promotion in the ranks is made, without reference to seniority, by officers commanding regiments, who have the power of conferring every grade up to that of serjeant-major;—they have also the power of recommending non-commissioned officers for commissions. Promotion in the ranks.

Non-commissioned officers and soldiers are allowed, with the sanction of their commanding officers, to obtain their discharge upon payment of a sum of money computed with reference to the unexpired period of their service. Discharges.

Honorary distinctions as the reward of military services have existed in the earliest periods of history. Dupin says,*—"When an empire permanently maintains a large army, whatever may be the public wealth or the national generosity, it is impossible to bestow upon all who have merited well of their country pecuniary rewards sufficiently ample to repay them for the hardships and dangers of the military career. *Honor is the only treasure which, impartially distributed, remains ever inexhaustible.*" Honorary distinctions

But an *impartial* distribution is not sufficient. Honors must be conferred charily and with discrimination, or they lose their value. The ancients found their highest ambition gratified in the privilege of wearing a sprig of to be conferred with discrimination.

* On the Military Institutions of Great Britain.

parsley or a wreath of bay-leaves, distinctions which must have been utterly worthless had they not been exclusively the expression of a country's gratitude, and the emblem of recognized merit; and it need not be insisted, for it must be evident to all, how absolutely the value of an honorary distinction depends upon the difficulty of its attainment, and the degree of actual merit in the possessor which it indicates.

Their origin.

The earliest orders of knighthood in most parts of Europe were instituted exclusively as the reward of military service, but they gradually diverged from their original purpose, and the privileges of rank, the favor of princes, and claims yet more questionable superseded those of service, till at length the soldier ceased to strive for a distinction which was more easily attained by the golden stick of the courtier than by his own sword.

In England, grants of land and confiscated estates and lordships were at one time bestowed freely enough upon successful soldiers by the monarchs whom they placed or maintained upon their thrones; but no distinction intended exclusively for military services was established until George the First in 1725, instituted (or rather revived, for it is said to have existed as an order of knighthood as early as in the year 1399,) the *Military Order of the Bath.* It was then limited to thirty-six members. At the close of the war in 1815* considerable changes were made in the constitution of this Order, and the

The Order of the Bath.

* In the same year George the Third founded the Order of the Guelph of Hanover, which was principally conferred upon naval and military officers; but since the separation of the Crowns of Hanover and England on the accession of the present Sovereign, this has ceased to be a British order, though it continues to be worn as such by those who received it up to 1837.

number of its members was greatly increased, and in 1847 a new statute was introduced, by which the Order ceased to be exclusively military, and was divided into the three classes of civil, military, and honorary members; their number were increased to 952, consisting of Knights Grand Cross, Knights Companions, and Companions

The Grand Cross is reserved for military officers and civil employés of the highest rank, and the other two classes are conferred upon General and Field Officers respectively, and upon persons in the civil service of the Crown.

No officer under the rank of major is eligible for any class of the Order of the Bath.*

The Bath is at present the only Order to which military service gives a claim; the Orders of the Garter, the Thistle, and St. Patrick, being conferred only upon royal personages or members of the peerage, either for political services or in right of their hereditary rank.

The expediency of creating an Order to which all ranks of the army might aspire, led to the institution of the *Victoria Cross*, in 1856. This highly-prized decoration can only be obtained by personal bravery in the field of battle, and is therefore a worthy object for the ambition of every officer and soldier. It has been objected that there is something invidious in singling

The Victoria Cross.

* The somewhat lavish and indiscriminate distribution of the Order of the Bath during the late war has tended to depreciate its value in the army. A decoration conferred, without exception, upon every officer holding a certain rank, or filling a certain position on the staff, cannot be considered to indicate any high merit, and will not therefore be prized or coveted by those whose conspicuous services had entitled them to be selected for distinction.

out individuals for distinction on occasions when all do their duty well, but even among the bravest there is room for isolated acts of conspicuous gallantry, the notice of which by the Sovereign cannot fail to be highly and gratefully appreciated throughout the army.*

Medals and clasps.

An objection more valid exists to the practice of distributing medals and clasps to the army *en masse*. Even were it provided that only men actually and necessarily under fire were to be entitled to these decorations, it is doubtful whether the principle could be defended; but when the mere fact of an individual or a corps having formed part of an army engaged in active operations even though beyond the sound of the enemy's guns, is sufficient to give him a claim to a medal in common with him who stormed the breach or encountered the enemy hand-to-hand, it is obvious that these decorations cannot be prized as it is desirable that every honorary distinction conferred by the Sovereign should be.†

The Peninsular medal.

It was long made a reproach to our Government that our working soldiers were not decorated. With exception of the Waterloo medal, there was not a single

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* A peculiar value was attached to the Victoria Cross on the occasion of the first distribution, from the circumstance of the Queen having in person conferred the decoration—an act as graceful as it was gracious. "I have lost a leg," said one who had richly earned the distinction conferred upon him on this memorable occasion, "and I would lose an arm to be so honored again."

† The French were very loud in their denunciations of the system of conferring medals in wholesale for actions or campaigns; they have, however, of late, by the institution of the St. Helena medal, which is conferred upon all who were present during any part of the Emperor Napoleon's continental campaigns, appeared to have followed our example.

honorary distinction to which any inferior officer or soldier could aspire; and it was but a few years ago that those who had served throughout the Peninsular war received a medal to commemorate their actions.

It was owing to the exertions of the Duke of Richmond, himself a Peninsular soldier, that this tardy acknowledgment of service was conceded; since then the country has gone into the opposite extreme, and medals are now granted on the most ordinary occasions, with a lavish profusion which tends to render them valueless.

Foreign decorations

Military officers* and soldiers are permitted, under certain conditions, to accept and wear decorations bestowed by foreign Sovereigns in alliance with England, for services rendered before the enemy; thus officers who served during the late war have received the French Legion of Honor, the Military Order of Merit, the Sardinian Order of San Lazarus, and the Turkish Medjidie; while our Queen, in return, has conferred upon a certain

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* Officers and others attached to the administrative and civil departments of the army share, although non-combatants, in these distinctions. This is a wise and a just measure; wise, since it tends to encourage zeal and good conduct; just, because these classes frequently share the dangers, and always share the hardships of the soldier. Audouin says of the Marshal de Séque, Minister of War, who introduced into the French army the practice of decorating non-combatant officers:—

"Aussi militaire que les plus militaires il reconnut cependant que si l'on ne placait l'honneur que dans la carrière des armes les administrateurs seraient tentés de chercher dans la leur, la fortune."

There are those in our army who begrudge to non-combatant officers this participation in military distinctions, but the higher class of officers, and those who have best earned their own honors, do not share in so petty a feeling.

number of French, Sardinian, and Turkish officers the Order of the Bath, and upon the entire armies of those nations, the Crimean medal and clasps.

can be accepted only for military services.

It is only for military services, however, that a foreign decoration can be conferred; no British subject is permitted to wear a foreign order for services rendered to art or science, or in the performance of civil duties. An officer who has received permission to wear a foreign order may, however, accept a superior class of the same decoration without further sanction.

Knighthood.

Military officers are eligible for ordinary knighthood; but this, though it was formerly by no means uncommon in the army, is now rarely conferred. In cases of very distinguished merit, military officers are occasionally raised to the baronetage and even to the peerage; no less than twelve officers have attained the latter distinction during the present century, and it is usual in conferring this high honor to accompany it with a parliamentary grant of an annuity, not only for one life, but for the two succeeding generations of the officer selected for the distinction.

Baronetage.

Peerage.

BOOK III.

THE ADMINISTRATIVE DEPARTMENTS AND ESTABLISHMENTS OF THE ARMY.

CHAPTER I.

ADMINISTRATIVE* DEPARTMENTS.

Administrative departments

WHAT *General* and *Staff Officers* are to the Commander-in-Chief, that the *Administrative Army Departments* are to the Minister-of-War, whose authority they represent in a subordinate degree while carrying out with discretionary powers, more or less limited, the orders and arrangements of the central administration of war.

enumerated.

The administrative departments of the army are:—

†On the Staff of the Army.	1. The commissariat department.	
	2. The medical	,,
	3. The purveyors'	,,
	4. The chaplains'	,,
On the Civil Establishments of the Army.	5. The military store	,,
	6. The barrack	,,
	7. The royal engineer	,,

Civil branch.

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* The author has substituted the word administrative for "civil," which is the term commonly but inaptly applied to departments formed exclusively for military purposes.

† The order in which these departments are enumerated in the "Army List" has been here maintained.

Independent of one another.

All these departments, though under the common authority of the war ministry, act independently of each other, owing a separate responsibility, and being governed by distinct laws and regulations. This want of connection between the different departments is attended with serious inconvenience, more especially on active service, where unity of action is so important to military success. The absence of a powerful central body to exercise an active and direct local supervision over all civil establishments, is the great defect of our administrative system; such a body* acting in subordinate co-operation with the military commander would promulgate and enforce the orders of the Secretary-of-State; originate and direct such measures as might not have been provided for, or as unforeseen circumstances might render necessary; control not only one but every

Want of a superintending body.

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* The French *Intendance* is essentially a corps of control over what we call the civil departments of the army. The *Intendant Militaire* is not himself a public accountant either of money or of stores; he is thus able to devote his entire attention to administrative arrangements. The supplies of the army, the *munitions de guerre* as well as *de bouche*, the transport, the hospitals, the treasure, general and regimental finance, and accounts, clothing, barracks, and every army service of a non-military nature, are under the immediate direction of this body of officers; they alone are responsible to the General commanding on the spot, and to the Minister-of-War; they cannot evade their responsibility by pleading the failure of other departments, since all are equally subject to their supervision, and while unity of action, regularity, promptitude, and economy are thus secured, military officers are relieved from the necessity of personal interference in many harassing details which they are rarely in a position to understand, and which must divert their attention from their more legitimate duties. The difficulty of adapting such an institution to the peculiar character and organization of our army are not by any means so great as is commonly supposed.

description of military expenditure; ensure a prompt and correct accountability for all disbursements and distributions; establish an uniform system; promote harmony among departments which now have separate and, perhaps, antagonistic interests; and carry into the midst of the camp the authority of the central war administration.

Benefits derivable from such a corps.

Had such a corps existed during the late war, how incalculable a saving in men, money, and material would have been effected. As a mere question of economy, such an institution would be attended with the happiest results,* and, although the direct control of an intermediate agency might offend the dignity and lessen the importance of existing departments now immediately accountable to the War Office, it is not to be supposed that a minister responsible for the efficiency of military establishments and for the profitable application of the public resources, would allow himself to be deterred by consideration for individual interests or feelings from placing our administrative system upon a sound and firm basis.

The following outline of the constitution, functions, and responsibilities of the different army departments may serve to illustrate the necessity, more particularly on active service, of a more centralized responsibility in the non-combatant branches of the army.

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* Sir Charles Trevelyan stated, in his evidence before the Commission of Enquiry on Army Purchase, that, by the establishment of an institution similar to the *Intendance*, "we should save at the commencement of the next war more than enough to buy up all the vested interests connected with the purchase system."—See "Report on Army Purchase," Question 4665, page 298.

1. *The Commissariat.*

The commissariat.

The supply of provisions and forage to the army, at all places and under all circumstances, is the legitimate function of a "Commissariat," and every duty unconnected with this object is foreign to the character and intention of this department. A reference to a previous chapter will show by what means the English commissariat came to be charged with various duties of a financial and local description, until "supply duties" came to form but a small portion of the prescribed functions of the department.

When on the creation of a minister of war, and the consolidation of military departments which ensued, the direction of the commissariat was transferred from the Treasury to the War Office, a favorable opportunity was afforded for removing the anomalies which characterised that department, and of uniting its duties to its legitimate purpose.

It was accordingly in contemplation to relieve the commissariat from its financial duties, for the performance of which a distinct body of Treasury agents was to be formed, and this arrangement would probably have led to the creation of a department of general supervision and control over the different administrative services of the army.

The expense of maintaining double establishments at all our military stations abroad caused this plan to be abandoned in favor of the present system, under which the officers of the commissariat are not only confirmed in their character as financial agents but invested with the additional office of controllers of army expenditure.

In this capacity the commissariat officer is held responsible for the proper appropriation of all funds voted for

military purposes, and exercises on foreign stations that financial control over army expenditure which in England is exercised directly by the Treasury. The expediency of lodging such a power in the hands of an executive officer subordinate to the department, the expenditure of which he is required to control, may be doubted, and the divided allegiance which is imposed upon the commissariat is another objectionable feature in the present system.

The difficulty of serving two masters is proverbial; but a commissariat officer has to serve several. He is primarily responsible to the war minister; for his discipline and local duties he answers to the military authorities; for his financial duties to the Treasury; and on matters of account he corresponds with the Treasury Board, the Accountant-general at the War Office, the Paymaster-general, and the Auditors of public accounts.

The following are now the principal duties of the commissariat:—*

Its duties,

Treasury duties.

1. Raising funds by the negotiation of bills of exchange or otherwise.
2. Control of army expenditure within authorized credits, and approving and ordering of all payments for military services.
3. The custody of the "treasury chest" (generally called "military chest"), and payment by imprest to other departments, or in detail to parties entitled, of all army services.
4. The supply of funds for naval and colonial services, under prescribed regulations.

* This refers only to the commissariat on foreign stations. The very limited establishment maintained in the United Kingdom is employed almost exclusively in exercising a general supervision over the supplies furnished under contracts entered into by the war department.

War-office duties.

5. The supply of provisions, forage, fuel, and light to the troops by contract, purchase, or requisition, and the issue of the same to regiments and corps.

6. Forming contracts for all services and supplies on account of the war department, including the hire of lands and buildings, and engineer and barrack services.

7. The supply of land transport (where no military train exists) and of inland navigation; also, where there is no naval agent, the making of agreements and charterparties for sea-going vessels.

8. Acting as paymasters to the corps of royal artillery and royal engineers.*

9. The examination, revision, and compilation of the annual estimates for army expenditure in all branches of the military service.

Accounts and correspondence.

10. Rendering accounts of receipts, disbursements, and issues to the Treasury, the War Office, and the Audit Office, and for non-effective services to the Paymaster-general; and corresponding with those departments upon all matters falling under their respective jurisdiction.

and responsibility.

The commissariat is responsible to the war department for all its transactions connected with military supplies and War Office expenditure, and to the Board of Treasury for general financial duties; and its corre-

* This duty formerly devolved on the ordnance storekeepers' department. The ordnance corps so rarely act together in a large body, that paymasters have never been attached to their establishment. There is now, however, one chief paymaster stationed at the headquarters of the corps at Woolwich.

spondence is conducted with those two offices accordingly.

In addition to these duties, the commissariat is charged with various services of a local nature; in the Australian colonies, at Gibraltar, and Bermuda, for instance, with the supply of provisions, stores, and buildings for convict establishments; in Canada, the periodical distribution of presents to North American Indians in return for lands ceded to the Crown; also, in most of our foreign possessions, the payment of Chelsea pensioners, magisterial and ecclesiastical establishments; in some instances, the custody and disbursement of colonial funds also devolves upon the commissariat. Local duties.

In consequence of the commissariat not being employed in the United Kingdom* except in the superintendence of contractors, the system of supply at home and in the colonies is quite distinct; and as garrison duties and those in the field further differ most materially, a transition from home service to foreign service, and from peace to war, is attended with unnecessary abruptness and disturbance to our military economy.† Effects of the want of uniformity.

* The duties performed by the commissariat abroad are on home stations performed by the different branches of the War Office, the Paymaster-general's department, and the army agents; the allowances to the latter alone amount to within a trifle of the pay of the entire commissariat staff on foreign stations, being no less than 37,140*l.* a year. The substitution of a more legitimate official body for "army agents" is a reform urgently called for, and it is to be hoped that the interests of a few influential and wealthy individuals will not much longer be allowed to outweigh the requirements of the public service.

† Here the example of the French might be beneficially followed; they have but one system of supply, whether in France, in Algeria, or in the field, while we have one for the

An assimilation of the regulations governing our supply duties throughout the British Empire, and rendered as far as possible applicable to field service, would tend in a great measure to prevent the occurrence of that confusion and waste which must always be expected to result from a sudden change of system.

Organization.

The commissariat at present retains the organization introduced under the Duke of Wellington in 1808; the establishment is as follows:—

Officers*	1	commissary-general,
	12	deputy commissaries-general,
	36	assistant commissaries-general,
	70	deputy assistant commissaries-general.
Total	119	

United Kingdom, another for the colonies, a third for the field, and a fourth for India. Even the system adopted in our camps of instruction, so far from being a training for active service, is utterly inapplicable to the field; indeed, the commissariat may be said to be entirely unrepresented in our camps in England and Ireland as far as these are to be considered as schools for field service.

* The French *Intendance* consists of the following officers:—

28	intendants, with the relative rank of brigadier-general.
78	sous-intendants, 1st class, with the relative rank of colonel on the staff.
90	sous-intendants, 2nd class, with the relative rank of lieutenant-colonel on the staff.
52	adjoints, 1st class, with the relative rank of major on the staff.
26	adjoints, 2nd class, with the relative rank of captain on the staff.
Total 274	officers.

Clerks - { 60 established commissariat clerks,
77 assistant and temporary clerks,
(Not in the line of promotion.)

Subordinates { 25 storekeepers,
78 assistant storekeepers,
54 issuers.

No one can enter the superior branch but as an established clerk, and one year's service in that rank is necessary before promotion to a commission; a deputy assistant commissary-general must serve four years, an assistant five years, and a deputy commissary-general three years, before being eligible for promotion.* Service.

A commissary-general is only employed in the field or upon duties of great importance; the principal foreign stations are under the charge of deputy commissaries-general, those of minor importance, of assistants, and in some few cases, deputy assistant commissaries-general.

Promotion takes place partly by seniority and partly by selection; but in this respect, and in most other matters connected with the administration of the commissariat, there is an entire want of any defined system to regulate the position and prospects of its officers; this has long been felt as a serious evil, which, it is hoped, may ere long be remedied. Promotion.

The officers of the commissariat bear the Queen's commission under the sign manual, but do not hold Rank and pay.

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* These conditions may be relaxed in as far as the service in each rank is concerned, but the aggregate period of service in the different ranks is obligatory, and thirteen years' service is required to qualify an officer for the rank of commissary-general.

military rank, and cannot exercise command, but have a relative army rank, which serves to regulate their allowances and precedence.*

The scale of pay† is as follows :—

	Relative Army Rank.	Daily Pay.
Commissary-general	Brigadier-general	£4 14 11
Deputy Commissary-general	Lieutenant-colonel under three years service as major.	1 8 6

* The military officer *in command* of a station or force would, however, take precedence of a commissariat officer on the same station even though the latter held a higher relative rank ; this is perfectly intelligible, since the right of *command* necessarily supersedes all others. It is more difficult to account for the practice which occasionally prevails of making military officers presidents of deliberative boards of which civil officers of a superior relative rank are members ; as the presidency of such a board cannot possibly involve any question of military command, and it may be presumed that a medical or a commissariat officer is from his professional knowledge at least as competent for such a duty as a regimental officer, the relative rank should on these occasions be allowed to decide the precedence.

Vauchelle says of relative army rank, "les assimilations ne sont, après tout, que le moyen donné de mesurer le degré de considération extérieure dû, selon les formes militaires, a des administrateurs, qui vivent pendant la paix, comme pendant la guerre avec l'armée, du sein de laquelle ils sont sortis pour se vouer a l'importante et difficile tâche de pourvoir a tous ses bésoins au milieu de privations, de souffrances, et de périls partagés avec elle."

† Officers below the rank of commissary-general receive an additional rate of pay when in charge of a foreign station, in order to meet the pecuniary responsibility attaching to their position, and with an army in the field officers of all ranks become entitled to *extra war pay*, or, more properly speaking, to their original pay, as established by the Duke of Wellington,

[but

	Relative Army Rank.	Daily Pay. £ s. d.
Assistant Commissary-general	Captain - -	0 14 3
Deputy - Assistant-Commissary-general	Lieutenant - -	0 9 6
Established Commissariat Clerk	Ensign - -	0 7 6
Storekeepers -	Non - commissioned officers - - -	6*s.* to 7*s.* 6*d.*
Assistant Storekeepers -		4*s.*
Issuers - -		2*s.* 6*d.*

The total charge for the commissariat establishment for the current year is under 45,000*l.*, exclusive of the pay of the subordinate staff, which amounts to about 20,000*l.* Considering that the entire army expenditure in the colonies passes directly through the hands of the officers of the commissariat; and that in addition to financial duties of such magnitude, and involving so great a pecuniary responsibility, and the supply of the entire army, they perform various extra-official duties, it will Total expense.

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but was reduced by the Treasury on the conclusion of the war in 1817. The rates of war and charge pay are now as follows:—

	Charge Pay. s. d.	War Pay. £ s. d.
Commissary-general - - - -		1 18 0
Deputy commissary-general - At the Cape of Good Hope - - -	19 0	0 9 6
Deputy commissary-general - Elsewhere - - -	9 6	
Assistant commissary-general - In the Tropics - -	4 6	0 5 0
Assistant commissary-general - Elsewhere - -	5 0	
Deputy-assistant commissary-general - -	2 6	0 5 0

appear that the expense of this department is proportionately, if not positively, less than that of any other department of the army.*

Half-pay.

The charge for half-pay of the commissariat is 31,000*l.*; this includes 150 officers of all ranks, a considerable number of whom are young and active officers, who were reduced at the conclusion of the last war, and who are supposed to be available for service, whenever they may be called upon.

Subordinate staff.

The subordinate commissariat staff are entitled to pensions under the provisions of the Civil Superannuation Act.

First appointments.

Appointments to the commissariat are made by the Secretary-of-State for War, and candidates are required to pass an examination before being confirmed in their nominations.†

The Medical Department.‡

Medical staff.

This important branch of the public service is divided into two sections; the first composed of medical staff officers, the second of regimental surgeons; the duties and organization of the latter have already been briefly

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* The cost of the machinery for raising and disbursing the entire military expenditure *in the colonies*, for provisioning the army, and performing the various other duties devolving on the commissariat, amounts to little more than *one per cent.* on the foreign army expenditure; there are few private establishments the business of which is conducted on such moderate terms.

† For new organization of the commissariat, see Appendix I., page 440.

‡ It has been shown in previous chapters how the medical department of the army, after having passed through many stages, arrived at its present organization.

treated of under the head of "Regimental Organization." The officers of the medical staff* consist of—

Ranks.

5 inspectors-general,
13 deputy inspectors-general,
21 staff surgeons, first class,
48 staff surgeons, second class,
101 assistant surgeons.

Duties.

The duties of the three former ranks are entirely administrative and inspectorial; these classes of officers not practising their professions, but exercising a general supervision over the executive medical officers, and directing the administration of hospital and sanitary establishments. Thus an inspector or deputy inspector-general, would rarely in person attend the sick or wounded, nor would he, as a rule, interfere with the mode of treatment adopted by the executive medical officer, who is thus left to bear his full professional responsibility. On the other hand, the superintending staff officers assume the direction of all administrative arrangements connected with military hospitals, and thus relieve the surgeon from all duties unconnected with the actual treatment of his patients.

Defects of French medical department.

It has been objected that the inspectorial and superintendent element in the army medical department is out of proportion to the strength of the working staff; and the example of the French has been cited in support of this argument; but it is overlooked that in the French service certain officers of the *Intendance* stand very much in the position of the superior officers of our medical staff, and exercise a

* These numbers are exclusive of Medical Staff Officers of the Queen's service employed in India, who are borne on the establishment of the East India Company's service.

† The Royal Warrant of 1st October 1858, effects some important changes in the constitution and emolument of the Medical Department. *See* Appendix II. p. 439.

direct and powerful control over the administration of military hospitals. It would be very inexpedient (indeed were it desirable, it would be impracticable,) to introduce a similar system into our service; and it is not easily understood how, in a country where medical science and its professors take so high a rank, the interference of a non-professional body in the details of medical administration is tolerated. The French army surgeon is *de facto* a subordinate member of the *Intendance*, amenable to the authority, and dependent in a great measure for his advancement upon the testimony of an officer necessarily incapable of forming a just opinion of his professional merit. Nor is this all; the system is calculated to destroy all sympathy between the surgeon and his patients. If a sick man requires any indulgence or comfort, it is not to the medical officer but to the intendant that he must address himself; and to such an extent is the power of the latter carried, that the surgeon may not order a window to be opened in a hospital to improve the ventilation without first requiring the consent of the intendant, or, in his absence, of his subordinate officer, whose position is analogous to that of our purveyor.* Even the hours for visiting the sick are prescribed by the intendant, who is required to report upon the regularity of the surgeon's attendance, and who can actually forbid his prescribing any medicine or diet not included in the French Pharmacopœia, or differing from the dietary table established in the hospital.†

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* A French medical officer observed to the author "In England the purveyors are under the doctors, in France they are placed in authority over them."

† The following extract from *Vauchelle* conveys a concise description of the organization of the French medical service:—

"The medical officers are under their own organization,

The rules of admission to and advancement in the medical service may be summed up as follows:— Admission.

Every candidate for admission in the medical service is required to furnish the Director-General of the

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formed into a corps entitled 'The Medical Department of the Land Forces.'

"The two professions of physicians or surgeons are amalgamated under the denomination of army surgeon.

"The profession of the apothecary continues to be distinct.

"The following table shows the 'cadre' of the corps as now organized:—

Surgeons	Inspectors			7	1087
	Principal surgeons	1st class	40	80	
		2nd class	40		
	Surgeons	1st class	100	320	
		2nd class	220		
	Assistant surgeons	1st class	340	680	
		2nd class	340		
Apothecaries	Inspectors			1	146
	Principal apothecaries	1st class	5	10	
		2nd class	5		
	Apothecaries	1st class	15	45	
		2nd class	30		
	Assistant apothecaries	1st class	45	90	
		2nd class	45		
					1233

"This establishment remains the same in peace and in war.

"In the event of insufficiency in numbers, it is supplied by auxiliary medical officers appointed by the minister of war or the intendants; their number is not limited, but varies with the wants of the army in the field.

"The Imperial School of Military Surgery and Pharmacy at Paris receives professional pupils, who purpose entering the army medical department, and who are required to undergo one year's probationary service conjointly with the auxiliary surgeons.

"This school is the recruiting department of the corps.

Army Medical Department with a certificate vouching for his respectability, together with a diploma from the Royal College of Surgeons of London, Dublin, or Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow, or of Trinity College, Dublin; he is then subjected to a competitive examination, and, according to its result, rejected or attached to the General Hospital at Chatham, where he undergoes a probationary service until a vacancy admits of his

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"To be admitted to the school, candidates are required,—

"1. To be native Frenchmen.

"2. To be Doctors of Medicine or Masters of Pharmacy (*Maître en Pharmacie*) of one of the Colleges or Faculties of France.

"3. To be exempt from all physical disabilities.

"4. To be able to pass the prescribed examination.

"5. To be under twenty-eight years of age.

"A certain number of inspectors forms, under the Minister of War, a Council, called 'The Military Council of Health,' which directs and superintends *in all that concerns the art of healing*, the branches of the medical service, and furnishes all requisite information on matters connected with it.

"Individually the inspectors are charged with annual medical inspections.

"With an army they may be charged with the Direction of the Medical Department. In this position, which the Minister may also bestow upon a principal surgeon, they perform under the chief intendant the functions of members of the Military Council of Health.

"The inspectors of apothecaries and the principal apothecaries perform with regard to their branch the same duties.

"As to the other surgeons, they are distributed among regiments and corps, and the various hospital establishments."

In addition to the above staff, these 300 "*officiers d'administration des hopitaux*," performing in their different grades the functions of our purveyors, medical clerks, and hospital serjeants. These persons are under the immediate orders of the *Intendance*.

being posted as assistant surgeon either to the staff or to a regiment.

The following are the relative ranks and rates of pay of the officers of the medical staff who hold the Queen's commission :— Rank and pay.

	Relative Army Rank.	Daily Pay, according to length of Service.
Inspector-general -	Brigadier-general	36*s.* to 40*s.*
Deputy inspector-general - - -	Lieutenant-colonel	24*s.* „ 30*s.*
Staff surgeon, 1st class	Major - -	19*s.* „ 24*s.*
Ditto 2nd class	Captain - -	13*s.* „ 22*s.*
Assistant staff surgeon	Lieutenant -	10*s.* —

In addition to these rates of pay, medical officers at the head of their department, on foreign stations or in the field, receive a daily allowance rising from 5*s.* to 20*s.* a day, according to the number of troops under their professional charge. Extra pay.

A service of five years is required to qualify an assistant surgeon for advancement to the superior rank; as a general rule seniority governs promotion, but in the case of distinguished service the claims of a medical officer may be recognised and rewarded without reference to his length of service. Service.

The principal stations in the United Kingdom and in the Colonies are under the charge of inspectors and deputy inspectors-general; those of minor importance of 1st class staff surgeons; staff surgeons of the 2nd class, and assistant staff surgeons are attached to general hospitals. Stations.

The charge for the pay of the 188 medical staff officers employed in the United Kingdom and the Colonies Charge.

(exclusive of India), including 6 apothecaries and 21 dispensers, amounts to 67,610*l.*

Half-pay. The half-pay and retired allowances of 179 officers of the medical staff amounts to 46,952*l.*

Purveyor's Department.

Purveyor's department. This is a subordinate branch of the medical service, the duties of which consist in the details of hospital economy under the directions of the superior medical officers.

Its origin. The office of purveyor was instituted in the early part of the Peninsular war, but previously to that period "hospital stewards" were employed at some of the principal military hospitals in the performance of corresponding duties.*

Abolition and reorganization. On the conclusion of the Peace of 1815, the establishment of purveyors was virtually abolished,† and it was not until on the outbreak of the Russian war that this branch of the service was re-organized, it having been found absolutely necessary to relieve medical officers from the details of hospital supply and account, and extra-professional duties.

Duties. Purveyors are now required to provide military hospitals with all provisions, stores, furniture, and supplies of every description, with exception of medicines,—to keep nominal registers of the admission and discharge of patients, and to take charge of their arms and clothing; to keep accounts of hospital expenditure; superintend servants and other attendants; to report upon the state of the buildings and make requisitions for

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* Dr. Jackson, in his work "*On the Formation and Economy of Armies,*" describes the Purveyors as "Commissioned Stewards."

† A few purveyors only continued to be employed in the United Kingdom at the principal medical stations.

the necessary repairs; to make the wills of patients and conduct funeral arrangements; and to maintain order and cleanliness throughout the hospital.

Purveyors are authorized to draw from the commissariat all such supplies as that department may be able to furnish, and to avail themselves of existing commissariat contracts. In case of necessity they are allowed to enter into separate contracts;* they are also empowered to receive imprests of money from the Treasury Chest for which they account to the War Department.

Position of purveyors.

The position of the purveyor towards the medical department is capable of being more clearly defined; it would appear desirable that his responsibility should be entirely local, that in all matters connected with hospital administration he should be strictly under the orders of the medical officer in charge, and that his accounts should be rendered to the local commissariat. In fact the purveyor's department should be a subordinate branch of the commissariat, placed at the disposal of the medical department for the performance of special duties, but continuing in all matters of account responsible to the commissariat.

Such an arrangement would strengthen the authority of the medical officer, who should reign supreme within his hospital, ensure promptness and regularity of supply, and afford every guarantee for the exercise of due economy.

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* This should not be; the officers of the commissariat are the legitimate agents for entering into all contracts for army services abroad, and no circumstances can arise in which this duty would not be better performed by them than any other department. To allow more than one agent of the Government to bid for supplies must necessarily have the effect of raising prices.

The purveyor's department consists of the following grades:—

	Relative Army Rank.	Daily List of Pay.
1 purveyor-in-chief	Major	30*s.*
1 deputy purveyor-in-chief	Captain	17*s.*
28 purveyors	Lieutenant (after 15 years, junior captain).	10*s.* to 20*s.*
89 purveyors' clerks	Ensign	7*s.* to 11*s.* 6*d.*
119 officers.		

The annual charge for the pay of these officers is 19,830*l.*

All appointments to the purveyor's department, are made by the Secretary-of-State for war.

The Chaplain's Department.

Chaplains. Their origin.

The period at which it first became a practice to attach chaplains to bodies of troops, is not to be fixed with any degree of accuracy. During the reign of Queen Mary we first find chaplains borne on the strength of the army, their daily pay being 2*s.* a day; under Queen Elizabeth the pay was reduced to 1*s.*; under King William it was again raised to 4*s.* Up to the commencement of the present century, the office of military chaplain was saleable, and not only that, but the holders of the office were not required to accompany the army, provided they paid a deputy to do their duty; and the nomination of regimental chaplains was considered so much a legitimate branch of the patronage of commanding officers, that on the re-organization of the chaplain's department towards the end of last century, Government thought itself called upon to pay

the sum of 700*l.* to all colonels of regiments, in order to indemnify them for the loss of this source of emolument.

Baron Dupin says:—

"In 1795, General Abercromby, preparing an expedition against our American possessions, promulgated an order to the chaplains of all the corps of his army to repair to head-quarters, to agree upon the number of their body who should accompany the troops; but the reverend gentlemen earnestly represented that they had purchased their religious employments with a perfect understanding and according to a formal promise, that they were never to be called upon to serve personally provided they engaged a deputy. Not a single chaplain consented to repair to head-quarters."*

Re-organization.

In 1796, this department was placed upon a better footing, the pay of chaplains in the United Kingdom was raised to seven shillings, and on foreign service to ten shillings a day, and a chaplain-general was placed at the head of the service.

Religious toleration of British Government.

During the Peninsular War the department was re-organized; instead of being as hitherto appointed to regiments, chaplains were now attached to brigades, and the nature of their duties was more clearly defined. Although no provision had as yet been made for the religious instruction of dissentients from the established religion in the army, the following testimony, borne by a Frenchman and a Roman Catholic, to the tolerance of our Government cannot fail to prove gratifying:—

"Notwithstanding the zeal of the Government for the established religion, which must be so much the greater in consequence of the Prince being invested with the character of Supreme Pontiff, the intolerance of the executive power towards the Catholics diminishes daily. The chiefs of corps are enjoined to take particular care that no soldier professing the Catholic religion be punished for not attending divine service as performed by the Church of England. It is desired,

* *One* did join, and was made chaplain-general of the army, *pour encourager les autres.*

on the contrary, that he may have perfect liberty to enjoy the exercise of his own religion whenever it can be done without interfering with the indispensable duties of the service."*

Chaplains of all denominations established.

Since then we have gone farther, and provided chaplains of the different Christian denominations, in order that no soldier shall be without the means of attending divine worship, and receiving religious instruction according to his faith. Thus, during the late war, there were Roman Catholic and Presbyterian chaplains appointed and paid by the State to celebrate divine service, and to attend to the spiritual welfare of the soldiers belonging to their religion. And throughout the United Kingdom and the Colonies all means are adopted, and no expense is spared, to afford the soldier, whatever be his creed, every facility for attending service and receiving instruction according to his own form of worship.

Contrast with other countries.

In this respect England stands alone, and sets a noble example to the rest of the world. In no other State does the public provide for the religious wants of its soldiers except according to the established faith; and even where sufficient tolerance exists to exempt dissentients from the religion of the State from attendance upon its celebration, no means are adopted, even for the dying, to secure them the aid and comfort of ministers of their own religion.†

* Dupin.

† In the army of the United States, though it is principally composed of Irish Roman Catholics, no provision whatever is made by the State for the religious instruction of the members of that Church serving as soldiers. This may not be owing to any feeling of intolerance, though the American Government is not free from a suspicion of such motives, since it is contrary to law to celebrate the Church of England service in its integrity, in any part of the States. The British minister and consuls, indeed, were formally refused permission to have divine worship according to their own forms performed in their private houses for the benefit of their countrymen.

The chaplain's department is now established as follows:— Organization.

1 chaplain general,
22 commissioned chaplains,
35 assistant-chaplains.

The pay of the chaplains is 16*s.* a day, rising on a progressive scale to 22*s.* 6*d.*; that of the assistant-chaplains ranges from 200*l.* to 400*l.* a year, according to the extent and importance of their duties; the annual cost of the establishment is about 15,000*l.* a year. The chaplains and assistant-chaplains are attached to the principal military stations at home and abroad. In the field they are stationed at the head-quarters of the army, the principal hospitals, and with brigades. Rank and pay.

In addition to this establishment, however, there are allowances made to clergymen of various denominations for performing divine service to the troops at minor stations at home and abroad, which, together with the cost of religious books and contingencies, amount to 20,000*l.*; making the total expenditure for divine service throughout the army 35,000*l.* Allowances to army chaplains. Total charge.

Appointments to the chaplain's department are made by the Secretary-of-State for War on the recommendation of the chaplain-general. Joint appointments

The Military Store Department.

The duties of this department consist in receiving, holding, and issuing every description of military stores as distinguished from provisions, such as arms, clothing, camp equipage, &c. Military storekeepers.

Previously to the consolidation of departments consequent upon the establishment of a war ministry, the store department formed a branch of the ordnance, and storekeepers on foreign stations were members of the Board of respective officers of Ordnance, under whose joint responsibility all matters connected with the expen-

diture of artillery and engineer services were conducted. Storekeepers abroad were also the paymasters of the military ordnance corps.

Their duties. At present, however, the duties of these officers are confined to the receipt and issue of all non-consumable army stores; they further exercise a general supervision over the accounts of barrack-masters, and receive imprests of money from the commissariat for incidental expenditure, for which they account to the war department.

The military store department has been recently established as follows:—*

Rank and pay.

	Relative Rank.	Scale of Salary.
3 principal military storekeepers -	- Lieut.-colonel	£750 to £850
7 military storekeepers -	- ditto	- 540 „ 680
21 deputy-storekeepers	- Major	- 370 „ 490
58 assistant ditto	- Captain	- 250 „ 330
70 clerks, 1st class	- Lieutenant	- 150 „ 220
88 clerks, 2nd class	- Ensign	- 80 „ 120
247		

Increase of salary. The salaries rise by an annual increase of from 10*l.* to 25*l.* On foreign stations extra pay is allowed, varying according to rank from 10*l.* to 70*l.* a year.

Total charge. The annual pay of the officers of the store department amounts to 67,000*l.*†

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* The military store officers hold their appointments under the commission or warrant of the Secretary of State for War.

† It may be worthy of consideration whether the duties of this department might not be as efficiently and far more economically performed by officers and non-commissioned officers of the army than by a body of civilians. Retired field officers would probably for 200*l.* or 300*l.* a year undertake the direction of the principal arsenals; the less important stations might be placed under the charge of captains; the clerical

The Barrack Department.

All barracks, quarters, and other public buildings used for military purposes are placed under the charge of barrack-masters who are responsible for their proper condition; they are required to make periodical inspections of the same, both with the view to the necessary repairs, and in order to ascertain the damage done by the troops in occupation, assessing the value of such damages according to prescribed rules, and receiving the amount from the corps indebted. Barrack-masters.

They have the custody of every description of barrack stores and furniture, and are responsible for the cleanliness and general good order of all buildings under their charge. Their duties.

Barrack-masters are, for the greater part, half-pay or retired military officers;* the ranks and emoluments are as follows:— Rank and pay.

		Relative Army Rank.	Daily Pay.
			s. *d.* *s.* *d.*
20	barrack-masters	1st class, Majors	15 0 to 20 0
72	ditto	2d class, Captains	10 0 „ 12 6
6	ditto	3d class, Lieutenants	7 6 —
Total 98	officers.		
2	barrack clerks	Non-commissioned Officers	7 6 —
164	barrack serjeants	„	2 6 to 4 0
271	ditto	„	0 6 „ 2 0
Total 437	Non-commissioned Officers.		

duties being in all cases performed by non-commissioned officers holding warrant rank.

* In most Continental armies the regimental adjutant is the officer responsible for the building occupied by his corps,

The annual pay of this establishment amounts to 38,500*l.*

The Royal Engineer Department.

Engineer department.

This consists of a body of civilians attached to the corps of Royal Engineers for assisting in the practical details of that service, superintending labor, conducting accounts, and performing the necessary clerical duties.

Desirable to appoint non-commissioned officers to those places.

In most of the foreign armies these functions are performed by non-commissioned officers of the corps of engineers, selected for their meritorious conduct and peculiar qualifications; and considering how superior a class of men enter the ranks of the Royal Engineers, it may become worthy of consideration whether the offices of clerk of works and engineer clerk might not with us be made prizes for our best qualified non-commissioned officers. Such an arrangement would probably attract many well-educated men into the corps of engineers,—form a powerful incentive for exertion and improvement, and undoubtedly result in a saving to the public.

Establishment.

The present establishment of the royal engineer department consists of:—

Rank and pay.

1 superintendent;
1 deputy surveyor;
174 clerks of works, with salaries from 110*l.* to 300*l.* a year;
6 draughtsmen, with salaries of 200*l.* a year;
99 clerks, with salaries of 80*l.* to 370*l* a year; and
66 temporary clerks and foremen of works.

Pay and total charge.

The annual pay of the establishment, inclusive of that of office keepers, &c., is 55,000*l.*

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and the barrack service generally is under the direction of the Intendance. Our system of housing the troops will be found more fully discussed under the head of "Quarters and Encampments."

There are yet two departments, which, although they do not appertain to the effective staff of the army, perform a very important part in our military economy; these are the *Recruiting Staff* and the *Pensioners' Staff*, charged respectively with superintending the soldier in the first and in the last stage of his career.

Recruiting Staff.

Recruiting staff.

All orders and regulations respecting recruiting for the army emanate from the office of the Adjutant-general to the forces; and are carried out by the recruiting establishments formed in different districts of the United Kingdom. These are nine in number, and consist each of an inspecting field-officer, an adjutant, a paymaster, a staff surgeon, and a superintending military officer, temporarily detached from his regiment for this service. These officers send their parties to the different towns and villages within their districts, making known the terms of enlistment, and inviting recruits to join the army.

Establishment, and duties.

On arriving at the head-quarters of the district, the recruit undergoes an examination by the staff surgeon, and if approved, he is sent before a civil magistrate to be attested.* The paymaster next pays him the amount of bounty agreed upon, and he is despatched to join the regiment to which he is appointed.

Pay and charge.

The pay, allowances, and expenses of the recruiting staff in the United Kingdom, exclusive of payments to recruits, amount to about 30,000*l.* a year.

Staff Officers of Pensioners.

Staff officers of pensioners.

This department consists of 113 officers, of whom 72 are employed in England and Scotland, 30 in Ireland,

* This subject will be more fully treated in a subsequent chapter under the head of "Bounty."

Duties. and 11 in the Colonies; they are charged with the duties of paying and organizing military pensioners, of superintending their periodical training and exercises, and maintaining the body in a state of good order and military discipline.

Pay. Staff officers of pensioners must be regimental captains on the half-pay or unattached pay of the army, and receive in addition to their non-effective pay 10*s.* 6*d.* or 8*s.* 6*d.* a day, according to their class, together with travelling expenses and contingent allowances.

Total charge. The pay and allowances of this department, including those of non-commissioned officers, amount to about 28,000*l.* a year.

Recapitulation of charges of administrative departments. The pay of the *personnel* of the administrative departments of the army may be summed up as follows:—

Commissariat department	- -	£65,000
Medical	„ - -	67,600
Purveyors	„ - -	19,800
Chaplains	„ - -	35,000
Military store	„ - -	67,000
Barrack	„ - -	38,000
Royal Engineer	„ - -	55,000
Recruiting Staff	„ - -	30,000
Pensioners' Staff	„ - -	—*
Total pay of Administrative Departments - - - -		£377,000

This is equal to about 3½ per cent. on the total military expenditure.

* This item is charged among the non-effective services of the army.

CHAPTER II.

EDUCATIONAL AND SCIENTIFIC ESTABLISHMENTS OF THE ARMY.

Want of education in the army in former times.

UNTIL a recent period an opinion was unfortunately prevalent, that education was not requisite to fit young men for military command, and the lad who showed the least disposition to learn, and gave the smallest promise of intellectual improvement, was thought "good enough for the army," which was considered a convenient and honorable refuge for the idle and the ignorant. There were, no doubt, at all times many highly educated and accomplished officers in our army, but no bar existed to the admission of the uneducated, and the professional if not the general knowledge of a very large proportion of military officers was extremely limited, while far too little importance was attached to superior attainments, upon which advancement did not in any material degree depend to encourage them in improving themselves by study and application.

Scientific branches excepted.

The scientific branches of the army should, however, be excepted; these corps must, at all times, have demanded more or less preliminary study and training; and the necessity of giving a special professional education to young men aspiring to enter the "trains of artillery," or to become "practitioner engineers," must have made itself felt even at a period when the general standard of education in society was so low that it was no discredit to a gentleman to be scarcely master of its rudiments, and when writing with tolerable orthographical and grammatical accuracy was classed among the higher accomplishments.

Military academy of Woolwich,

A military school of training is said to have existed at Charlton, near Woolwich, in the time of the Stuarts, but the authentic basis of the Royal Military Academy at Woolwich, cannot be carried back beyond the year 1741, when it was established by a warrant of King George II.* This continued for about sixty years to be the only institution of the kind in Great Britain; the lectures of the masters, of whom Thomas Simpson, the geometrician, was one of the first, were ordered to be attended by the "practitioner engineers, the officers, serjeants, corporals, and cadets† of the Royal Regiment of Artillery not upon duty," and also by such "bombardiers, miners, pontoonmen, matrosses, and others of the said regiment as have a capacity and inclination to the same."

used by East India Company service.

The Court of Directors of the East India Company recognizing the importance of a preliminary training for their officers, availed themselves of the Royal Academy under arrangements entered into with the Master-General of the Ordnance in 1798, and continued to send their cadets to this institution until the completion of their own college at Addiscombe in 1810.

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* "History of the Royal Military Academy," by Colonel F. Eardley Wilmot.

† The order of enumeration sufficiently demonstrates the difference in the position of cadets in those days and at present. The cadet was then a volunteer attached to a military body, associating with officers, but doing the duty of a private soldier. There were four or five such to each company of artillery in 1744; namely, two cadet gunners, with the pay of 1*s.* 4*d.* a day, who on parade took the right of the gunners of the company, and two or three cadet matrosses, with the pay of 1*s.* a day, who took the right of the matrosses. They were united into a distinct body, called the cadet company, in 1745, and gradually increased in number from 40 to 60, which was the establishment in 1782, and which ten years later rose to 90, and in 1806 to 188 cadets. The present number is 200.

Institution and progress of military college at Sandhurst.

Meanwhile circumstances had arisen which induced the Government to recognize a private establishment for the education of infantry and cavalry officers, with reference more especially to the staff of the army, which has been formed at High Wycombe, in Bucks, by General Jarry, in 1799 ; and a royal warrant was issued in 1801 forming a Board of Commissioners of the Royal Military College, with its senior department at High Wycombe, and the junior department at Great Marlow. Three years later Captain Douglas, of the Royal Artillery, now General Sir Howard Douglas, being appointed superintendent of studies to assist General Jarry, the establishment assumed in all essential particulars the official character it has borne until the present time. The removal of both departments to Sandhurst took place in 1820, but the senior had for some years previously been removed from High Wycombe to Farnham.

Changes in its constitution.

Changes of an important character have been recently made in the system of the Royal Military College, and the vote of the House of Commons of April 26, 1858, which expressed the all but unanimous opinion of the country, in affirming the principle of competition as a test of qualification for the honor of bearing the Queen's commission, will, if it receive the royal assent, create a necessity for still further modifications of the warrant of 1808, by which the college has hitherto been governed. It is difficult, therefore, at the present moment, to state otherwise than very generally the actual condition of our military educational establishments.

Council of education.

The Council of Military Education, of which the Commander-in-Chief is *ex-officio* President, is entrusted with the general duty of advising upon all questions of superior military education ; that is to say, the education of officers ; that of non-commissioned officers and soldiers being, as hereafter shown, under the immediate direction

of the Secretary of State for War. This council, which consists of a vice-president, five members, of whom four are military officers, a secretary, and a staff of examiners, directs all examinations, whether for first commissions or for staff appointments, and has visitorial powers over the military colleges, though it cannot directly interfere in their management. The council is also entrusted with the selection of professors and masters.

Royal Military College.

The Royal Military College comprises two establishments, called respectively *the Staff College* and the *Cadet's College*, which are under one supreme head, with the title of Governor, and have also some members of their administrative staff in common; in other respects they are distinct.

Staff College.

The Staff College, as its name implies, is intended for the education of officers for staff employment; it is calculated for thirty students, viz., twenty-five from cavalry, guards, and infantry * of the line, and five from artillery and engineers, who are required to have served for not less than three years, exclusive of leave of absence; to have passed, if below the rank of captain, the examination for a troop or company; and to be recommended for staff employment by their commanding officers. They are then subjected to a competitive examination for entrance to the college before the Council of Education; or if serving abroad, before a board of officers appointed for the purpose.

Course of study.

Examination.

The course of study at the Staff College is limited to two years, but officers may enter the college for one year only, or with the sanction of the Commander-in-Chief, compete with the students at the final examination without passing through the college.

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* No one regiment can supply more than one officer at a time for the Staff College.

Appointment to the staff.

The names of the successful candidates are noted by the Commander-in-Chief for staff employment as vacancies occur; no pledge can, however, be given that every officer so named will be employed upon the staff; all that the Government can engage is, that after the year 1860 no officer, with certain exceptions,* shall be so employed who has not passed through the college.

Candidates to serve in the three arms.

There is a feature of great value in the new system; it is that every officer, before he is declared fit for the staff, shall do duty for a certain period with each arm in which he has not already served, in order to ensure his future acquaintance with the discipline and details of all branches of the army. It will thus no longer be possible for an infantry officer, when placed upon the staff, to be wholly ignorant of the tactics of artillery and cavalry, or for the artillery and cavalry officer to feel at a loss in directing the movements of infantry.

Benefit of these measures.

The advantage of a measure so thoroughly calculated to secure the services of efficient officers for the important duties connected with staff employment need not be dwelt upon. It has long been so obvious as to have been again and again urged upon the authorities, but it has

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* Officers who had reached the rank of lieutenant-colonel in the army on the promulgation of the new arrangement in December 1857, are exempted from examination. Thus, a captain in the Guards can hold a situation on the staff without submitting to any test whatever; and field officers may likewise be appointed to the staff for "distinguished conduct in the field," though it must be obvious that the most brilliant gallantry in action affords not the slightest guarantee for the efficient performance of staff duties.

It is to be hoped that most officers will not hesitate to waive their privilege in these cases, and that they will make it a point of honor to prove their qualification for any office conferred upon them, by submitting to the test imposed upon their less favored comrades.

been reserved for the present Commander-in-Chief to introduce this most valuable reform into our system of military education.

Officers admitted to the Staff College continue in the receipt of their regimental pay, and are not required to make any payment on account of their course of instruction.

Cadet college.

Cadet College.—The subject of education is one upon which the greatest diversity of opinion exists in all countries, as is sufficiently proved by the various methods of public and private tuition, each of which has its advocates and admirers. Upon one point, however, most Englishmen are agreed, and that is, that an exclusively professional training at an early age, such as was formerly pursued at Sandhurst and Woolwich, is not only unnecessary but mischievous, and that it is far preferable to allow the youths of the country to obtain their ordinary education at public or private schools, and to complete their special studies for the army at a more mature age.

Admission and course of study.

It is with this view that the recent changes have been made in the constitution of the junior department of Sandhurst Academy, now called the Cadet College, to which young men between the ages of sixteen and eighteen years will be admitted by unrestricted competition, receiving their commissions in the army without purchase after a course of two years study. The majority of students will necessarily be appointed to the cavalry and infantry, but a certain number will be allowed to compete for admission to the Royal Military Academy at Woolwich,*

* Cadets who wish to obtain commissions in the Royal Artillery and Royal Engineers will be at liberty to attend any of the competitive examinations for admission to the Royal Military Academy, and if unsuccessful will be allowed to retain their position at the Royal Military College.

and qualify themselves for service in the Royal Engineers and Artillery.

Under this arrangement every educational establishment in the kingdom will be able to present its candidates for military service; a common test will be applied to all on admission; a common course of practical study will succeed, and the proved intelligence and ability of the most energetic of the youth of England will be concentrated into one focus, and thence diverge to supply the various branches of the military service.* Advantages of the system pursued.

The great advantage derivable from young men destined for the same career being brought together and becoming acquainted with one another previously to their common start in life is thus secured, without imposing any trammels upon their general education and characters at too early an age.

The contributions payable by the Royal Military College cadets are as follows:— Payments.

		Per annum.
1.	Sons of private gentlemen - - -	£100
2.	„ admirals and general officers -	80
3.	„ general officers not having command of regiments - - - -	70
4.	„ captains and commanders, royal navy, or effective field officers of the army	50

* The benefits to the army and to the country generally which may be expected to result from the system of open competition are almost incalculable. While the army was a comparatively close career, it could not be a popular service among those classes which were as a rule excluded from it. Now that education has been established as the general test for admission, a tie has been created between the army and the people at large which will strengthen with years, and prove an unfailing support to Government under all circumstances.

	Per annum.
5. Sons of all officers of the army and navy under the above ranks - . -	£40
6. „ officers of the army and navy who have died in the service, leaving their families in pecuniary distress - -	20

Queen's cadetships.

There are, further, twenty "Queen's cadetships," intended for the orphans of officers who have fallen in action or died from the effects of their wounds or of disease contracted on service, leaving their families in reduced circumstances.

Boys elected to a Queen's cadetship receive at the age of thirteen years a special allowance of 40*l.* a year, to enable them to qualify themselves; and on attaining the age of sixteen enter the Royal Military College, and receive a gratuitous education for the army.

Establishment.

The following is the establishment of the Royal Military College:—

		£	s.	d.	
Military branch.	1 Governor - - -	1,000	0	0	a year.
	1 Lieutenant-Governor -	385	5	0	„
	1 Major - - - -	300	0	0	„
	2 Captains - - -	138	7	6	„
	1 Paymaster and quartermaster - - -	197	6	8	„
	1 Riding-master - -	136	17	6	„
	1 Adjutant - - -	182	10	0	„
	1 Surgeon - - - -	255	10	0	„
	1 Assistant surgeon - -	136	17	6	„
	1 Chaplain - - -	400	0	0	„
	9 Non-commissioned officers, 4*s.* and 3*s.* a day.				
	13 Buglers and drummers, 1*s.* 6*d.* a day.				

Civil branch.
- 18 Professors and masters, from 180*l.* to 450*l.* a year.
- 4 Clerks, from 100*l.* to 200*l.* a year.
- 1 Armourer, 3*s.* a day.

Commissions disposable.

The scale of the Royal Military College does not, however, at present admit of its becoming the sole avenue to military service ; and about 200 first commissions will remain at the disposal of the Commander-in-Chief for the benefit of deserving non-commissioned officers, or of gentlemen who may offer themselves for direct appointment and satisfy such tests of qualification as may be imposed in those cases.*

Educational test of non-commissioned officers promoted from the ranks.

It would appear very desirable that an educational test should be established for the promotion of non-commissioned officers to the higher grades, with the understanding that a fixed number of commissions should be annually conferred upon those who proved themselves qualified for the honor. Nothing would more tend to raise the character of the lower branches of the army, and to attract into the ranks a superior class of men, than the understanding that the soldier's advancement must be ensured by his own exertions. The test would not require to be of a very severe kind, since the practical knowledge possessed by a good non-commissioned officer, and the experience acquired in passing through the inferior regimental grades, would compensate to a great extent for higher attainments ; but he should in all

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* The age of candidates for direct appointment is established at from 18 to 21 years ; they are required to undergo an examination under the direction of the Council of Military Education, similar to that to which the students of the Royal Military College are subjected. Two trials are allowed to each candidate at any interval of time within the established limit of age.

cases be required to possess that degree of general education which would fit him for the society of gentlemen bearing the Queen's commission.

Its probable effect.

Under such an arrangement, it may be predicted with all confidence that, in the course of a few years, the difficulty would not be to find, but to select, non-commissioned officers deserving and qualified for the honor of a commission.

Royal Military Academy at Woolwich.

The Royal Military Academy at Woolwich continues to be a school of application for the artillery and engineers; it is recruited entirely by open competition, with a temporary exception in favour of the cadets from the establishment at Carshalton,* which will terminate with the present year, when they will have been absorbed.

Conditions of admission.

Candidates for admission to the academy must be between the ages of seventeen and twenty years; the course of study is about two years, or until the student shall have become sufficiently advanced in scientific knowledge to pass the final examination for a commission in the Royal Artillery or Royal Engineers.

Payments.

The payments are required to be made in advance, at the rate of 62*l.* 10*s.* for each half year, for the sons of private gentlemen; but the sons of military officers are admitted on nearly the same terms as are established for cadets of the Royal Military College.

Management.

The Royal Academy will for the future be under the Commander-in-Chief, as regards discipline and internal arrangements; but all matters of finance will be directed by the Secretary of State for War. It is also under the

* The establishment at Carshalton, near Sydenham, was formed in 1848, as a lower school to Woolwich academy, and was intended to remedy the serious moral evils resulting from the preparation of very young candidates in a garrison town like Woolwich; the experiment was not, however, found successful, and no fresh admissions were made after 1854.

visitorial supervision of the Council of Military Education.

The following is the establishment of the Royal Military Academy :— Establishment.

		Salary per annum. £	s.	d.
Military branch.	1 governor, lieut.-colonel, royal artillery	500	0	0
	1 captain and paymaster	200	0	0
	1 captain	91	5	0
	4 first lieutenants, at	73	0	0
	1 quartermaster, at	54	15	0
	1 surgeon, at	50	0	0
	15 non-commissioned officers	from 50*l.* to 100*l.*		
Educational branch.	9 professional instructors (officers of artillery or engineers)	from 91*l.* to 300*l.*		
	27 professors, lecturers, and masters	from 80*l.* to 500*l.*		
	1 chaplain	250	0	0
	1 clerk	220	0	0
	2 modellers	from 90*l.* to 125*l.*		

The military officers employed in the academy receive their regimental pay in addition to the foregoing salaries.

The junior establishment of Carshalton is likewise presided over by a lieutenant-colonel of artillery, with a salary of 250*l.* a year ; the educational branch is composed of seven masters, with salaries varying from 60*l.* to 350*l.* a year. School at Carshalton.

Army and Regimental Schools.—Up to the commencement of the present century no provision had been made by the State for the instruction of soldiers or their families. While it was thought of little importance whether an officer were able to read or write his own language with Regimental schools.

ordinary correctness it could scarcely have been considered necessary or even desirable to extend to the common soldier the advantages of education.

Their origin

The first regimental school was established by the Duke of Kent in 1809 in his own regiment, the First Royals. Dupin, in referring to it, describes it as a wholesale manufactory for non-commissioned officers. In 1811, the Duke of York, impressed with the success of the experiment, resolved to extend it to the entire army, and a general order of 1st January 1812 promulgated the rules and regulations intended to govern these institutions. Although soldiers themselves were permitted to receive instructions in these schools they were mainly intended "to give to the soldiers the comfort of being assured that the education and welfare of their children are objects of their Sovereign's paternal solicitude, and to raise from their offspring a succession of loyal subjects, brave soldiers, and good Christians."

and objects.

Superintendence.

General, commanding, and other officers were enjoined to use all efforts to render these schools efficient, and chaplains were required to visit them frequently and diligently scrutinize the conduct of the serjeant schoolmasters.

Duke of York's school.

In 1801 the Duke of York proposed the institution of an asylum for the maintenance and instruction of the orphan children of non-commissioned officers and soldiers, which was accordingly founded in that year, and which was opened for the reception of 700 boys and 300 girls* in 1803.

The State, in thus providing a home for the children of its soldiers, might, without any imputation of unfairness, have claimed from them in return a certain period

* At present no girls are admitted.

of military service for which the training and education they receive peculiarly fit them; but the generosity of the act was unqualified by any such condition, and the pupils of the Royal Military Asylum (or "The Duke of York's School" as it is commonly called after its royal founder) are at liberty to enlist in the army or to enter civil life; the majority, however, probably from the influence of early association, prefer the army.*

Normal school.

The difficulty experienced in finding well-qualified non-commissioned officers to undertake the duty of instructors in the regimental schools, led in 1846 to the establishment, in connexion with the Duke of York's school, of a normal school for the training of army schoolmasters.

Conditions of admission.

From thirty to forty students are here admitted to a two years' course of study; the last half of which is passed at the upper or model school, where they are taught the practice of teaching orally by lecture and by books. About one-third of these students are soldiers not under the rank of corporal, the remainder are from civil life; the civilian candidates must be between the ages of nineteen and twenty-one, and are required to enter into a bond to enlist for general service in the army at the end of their course of instruction.

Examinations.

The examinations are conducted by the Inspector-general of army schools, and soldiers on passing are discharged from their corps and re-enlisted for general service. They are then, in common with the successful civilian candidates, appointed by the Secretary of State to such regiments or garrisons as may require their service.

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* Of 767 boys discharged between the years 1842 and 1849, 514 enlisted in the army, and 253 entered civil life.

Advantages of the institution.

The Royal Military Asylum or "Duke of York's School" thus answers the double purpose of giving an elementary education to children, and of training instructors for soldiers and their families throughout our widely-scattered dominions. Many a boy who learnt his earliest lessons at this noble institution, will probably return to it to qualify himself for conferring, in his turn, the blessings of education upon another generation of soldiers' children.

Direction.

The Royal Asylum is conducted under the direction of a Board of Commissioners, who make the regulations connected with its interior arrangements and economy and the admission of pupils.

Establishment.

It is presided over by a commandant, with a salary of 300*l.* a year, and the following staff:—

	£	*s.*	*d.*
1 assistant and secretary, salary per annum -	182	10	0
1 quartermaster - - „ „ -	180	0	0
1 surgeon - - - „ „ -	419	15	0
1 dispenser - - - „ „ -	136	17	6

21 non-commissioned officers, from 1*s.* 10*d.* to 6*s.* a day.
55 corporals (boys) from 1*d.* to 3*d.* a week.
1 housekeeper 70*l.* a year.
28 nurses, servants, &c., from 10*l.* to 30*l.* a year.

Educational staff.

The educational staff is composed of 1 head-master and chaplain, salary 400*l.* a year; and 12 masters and assistant masters with salaries rising from 40*l.* to 250*l.* a year; with 20 monitors and 14 pupil-teachers.

Inspection of schools.

The normal school is conducted under the direction of the Inspector-General of Military Schools, an officer of the War Department, under whose charge the entire system of army education (that of officers excepted) is placed, and who is required to make periodical visits of inspection to the different stations occupied by our troops with the view of maintaining every description of gar-

rison or regimental school in a state of efficiency. He has three permanent assistants, with salaries of 450*l.* a year, stationed in the United Kingdom, and acting assistants in the Mediterranean and India, from whom he receives periodical reports upon every subject connected with the schools within their districts, by means of which, together with his personal inspection, he is enabled to keep the Secretary of State informed of the condition of every educational establishment in the army, and of the characters and capacities of the schoolmasters employed.

Army schoolmasters.

The number of trained schoolmasters at present on the establishment is 168, exclusive of those temporarily acting in that capacity with regiments of embodied militia; they are divided into four classes, and the following are their ranks and rates of pay, and allowances:—

Rank and pay.

Rank.	Daily Pay.	Lodging and Fuel Allowance per Week.
	s. *d.*	*s.* *d.*
First-class schoolmasters, ranking as warrant officers immediately after commissioned officers - -	7 0	10 0
Second-class ditto, ranking with sergeant-major - - -	5 6	8 6
Third-class ditto, ranking after serjeant-major - - -	4 0	8 6
Assistant schoolmaster, ranking as serjeant - - - -	2 0	4 3

These liberal rates of remuneration,* and a position calculated to ensure them respect, and to give them due authority in the performance of their important and responsible duties, must act as an encouragement to

* Schoolmasters are permitted to instruct the children of officers at such hours as do not interfere with their school duties, upon their own terms of remuneration.

young men of a superior education and position in civil life to compete for these appointments, which also furnish prizes for the better class of non-commissioned officers and soldiers, and tend to ensure a constant supply of thoroughly qualified instructors. The effect of such a system upon the army cannot fail to prove of the highest benefit.

Duties.

It is usual to attach a first-class schoolmaster to each of the large camps and garrisons, and it is his duty to superintend all the military schools within the district, to provide for the efficiency of the inferior schoolmasters and the schoolmistresses,* to conduct the regular duties of the general or garrison school, and to give lectures upon various subjects of interest or instruction. Minor garrisons and regimental and detachment schools are under the charge of the inferior classes of schoolmasters.

Infant and industrial schools.

The means of instruction are thus afforded to all non-commissioned officers and soldiers, and to their children, and an infant class is established in each regiment under charge of a schoolmistress for the instruction of very young children of both sexes. There is further an industrial school, likewise under the schoolmistress, in which the elder female children are taught knitting, sewing, and household occupations.

Attendance

Attendance at these schools is voluntary, and the following are the rates of payment chargeable to

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* Every regiment and garrison has a schoolmistress, with pay rising from 18*l.* to 36*l.* a year, who conducts the infant school instruction, and teaches needlework and other industrial arts to the female children of soldiers. It is to be hoped that *cooking* may ere long be considered as necessary an art as washing and sewing, and taught to soldiers' daughters. There are at present 130 schoolmistresses employed, many of whom were trained at some one or other of the institutions existing for this purpose.

pupils, the amount of which is credited to the public:—

Charges.

Sergeants	8*d.* a month.	
Corporals	6*d.*	,,
Drummers	4*d.*	,,
Children — if one child only attends	2*d.*	,,
Children — if two of the same family attend	1½*d.*	,,
Children — if three or more of the same family attend	1*d.*	,,

Position of schoolmasters.

Army schoolmasters at present occupy a somewhat anomalous position, being a body distinct from the army itself, *in* it but not *of* it, and, although amenable to military law, by an express provision of the Mutiny Act, they are in many respects exempted from regimental discipline. The Secretary of State for War appoints and removes them, he regulates their schools, selects the books to be in use, prescribes the modes of instruction and regulates the expenditure. This arrangement has arisen as a natural result of that jealousy with which, under our constitution, the responsible administration withholds from the executive military authorities all financial control, and which, however right it be in principle, cannot fail to give rise to some inconvenience in practice. In this case it would be quite impracticable to separate the executive and administrative functions, and, as in the management of hundreds of schools, questions of finance must be matters of daily occurrence and reference, and always more or less connected with the interior management of the school, it has been found expedient to vest the entire control of those services in the Secretary of State's department, leaving to commanding officers the duty of enforcing general regulations, but not the power of altering them.

The civil character of the schoolmasters further tends

Their civil character acting injuriously.

to weaken that interest in his schools which, when they were conducted by ordinary and very often incompetent non-commissioned officers under immediate regimental control, the commanding officer generally took in their success. The Duke of Wellington* decided, on the formation of the Normal school in 1846, that the establishment should be wholly civil, and only subject to the Commandant of the Royal Military Asylum, upon which it was grafted, so far as was absolutely necessary as a matter of discipline. This has led its students sometimes to pride themselves upon not being soldiers,† rather than to identify themselves heartily with the body with which their duties and interests are so closely connected; an error of youth and inexperience which will probably correct itself.

Royal Artillery and Engineer schools.

The royal artillery and engineer schools are conducted on the same principles as those of the rest of the army, but from the detached service of those corps and the higher qualifications of their non-commissioned officers, serjeants are commonly placed in charge of these schools in place of normal schoolmasters.

Religious character of army schools.

The religious character of our army educational establishment is one which cannot be altogether passed over; it becomes a question of peculiar importance and delicacy when we consider the mixed elements of which our army is composed, and the complete freedom and equality of

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* The Duke of Wellington was generally disposed to give decided power and independence to civil establishments connected with the army, and to protect them within the sphere of their duties against unnecessary military interference. A strong illustration of this may be found in the extensive, almost irresponsible powers, which he gave to barrack-masters.

† Cæsar's reproach to his mutinous soldiers, "Quirites non milites," would be accepted as the highest compliment by these individuals.

every Christian creed or form of worship which it is our pride to maintain.

Respect for religious scruples.

All our military educational establishments are essentially of a secular character, chaplains and clergymen of every denomination being impartially excluded from their management and control; and so scrupulously are the religious opinions of both adults and children respected, that it is optional with them to attend or to absent themselves during the few minutes of prayer and religious instruction which precede the daily lessons.

Attendance at prayers not compulsory.

It is not to be believed that any real religious feeling can be offended by a simple prayer or thanksgiving to the universal God, or a plain oral explanation of a portion of Scripture* or sacred history; and when it is reflected that thousands of soldiers' children pass their lives between one barrack and another, excluded from all means of education but that which these schools afford, the most zealous advocate of any one form of Christian belief can scarcely object to their enjoying this slender opportunity of learning the elementary truths common to every form. Still even this is not made compulsory, and whatever excuses may be made by parents for failing to avail themselves of these schools for the instruction of their children, the apprehension of religious proselytism in any shape can surely not be among their number.

Royal Hibernian school, Dublin.

The Royal Hibernian Military School in Dublin is conducted upon the principle of, and with the same objects, as the Royal Military Asylum, and provides for the education and maintenance of 410 boys, the sons of soldiers. It is under the direction of a commandant, with a salary of 277*l.* a year, with a staff consisting of one secretary, one chaplain, one surgeon, one quarter-

* When the schoolmaster is a Roman Catholic the Douay version of Scripture is used in the daily morning prayer.

Establishment.

master, one military instructor, whose aggregate salaries amount to 930*l.* a year, and eighteen non-commissioned officers. The educational branch is composed of one head schoolmaster, ten assistant schoolmasters and instructors, and eight monitors, whose salaries amount in the aggregate to 715*l.* a year.

Its original object.

This institution was founded in 1769 under the name of "The Hibernian Society," for the purpose of "maintaining, educating, and apprenticing the orphans and children of soldiers in Ireland." It received its present title and constitution under a royal charter of 22nd December 1846.

School of Instruction at Chatham.

The School of Instruction at Chatham was founded under the provisions of a royal warrant of 23rd April 1812, at the suggestion of General Pasley, who for many years directed the institution and established the system

Objects.

of instruction now maintained. The object of the school is to give a practical training in the various duties of their profession to soldiers of the corps of royal engineers, who, as soon as they have acquired a sufficient knowledge of the ordinary military exercises and evolutions, are sent to Chatham to be taught the theory and practice of engineering.

Course of study.

The course of study, commencing with the first rudiments of education, proceeds by a system admirably calculated to keep pace with the capacities and acquirements of the students, to develop the various branches of the engineering service, and the accessory knowledge requisite for its practical application; and a high degree of interest is given to the studies of the school-room by the accompanying labors out of doors in which they are daily employed, such as the construction of earthworks and batteries, gabions, fascines, rafts, pontoons, &c. &c.

Attached to the establishment is a regimental school

for the children of non-commissioned officers and soldiers of the corps of engineers.

Staff and Establishment.

The staff of the institution is as follows :—

	Daily pay.*
1 director, colonel royal engineers -	1*l.* 6*s.* 3*d.*
1 superintending officer, lieut.-colonel, ditto - - - -	16*s.* 1*d.*
2 instructors of field works, captain and lieutenant - - -	13*s.* 1*d.* 6*s.* 10*d.*
1 superintendent of surveying, captain	11*s.* 1*d.*
1 clerk of works - - -	284*l.* a year.
24 non-commissioned officers, assistant instructors - - -	1*s.* 6*d.* a day.

School of Musketry at Hythe.

The School of Musketry at Hythe was established in 1854, with the view of perfecting the troops in the use of the rifle, which had been in the year preceding substituted for the old infantry musket, by enabling a certain number of officers, non-commissioned officers, and men from each corps to be instructed in the use of that weapon, in order that they might communicate the knowledge and experience so acquired on their return to their regiments.

Staff and pay.

The staff of the school is composed of—

	Daily pay.* £	*s.*	*d.*
1 commandant - - -	1	2	9
1 chief instructor - - -	1	10	3
2 captain instructors (additional staff pay) - - - -	0	11	6
1 staff officer - - - -	0	9	6
1 paymaster and quartermaster -	0	6	0
1 surgeon - - - -	0	5	0
2 staff serjeants - -	4*s.* 6*d.* and 3*s.* 10*d.*		
5 first-class serjeant instructors -	0	3	4

* In addition to ordinary regimental pay and allowances.

	Daily pay. £	s.	d.
2 clerks - - - -	0	2	10
1 armourer - - - -	0	2	10
12 privates - - - -	0	1	4

Instructors of musketry.

In addition to the staff of the school at Hythe there is a corps of instructors composed of—

	Daily pay s.	d.
10 district inspectors - - -	9	6
83 regimental instructors - - -	2	6
21 depôt instructors - - -	3	11
100 serjeant instructors, second-class - -	2	10
100 serjeant instructors, third-class - -	2	0

The sum of 3,500*l.* is voted annually as additional pay to non-commissioned officers and soldiers who distinguish themselves by their skill in the use of the rifle.

Shoeburyness.

Artillery Experimental Establishment at Shoeburyness is a practical school of artillery, where the effect of various descriptions of ordnance is tested, and instruction given upon these subjects to the young artillery officers and cadets. It is directed by a colonel of artillery as superintendent, assisted by a captain instructor and four non-commissioned officers.

Select committee.

The Select Committee at Woolwich is an establishment maintained for the purpose of reporting upon the various inventions and suggestions connected with ordnance, which are almost daily brought under the notice of Government. It is presided over by the director-general of artillery, with a secretary and assistant secretary of the same corps, and about seven non-commissioned officers as clerks.

Small arms committee.

The Small Arms Committee is a similar but smaller

* In addition to regimental pay and allowances.

body, especially concerned with the arms of the infantry, and composed chiefly of officers of that branch of the service. The president receives staff pay as a colonel and the secretary as a captain.

A Department of Artillery Studies is formed at Woolwich, under a director, an instructor, and two masters, for the instruction of the junior officers of artillery, and an allowance of 300*l.* a year is made for the travelling expenses of a proportion of these, to enable them to visit, under the superintendence of the director, the fortifications and public works both in this country and on the continent.

Royal Military Repository.

The Royal Military Repository at Woolwich was established in 1775, when a large and valuable collection of models of guns, carriages, and ordnance of different kinds, was made under the superintendence of General Congreve; this collection, which was contained within the arsenal, was destroyed by fire in 1805, and in 1819 a building was erected as an ordnance museum, on the heights above Woolwich, in which models and specimens in great variety and number have now accumulated.

A system of instruction similar to that established in the engineer school at Chatham, is formed in connexion with the repository.

The staff is composed of one lieutenant-colonel as superintendent, two captains instructors, fourteen non-commissioned officers, and one clerk.

United Service Institution.

The United Service Institution was founded by the officers of the army and navy in 1830, and until 1856,— when in consequence of the heavy charges for rates and taxes to which it was subjected, the Government made an annual allowance of 400*l.* towards its maintenance,— it was altogether supported by the contributions, subscriptions, and donations of private individuals.

Its objects.

The institution is intended to be a central repository for objects of professional interest, and of books relating to the naval and military services. It comprises a museum of professional and miscellaneous objects, a model room, a library and reading-room, and a theatre for the delivery of lectures. It is managed by a council formed of officers of both services, under whose direction a quarterly journal on subjects of professional interest is published and distributed gratuitously to the members of the institution.

Conditions of membership.

Officers of the army and navy, as well as the departments connected with them, and of militia and volunteers, are eligible to become members on payment of an entrance fee of 1*l.*, and an annual subscription of 10*s.*

Artillery Institution.

The Royal Artillery Institution at Woolwich is a regimental establishment for technical and professional objects; the public provides for the salary of a secretary, a captain of artillery, but the establishment is otherwise supported by private contributions.

Miscellaneous establishments.

Some small allowances are made towards the support of a military medical museum at Chatham, the professorships of military surgery in Dublin and Edinburgh, and for the maintenance and instruction of a limited number of African youths, qualifying for service as army surgeons on the Western Coast of Africa, the climate of which is so fatal to Europeans.

Barrack libraries and reading rooms.

It only remains to notice the *barrack libraries* and *reading-rooms* established at the principal military stations for the use of non-commissioned officers and soldiers. In the words of the Queen's regulations, "the object of these institutions is to encourage the soldiers to employ their leisure hours in a manner that shall combine amusement with the attainment of useful knowledge, and teach them the value of sober, regular, and moral habits."

Selection of books.

The selection of books and periodicals for these libraries and reading-rooms is made by the Inspector-general of military schools; a public allowance is granted for the pay of librarians and for contingent expenses.

Payment.

Non-commissioned officers and soldiers become entitled to the benefits of these institutions by a monthly payment of 1*d.*, which contributions are carried to the credit of the public in the regimental pay lists, as are also the fines payable for injury or losses of books.

Officers are permitted to avail themselves of barrack libraries in consideration of one day's pay of their rank per annum.

Recapitulation of charges for educational establishments.

The following is a recapitulation of the charges incurred during the year 1858 for the educational and scientific establishments of the army:—

	£	£
Council of Military Education - - -		5,180
Royal Military Academy at Woolwich:		
Military branch, salaries, and allowances - - - -	2,833	
Educational branch, salaries -	9,230	
Messing of 200 cadets, at 2*s.* 6*d.* each per day - - -	9,125	
Clothing of ditto, at 6*d.* each -	1,825	
Servants' wages, washing, contingencies, &c. - - -	2,321	
Expenses of junior establishment at Carshalton - - -	4,509	
Total of Royal Military Academy -		29,843*
Carried over -		£35,023

* The contributions paid by cadets are calculated to cover about five-sixths of this charge. During the year ended on 31st December 1857 they amounted to 25,017*l.* 10*s.*, and the charge to 27,864*l.*

	£	£
Brought over		35,023
Royal Military College:		
Military branch, pay and allowances	4,610	
Educational branch, salaries	5,478	
Board and washing for 180 cadets	4,016	
Fuel and light, taxes, servants' wages	4,724	
Maintenance of "Queen's cadets" and "Queen's scholarships"	600	
Estimated charge for re-organization and extention of the establishment	4,000	
Total for Royal Military College		23,428*
Royal Military Asylum and Normal Schools:		
Military branch, pay and allowances	2,625	
Educational branch, salaries	2,013	
Provisions and clothing for teachers and students	2,136	
Provisions and clothing for 470 boys	6,395	
Wages, taxes, fuel and light, contingencies, books, school apparatus	3,128	
Total for Royal Military Asylum		16,297
Royal Hibernian Military School:		
Military branch	2,276	
Educational branch	715	
Carried over		£74,748

* The contributions of cadets for the year 1857, when the charge was 19,074*l.*, amounted to 21,000*l.*

	£	£
Brought over		74,748
Royal Hibernian Military School (cont.):		
Provisions for 410 boys	5,039	
Ditto for schoolmaster and serjeant	329	
Clothing	975	
Contingencies, fuel and light, wages, &c.	1,669	
Total Royal Hibernian School		11,002
Regimental and Garrison Schools:		
Pay and allowances of assistant inspectors, schoolmasters and schoolmistresses, schoolmaster serjeants, soldier assistants, &c. &c.	26,167	
Artillery and engineer schoolmasters	2,300	
Allowances to pupil-teachers, expenses of training schoolmistresses, pay of orderlies, travelling expenses, &c.	3,592	
Total for Army and Regimental Schools		32,059
Engineer Establishment at Chatham:		
Pay and allowances of staff	2,890	
Materials and labour for field works	5,930	
Contingencies	937	
		9,757
Barrack Libraries and Reading Rooms:		
Allowances to librarians, stationery, repairs of books, contingencies		3,582
Carried over		£131,148

	£	£
Brought over		131,148
Musketry Instruction:		
Pay of the staff of the school at Hythe	2,623	
Ditto of corps of instructors	12,064	
Ditto of regimental and depôt instructors	5,287	
Rewards to skilled rifle-shots	3,500	
		23,475
Select and Small Arms Committee at Woolwich, and charges incidental to experiments		3,808
Artillery Establishment at Shoeburyness		700
Maintenance of African youths qualifying for Army Surgencies		1,000
Miscellaneous		3,155
Total charge for educational and scientific establishments		£163,286

Total charge.

About 61,000*l.* is the amount which, during the last financial year, was received and credited to the public on account of contributions and payments made towards educational purposes; so that the actual cost to the State of these establishments does not probably exceed 100,000*l.*, or about seven-eighths per cent. on the total army expenditure.*

* The average annual charge for the maintenance of military schools, colleges, and scientific establishments in France is about 110,000*l.*

CHAPTER III.

MANUFACTURING ESTABLISHMENTS.

Dependence placed by the Government on private establishments,

In no European country is private enterprise so much relied upon for the supply of public wants as in England. In most of the continental states the Government interferes more or less directly in the various branches of industry and commerce, and all *matériel* required for the public service is obtained by means of factories formed by the State and worked by its agents.

contrasted with the French practice.

As regards the army there is hardly one article of supply necessary to the soldier which is not produced in a government establishment, and the use of labor at a price below market value, which conscription enables the State to command, effectually distances the efforts of private competition, and cannot fail to exercise a detrimental influence upon individual enterprise.

The contract system considered.

In England we have, perhaps, run into the opposite extreme by a somewhat indiscriminate resort to the system of contracts, which recommends itself by its apparent fairness and economy. There can be no doubt that the competition created under such a method must have a wholesome effect in stimulating enterprise, and keeping down prices; but, on the other hand, it does not always afford sufficient security for promptness and regularity of supply on an emergency, or for the good quality of such stores as can only be practically tested by actual use. As regards the economical question, it is to be doubted whether when the expenses of the necessary machinery of control and inspection and the profits of the contractors are taken into account, any actual saving is the effect of the contract system, as compared with the supply by means of Government factories when efficiently conducted.

English Government manufactories,

The only permanent army manufactories in England are those intended for the production of ordnance materials; but even in this all-important branch of the service, private establishments have been until recently relied upon to a far greater extent than the result proved to have been altogether safe; for, notwithstanding the enormous manufacturing power of the country, it found itself unequal to meet the sudden demand for warlike materials which arose on the outbreak of the Russian war; nor is this difficult to explain, for it is obviously not worth the while of a manufacturer to keep himself in a position to supply articles the demand for which is of so extremely capricious and uncertain a nature, or for workmen to perfect themselves in a branch of labor which offers no security for proving remunerative. When then a sudden demand arose for an enormous supply of the munitions of war, not only were private establishments unable to provide them in sufficient quantities, but those that were supplied were produced at a cost considerably beyond, and in some cases of four and five times, their value,* and of a quality so inferior as to involve great risk of the failure of military operations.

placed on a better footing.

Fortunately the danger of relying upon private enterprise for the supply of our warlike stores was recognized at an early period of the war, and extraordinary exertions were made to place our decaying manufacturing establishments upon an efficient footing; the result has been most satisfactory, and it is to be hoped that no false confidence will again allow those establishments to sink into neglect, and that the assertion that the War Department is now

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* The shells for which the contractors during the late war charged 73*l.* ton, are now produced in the Government factories for 15*l.*

"in a position to produce warlike stores such as the world has never before equalled, and of which the country may well be proud," may long remain as free from exaggeration as it is at present.*

The existing manufacturing departments of the War Office are:— Existing establishments.

Woolwich
1. The carriage department.
2. The gun factory.
3. The laboratory.

Waltham - 4. The gunpowder factory.

Enfield - 5. The small arms factory.

1. The royal carriage department was established as a distinct branch of the ordnance in 1803, since when it has, keeping pace in a greater degree than any of the other establishments with the mechanical improvements of the age, increased in extent and importance.† The object of this department is to produce every description of gun and ordnance carriage for the land and sea service, with the various accessory implements for artillery, such as ammunition and powder cases, shell boxes, barrels, &c. Royal carriage department,

This factory is by far the largest branch of the arsenal, its buildings alone covering an area of 255,152 superficial feet. Upwards of 3,000 hands are employed in the described.

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* "Past and Present Condition of the Manufacturing Branches of the War Department. By John Anderson, Inspector of Machinery." The author has largely availed himself of this interesting report in connexion with the subject of this chapter.

† In 1814 the royal carriage department, by a great effort turned out 2,400 pairs of wheels. In 1855 it produced nearly 10,000 pairs. The expenses of the staff of the establishment are less now than when it was comparatively in its infancy.

department, and the machinery for working wood and metals moved by twenty-three steam engines, equal to 720 horse power, is computed to be equal to the manual labour of 12,000 men.

Extent.

A square space of 20 acres communicating with the Thames by a canal, is devoted to storing timber, which is conveyed to the workshops by means of railways which intersect the whole ground, and deposited where wanted by means of powerful cranes, by the use of which the expense of from 50 to 100 pair of horses, formerly employed for this purpose, is saved.

The productive power of the carriage department is at present fully equal to the probable demand; but whenever, owing to a sudden pressure, it is necessary to resort to private establishments, the most strict and minute examination is made by the department of every article furnished by contract previously to its acceptance for the public service.

Gun factories.

2. *Gun Factories.*—Up to the commencement of the late war this department produced only brass guns, but the failure of a number of iron mortars supplied under contract by private manufacturers led to a determination on the part of the Government to render itself as far as possible independent of private manufacturers for the supply of an article of such vital importance, and an iron foundry was accordingly commenced, and is now in course of completion.

Employment of machinery.

In this department too machinery is employed to a great extent, both in the manufacturing and in the testing process; and so important is it considered that a thorough knowledge of the relative tenacity of the metal used for heavy ordnance should be acquired, that a photographic apparatus is attached to the gun factories, by means of which views of the fractured pieces of guns are taken.

It is computed that the gun factory will ultimately be able to turn out fifteen brass and thirty iron guns a week. At present it cannot produce above eight iron guns.

An interesting and important branch of manufacture in this department is that devoted to the production of Lancaster shells, of which, by means of forty different machines, some of them of great power, no less than one hundred shells can be manufactured in a day. Lancaster shells.

3. *The Royal Laboratory.*—It is here that every description of ammunition for ordnance and small arms is manufactured. The heavy demands made upon the laboratory* on the outbreak of the war necessitated the construction of additional manufactories for the supply of shells, small arms, cartridges, and rockets; and the establishment has now been permanently increased to an extent which will enable it to keep pace with whatever demands may be made. Here, as elsewhere in the arsenal, machinery has been made to do the work of human hands, and the result is an enormous saving in time and money and a more perfect workmanship. The shells produced in the model factory erected in 1855 by Captain Boxer, of the Royal Artillery, were not only turned out with a rapidity quite unprecedented in former times,† but their cost was 5*l.* a ton less than the contract price.‡ Royal laboratory.

So complete is the machinery in this branch of the laboratory, that the shell passes through the various

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* When war was declared the arsenal did not contain a sufficient quantity of shells to furnish the first battering train that was sent to the East, and the fuses then issued had been in store ever since the battle of Waterloo.

† Upwards of 10,000 shells, and 250,000 minié bullets were turned out in the course of a single day.

‡ This is a considerable saving on an article of which the consumption amounted to several hundred tons daily.

stages of conversion from the scrap of old iron in the furnace into the formidable missile in the hold of the ship, without actually coming in contact with the hand of the workman or laborer.

Cartridge bags.

Among the more important additions made to the laboratory is a paper-mill for the manufacture of bag cartridges, which is capable of producing 400,000 bags a day. Mr. Anderson states:—

"Great doubt having been expressed with regard to the propriety of the Government becoming their own paper manufacturers, even in the case of such a special article as the bag cartridge, the subject was well considered before such an undertaking was embarked in.

"In order to carry out the cartridge manufacture in a satisfactory manner, it is essential that these bags shall not be crushed or even flattened, as any such flattening will prevent their successful filling by machinery, and necessitate their being opened up by hand. It, therefore, follows, that the conveyance to the arsenal of 400,000 bags per day would be both a troublesome and an expensive work; but if the bags are made on the spot, not only will this carriage be saved, but at the same time the bags will be spared all unnecessary handling in the manufacture.

"From inquiries that were made, it was found that bags of the required accuracy could not be delivered (under contract) at less than half a farthing each. In the arsenal they will be obtained at considerably less than the half of that sum, and without any risk of failure in respect to the quality of the article, a consideration of immense importance in things of this kind, which, from their delicate nature and great number, cannot be properly examined."

Rockets.

The rocket manufactory was likewise greatly extended during the war, and is now capable of producing 500 rockets per day; the large amount of skilled labor hitherto necessary in this department being now performed by machinery.

Extent of establishment.

The royal laboratory, which comprises the departments of the inspector of machinery and of works and

a chemical establishment, covers an area of 315,480 superficial feet, and contains 25 steam-engines and 22 steam boilers, representing above 800 horse power; 986 machines of various descriptions, many of which are of marvellous ingenuity or power, and 5,430 feet of polished shafting.

Gunpowder manufactory.

4. *The Gunpowder Manufactory at Waltham Abbey.*— The frauds and failures of contractors engaged to supply this all important article of warlike material led the Government, in 1790, to determine upon establishing their own powder manufactory, a measure which has been attended with the happiest results, and ensures a far better description* of gunpowder at a greatly reduced cost; and although the Government establishment is insufficient to provide the full supply necessary during a period of war, and contractors will still to a certain extent have to be resorted to, the standard of quality is regulated by the factory at Waltham Abbey, from which samples are supplied to the different private powder-mills.

Its produce.

During the war in the early part of the present century, there were three Government manufactories for gunpowder, and their annual produce amounted to above 100,000 barrels. On the conclusion of peace in 1815, so large a supply remained in store, that the Government abolished two of the manufactories, retaining only the one at Waltham Abbey, and even this on so reduced a scale, that in 1840 its produce could not be brought to

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* Under the contract system the regulation charge for cannon was half the weight of the ball, and the average range 190 feet. The range of the powder produced by Government is now increased to 268 feet, and the charge reduced to one-third the weight of the ball!

exceed 3,500 barrels, and supplies had to be obtained by contract.

Improvements.

From that period, however, up to the commencement of the late war, many important improvements were introduced, and at the present time new works are in progress which will raise the annual produce to 20,000 barrels.*

Precautions.

The manufactory is built with so careful a regard for the safety of those employed in it, that although it does not contain more than twelve or fourteen detached buildings, these are dispersed over a surface of fifty acres of ground; and, as a further precaution, a large copper tank capable of containing a large supply of water is suspended over each mill, by means of which the entire store of powder may be instantaneously flooded on the first symptom of danger.

Whenever 500 barrels have accumulated within the factory grounds, they are despatched by water to the magazines at Purfleet.

Machinery.

A large quantity of new machinery has been recently introduced at Waltham Abbey, which, in addition to an extensive saltpetre refinery, and a range of charcoal ovens, contains twenty-one water wheels, five steam-engines, and seventy-two machines of various descriptions.

Small arms factory.

5. *Small Arms Factory at Enfield.*—A Committee of the House of Commons having, in 1854, reported upon the expediency of a public establishment for the manufacture of small arms, in consequence of the uncertainty as well as the expense attending this supply under con-

* This would not, however, suffice for the wants of the naval and military service in war. The consumption of gunpowder during the siege of Sevastopol is said to have exceeded 100,000 barrels, of which 32,000 had to be purchased in America and in Belgium.

tract with private individuals, 40,000*l.* was voted for the immediate erection of the necessary buildings and machinery at Enfield.*

A striking feature in this establishment is the employment of machinery for the manufacture of the musket in all its intricate parts which had been most successfully adopted in the United States of America, but had not hitherto been attempted in this country. Use of machinery.

To give even an approximate description of the extent and the ingenuity of the machines now in use at Enfield, would far exceed the limits of this work. They must be seen to be appreciated, and studied to be understood, but some idea may be formed of the minuteness and nicety of the operations carried on in this factory from the fact that the musket is made up of between fifty and sixty pieces, each of which requires several special machines for its production; that the bayonet alone undergoes seventy-six distinct operations from first to last, and that the gun-stock passes through seventeen different machines, each advancing it one step towards completion, while only in the last stage, that of "polishing," is manual labour resorted to.

At present the manufactory is calculated to produce at the rate of 900 or 1,000 muskets and bayonets a week, of a quality hitherto unattempted by private enterprise, and at a price far below that formerly paid under contract.† Produce.

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* Enfield is situated on the Eastern Counties Railway, about twelve miles from London. Considerable doubts are entertained as to the wisdom of placing this manufactory at a distance from the arsenal; and, independently of this, the unsuitableness of Enfield for such a purpose is obvious. All the objections urged on this subject, however, were overruled.

† The bayonet formerly, under the contract system, cost 7*s.* 6*d.*, but it was considerably inferior to those produced at Enfield, the cost of which does not exceed 4*s.*

Opposition to Government factories considered.

It is but natural that considerable opposition should have been made among those interested in the gun trade to a Government establishment which appeared to enter into direct competition with private manufactures; but the House of Commons did not assent to a measure, opposed in principle to national policy, until it had been clearly shown that the trade of England was unable to furnish an adequate supply of small arms, so much so that contracts had to be entered into with firms in France, Belgium, and America. In those countries Birmingham may find far more formidable rivals than in a Government factory, which will tend rather to stimulate private enterprise than to monopolize its profits. Enfield is not calculated to turn out the full number of rifles required for the army, which, under ordinary circumstances, may be estimated at 500,000 every twelve years, but which during war would amount to considerably more. A resort to private manufactories will therefore continue to be as necessary as ever, and so strong is the predilection in this country for the supply of all public stores by the contract system that the Government factory could not long be maintained if the private trade could satisfy the nation that it was in a position to furnish small arms of as good a quality, in as great a number, and at as low a price* as could be produced in a Government establishment. Until this is done, however, the State acts but with common prudence in adopting measures for placing so important a branch of military manufacture upon a secure footing, and in rendering itself to a certain extent independent of private resources for the supply of an arm upon which the soldier's efficiency mainly depends.

Direction.

The different manufacturing departments that have been enumerated in the foregoing sketch are placed under

* The cost of the rifle produced at Birmingham exceeds by 15*s.* that manufactured at Enfield.

the superintendence of lieut.-colonels of the royal artillery, with a staff of officers and clerks, whose aggregate salaries amount to 22,000*l.* a year.

The number of foremen, artificers, labourers, and boys employed in these establishments amounts at present to 6,972,* and their annual wages are estimated at 388,663*l.* Labor.

A special police force is kept up at the different departments for the maintenance of order among this enormous assemblage, the charge for which amounts to about 7,000*l.* a year. Police.

The total charge for pay of wages of officers, clerks, artificers, labourers, &c. employed in the manufactory department amounts, for the current year, to 425,113*l.* Pay of establishment.

The cost of warlike stores, including the purchase of small arms, iron ordnance, shot and shell, machinery and timber, &c., during the last three years, amounted to 4,343,918*l.*, or about 1,447,972*l.* a year. Of this sum, however, 600,000*l.* is for stores supplied to the East India Company, and repayable to the British Government. Charges.

The total amount expended in the improvements and additions effected during the last four years in the different manufacturing establishments amounts to 618,780*l.*

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* During the late war above 10,000 workmen were kept in constant employment.

CHAPTER IV.

ADMINISTRATION OF JUSTICE.

Importance of a knowledge of military law.

A MILITARY officer is never placed in a position of higher responsibility than when called upon to exercise those judicial functions which the Queen's commission imposes upon him. Upon the strict and impartial administration of justice hinges the discipline of the army, and it is obvious that a duty involving not only the efficiency of the service, but the honor and even the lives of its members, cannot be conscientiously performed without a thorough knowledge of those laws which, framed alike for the repression of crime and the vindication of innocence, form the code of military jurisprudence.

The "Queen's Regulations" most emphatically impress upon officers of the army the importance of studying the orders and regulations referring to the practice and proceedings of courts-martial, and of those special laws to which the soldier is subject. Fortunately there are great facilities for acquiring this branch of knowledge, for not only are our military laws expressed in plain and intelligible language, free from that verbiage with which our civil code is overlaid, but some of the best contributions to our military literature are devoted to the elucidation of this subject, and enable every officer to master the principles upon which martial law is founded, and the forms according to which its proceedings are conducted. To those works, too well known to require enumeration, the student is referred; from them the author has principally derived the materials for the following outline of the forms of military law, a subject which, feeling his utter inability to do justice to, he would not have presumed to touch upon, even in the most general manner,

Facilities for acquiring it.

did it not form too important a feature in the administration of an army to be altogether passed over.

Necessity for martial law.

The army is, in its organization and its duties, so essentially different from other sections of society, that the ordinary laws under which civil government is administered are insufficient to ensure that cohesion and subordination which are indispensable for the efficiency of a military force, and to maintain that invariable discipline without which an army becomes more dangerous to the country which it serves than to its enemies.

Indeed, it stands to reason that a large body of men trained in the use of arms, and conscious of the strength which their organisation confers, require that their power be restrained by laws more stringent in their nature, and more immediate in their application, than is either necessary or desirable for the ordinary purposes of government. The complicated machinery and the tedious formalities of the civil law render it quite inapplicable to the prompt and vigorous repression of military offences, more especially since many acts which are not punishable by the common law of the land, because they do not affect society at large, become crimes when committed by soldiers, as being subversive of military discipline.

Hence the necessity for a special code of laws for the government of armies, which indeed has been so generally recognised that there is scarcely a period of history in which we cannot trace some system of military jurisprudence more or less distinct from the ordinary law of the land.*

Origin and progress of martial law.

In our own country the high constable and the provost-marshal were, up to a comparatively recent period, the

* This is a subject of great interest, and a compendium of the various systems of martial law in the different armies of the world would form a most valuable contribution to military history.

chief administrators of military law; their powers were most extensive,—almost unlimited indeed; for although articles of war defining offences and affixing punishments were promulgated as early as in the reign of King John, the commander of an army in the field allowed himself to be little restricted by established laws, which, as a rule, he was authorized to modify to suit the position in which he found himself placed. Thus the *Ordinances of War*, though bearing the name of the sovereign, were frequently what we now should call "General Orders," established and promulgated by a military commander.

The Ordinances of War of Richard the Second were of extraordinary severity* and continued to be so during successive reigns until Essex, under Elizabeth, promulgated his "One Hundred and Seven Articles," which considerably limited the summary powers of the general and the high constable, and some of which are retained to the present day. In 1689 the proceedings of courts-martial were regulated by the first Mutiny Act. In proportion as military offences fell under the jurisdiction of defined tribunals so did the powers and the importance of the high constable and the provost martial decline; the former office was abolished towards the close of the seventeenth century; the provost became "judge-martial and advocate-general," performing no executive duties, but acting as the legal adviser of the commander of the forces, and the officers charged with the maintenance of order became simply subordinate agents to exercise police duties and to execute the sentences of courts-martial.

First Mutiny Act.

Military police.

During a period of war, however, the military police are to this day entrusted with discretionary powers for

* In reading over the list of punishments in the shape of torture and mutilations of our early military code, we are reminded of the criminal laws of a certain Asiatic prince whose *lightest* punishment was simple death.

the immediate repression and punishment of certain offences.*

Effect of martial law.

The character of military jurisprudence varies considerably in the different States of Europe. In most of the continental armies the soldier, from the hour that he assumes his uniform, is withdrawn from the influence of civil government and falls at once under the sole operation of a distinct and exceptional code of laws. No matter how unconnected with his military duties be his offence, he is amenable only to a military tribunal. In our own country the case is very different; there the civil law is supreme and the soldier cannot escape from the liability of the citizen, but continues amenable to the ordinary tribunals for any infringement of the civil laws, while for offences against discipline or good order he falls under the jurisdiction of *martial law*.

Objections to martial law considered.

The constitutional jealousy of military power so prevalent in this country, together with an imperfect knowledge of the subject, has led to martial law being looked upon with some suspicion, as having a tendency to over-ride the civil authority; nothing can be more erroneous than such an opinion. Martial law, so far from being with us an innovation upon civil law, is but an additional restraint for the protection of the state against the offences of a body which has within it the elements of danger; it does not affect the citizen† who cannot possibly fall under its influence, nor can it grant

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* The provost-marshal, with an army in the field, has the power of executing summary justice upon soldiers taken in the act, and can even inflict capital punishment upon his personal responsibility.

† Except in the case of martial law being proclaimed, as in periods of war, insurrection, or rebellion, when the civil law is suspended, and the military authority is for the time being supreme.

immunity to the soldier for offences against society; for not only is he amenable to the civil judicature for offences committed against civilians even when of the most trivial nature, but breaches of military discipline, when accompanied by an infringement of the civil law, bring him under the influence of the ordinary tribunals. Martial law is thus a further safeguard to the country and not, as civilians have sometimes objected, a privilege of the army; indeed it is rather, as an able writer on military jurisprudence has said,* "by the very limited term of its duration and the frequency of its renewal" more essentially a law emanating from the people than any other existing statute.

Mutiny Act and Articles of War.

The right of convening courts-martial is conferred upon the Crown by an annual Act of Parliament known as the "Mutiny Act," which also defines the powers and constitution of such tribunals, the offences which they are competent to deal with, and the penalties which they have the right to award. By the same Act the Sovereign is empowered to make "Articles of War," which are, in fact, the interpretation by the Crown of the spirit of the Mutiny Act.

Fairness of courts-martial.

While admirably calculated to repress crimes and offences and to maintain good order in the army, martial law, as established in England, is equally framed to afford the means of vindication to the innocent; it is essentially based upon principles of equity; and although the guilty would no doubt prefer the chances of escape which are afforded by the technicalities and the complicated procedure of the civil courts, a soldier conscious of innocence

* Tytler, "Essay on Military Law"; see also "Simmons on Courts-Martial;" a work which well merits the favor in which it is held throughout the army, and which has become an almost universal authority on questions of military jurisprudence, and the practice of courts-martial.

would, as a rule, prefer to be tried by court-martial than by any other tribunal; and this confidence in the fairness of his judges must powerfully contribute to the maintenance of discipline.

Members at once judges and jurymen.

Courts-martial are unlike any civil tribunal in this country, inasmuch as the officers who form them are at once judges and jurymen, and pass the sentence as well as pronounce the verdict; in other respects, however, the spirit of the English common law is maintained in these courts.

Liability of civilians to martial law.

Not only the officers and soldiers of the army, but all persons attached to it or in immediate connexion with it, become amenable to martial law for the infraction of established regulations. Thus sutlers and other camp followers are liable to be tried and punished by courts-martial, although they are not and never were soldiers; and in like manner persons attached to the departments of the army in civil capacities are subject to military jurisdiction while so employed.*

Judge-advocate general.

The judge-advocate general is the chief officer charged with the administration of military law. It is his duty to receive and revise the proceedings of all general courts-martial, in order to determine upon their strict legality and accordance with established forms before submitting them for confirmation and approval to the Sovereign.

Tenure of office.

The judge-advocate general holds his appointment by letters patent under the Great Seal, and vacates his office

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* This is not as generally known as it should be. Of the tribes of civilians sent out to join the army in various capacities during the late war, the majority objected to submit to military discipline, and refused to acknowledge their liability to military law, with a pertinacity which it frequently required the practical arguments of the provost-marshal to bend.

on a change of ministry. He is immediately assisted by a permanent deputy.

Acting judge-advocate.

It is usual when active military operations on a large scale are undertaken to attach a judge-advocate commissioned for the occasion to the army; but for ordinary purposes it is in the power of general or other officers who are authorized to convene courts-martial, to appoint a person to execute the office of judge-advocate, either during pleasure or for any special occasion. His duties are to register and record the proceedings, to advise on points of law, to point out any deviation from the established rules, and to furnish the members of the court with information upon any subject connected with their judicial functions.*

Courts-martial described.

Courts-martial are of three kinds, general, district, and regimental; and the Mutiny Act and the Articles of War define the jurisdiction and the composition and limit the powers of each.

General court-martial.

General Court-Martial.—This is the highest form of military judicature competent for the trial of officers of every rank in the army, as well as of warrant and non-commissioned officers and soldiers. It is the only court which can pass sentence of death or transportation for

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* In French courts-martial there is always a "*Commissaire Impérial*" ("*royal*" or "*public*," as the case may be,) who performs the functions of our judge-advocate, with more extensive powers however, as to enforcing the strict observance of legal formalities.

A *rapporteur*, who is likewise an officer of the military law, acts as public prosecutor, and is assisted by a *greffier*, who records the proceedings, and "tient la plume au conseil."

The two former officers are generally selected from the *Corps de l'Intendance Militaire*, the members of which are, as a rule, qualified for the duty by the study of military jurisprudence. The *greffiers* are generally non-commissioned officers.

life, and it cannot be convened except by the sign manual of the Sovereign or by officers armed with the Sovereign's warrant to that end.* No general court-martial can be held without the attendance of a deputy-judge-advocate duly appointed for the purpose. It must consist of thirteen commissioned officers,† except in certain of the colonial possessions, where, owing to the difficulty of collecting so large a number, seven, or even five, officers may constitute a court. The president and members of all courts-martial are required to be of a rank equal with, if not superior to, the prisoner's.

Power of convening.

Composition.

An officer can only be tried by a general court-martial, which is empowered to pass sentences of death, dismissal, transportation, and, in the case of non-commissioned officers and soldiers, the additional penalties of degradation, imprisonment, reduction, penal labor, forfeiture of service and of pay, and corporal punishment.‡

Powers.

Every officer bearing the Queen's commission in the army is liable to serve on courts-martial, but officers of

Liability to serve on courts-martial.

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* Our *general* courts-martial correspond with the French "*conseils de guerre permanents*," two of which are established in each military division for the trial of the more serious offences. These are not confined, as with us, to offences against discipline; the French law holding that any crime committed by a soldier is a military crime, and recognizable only by a military tribunal.

† In France a *conseil de guerre*, for the trial of officers under the rank of captain or soldiers, consists of seven members, viz., one colonel (president), one major, two captains, two subalterns, one non-commissioned officer. In courts-martial for the trial of general or field-officers, members of their own rank are appointed in place of subalterns and non-commissioned officers. No one can be a member of a conseil de guerre who is not above twenty-five years of age.

‡ A non-commissioned officer cannot undergo corporal punishment without having first been reduced to the ranks.

the regimental staff and of the military or administrative departments are only selected "in extreme cases," the nature of their avocations rendering it inexpedient so to employ them. It would, however, be not only unobjectionable, but decidedly proper, that on the trial of an officer of those classes, a certain proportion of officers of his own corps* should be members of the court, not only as giving to the tribunal an additional feature of fairness, but as bringing to its deliberations a certain degree of professional knowledge which is not always possessed by military officers and which could not fail to prove of use in the consideration of the motives, the character and the extent of offences.

Expediency of officers of administrative department serving as members of courts-martial.

District courts-martial.

Composition and powers.

District or Garrison Courts-Martial may be convened by officers (not below the rank of field officers) commanding districts or corps; they consist of seven, five, or three members; the president, who must not be under the rank of captain, officiates as judge-advocate to a limited extent, and the court is competent to try warrant† and non-commissioned officers and soldiers for secondary offences and to pass sentence of imprisonment not exceeding six months, corporal punishment, forfeiture of pay

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* In France a special clause in the articles regulating the composition of courts-martial directs, that on the trial of a member of the Corps de l'Intendance, two officers of that service should be members of the court. This measure is so obviously fair and expedient, that it is difficult to understand why a commissariat or medical officer in our service has so long been, and continues to be, debarred from the privilege of *trial by his peers.*

† The trial of warrant officers is regulated by a special clause in the Mutiny Act, and the sentence passed upon them cannot be carried into execution until confirmed; if at home, by the Sovereign; or abroad, by the general commanding on the station.

and pension. It has also the power to reduce non-commissioned officers to the ranks, and to recommend the discharge with ignominy of private soldiers.

The proceedings of these courts are, after confirmations, transmitted to the judge-advocate-general, in whose office they are registered and preserved. Proceedings.

*Regimental Courts-Martial** may be convened by officers commanding regiments or detachments for inquiring into disputes and minor offences relating to the interior economy or discipline of a corps, and are competent to sentence to corporal punishment, imprisonment for a period not exceeding forty-two days, and a partial forfeiture of pay for any period not exceeding six months. Regimental courts-martial. Powers.

The court must consist of at least three members, the president being of the rank of captain, the officer commanding the corps or detachment to which the prisoner belongs is ineligible to sit on the court, but has the power to confirm its proceedings.† Composition.

In all courts-martial the junior member gives his vote first, judgment being given by the majority of voices, except to pass sentence of death, in which case two-thirds of the members must concur. If, owing to the absence Voting.

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* The distinction between the powers of general and regimental courts-martial was first established under James the Second, in 1686.

† Courts corresponding to our district and regimental courts-martial are held in France under the name of "*conseils de discipline.*" These are composed of seven members, namely, a field-officer (president), three captains, and three subalterns, and are competent to try soldiers for offences not sufficiently important to come under the jurisdiction of the *conseil de guerre*, and to sentence them to service in the *compagnies de discipline.*

of a member, the court be reduced to an even number and their votes be equally divided, the prisoner has the benefit of an acquittal.

Open courts. The proceedings of courts-martial are conducted in open court, but the president may forbid the publication of the report of a trial during its continuance.

Oaths of members. Every member of a court-martial is sworn to do his duty fearlessly and conscientiously, and further not to divulge the vote given by himself or by any other member of the court.

Evidence. All evidence given before a court-martial is also upon oath.

Courts of inquiry. There is yet another description of military tribunal, called a court of inquiry,* which does not pass sentence, although it may express censure.

Simons says:—

"A court of inquiry is rather a council than a court, which any officer in command may take advantage of to assist him in arriving at a correct conclusion on any subject on which it may be expedient for him to be thoroughly informed."

Composition and powers. The number and the rank of the members of courts of inquiry are unlimited by regulation; no evidence can be received upon oath, and these courts thus serve rather to enable officers in command to determine upon the necessity or expediency of ulterior proceedings by courts-martial or otherwise, than to have any direct effect upon the subject under investigation.

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* The French have their *conseils d'enquête*, but they are more of the character of inferior courts-martial than mere courts of enquiry; they are intended for the trial of officers for minor offences, and they have the power of sentencing officers to reduction to half-pay for a period not exceeding three years, or to imprisonment for a period not exceeding six months. The proceedings of these courts are held with closed doors, and the members, five in number, vote by ballot.

Having now sketched the legal proceedings adopted for the trial of military offences, reference must be made to the execution of the sentences passed by courts-martial. The punishments to which officers are liable are, *death, transportation, fine, imprisonment, cashiering, dismissal, loss of rank* or *seniority,* and *reprimand.* Punishments.

The four former are happily so extremely rare in our service, that they do not call for particular notice; death can only be inflicted upon an officer for crimes that are at present hardly known in the army; and transportation, fine, and imprisonment are the penalties for embezzlement only. It is now many years since an officer in the British army has been sentenced to any one of these punishments. Death. Transportation.

Cashiering is the most severe form of dismissal, since it implies disgraceful conduct and a disqualification to serve the Crown in any civil or military capacity. Cashiering.

Simple dismissal, which may also be inflicted by the Sovereign without the intervention of a court-martial, Dismissal.

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* In the French army there is no distinction in the punishment awarded to officers and soldiers. There are three kinds of penalties, classed as *peines correctionelles, peines afflictivés et infamantes,* and *peine infamante;* the first comprising various periods of imprisonment; the second, death, hard labor, in irons or otherwise, for periods from five to twenty years, solitary confinement from five to ten years, and *degradation,* a form of punishment corresponding to our discharge with ignominy, and always accompanying the sentence of *peines afflictives.* After having undergone *correctional* punishments, soldiers are sent to Africa to complete their term of service. There is no corporal punishment in the French army.

† The legal right of the Sovereign to dismiss an officer from the army has been questioned, as it is erroneously held that an officer can insist upon being tried by a court-martial; the royal prerogative in this respect is, however, beyond all

does not preclude the possibility of restoration to the service.

Loss of rank.

Loss of Rank or Seniority, a common penalty in the navy, is not a sentence frequently resorted in the army, owing probably to the system of purchase, which would render it very difficult to carry out such a punishment equitably; since the officer who had paid for his commission would thus be far more severely punished than he who had received it without purchase; while, on the other hand, the non-purchaser would find it more difficult to regain the position forfeited, and would thus be more injured than his wealthier comrade. It is, indeed, a punishment which can only be fairly applicable in a service in which seniority is the rule.

Reprimand.

Reprimand, the lightest penalty which a court-martial can inflict, is of several degrees; in some cases it may accompany other forms of punishment, such as reduction of rank or suspension of pay for a certain period, but unless it be otherwise specified in the sentence, a private admonition by the general or the immediate commanding officer is considered to suffice.

Punishments of non-commissioned officers and soldiers.

The punishments to which non-commissioned officers and soldiers are subjected have been already referred to. The execution of the sentence follows in all cases immediately upon the confirmation of the finding of the court.

Death.

Sentence of death is now happily a rare occurrence in our army; when it becomes necessary to resort to this extreme measure, execution, either by shooting or hang-

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doubt. An officer in the army holds his commission by the favor of the Sovereign, who can at any moment revoke it, and it is extremely improbable that this power would be abused, or operate otherwise than beneficially to the service.

ing, according to the nature of the crime, takes place in the presence of the entire garrison with solemn formalities,* which cannot fail to prove an impressive example, and which contrast strongly with the indecency characterising an ordinary execution in this country.

Transportation.

Transportation for Life.—Soldiers sentenced to this punishment are transferred to the civil power, in the custody of which they undergo their sentence.

Corporal punishment.

Corporal Punishment.†—A recent Act reduces this punishment to a maximum of fifty lashes, and deprives it of those features of inhumanity which formerly characterized its infliction, when soldiers actually died under the lash, and when the only effect produced upon their comrades, forced to witness the scene, was sympathy for the sufferer and horror at the brutality of the penalty.

Its effect considered.

Whether corporal punishment in its present modified form, answers any purpose sufficiently important to counterbalance the obvious objections to its continuance is a question upon which much diversity of opinion exists; the opponents of flogging argue, with much reason, that the soldier who is so thoroughly bad as to require the lash to control him, were better drummed out of a regiment, which he could only disgrace or corrupt; and that the offender who is not hardened or confirmed could be degraded, but would not be reformed by such

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* Nothing tends more to render military discipline *a habit* than a strict observance of all established forms, a relaxation of which invariably leads to disorder and disorganization, if not to insubordination.

† Corporal punishment existed in the armies of the Greeks and Romans. It was a privilege of the *Roman* soldier (as distinguished from the provincial or foreign legionary) to be beaten with a *vine stick*, as it was of a peer in our own country to be hanged with a silken rope.

a punishment. Be this as it may, there can be no doubt that the mere fact of its existence must serve to deter many a high-spirited young man from entering the ranks of the army, and there is reason to believe that a punishment, so destructive of that dignity and self respect which form the best guarantee for good conduct and good service in every station of life, will not much longer remain upon the military statutes, and continue to place the British soldier on a lower footing than the citizen, or than the soldier of other states in which military discipline is maintained without the use of the lash.

Mode of inflicting corporal punishment.

Corporal punishment is inflicted by means of a whip on the bare back by drummers, in the presence of the regiment to which the offender belongs; a medical officer is always required to attend on these occasions, to certify the soldier's physical fitness to undergo the punishment, and, if necessary, to recommend a remission of a portion thereof; a recommendation which a commanding officer could not refuse to attend to except upon his personal responsibility.

Branding deserters.

The Mutiny Act authorizes another description of corporal punishment in the case of deserters, this consists in branding them with the letter D, an operation performed by the trumpet or drum-major, under the superintendence of a medical officer. It cannot be conceived that a man contemplating such a crime as desertion would be deterred from it by the fear of this barbarous and unmeaning punishment, which will, let us hope, be, ere long, abolished.

Imprisonment.

Imprisonment is of several kinds, solitary, with hard labour, and ordinary. The first cannot exceed eighty-four days in one year, or fourteen days at a time; or either of the two latter, six months at one time. Soldiers condemned to imprisonment undergo their sentence in the nearest military prisons.

Military prisons.

The military prisons are under the direction of an inspector-general; there are nineteen in all, of which ten are in the United Kingdom, and the remaining number in the principal garrisons abroad. Each prison is under the charge of a governor, usually a half-pay or retired military officer, who is responsible for the maintenance of order and discipline, for the safe custody of prisoners, and the interior management and economy of the establishment; he is assisted in his duties by non-commissioned officers, who act as wardens, gate-keepers, guards, &c. A medical officer and a chaplain is attached to each prison, and a general supervision is exercised by "visitors" appointed by the Secretary of State or the the general commanding, who are required to hold periodical inspections, and to furnish reports upon the condition of the prisoners.

Establishment and direction.

Visitors.

Visitors investigate the complaints of prisoners, punish those who are refractory, and recommend the remission of the sentences of those whose good conduct appears to entitle them to indulgence. The prisoners are divided into three classes, each distinguished by its dress. On admission they are placed in the third class, from which, by good conduct, they are eligible to be promoted to the second and first class, in which the discipline and labour are less severe.

Classification of prisoners.

Employment of prisoners.

The prisoners are principally employed in shot exercise, breaking stones, picking oakum, and performing general fatigue duties; and those sentenced to solitary confinement are placed in cells adapted to the purpose, but permitted to take such daily exercise in the open air as may be necessary for the preservation of health.

Every prisoner passes daily under the immediate inspection of the governor, the surgeon, and the chaplain.

Diet.

The diet of soldiers confined in military prisons is strictly prescribed by the regulations. All supplies are

obtained under contracts entered into by the visitors at home, and on foreign stations by the commissariat.

Stoppage of pay.

Soldiers undergoing sentence of imprisonment receive no pay, but sixpence a day is charged on their account by the regimental paymaster, and applied to the cost of their sustenance while in prison.

Discharge with ignominy.

Discharge with Ignominy consists in the soldier being stripped of his facings in the presence of his regiment and drummed out of barracks. It is a punishment only inflicted upon soldiers guilty of infamous conduct, addicted to habitual drunkenness, or of otherwise confirmed bad character.

Cost of administration of martial law.

The average expense attending the administration of martial law during the last three years is about 52,000*l.* a year, of which 45,000*l.* is for the maintenance of military prisons, and the balance for the pay and incidental expenses of the judge-advocate general's department.*

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* The average charge under this head in the French army is about 45,000*l.* a year.

BOOK IV.

MILITARY FINANCE.

CHAPTER I.

GRANT, APPROPRIATION, AND SUPPLY OF MILITARY FUNDS.

Army expenditure.

No one can seriously consider the enormous outlay involved in the maintenance of our military establishments without being impressed with the vital importance of a well-regulated system of finance, by means of which the national resources devoted to this purpose should be most profitably applied, and military efficiency reconciled with public economy.

To elucidate a subject which has formed the earnest study of successive generations of statesmen and administrators is far beyond the humble pretensions of this work and the capacity of its author, who can only attempt to present a brief outline of the existing system of army finance, the principle upon which funds for military services are obtained and applied, and the machinery employed for carrying on the operations connected with this all-important branch of army administration.

The budget.

The supreme control of all public expenditure is vested in Parliament. The Chancellor of the Exchequer, as the financial minister of the Crown, annually submits to Parliament a detailed statement of the sums required for carrying on the public service in all its branches, and the proposed means of creating a revenue equal to meet

these demands. This statement is called the budget, and forms the basis of all parliamentary votes.

The Treasury. The Treasury is the executive department, responsible for the application of funds in accordance with the votes of Parliament.

Estimates. Each great department of the State annually submits to the Treasury an estimate of its probable expenditure for the ensuing year. This estimate is subject to the revision of the Treasury, with whom exists the power of reducing any item that may appear in excess of the requirements of the service.

Heads of service. The demands of each department are classed under different *heads* of service, which are laid in detail before Parliament, and the expenditure sanctioned by the Legislature is voted, not in the aggregate, but for each item under its distinct head.

Appropriation Act. A special Act of Parliament, however, called "The Appropriation Act," confers upon the Treasury the right of altering, on the occurrence of unforeseen emergencies, the proportions assigned to the different services, and of allowing a department to apply a surplus upon one vote to a deficiency upon another.

Audit Board. The Board of Audit exercises, under the Treasury, an active supervision over the expenditure of the different departments, in order to verify the application of funds to their prescribed purpose; and a statement corresponding to the estimates and votes, showing the result of the expenditure as compared with each vote, is annually submitted to Parliament, any change in appropriation within the aggregate amount voted being supported by the sanction of the Treasury.

Control by Parliament. It will thus be seen that Parliament exercises a supreme and direct control over every description of public expenditure, and, as a consequence, over the entire machinery of Government.

Direction of military expenditure.

All military expenditure is directed by the Secretary-of-State for War, who annually prepares an estimate of the cost of the army establishments for the ensuing year, divided under six heads, each head being subdivided into a number of separate votes, viz. :—

LAND FORCES (including embodied Militia):—*Numbers, Pay, Allowances, and Miscellaneous Charges.*

CIVIL ESTABLISHMENTS :—*Central Administration of War, Manufacturing Establishments, Civil Departments, &c.*

SUPPLIES :— *Clothing, Provisions and Forage, Warlike Stores, &c.*

WORKS AND BUILDINGS: —*Barracks and Fortifications.*

EDUCATIONAL ESTABLISHMENTS.

NON-EFFECTIVE SERVICES :—*Half-pay, Retirements, Widows' Pensions, Pensions to discharged Soldiers, &c.*

War Office estimates.

In order to obtain the greatest possible accuracy in these estimates, the head of each branch of the War Department furnishes the Secretary-of-State with a detailed statement of the probable expenditure of his immediate department. An officer specially charged with this duty incorporates these into a general estimate, which, being revised and finally approved, is submitted to the Treasury and included in the annual budget laid before Parliament.

Paymaster-General.

The amount having been voted, the Treasury authorizes the Paymaster-General to honor the orders of the War Department to the extent of the vote.

The Paymaster-General is the cashier of the Treasury, and makes payments upon the authority of that department by means of orders upon the Bank of England,

which establishment is kept periodically advised of the probable amount to be drawn for.

Accountant-General, War Office.

The Accountant-General is the chief financial officer of the War Department. All orders for payments in the United Kingdom emanate from him, and he is responsible that the expenditure authorized is in accordance with established regulations, or in exceptional cases, with the special authority of the Secretary-of-State. The appropriation of funds within their respective votes is further checked by means of a daily audit of the vouchers and books of the War Department under the direction of an inspecting officer attached to the establishment of the Audit Office, whose reports are transmitted to the secretary.

Auditorial inspection.

Army agents.

All monies required to defray the charges of regimental subsistence at home are lodged in the hands of army agents, who act as the bankers of regimental paymasters, and render an account of their transactions to the War Office.*

Agents are appointed by colonels commandant of regiments, who are responsible for the funds which pass through their hands; they are paid, however, by the public, receiving 12*s.* 6*d.* per cent. on the amount of the regimental pay, and a daily allowance of 1*s.* per troop of cavalry, and 6*d.* per company of infantry borne

* The employment of army agents arose under a military system that has long been obsolete; and the interposition of the agent between the paymaster-general and the regimental-paymaster has now only the effect of multiplying accounts and retarding their final settlement. That army agents are very useful in attending to the private business of officers is not to be doubted; but it may well be questioned whether this accommodation should be afforded at the expense of the State; and, if so, whether it would not be better to establish an agency which would benefit the officer without embarrassing the public accounts.

upon the establishment of the regiments for which they act.

Raising funds by the commissariat.

On foreign stations the necessary funds are obtained partly by remittances of specie, but principally by the negotiation of bills of exchange drawn upon the Lords of the Treasury by the officers of the commissariat acting in this respect on behalf of the Treasury.

This is one of the most important and delicate duties of the commissariat, and although certain regulations are prescribed for conducting them, much must be left to the discretion of the officer, upon whose intelligence and financial knowledge the success of these operations must greatly depend.

The process of raising funds is as follows :—

Public advertisements calling for tenders.

The senior commissariat officer (in his capacity of controller of army expenditure and treasurer), who is required to be kept from time to time informed of the probable requirements of the different departments on the station, invites by means of advertisements in the public papers, written tenders for specie to be received on a given day at his office in return for bills upon the Treasury. These tenders are required to state the amount for which it is proposed to purchase bills, the rate of premium or of discount, and the value in British money of foreign coins to be offered in payment.

The period of receiving tenders must necessarily depend upon the wants of the service, and the state of the money market; thus, were the rate of exchange unusually favorable, the commissariat officer would be justified in rawing bills, even though the chest under his charge were well supplied;* while in the contrary

* The amount to be kept in the chest should not under ordinary circumstances exceed the ensuing two months' expenditure, but in this, as in most other matters connected with his financial duties ample discretion is left to the commissariat officer.

case, that is to say, if his bills would have to be sold at a loss, he should, if practicable, defer drawing, or draw only for a small amount, in the expectation of a favorable change in the state of the market. It is, of course, of the utmost importance that strict secrecy should be observed as to the amount of money in the chest, as persons in the habit of dealing in bills of exchange would naturally take advantage of the necessities of the public to raise their terms.

Proceeds of bills.

Tenders for bills are opened by the controller at the appointed hour, in the presence of a military officer specially appointed for this duty, and as each tender is opened both officers affix their initials to it. A schedule is then prepared embodying all the tenders, those most favorable to the public are recommended for acceptance; and bills at thirty days' sight are drawn in triplicate in favor of the successful tenderers, and the proceeds lodged in the chest and credited to the public; advices of the bills drawn, with full particulars of the transaction, and explanations of any unusual circumstances connected with them, being at the same time transmitted to the Paymaster-General.

The bills are drawn by the senior commissariat officer, and countersigned by the officer commanding, or by his military secretary.

It will be obvious, that while these arrangements ensure to the public every possible advantage, the publicity afforded must give full confidence to the banking and commercial interests that no partiality or favor can influence these operations, and must create a wholesome competition in the money market.*

* The author, while employed in Sardinia during the formation of the Anglo-Italian Legion, was urged by those possessed of local experience not to adhere to the established regulations with regard to the negotiation of bills, the invitation for tenders by public advertisement being, it was alleged,

In the duty of negotiating Treasury bills the financial knowledge, the tact, and the judgment of a commissariat officer are fairly tested. This is more especially the case during a period of war, and in a foreign country, when publicity by means of newspapers cannot always be ensured, but where it is still mischievous to allow the negotiation of bills to fall into the hands of a few privileged speculators. It thus becomes peculiarly important, not only with the view of raising the value of bills, but to support the national credit, that all parties should be inspired with full confidence in our transactions, and made to understand the principle of open competition upon which they are conducted; and the commissariat officer owes it no less to himself than to the public, that while every advantage is secured to his Government, no suspicion of partiality or appearance of monopoly should be allowed to attach to his financial operations.

Duties in negotiating Treasury bills.

But it is not alone the state of the *local* money market he must watch with as much attention as the physician watches the symptoms of his patient; he must look at the comparative rates of exchange in neighbouring places, and be ready to avail himself of a rise or fall on other stations, either to supply them if required, or to make requisitions for his own wants; thus, for instance, if in consequence of a scarcity of money at Malta, bills of exchange were at a discount, while owing to the necessity of making large remittances from Gibraltar they were there at a premium, the commissariat officer at the former

Exchange operations

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contrary to local usage, and likely to be viewed as an *undignified* proceeding on the part of the British Government; he persevered, however, in the prescribed course, and the result was that while the bills drawn upon the Treasury by other agents were negotiated at a loss, his bills realized an average premium of one per cent., and the bankers themselves were ready to admit the advantages of our system.

place would, instead of drawing upon the Treasury, make a requisition upon his colleague at Gibraltar, who, taking advantage of the demand for bills, would raise the required amount. This not only prevents unnecessary loss on the negotiation of bills, but has a wholesome effect in demonstrating the independence of the drawer of local resources, and thus serves to control the market.

Treasury chest. The Treasury chest on all foreign stations is under the charge of the senior commissariat officer in his capacity of treasurer. With the view to a more perfect security the bulk of the money is kept in a depôt chest under two locks of different construction, of which the controller holds one key, and a commissariat officer appointed by him the other; the presence of both officers is therefore necessary in order to withdraw any portion of the public money.

Cashier. An officer charged with the payments in detail, under the responsibility of the senior commissariat officer, receives from time to time a sum of money estimated to meet one week's expenditure; he is called the cashier of the detail chest.

Accountant. At every station the controller is required to appoint a commissariat officer to act as War Office accountant. It is his duty to examine every claim for payment, to certify its correctness in all its details, its being in accordance with established regulations, and within the amount of the credit of the service to which it refers. The certified claim is then submitted to the controller, upon whose order and approval payment is made by the cashier.

Having now attempted a sketch of the machinery by means of which funds for army services are raised and expended, it is necessary to revert to the details of the different items of army expenditure, and the regulations under which the emoluments of the soldier and the various charges incident to his maintenance are appropriated.

It will be seen by a reference to the parliamentary votes, that military emoluments appear under different financial and material forms; that is to say, in the shape of *pay* and *pecuniary allowances*, as well as *supplies in kind*. The latter will form the subject of a separate section of this work; for the present we have to consider *pecuniary emoluments* which, for the sake of arrangement, may be classed as follows:—

I. Bounty.
II. Pay.
III. Money allowances.
IV. Non-effective allowances.

Under these heads are comprised every description of immediate remuneration received by the soldier in the various stages of his career from enlistment to discharge and pension.

CHAPTER II.

BOUNTY ON RECRUITING.

Modes of recruiting.

In the absence of a law which, like conscription, compels every subject to render military service, the means possessed by our Government for maintaining its military force on an efficient footing limit themselves to an appeal to the patriotism, the personal tastes, and the necessities of the people.

The first of these is a resource which, under ordinary circumstances, can be but little relied upon; patriotism is a domestic virtue, powerful for the defence of the country in imminent circumstances, but rarely excited by considerations of general policy. In the event of an invasion, for instance, it would instantaneously be aroused throughout the land; but no Englishman considers himself called upon to contribute personally to the ordinary necessities of Government, to the prejudice of his own feelings or interests. Personal tastes,—a predilection for a life of adventure,—a dislike to settled pursuits and fixed habitation,—a roving, restless disposition,—and more or less of that warlike spirit which, whether or not we be a military nation, is tolerably prevalent in all classes,—no doubt, attracts many recruits to the army; but by far the greater number enter the ranks from the pressure of temporary distress, as the assured means of livelihood, and the alternative of a more laborious mode of life.

The aristocratic* element of our army excludes to a great extent from the ranks the incentive of personal

* Let this term be understood in its wide sense. It is not meant that our army is officered exclusively, or even princi-

ambition, an element of great importance in the continental armies, since it serves to reconcile men in some degree to the oppressive law of conscription, by attaching to compulsory service the prospect of personal distinction. Indeed, it may be questioned whether conscription could be maintained under any but the most despotic government, were the avenues of advancement so little open to the private soldiers as with us. It is true, that the prizes are not numerous, but all may compete for them; only one can win the race, but many enter.

Conscription.

There is but a very narrow field in the ranks of the British army for that laudable ambition to better himself, to rise in the social scale, which proves so powerful an incentive to the great mass of the people in their various undertakings in civil life, and which reconciles them to commence their career in the most subordinate and laborious positions for the sake of a prospect, more or less remote, perhaps vague, yet still not unattainable.

Absence of ambition in the ranks.

The English soldier knows how greatly the chances are against his rising to a superior rank; he knows that even were he to attain the grade of officer, he would

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pally by members of the aristocracy. Such is far from being the case. With the exception of the household troops and perhaps a few picked corps, the officers of which belong principally to the titled or untitled nobility, the upper section of the middle class is the one most strongly represented in the higher branches of the army, and the analysis of a Line regiment will show that the majority of its officers are the sons of the smaller gentry, merchants, professional men, clergymen, manufacturers, naval and military officers, and of the wealthier class of tradesmen. The term aristocratic, as applied to the constitution of the army, is meant to express that system of exclusiveness, which, whether founded upon the test of birth, of caste, or of money, creates a powerful barrier between the governors and the governed.

find his means inadequate to support his position,* or ensure his further advancement; and this knowledge undoubtedly operates prejudicially on our recruiting system, as it excludes from the army what is gradually becoming the largest, as it has long been the most vigorous class, that large section of society which may be called the substratum of the middle class, from which are drawn the best recruits for colonial and mercantile adventure, which officers our merchant navy, plans and executes our railways, and takes a leading part in the various practical undertakings which carry British enterprise throughout the world.

Middle classes

unrepresented in the army.

This class is unrepresented in the army, and the basis of our recruiting operations is thus unnecessarily narrowed to the lowest and the least educated section of the community.

Promotion from the ranks.

In most of the continental armies one-third of all vacant commissions are bestowed upon such non-commissioned officers as may be found qualified to hold them, and further advancement is conditional only upon con-

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* Col. Charles Stuart, in his evidence before the Commission on Army Purchase, Question 2193, page 128, stated that as a rule non-commissioned officers objected to be promoted to a commission; that on a certain occasion five serjeants in succession declined such promotion when offered to them, "preferring such situations as messengers at the Horse Guards and others, which do not raise them to what is called the rank of gentlemen," and that one who did finally accept a commission became "perfectly wretched."

During the late war, while the army lay in Bulgaria, a commission which was offered to the non-commissioned officers of the brigade of guards was successively refused by *fifteen serjeants!*

Surely there must be something defective in our military institutions when that which should be the soldier's highest ambition becomes to him not only a matter of indifference, but of positive dislike and injury.

duct and ability; were a similar system introduced with us, a superior class of men would be attracted into the service, and the cost and difficulties of our recruiting greatly diminished. Our existing institutions, however, render a *systematic* promotion from the ranks impracticable, and the most insuperable objection to its introduction would be the fact, that, as a rule, the material for good officers would not be found to exist in the ranks of the army constituted as it now is.*

The principal resource of the Government for the supply of recruits must then be pecuniary rewards; and it becomes the great object of administration to place these in the form best calculated to prove attractive.

With this view, three kinds of remuneration are offered to the soldier. Firstly, a sum of money, to act as an immediate inducement to enlist. Secondly, a daily rate of remuneration, as nearly as possible equivalent to the ordinary wages of labor. Thirdly, a prospective provision after a fixed period of service. These points will be now considered under the heads of *bounty*, *pay*, and *pension*.

Bounty.

The practice of offering a gratuity to recruits probably took its origin in the indentures into which, as early as in the fifteenth century,† it was usual for the sovereign to enter with individuals of property and position, who bound themselves, in consideration of a stated amount of

* Out of 73,000 men in the infantry of the line, including non-commissioned officers, 20,000 can neither read nor write; 13,000 can read only; 38,000 can read and write with more or less proficiency, and 2,000 are of "superior education;" by which should be understood that degree of education which would fit them for the lower branches of mercantile or other civil employment, and for regimental clerkships.

† See *Rymer's Fœdera*.

"regards," to provide a given number of soldiers. These regards were, in fact, a *bounty* on enlistment. At a later period we find mention made of "coat money," which was a sum paid to recruits on engaging themselves, and intended to enable them to procure their outfit. During the reign of Elizabeth several ordinances were passed to regulate the levy of troops. Among the clauses we find one distinctly authorizing impressment, and another which gives to magistrates the power of pardoning criminals on condition of their entering the army,* but there is no mention of bounty, or any remuneration beyond the daily pay.

First Mutiny Act.

Under the provisions of the first Mutiny Act in 1689,† captains of companies were charged with the recruiting of their own men; and a regulation of a few years later allows them two non-effectives for the expense so incurred by them.

Recruiting placed on a superior footing.

Towards the end of the last century recruiting appears to have been placed upon a sounder footing. In 1778 an inspector-general was appointed, under whom medical inspections of recruits were established. It was also for the first time considered necessary to fix a standard of height and age, and a stated sum was allowed for every approved recruit; but this was a perquisite of the inspector-general, who made his own arrangements with his subordinate agents, who again made theirs with the

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* A similar Act was passed in the early part of the present century, by which courts-martial were empowered in certain cases to commute sentence of death for perpetual military service.

It is said that more than one of these convicts, appointed to serve in the African corps and West India regiments, rose to the rank of field officers.

† This Act was passed in April 1689, and was to remain in force for six months only.

recruit; and what with deductions for clothing and necessaries, the recruit, instead of finding himself the richer, more frequently was declared in debt by the time he had joined his corps.

Transferred to adjutant-general.

In 1806 twenty more recruiting districts had been formed in the United Kingdom and Ireland, but it was not until the following year, when the recruiting service was transferred to the adjutant-general of the army, that the bounty became a direct transaction between the State and the recruit.

From this time regimental officers ceased to derive a profit from the recruitment of their men.

Amounts of bounty.

The amount of bounty must, of course, vary with the necessities of the state, the general prosperity of the country, and the demand for labor. In a season of scarcity, or when work is not plentiful, a bounty is hardly required to attract a certain class of men to a service which ensures their maintenance; when, on the other hand, there is an unusual demand for labor, and wages become proportionately high, the Government having then to bid against the landholder or the manufacturer, must offer better terms, and the amount of bounty is regulated accordingly. The condition of the soldier, his food and clothing, and more than either, his pay, will always have a certain influence in determining the recruit; but, as a rule, it is the bounty which acts as the most powerful incentive on enlistment. The class from which our soldiers are taken is not a provident one, and the immediate possession of a sum of money is a stronger temptation than the certainty of support and the remote prospect of a pension on discharge; the latter may, after a certain period of service, keep men in the army, but it may be much doubted whether it has the slightest influence in attracting men to it in

the first instance; and this becomes evident from the fact that while a trifling increase in bounty gives a most powerful impulse to recruiting, the material improvements in the condition of the soldier, which have year by year been effected, appear to have no influence whatever upon recruiting operations, however much they must contribute to render the soldier more contented.

Standard.

The standard is another means of accelerating or retarding recruiting operations. In time of war, when the demand for soldiers becomes unusually great, the Government adopts the course of raising the bounty and lowering the standard; that is to say, of offering a higher price for an inferior article. In peace, or when reduction instead of augmentation has to be effected, the bounty is reduced and the standard raised.

The highest amount to which the bounty ever rose was during the Peninsular war, when it was as follows:—

	Standard.			Bounty.†					
	Height.		Age.	For Life.			For Limited Service.		
	Feet.	In.	Years.	£	s.	d.	£	s.	d.
Men or Youths	5	3	17 to 25	23	17	6	18	12	6
Boys - -	5	2	under 17	16	14	0	13	0	6
Ditto* - -	5	0	under 16	6	15	6	5	14	6

We may infer from these figures how extensive and urgent the demand for soldiers must have been at this period, and what enormous sacrifices the country was

* The enlistment in every battalion of 100 boys, under sixteen years of age, was authorized by a Regulation of 1804.

† These sums must not be understood as representing the actual amount placed in the hands of the recruit; since the

called upon to make in order to keep pace with the requirements of the war and to maintain an army which, inclusive of the incorporated militia, amounted to above 800,000 men. And if the navy be taken into account, we find that above one million men, or about one twentieth part of the then population of these islands, were engaged in the active defence of the country. Military force in 1812.

The employment of a military force so disproportionate to the population must necessarily have had the effect of greatly raising the price of labor and the consequent cost of candidates for voluntary enlistment; but while the bounty was raised to a higher amount than it ever was before or since, no increase was made to the soldier's pay, another proof that to the recruit a sum in hand affords a more powerful temptation than any ulterior, though permanent advantage. High rates of bounty.

The amount of bounty is of course further influenced by the term of enlistment, which at the period just referred to was unlimited; that is to say, the soldier could not demand his discharge, though the State might grant it. During the progress of the war the experiment of enlisting men for a limited period was tried, the bounty being one-fourth less than for enlistment for life; Length of service.

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bounty was intended to cover every expense connected with the man's enlistment up to the time of his being sent to his regiment, and further to defray the cost of clothing and necessaries; these deductions were in general carefully kept out of view until the engagement was complete and irrevocable, and the soldier's first experience of military life was too often a sense of disappointment, and a suspicion of having been duped. Among very recent reforms none is more creditable to the authorities than the establishment of a fixed nett bounty, free from all deductions; let us trust that the soldier's pay will ere long, by the abolition of "stoppages," be in like manner proclaimed at its actual rather than its nominal value.

it may be much questioned, however, whether the man who enlists for the immediate possession of a sum of money would be much influenced by so remote a consideration as the period of his discharge. Dupin, indeed, quotes a table from which it appears that in 1814, out of 3,250 recruits, 2,478 enlisted for life, and only 772 for a limited term the duration of their service. Limited enlistment was, however, very general at an earlier period, and the Mutiny Act of 1714, authorized any soldier to demand his discharge after only three years' service, provided his conduct had been good. At present the term of service is ten years in the infantry and twelve in the cavalry and artillery, at the expiration of which soldiers may renew their engagement.

Limited enlistment.

Necessity and advantages of the bounty considered.

It is to be regretted that it should be necessary to offer a premium on enlistment; in a word, to bribe men to enter a service, to belong to which should be considered an honor and a privilege; but it must be admitted that nothing is so well calculated to tempt the reckless, the improvident, and the dissolute as the immediate possession of a sum, which to an idle, hungry, or thirsty man of the working class must appear wealth; and while it is a paramount object to obtain a certain quantity of material, irrespective of quality, trusting to discipline to convert it into serviceable shape, there can be no method better calculated to prove efficacious than the offer of a bounty.

It is very probable that if we were able to extend our recruiting operations to a superior class of men, bounties on enlistment might be abolished, and some more permanent prospective advantages, acting also as an incentive to good conduct and prolonged service, established in their place; but before the army can be rendered

attractive to the best portion of the working class and the great body of the middle class,—before the yeoman, the mechanic, and the tradesman can be taught to consider military service a privilege and an advantage, rather than a derogatory and a profitless undertaking,—before those classes would make their sons soldiers as readily as they now make them apprentices, clerks, and shopmen,*—a complete revolution, not so much of a financial as of an administrative nature, must take place in our army; and until then the bounty will be found the most effectual method of filling the ranks.

The proportion ordinarily borne by our military force to the general population has in a previous chapter been shown to be smaller than in any other European state ;† nevertheless, it may be questioned whether a sudden augmentation of our army does not more directly affect the labor market than is the case elsewhere; for, on the continent, all but the highest classes contribute in a degree pretty nearly corresponding with their numbers to the army; with us it is only one class that feeds the

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* It was recently made a severe reproach to the shopmen of London that they preferred their somewhat effeminate pursuits to military service; their rejoinder, however, was perfectly unanswerable; "We have no particular predilection," they said in effect, "for measuring silks or weighing sugar; but we hope by means of good conduct and industry to rise to something better in time. Can you promise us such a prospect in the army? Until you can, do not ask us to descend to companionship with the class of men which we see following the recruiting serjeant through the streets of London."

† Our naval forces have not been considered with reference to this question, but even taking these into account, we shall be found to bear a favourable comparison with other countries.

ranks, and that the very one which supplies the principal channels of manual labor.

When, then, on any emergency, an increased demand for soldiers arises, the State has to enter the market and bid directly against the industrial, agricultural, or manufacturing interests for the labor upon which their very existence depends; and the economical system is thus far more disturbed than would be the case if our soldiers were drawn from the several classes of society instead of from the laboring class alone.

It seems to be universally acknowledged that the manner in which the army is raised is not calculated to draw forth the best resources of the country, or to furnish the most effectual means of maintaining an efficient military force; and so much is this conviction felt, that Englishmen begin to discuss the chances of a conscription being tolerated.

An able and earnest writer upon the subject of recruiting for the army has stated that—

"So strongly have the evils and dangers of this state of things impressed themselves on the minds of thoughtful men, that one hears it said on every emergency, even by those from whom such opinions were least to be expected, that we must have a conscription.

"There are, indeed, but two possible modes of obtaining a good and sufficient army, and of keeping it permanently on foot. One is the method of conscription, the other the method of making the army a desirable profession for rational men."

Surely there is no sacrifice which the country will not make in order to escape one of the most oppressive and unjust laws that political expediency ever invented; but there is no occasion for any national sacrifice;—abolish the anomalies and the exclusiveness of our military system; render the army an attractive and

honorable, if not a lucrative career to the intelligent and educated members of the middle classes, rather than a refuge for the dissolute and improvident, and one of the most difficult problems of military administration will be satisfactorily solved.*

Within the last three years the amount of bounty has undergone several changes. In 1856, before peace had been declared, it was 7*l.* In the following year it fell to 2*l.* At present it is fixed at 3*l.*

Cost of a recruit.

The bounty represents, however, only a small portion of the cost of a recruit; when the bringing expenses and the charges of the recruiting staff are added, the sum which the recruit at the present rate of bounty costs the country from his enlistment up to the time he joins his regiment is between 8*l.* and 9*l.*; and if we further add the value of his kit, clothing, armament, and equipment, it will amount to about 20*l.* This is then the cost of the soldier in his first stage, or so to speak, of the raw material of the army. Every day's training and instruction adds to his expense and to his value; and by the time that example, practice, and discipline have converted the recruit into the soldier, and enabled him to act his allotted part in the military system of which he is an atom, it becomes difficult to fix his money value, since no amount of money could immediately supply his place.

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* Military officers of experience entertain similar views, and have repeatedly urged the vices of our present system of recruiting. General Codrington, the late commander of the forces in the Crimea, stated, during a discussion in the House of Commons upon recruiting, (10th May 1858,) "we seduce men into the service by means which are dishonorable and degrading to the profession."

The charges for bounty and other recruiting expenses during the last three years were as follows :—

	1856–7.	1857–8.	1858–9.	Average per Annum.
	£	£	£	£
Recruiting department at head quarters - - -	4,254	2,005	2,050	2,770
Recruiting districts - -	24,099	20,758	21,349	22,070
Allowances and expenses of recruiting officers - -	6,700	4,494	5,403	5,332
Bounty - - - -	395,100	12,000	70,000	159,233
Bringing money - -	21,000	3,000	5,000	9,666
Medical attendance (civil) -	1,000	300	500	600
Allowances for travelling to rejected recruits - -	1,000	300	500	600
Total - -	453,153	42,857	104,800	200,270

The average charge for the levy of troops during these three years stands to the total average army expenditure for the same period at one-third per cent.

CHAPTER III.

PAY.

IN the earliest periods of history military service was yielded or exacted without pecuniary remuneration. It was the duty of the citizen to rally to the defence of his country; it was an honor no less than a necessity to bear arms to repel foreign aggression or maintain domestic rights, and under such a state of society it was neither desirable nor practicable to affix a money value to military service. It was not long, however, before the bands leagued for defence were tempted to extend their power to retaliatory or aggressive invasion, and as the scene of their operations became more and more distant from their homes, and their ordinary means of maintenance diminished in proportion, the necessity for a systematic provision for men engaged in warlike services arose. At first a distribution of the fruits of conquest may have been the most natural and the most just mode of remuneration that could be devised; but as society advanced, as villages grew into cities, and cities into states, and the many began, under the inevitable laws of nature, to submit to the guidance of the few, individual feelings and interests came to be less and less enlisted in the objects and results of warfare; the rights and privileges of citizenship became absorbed in the obligations of military service, and the soldier, withdrawn from the pursuits and influences of civil life, became a direct charge upon the community which profited by his employment. Origin of military pay.

The earliest records of military pay at a fixed rate, in other words, of the employment of stipendiary troops, are Athenian and Persian armies.

probably to be found in the Athenian armies during the second Persian war; the burden of military service had then become oppressive from the extraordinary demands made upon the country, and the duration of successive campaigns, and they who stayed at home now began to recognize their obligation of contributing to the support of those who went to war for their defence or for their profit.

Roman armies.

It was long, however, before the practice of paying soldiers became general. Three hundred and fifty years had elapsed after the foundation of Rome before a fixed rate of pay was established in that state for foot soldiers,* and a few years later extended to horsemen, although the latter were, as a rule, in a position which did not render the assistance of the State a matter of necessity.

Rate of pay

The pay was then fixed at two oboli† for the infantry, and six oboli for the cavalry, the latter four being intended to include the keep of the horse.

increased.

Cæsar doubled the pay of the army,‡ and under the empire a steady increase took place in successive reigns. Under Tiberius the pay of the prætorians was two denarii, and that of the legionary foot soldiers one denarius§ a day; under Domitian it had risen to nearly double that amount. When to these high rates of pay we add the

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* Livy L. iv. 59.

† The obolus was equal to about one penny farthing of our money. Hallam quotes the value of money at that period at twenty-four times its present worth; this would raise the minimum rate of pay established by the Senate for the common soldier to five shillings a day.

‡ "Legionibus stipendium in perpetuum duplicavit." Suetonius in Tul. cap. 26.

§ The denarius was equal to ninepence of our money.

donativa,* which the army, and more especially the prætorians, in course of time came to look upon as a right, and the amount of which actually became a matter for the soldiers' deliberation and decision, we may form some idea of the enormous sums lavished upon a corrupt and tyrannical army.†

Soldiers required to provide themselves.

As regards the *pay*, it must not be forgotten that the soldier was required to provide himself with everything requisite to put him in a fighting condition, and to maintain himself in the varying positions incident to his career ;‡ but making every allowance for their expenses, there can be little doubt that the daily

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* It was not until the later days of the empire that the army *exacted* donativa as the price of their allegiance, but the practice of distributing sums of money after a victory commenced at a very early period, and as generals bid for popularity, the sums so given increased in amount. Pompey after his Asiatic victories, gave every common soldier 1,500 drachms, equal to 53*l.*, and Cæsar at a later period gave as much as 5,000 drachms to every soldier. The conquests of these generals, however, were not barren victories, and the troops might justly expect some share of the booty which their valor had gained. Pompey's wars in Asia, for instance, brought a revenue of between two and three millions sterling into the coffers of the state.

† Herodian dates the decline of discipline in the army from the introduction of *donativa*, on the occasion of accessions to the throne. Hopeless, indeed, is the condition of that country whose sovereign reigns by the favor of the army ; and most dangerous is that army which is allowed to feel its strength, and to forget its responsibility.

‡ When on the accession of Tiberius a mutiny broke out in the legions of Pannonia, the malcontents thus proclaimed their grievances on the score of inadequate pay : "Denis in diem assibus animam et corpus aestimari ; *hinc vestem, arma tentoria, hinc saevitiam centurionum et vacationes munerum redimi.*"—Tacitus, Lib. 1.

pay of the Roman troops, irrespective of the *donativa*, considerably exceeded the ordinary wages of even skilled labor.

Pay under the feudal system.

The introduction of the feudal system effected a complete revolution in military economy; still the employment of "mercenary troops" (in contradistinction to those who took the field as the personal followers and dependents of landholders, and who drew no pay directly from the State,) continued very generally to prevail. The term *solidarii* occurs frequently during the middle ages, and Hallam * supposes that religious bodies, as the most wealthy and defenceless class of that period, were the first to avail themselves of mercenary valor.

In our own country the body guards of Canute the Great, six thousand in number, were composed altogether of mercenary soldiers. By the same class of troops did William in a great measure achieve the conquest of Britain; Henry the Second raised a large body of foreigners for his Continental wars; and Edward the First, in like manner, employed mercenary soldiers. Indeed, from those early periods down to the establishment of a regular army, there was no foreign war in which recourse was not had to this description of soldiery; sometimes they were Englishmen, but more commonly they were the natives of foreign states who sold their swords to the highest bidder, and who, having performed the conditions of their engagement, were at liberty to transfer their allegiance to another country.

The rates of pay necessarily varied with the nature of the service and the demand for soldiers; but at all times,

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* The reader is referred to *Hallam's Middle Ages*, chapter ii. for a full and most interesting account of the effect of the feudal system upon military establishments.

up to a comparatively recent period, military pay was in excess of the ordinary wages of civil labor.

Under Edward the Third the foot soldier received 3*d.* a day. Persons of a superior station bringing troops into the field were paid not according to their military but to their civil rank; thus bishops and earls received 6*s.* 8*d.*, barons 4*s.*, and knights 2*s.* a day. Under Edward the Third.

It is not until the reign of Mary that we find a fixed stipend allotted to the different classes of officers and soldiers; the following were the rates of pay then established in 1557:*— Under Mary.

	Daily Pay. £	*s.*	*d.*
Captain-General	5	1	2
Lieutenant-General	3	6	8
High Marshal	3	6	8
Master of the Camp	1	0	0
General of Horse	3	6	8
Captain General of Foot	3	6	8
His Lieutenant	1	0	0
The Sergeant-Major	0	15	0
The Master of Ordnance	1	6	8
His Lieutenant	0	13	4
Master of Carriages	0	10	0
High Treasurer	1	6	8
The Master of the Musters	0	16	8
The Provost	1	0	0
The Chief Harbinger	0	4	0
The Master of the Forage	0	6	0
Master of the Scouts	0	6	0
The Herald	0	5	0
Captain of Armed Horse	0	10	0
Lieutenant	0	5	0

* Grose, Military Antiquities.

	Daily Pay. £	s.	d.
Standard Bearer - - -	0	3	4
Surgeon - - - -	0	2	0
Trumpeter or Private - -	0	1	6
Captain of Light Horse - -	0	6	0
Lieutenant - - -	0	3	0
Standard Bearer - - -	0	2	0
Surgeon - - - -	0	1	6
Trumpeter - - - -	0	1	6
Light Horseman - - -	0	1	0
Captain of Foot - - -	0	4	0
Lieutenant - - - -	0	2	0
Ensign - - - -	0	1	0
Chaplain - - - -	0	1	0
Surgeon - - - -	0	1	0
Sergeant - - - -	0	1	0
Drummer and Fifer - -	0	1	0
Private Soldier - - -	0	0	8

Queen Elizabeth.

Under Queen Elizabeth we find some increase upon these rates; the pay of the *sergeant-major* is doubled. There is an *auditor-general* with 1*l.* a day, a comptroller-general of victuals with 10*s.*, and commissaries with 8*s.* a day.

Charles the First.

Under Charles the First (1639) a contingent allowance in the shape of 6 "*dead payes*"* is granted to captains of companies.

Composition of companies.

A company of infantry then consisted of 1 captain, 1 lieutenant, 1 ensign, 3 sergeants, 3 corporals, 3 drum-

* The practice thus introduced of bearing fictitious names on the muster rolls gave rise to numerous abuses; it has now been long discontinued, except in the foot guards, where "dead payes" still prevail, although to a limited extent. See foot note, page 279.

mers, and 188 rank and file, whose aggregate pay amounted to 7*l.* 8*s.* 10*d.* a day.

Regiments were periodically mustered by commissaries of musters, or muster masters, whose duty it was not only to check the numbers of effective soldiers, but to inspect their clothing and accoutrements; for the good condition of which captains of companies were held responsible.* Musters.

The following is an extract from a pamphlet in the British Museum, entitled "The Soldiers' Accompt for 1647." Rates of pay in 1647.

	Daily Pay.. £	s.	d.
Lord-General	10	0	0
Major-General	2	0	0
Quartermaster-General	1	0	0
Waggon Master-General	0	10	0
Muster Master-General	0	15	0
Advocate	1	0	0
Chaplain	0	4	0
Physician	0	6	8
Apothecary	1	0	0
Chirurgeon	0	4	0
Adjutant-General	1	0	0
Commissary-General of Provisions	0	16	0
Master General of Ordnance	4	0	0
Treasurer	2	0	0
Lieutenant-Colonel	0	15	0
Major	0	9	0

* How the muster masters accounted for the "dead payes," which must at the lowest calculations have amounted to 15 per cent. on the amount of pay drawn, does not appear. Probably a portion of their own emoluments were derived from this prolific source, which would tend to make them indulgent in their inspectorial duties.

	Daily Pay. £	s.	d.
Captain - - - -	0	5	0
Lieutenant - - -	0	4	0
Ensign - - - -	0	3	0
Serjeant - - - -	0	1	6
Foot Soldier - - -	0	0	8
Surveyor - - - -	0	10	0
Chief Engineer - - -	0	10	0
Engineer - - - -	0	6	0
Commissary to distribute victuals -	0	6	0

Cromwell.

Cromwell, on his accession to power, was too dependent upon the army not to adopt all possible means for its conciliation, and he accordingly made a considerable increase to the soldiers' pay.* Charles the Second made some reductions; William the Third again increased the emoluments of officers, and in consequence of the discontent among disbanded officers, established *half-pay* under a royal warrant, dated 16th March 1697. Previously to this period, however, parliament had on different occasions voted pensions to disbanded officers and soldiers.

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* Cromwell recruited his army from a superior class of men; condemning the admission of "tapsters and serving men" into the ranks, and urging his officers to engage none but "honest God-fearing men;" this probably necessitated a higher rate of pay than that ordinarily given.

"I had rather have a plain russet-coated captain who knows what he fights for, and loves what he knows, than that which you call 'a gentleman,' and is nothing else." Again, he says, "a few honest men are better than numbers;" and once again, "I have a lovely company; you would respect them did you know them; they are no 'Anabaptists,' they are honest, sober Christians; they expect to be treated like men." See "Carlyle's Letters of Cromwell."

Irregular issue of pay.

The pay, whatever its nominal amount, was continued, however, to be most irregularly issued. Under William the Third, petition after petition was sent in from officers and soldiers actually in want of food, or from their creditors who had speculated upon their necessities; and Grose relates, that as late as in the reign of George I., in 1718, the 7th regiment of foot, then quartered in Wiltshire, and but recently returned from foreign service, had four years' pay owing to officers and men, and in spite of repeated memorials could not obtain any portion of it. After the lapse of some time it transpired, that Lord Tyrawley, the colonel of the regiment, had managed to obtain a considerable portion of the arrears due, and appropriated them to his own use,—an act which, on being remonstrated with, he attempted to justify, by pleading "the custom of the army," and by the fact of the king being cognizant of his proceeding.

Consolidation of allowances.

During the latter part of the eighteenth century the pay of the army was established at the following rates; the allowances hitherto granted to officers for servants, and in other forms, and which were drawn in the shape of pay of non-effectives, being now consolidated with the daily pay, so that there was little, if any, actual increase upon the previous scale:—

	Cavalry.			Infantry.		
	£	s.	d.	£	s.	d.
Colonel	1	6	6	1	4	0
Lieutenant-Colonel	0	18	6	0	17	0
Major	0	15	6	0	15	0
Captain	0	11	6	0	10	0
Lieutenant	0	7	0	0	4	8
Cornet	0	6	0		—	
Ensign		—		0	3	8
Chaplain	0	5	0	0	4	8
Adjutant	0	4	6	0	4	0

	Cavalry. £	s.	d.	Infantry. £	s.	d.
Surgeon - - -	0	4	6	0	4	0
Surgeon's Mate - -	0	3	0	0	3	6
Quartermaster - -	0	4	0	0	4	8
Serjeant - - -	0	2	3	0	1	6
Corporal - - -	0	1	9	0	1	0
Private - - -	0	1	5	0	0	8

Stoppages

The soldier's pay, however, continued to be subject to various stoppages for clothing and provisions, as well as a permanent deduction of 10 per cent., as follows:—

s.	d.	
12	2	a year for poundage.
2	8¼	a year for agency.
1		a week to the regimental surgeon.
1		a week to the regimental paymaster.

discontinued.

In 1771* the soldier was relieved from these charges, and shortly after the outbreak of the American war the pay of the infantry man was raised to 10*d.*, and subsequently to 1*s.* a day, with a corresponding increase in that of non-commissioned officers.

Insufficiency of officers' pay.

It was not until twenty years later† that the pay of the inferior officers of the army was increased; nor was this effected until the poverty of the British subaltern had become a fruitful theme for the humor and ribaldry of small wits and ballad-mongers. Among writers on military subjects, too, the inadequacy of the pay of military officers forms a frequent subject of complaint, and pamphlets were published to prove the impossibility of an inferior officer of foot maintaining himself upon his pay.

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* Treasury minute, 18th April 1771.

† In 1797 the pay of officers was established at nearly its present rate; at the same time "dead payes" were abolished, and an annual contingent allowance granted in their place.

Baron Dupin says* :—

"While the progress of the Arts spread through almost every class of society the enjoyment of comforts hitherto unknown, military officers were obliged to impose upon themselves increasing sacrifices, which were rendered the more painful by the contrast around them. Their subordination, however, was such that no tumult, no revolt, scarcely even a complaint betrayed the discontent of the army."

This is generous testimony, and not the less true. A future historian of the army may apply similar remarks to the present period; for while the value of money has so greatly decreased during the present century, the incomes of military officers have undergone no change; and it is a notorious fact that it requires the greatest possible self-denial and economy to enable a junior officer in the army to subsist upon his regimental emoluments.

There is certainly no class of a corresponding social rank (naval officers and curates, perhaps, excepted) so ill paid as the regimental officers of our army; whether we take the average incomes of professional men, of merchants, or of public servants, the comparison is strikingly unfavorable to the army; in no other pursuit is the ordinary remuneration so low, in none are the prizes so few and so small in amount. Indeed, for the poor man, that is to say, for him who cannot purchase advancement, there are, unless by rare accidents, no prizes whatever.†

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* Military Force of Great Britain.

† "His experience had always been that the officers of the British army were the worst paid and the hardest working class of public servants that he knew of. He asked them to look to the pay of the officers of a regiment, and in the first place to look to the pay of a lieutenant-colonel. He would treat it in a mercantile way, so that it might be perfectly plain to the understandings of mercantile men. The lieutenant-colonel to arrive at that rank in the army, paid 4,500*l.* for his commission; and his pay for commanding a regiment was 365*l.* If they deducted from the price of his commission the interest at 5 per cent., which was but a fair deduction, amount-

It cannot be said that the members of the civil service are over-paid, yet what a contrast do their

ing to 220*l.*, and 20*l.* for regimental expenses, which he had no alternative but to incur, and deduct the income-tax, 11*l.* on his pay, it would in all amount to 258*l.*, leaving a sum of 107*l.* as the pay of a lieutenant-colonel for the duty he undertakes. A major, taking all similar deductions, received 93*l.* 15*s.*; a captain rather more, 108*l.*; a lieutenant 85*l.*; and an ensign, 73*l.* 5*s.* 10*d.* per annum. Yet these were the men whose organization was said to be so extravagant."—Extract of a Speech of Mr. Fox Maule on moving the Army Estimates in the House of Commons in 1850–51.

As, however, the regulation price is rarely adhered to, and officers purchase their commissions at a rate very considerably beyond the nominal value, the actual income of officers is considerably less than that quoted by Lord Panmure. In the cavalry and foot guards double the regulation price is ordinarily given; in the infantry of the line about one-third above regulation; in the two former arms all but the junior ranks of purchasing officers may be said to serve for nothing, since the interest of the capital invested by them in the purchase of their commissions exceeds the amount of their pay. In the infantry the result may be summed up as follows:—

——	Amount of Pay and Allowances.	Interest on Sums paid for Commissions and other Deductions for Regimental Expenses.	Difference.	——
	£ s. d.	£ s. d.	£ s. d.	
1. Lieut.-Col. in Command	365 0 0	380 12 11	15 12 11	Loss.
2. Major - - -	292 0 0	249 10 4	42 9 8	Profit.
3. Captain - - -	211 7 11	142 14 11¾	68 12 11¼	„
4. Lieutenant - - -	118 12 6	53 19 5⅛	64 13 0⅞	„
5. Ensign - - -	95 16 3	27 15 0	68 1 3	„
Average - -	216 11 4	170 18 6⅜	45 12 9⅝	Profit.

Thus the average income of purchasing regimental officers of infantry of all ranks is under 50*l.* a year; and a lieutenant-colonel not only serves for nothing, but pays 15*l.* a year for the privilege of commanding a regiment.

incomes afford to those of military officers; the maximum salary of the lowest class of clerks in a public office exceeds that of a major in the army, and only a favored few of the more fortunate officers can ever hope to obtain an income equal to that of the superior employés* in our public departments.

Pay of military and civil service contrasted.

If we compare the rates of regimental pay in foreign armies with our own, we find a considerable difference, apparently in our favor; the average pay of infantry officers of all ranks, from lieutenant-colonel to ensign, being with us about 220*l.*, and in the continental armies, from 100*l.* to 110*l.* a year. But when we take into

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* The following is a comparative statement of the salaries of regimental officers and of the clerks in the War Office according to a fair assimilation of ranks :—

Rank.	Pay per Annum.	Rank.	Salary		Average.
			Commencing at Minimum.	Rising to Maximum.	
	£ s.		£	£	£
Lieut.-Col. at 20*s.* a day -	365 0	Clerk, 1st Class. 1st section	670	800	735
Major, at 16*s.* a day - -	292 0	Clerk, 1st Class. 2nd section	520	650	585
Captain, at 11*s.* 7*d.* a day -	211 8	Clerk, 2nd class -	315	500	407
Subalterns, average 6*s.* 5*d.* a day.	117 2	Clerk, 3rd class -	100	300	200
Medium - -	246 8		—	—	482

The allowances to military officers are not included in this comparison, but the deductions to which their pay is subjected are likewise omitted; and when the expenses incident to frequent change of quarters, travelling, increased premiums of insurance for war or climate, risks, cost of uniforms, &c. are taken into account, the balance in favor of the civil employé would be considerably increased.

account the more expensive mode of life necessarily adopted in our service, and, indeed, not alone in the army, but in the corresponding classes in civil life, the numerous deductions to which the pay of English officers is subjected,* the higher cost of the necessaries of life in this country, and last, not least, the liability to frequent removal throughout our scattered colonies, the rates become more equalized. If we further consider that the foreign officer enjoys many privileges quite unknown in our service, that he travels at half-price, has free admission to public libraries and other institutions, access to almost all places of amusement for a trifling contribution from his pay, and that the State affords him the partial means of education for his children, we may conclude that, as far as money's worth is concerned, he is actually better off than our own officers. We know, in fact, that he can not only exist, but enjoy some of the luxuries of life upon his pay; while the English subaltern, without private means, can barely obtain more than the ordinary necessaries of life, and must support the outward appearances of his position at the expense of the most common comforts enjoyed by persons of corresponding stations in other professions.

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* These are—

Mess subscription { 30 days pay on appointment.
8 „ „ per annum.

Band subscription { 20 „ „ on appointment.
8 „ „ per annum.

And in addition certain regimental contributions and subscriptions which, although they are not compulsory, are so much considered as a matter of course as to leave little option to officers as to the payment; at a moderate calculation the pay of officers is thus decreased by 10 per cent. per annum. Married officers, though they may not avail themselves of the mess, are liable to the contribution on appointment and to one-half the annual subscription.

Pay of non-commissioned officers and soldiers.

The pay of our non-commissioned officers and soldiers is *actually* higher than that of the same classes in foreign armies; that is to say, the English soldier has, after providing for all his wants, a larger sum to spare than he of the Continent;* the latter having barely three halfpence a day for *menus plaisirs*, while our soldiers can at all times reckon upon at least double that amount to save, or expend upon their amusements.

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* The average rate of pay in all arms is as follows:—

	Non-commissioned Officers.			Privates.		
	£	s.	d.	£	s.	d.
England, per annum -	37	12	0	20	5	0
France „ „ - -	24	0	0	9	10	0

The rates of pay in other continental armies vary considerably; but they are fixed with reference to the soldiers' wants, and result in nearly the same surplus after payment of all compulsory stoppages. The Belgian and Sardinian soldier, for instance, receives a higher rate of pay than the French soldier; but the latter is not subjected, as the former are, to a deduction for his uniform clothing, and the amount remaining in hand for *deniers de pôche* remains about the same in both cases.

The following are the present established Rates of Regimental Pay.

	Household Cavalry.	Cavalry of the Line.	Royal Horse Artillery.	Royal Artillery.	Royal Engineers.*	Foot Guards.	Infantry of the Line.	Military Train.	Medical Staff Corps.	West India Regiments.	Cape Mounted Rifles.	Ceylon Rifles.	Malta Fencibles.	Canadian Rifles.	Newfoundland Companies.	St. Helena Regiment.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*			*s. d.*			
Colonel - - - - (per diem)	—	—	32 4	26 3	26 3	—	—	32 3	—	—			—			
Lieutenant Colonel - - - „	29 2	23 0	27 1	18 1	18 1	26 9	17 0		—				13 0			
Major - - - - - „	24 5	19 3	—	—	—	23 0	16 0		—				10 8			
Captain - - - - - „	15 1	14 7	16 1	12 2	11 1	15 6	11 7		15 0				8 0			
Second Captain - - - - „	—	—	16 1	11 1	11 1	—	—		12 6				—			
Lieutenant - - - - „	10 4	9 0	9 10	6 10	6 10	7 4	6 6‡		—				5 1½			
Cornet - - - - - „	8 0	7 0	—	—	—	—	—		—				—			
Second Lieutenant or Ensign - „	—	—	—	—	—	5 6	5 3		—				4 1½			
Adjutant - - - - - „	13 0	13 0	17 9	12 9	9 10	10 0	10 0		—				8 1½			
§Paymaster - - - - „	—	12 6	12 6	—	—	—	12 6		—				10 6			
Surgeon Major - - - - „	—	—	—	—	—	18 9	—		—				—			
§Surgeon - - - - - „	13 0	13 0	13 0	13 0	—	13 0	13 0		—				8 0			
Assistant Surgeon - - - „	10 0	10 0	10 0	10 0	—	10 0	10 0		—				4 3½			
§Veterinary Surgeon - - - „	8 0	8 0	8 0	8 0	8 0	—	—		—				—			
§Quarter Master - - - „	9 6	8 6	10 10	8 0	8 0	6 6	6 6		—				4 3½			
§Riding Master - - - „	9 0	9 0	9 10	—	—	—	—		—				—			

The pay of General Officers in chief command of regiments ranges from 1,000*l.* to 2,200*l.* a year; but this is rather a non-effective allowance than a rate of regimental pay.

* The Officers of the Corps of the Royal Engineers receive extra Pay when on Service. See "Money Allowances."

† The Pay of this class of Officers, though rather a non-effective allowance than a rate of Regimental Pay, continues to be borne on the Regimental Establishments, and is accordingly included in this Table.

‡ Lieutenants receive 1*s.* a day additional after seven years' service.

§ The Officers marked thus, receive an increase of Pay according to length of Service. See "Money Allowances."

Rates of Regimental Pay—*continued.*

	Household Cavalry.	Cavalry of the Line.	Royal Horse Artillery.	Royal Artillery.	Royal Engineers.	Foot Guards.	Infantry of the Line.	Military Train.	Medical Staff Corps.	West India Regiments.	Cape Mounted Rifles.	Ceylon Rifles.	Malta Fencibles.	Canadian Rifles.	Newfoundland Companies.	St. Helena Regiment.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Corporal or Sergeant Major - (per diem)	4 2	3 8	4 5½	4 3¾	4 8½	3 4	3 2	3 8	—	3 8	3 2	1 9	2 4½	3 4	3 2	3 2
Troop or Company Sergeant or Corporal Major - - „	3 8	3 2	—	—	—	—	—	3 2	5 0	3 0	—	—	—	—	—	—
Quarter Master Corporal Major, or Sergeant - - - „	3 8	3 2	3 11¼	3 9¼	4 2½	2 10	2 8	2 11	—	3 2	2 8	2 7	2 1	2 10	2 8	2 8
Color and Company Sergeant - - „	—	—	—	3 4	3 4	2 8	2 6	—	4 0	—	2 6	1 6	1 8½	2 8	2 6	2 6
Paymaster, Saddler, Armourer, or Hospital Sergeant - - „	2 8½	2 4	—	2 10	2 10½	—	2 0	2 4	—	3 0	2 2	2 0	1 4½	2 2	2 0	2 0
Trumpet or Drum Major - - „	2 9	2 4	3 0	3 9¼	4 2½	2 2	2 0	2 4	—	2 0	2 0	2 1	1 4½	2 2	2 0	—
Sergeant - - - - „	—	2 4	3 0	2 10	2 10½	2 2	2 0	2 4	3 6	1 4	2 0	1 3	1 4½	2 2	2 0	2 0
Corporal - - - - - „	2 6½	1 7½	2 4	2 2	2 2½	1 5	1 4	1 7½	—	1 1	1 4	0 10½	1 0	1 5	1 4	1 4
Bombardier - - - - „	—	—	2 2	2 0	—	—	—	—	—	—	—	—	—	—	—	—
Farrier, Saddler, Collar Maker - „	1 11½	1 3	2 3½	2 0	—	—	—	2 0	—	—	1 0	—	—	—	—	—
Private, Roughrider, Gunner or Driver - - - - „	1 11½	1 3	1 5½	1 3½	1 2½	1 1	1 0	1 3	1st class 2 0 2nd class 1 3	1 0	1 0	0 9	0 8½	1 1	1 0	1 0
Boys under 15 years - - - „	—	—	—	—	—	—	0 10	—	—	—	—	0 4½	—	—	—	—

Stoppages

These rates must not, however, be understood to represent the actual pay, more particularly as regards the soldier,* who is subject to "stoppages" varying in amount according to the circumstances in which he is placed; thus, for his ration of bread and meat the soldier is subject to a deduction from his pay as follows:—

In the United Kingdom	-	4½*d.* a day.
On foreign stations	- -	3½ „
On board ship	- - -	6 „

Again, in hospital he pays a stoppage of

10*d.* a day at home.
9*d.* a day abroad.
3½*d.* a day in the field.

It is very desirable that a simplification in this respect should be effected. Few soldiers can understand the complicated system of stoppages, and they do not, therefore, know, as it is most desirable that they should do, how their accounts stand.† In garrison it is just practi-

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* In the French army a certain amount of pay is fixed for each "position," and there are thus no less than eight distinct rates, viz.:—

1. In the field (with rations).
2. In garrison (with a ration of bread only).
3. On the march.
4. On detachment.
5. On furlough.
6. In hospital.
7. In hospital while on furlough.
8. In captivity.

There is further a distinct rate for troops while quartered in Paris. Inconvenient as this variety in the rates of the soldiers pay may appear, it may be questioned whether it is not in operation less clumsy than our own "stoppage system;" it is certainly more intelligible to the soldier, and infinitely less puzzling and laborious to the accountant.

† The stoppage for the ration of officers at foreign stations is only 1½*d.*; why the soldiers should pay more than double

cable, by means of considerable clerical labour, to carry out this system, but it is quite inapplicable to active service, where, indeed, it cannot be attempted with the slightest chance of a satisfactory result.

If it be indispensably necessary that the stoppage system be maintained * an uniform rate to meet all circumstances should be established; but it may be doubted whether a fixed *nett pay* would not, upon the whole, be more effectual, both in removing all mistrust on the part of the soldier and simplifying the settlement of accounts. Under such a system there need not be, as in the present service, a number of rates of pay. Two would probably suffice; the one being the effective pay of the soldier, the other the pay allowed him while in hospital; and an additional column in the pay-list would sufficiently distinguish the rate and afford a far better check than now exists with the complications of charges and credits.

Method of paying troops.

Apart from the stoppage system, our regimental finance is conducted upon a simple and intelligible principle. The Paymaster draws his funds from the agent in the United Kingdom, and on foreign stations from the commissariat, and makes advances to captains of troops or

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for the same ration it would be difficult to explain, but the system of "stoppages" is made up of anomalies.

* The fact that this system deludes the recruit into the belief that he will receive the nominal instead of the actual rate of pay, in other words, that he will have 1*s.* a day, while in fact he will have only 7½*d.*, should be an additional argument against its continuance; for although Government does not directly lend itself to so unworthy a device, it is well known that its subordinate agents do not hesitate to avail themselves of the fictitious rate of pay among their other baits for tempting recruits. The gain of a few credulous victims is purchased at the expense of much subsequent discontent, and of a feeling of mistrust which must have a mischievous effect.

companies for the pay of the men. Captains account for their disbursements to the paymaster, who exercises a check by means of a monthly muster of the corps to which he is attached, and renders quarterly accounts to the War Office.

Imprests to paymasters.

As, on foreign stations, all funds for regimental services are imprested to paymasters by the commissariat, it is worthy of consideration whether these officers might not be made sub-accountants of that department, which would examine and incorporate their accounts. If, in like manner, all imprests made to other departments of the army were accounted for on the spot, the commissariat accounts would represent the entire military expenditure on each station, and the time and labour now bestowed upon a separate examination of a number of distinct accounts, and in tracing credits and debits, would be saved.

Periods of issuing pay.

The pay of regimental officers is issued * on the first of each month *in advance;* that of non-commissioned officers and soldiers *daily.* The estimated amount of the regulated stoppages is left undrawn by the paymaster in the hands of the commissariat or the agent until at the end of each month a final adjustment is effected.

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* In the United Kingdom officers draw their pay direct from the agents. On foreign stations they have the option of drawing it on the spot from the paymaster, a course adopted whenever the rate of exchange is unfavorable.

RECAPITULATION of the NUMBERS and PAY of the REGIMENTAL ESTABLISHMENTS, exclusive of the QUEEN'S FORCES in INDIA, as voted for the YEAR 1858–59.

Corps.	Officers.	Non-commissioned Officers.	Rank and File.	All Ranks.	Horses.	Charge for Pay.	Average Annual Pay per Head (all ranks).*
HORSE.						£	£ s. d.
Household Cavalry	99	162	1,053	1,314	825	70,098	53 7 0
Royal Horse Artillery	44	90	1,426	1,560	1,200	55,604	35 13 6
Cavalry of the Line	476	687	8,078	9,241	5,993	329,748	35 13 9
Military Train	112	184	1,196	1,491	1,000	57,334	38 8 0
FOOT.							
Royal Artillery	658	1,272	15,203	17,133	2,606	580,025	33 17 0
Royal Engineers	367	301	3,000	3,668	120	165,918	45 4 0
Foot Guards	261	439	5,600	6,300	—	182,588	28 19 7
Infantry of the Line	3,331	5,913	69,350	78,594	—	2,045,541	26 0 6
Medical Staff Corps	2	70	928	1,000	—	31,910	31 18 2
Colonial Corps	423	634	8,140	9,197	900	229,696	24 18 5
Totals	5,773	9,752	113,974	129,499	12,644	3,748,462	28 19 0

* These figures must not be understood to represent the relative cost of the different corps, which is more effected by their clothing, appointments, and equipment than by the difference in the rate of pay; a life guardsman, for instance, receives double the pay of an infantry man, but his actual cost to the public is *four or five times* as much as that of the foot soldier.

The average Pay of Regimental Officers, Non-Commissioned Officers and Soldiers, is as follows:—

	Annual Charge.	Rate per Head.
	£	£ s. d.
5,773 Officers - - -	1,073,015	185 17 4
9,752 Non-commissioned Officers, Drummers, and Buglers	366,261	37 12 0
113,974 Rank and File - -	2,309,186	20 5 2
129,499 of all ranks - -	3,748,462	28 19 0

CHAPTER IV.

STAFF OR GARRISON PAY.

Staff pay a local allowance

STAFF pay is the remuneration fixed for the performance of local staff duties by officers who hold a military commission, independently of such employment, comprising the classes included under the head of General and Staff Officers in a previous chapter.*

in addition to regimental pay.

The peculiar organization of our staff, and probably, in a greater measure, the yet more peculiar institution of "purchase," have led to the remuneration of staff officers being established as a special and local allowance rather than a general rate of pay. A regimental officer, for instance, in a regiment of the line, on being selected for staff employment would have the right to argue that, having purchased his regimental commission, he was entitled to the emoluments derivable from it, irrespectively of his claim for remuneration for an extra duty; while the officer of a non-purchasing corps would contend that he should not be placed in a less advantageous position when

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* The pay of officers on the staff of the army, but who hold no other military commission or appointment, such as medical staff officers, chaplains, and others (already included under the head of the "Administrative Departments of the Army") is also called staff pay; but as the regulations which govern the issue of the emoluments of the *military staff* do not apply to the pay of officers permanently employed on general service, and as the rates of pay of the latter have already been given in the chapter treating of their respective duties and organization, the present remarks will be limited to the pay of military staff officers.

employed upon the staff than his brother officers in other branches of the service. Thus has arisen the practice, unknown in any other army, of staff officers drawing pay in two distinct military capacities,* while, of course, performing only the duties of one.

Inclusive pay preferable.

Whatever reasons may exist for detaching regimental officers for staff employment in preference to establishing a distinct staff corps, the system of double pay is indefensible. No officer in the army should draw pay (even though in the shape of pension) in more than one capacity. Let the rate of pay for each employment be a full remuneration for the duty to be done; let the staff officer, if it be thought requisite, draw double the pay of the regimental officer of corresponding rank; but, whatever be the rate, let it be clearly expressed and drawn as *inclusive* pay, upon one general principle to be applicable to the pay of officers of all branches of the service.

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* It has never been found practicable to draw any material distinction between the emoluments of purchasing and non-purchasing corps; any additional remuneration which at different times has been granted with the view of compensating purchasing officers for their outlay, has invariably been extended to the army generally irrespectively of such claims.

The following are the rates of staff and garrison pay:—

	At Head-quarters.	Elsewhere, at Home or Abroad.
	£ s. d.	£ s. d.
General commanding in chief { If a field-marshal	16 8 9	—
General commanding in chief { If below that rank	9 9 6	—
General	—	5 13 9
Lieutenant-general	—	3 15 10
Major-general	—	1 17 11
Brigadier-general	—	1 8 6
Colonel	—	1 2 9
Adjutant or quartermaster-general*	3 15 10	1 17 11
Deputy adjutant or quartermaster-general	1 17 11	0 19 0
Assistant adjutant or quartermaster-general, if on the half-pay of his regimental rank	0 19 0	0 14 3
" " If on the full pay	0 14 3	
Assistant-quartermaster, when no deputy quartermaster-general is employed	1 7 6	—
Deputy assistant-adjutant or quartermaster-general	0 14 3	0 9 6
Deputy assistant-quartermaster-general, if no deputy quartermaster-general is employed	0 17 6	—
Military secretary	†—	0 19 0
Assistant military secretary	—	0 9 6
Aide-de-camp { to the Queen‡	—	0 10 5
Aide-de-camp { to a general officer	—	0 9 6
Brigade-major	—	0 9 6
Garrison Staff.§	Rate of Pay ranging *from*	*to*
Commandants	0 7 0	1 0 0
Town or fort majors	0 4 9	0 15 0
Town or fort or district adjutant	0 4 9	0 7 6
Garrison quartermasters	—	0 7 6
Provost-marshal	—	0 9 6
Deputy provost-marshal	—	0 4 9

* When held by an officer under the rank of major-general the daily pay is 3*l.*

† The military secretary at head-quarters receives a special salary of 2,000*l.* per annum.

‡ Only the six senior aides-de-camp to the Queen are in the receipt of staff pay.

§ The rates of pay of this class of officers vary according to the importance of their post or duties.

Issue of staff pay.

In the United Kingdom staff pay is issued by quarterly payments in arrear by the general agent * on the authority of the Accountant-General of the War Department.

On foreign stations it is issued by the Commissariat upon the warrant of the officer commanding, the payments being made every three months in arrear.

Conditions.

Staff pay being considered *the remuneration for the performance of a local duty,* cannot be claimed by an officer for any period antecedent to his arrival at his station, or after his departure, whether on leave of absence or on sick leave. When, accordingly, an officer appointed to the staff is already serving on the station with his regiment, or otherwise there present, his pay commences from the date of his appointment in General Orders. If however, the officer is not present on the station to which he is appointed, he is entitled to an allowance calculated upon the length of the voyage to be undertaken by him in proceeding to his post, and varying from 18 to 145 days' pay, in addition to a free passage. A similar allowance is granted in the event of his proceeding home on sick leave, and likewise on his re-embarkation to return to his post at the expiration of such leave. †

Embarkation allowance.

This allowance is also granted under certain conditions to staff officers proceeding on leave of absence on their private affairs, provided they have served not less than two years in their staff employment, and that they purpose returning to their station.

Gratuities.

On the abolition of a staff appointment, the officer who has held it is entitled to a gratuity of two months' pay from the date of ceasing to do duty, and if he return to England, to the embarkation allowance in addition to

* Standing in the same position to the staff that regimental agents do to battalions.

† It is at present under consideration to discontinue this allowance, and to issue in its place staff pay from the date of embarkation.

such gratuity. If the abolition of the office be owing to the recall of a force on foreign service, then the officer is further entitled to his staff pay up to the date of his arrival in England with the force to which he was attached.

A special allowance is made to officers proceeding temporarily to staff command or employment.

Clerks.

A number of clerks are employed on the staff on home and foreign stations for the performance of clerical duties. A large proportion of these are civilians receiving a far higher rate of pay than would suffice for soldiers, among whom, doubtless, excellent clerks might be obtained were sufficient inducement held out to them to qualify themselves. At present, soldiers employed as clerks receive from 6*d.* to 2*s.* 6*d.* a day, while the pay of civil clerks ranges from 5*s.* to 10*s.* a day. With the increased opportunities of educational improvement now existing in the army, a competitive examination for subordinate appointments would soon create a number of highly qualified candidates for clerkships in every regiment in the service.

Charge of military staff.

The charge for the pay of 278 staff officers now on the establishment is estimated for the current year as follows :

	£	s.	d.
Staff in the United Kingdom -	61,588	5	8
Staff on foreign stations - -	37,461	6	8
Total* - -	99,049	12	4

If from this we deduct the charge for the military staff of the Commander-in-Chief's office, which has been included in the cost of the "Central Administration" (Book II., Chapter I.), we find the pay of the remaining 258 officers amount to 83,787*l.* 7*s.* 4*d.*, giving an average rate of pay of 325*l.* to each, and being equal to about 7-10ths per cent. on the entire military expenditure.

* Exclusive of 24,000*l.* for clerks and office contingencies.

CHAPTER V.

MONEY ALLOWANCES.

Different descriptions of money allowances.

THESE allowances differ considerably in their amounts and character, dependent as they are not alone upon the nature of the service, but upon the locality and the various circumstances which more or less affect the wants of bodies of troops or of individual officers and soldiers; thus, some of them are granted to regiments or corps for a specific purpose, and do not form a source of personal emolument; others are granted to individuals in the shape of additional pay; others, again, are merely local, incidental, or temporary, and not to be considered as permanent remuneration. Lastly, there are certain money allowances granted in lieu of *allowances in kind*, such as lodging money, commutation of rations of provisions, forage, fuel, and light.

Classification.

The following classification may be found to assist reference upon the different subjects to be treated:—

A.—*Allowances in the shape of Additional Pay.*

1. Command pay.
2. Brevet pay.
3. Non-effective allowance.
4. Contingent allowance.
5. Additional service pay.
6. Extra pay.
7. Riding allowance.
8. Acting pay.
9. Field allowance.
10. Good conduct pay.
11. Beer money.

B.—*General Allowances to Regiments or Corps.*

1. Stationery allowance.
2. Mess allowance.

C.—*Personal Allowances.*

1. Servant's allowance.
2. Table money.
3. Equipment allowance.
4. Remount allowance.

D.—*Incidental Allowances.*

1. Travelling, marching, and detention allowances.
2. Passage allowances.
3. Fatigue or working pay.

E.—*Money Allowances in lieu of Allowances in kind.*

1. Lodging money.
2. Commutation of rations.

F.—*Exceptional and Special Allowances.*

1. Colonial allowance.
2. Compensation for losses.
3. Stock purse fund.

A.—ALLOWANCES IN THE SHAPE OF ADDITIONAL PAY.

Additional pay.

These are pecuniary allowances granted under certain circumstances to different classes of regimental officers and soldiers.

Command pay.

1. *Command Pay.*—The officer actually present in command of a regiment of cavalry, or a regiment or battalion of infantry of the line, or of reserve companies, while the service companies are abroad, receives a daily allowance of 3*s.*

Brevet pay.

2. *Brevet Pay.*—Regimental captains holding a higher rank by brevet, receive an additional 2*s.* a day.*

Non-effective.

3. *Non-effective Allowance.*—The senior effective lieutenant colonel, and senior majors in regiments of cavalry,

* Brevet field officers of cavalry receive no additional pay.

or regiments or battalions of infantry of the line, are allowed each 20*l.* a year.

Each effective field officer of the foot guards receives an allowance of 75*l.* a year in lieu of non-effectives, and captains of companies of those corps receive collectively the following annual allowance in lieu of the pay of non-effective men formerly borne upon the establishment, and whose pay became the perquisite of the captain.*

	£	*s.*	*d.*
Grenadier guards - -	3,393	15	2
Coldstream guards - -	2,088	9	4
Fusilier guards - -	2,088	9	4
	£7,570	13	10

Contingent.

4. *Contingent Allowance.*—The officer commanding or paying a troop or company is entitled to an annual allowance to meet the expense of repairing arms, of burials, and of losses incurred by the debts of soldiers becoming non-effective. This allowance is as follows:—

					£	*s.*	*d.*
Life guards and horse guards, per troop - -					40	0	0
Cavalry of the line.	At home	For a troop not exceeding	49	privates	30	15	0
		Do. do.	69	„	41	0	0
		Do. exceeding	69	„	51	5	0
	Abroad	Do. not exceeding	59	„	51	5	0
		Do. do.	69	„	61	10	0
		Do. do.	79	„	71	15	0
		Do. do.	89	„	82	0	0
		Do. do.	99	„	92	5	0
		Do. exceeding	99	„	102	5	0

* It is to be hoped that all allowances of this nature will before long be abolished; their value being made up by a corresponding increase in the ordinary rate of daily pay.

		£	s.	d.
Foot guards	To each effective field officer *	58	16	0
	Per company	†20	17	6
Infantry of the line at home or abroad	For a company not exceeding 50 privates	18	5	0
	Do. do. 75 „	27	7	6
	Do. do. 100 „	36	10	0
	Do. exceeding 100 „	45	12	6

In all cases the contingent, although nominally intended to cover certain expenses, is understood to form a source of emolument.

5. *Additional Pay for Length of Service* is granted to the following classes of regimental officers:— Service pay.

	s.	d.	
Lieutenants, after 7 years' service as such	1	0	a day.
Paymasters, „ 5 „ „ „	2	6	„
Ditto „ 10 „ „ „	5	0	„
Ditto „ 15 „ „ „	7	6	„
Ditto „ 20 „ „ „	10	0	„
Adjutants, in addition to subaltern's pay - in the cavalry	3	6	„
Adjutants, in addition to subaltern's pay - in the infantry	2	6	„
Surgeons, after 10 years' service - -	2	0	„
Ditto „ 20 „ „ - -	6	0	„
Ditto „ 25 „ „ - -	9	0	„
Veterinary Surgeons, after 3 years' service	2	0	„
Ditto „ 10 „ „	4	0	„
Ditto „ 20 „ „	7	0	„
Ditto „ 25 „ „	9	6	„
Quartermasters, after 10 years' service	2	0	„
Ditto „ 15 „ „ -	3	6	„

* This is the only instance in which effective field officers receive contingent allowance.

† Officers commanding companies in the foot guards receive a further allowance in the shape of contingents derived from two non-effective men borne upon the pay list of each company.

	s.	d.	
Riding Masters, after 5 years' service -	1	6	a day.
Ditto „ 15 „ „ -	3	0	„

Extra pay to Royal Engineers.

6. *Extra Pay* is granted to officers of the corps of Royal Engineers* when employed on duty, their ordinary regimental pay being drawn only while they are on leave of absence or holding a staff or civil appointment with emoluments attached to it. The rates are as follows:—

	At Home. s.	d.	Abroad. s.	d.
Colonel - - - -	13	0	26	0
Lieutenant-Colonel - -	9	0½	18	1
Captain - - - -	5	6½	11	1
Ditto, if a brevet field officer	6	6½	13	1
Second Captain - - -	4	0	8	0
Ditto, if a brevet field officer	5	0	10	0
Lieutenant - - - -	3	5	6	10
Ditto, if above 7 years' service	3	11	7	10

Officers of the corps of Royal Engineers are not entitled to accommodation in public quarters or to lodging money, nor to the allowance for fuel and light in kind or in money.

Riding allowance.

7. *Riding Allowance* at the rate of 7*l.* per troop is granted to riding masters to defray the expenses of instructing the men and paying roughriders. In the Life Guards and Horse Guards the allowance of riding masters is 23*l.* 6*s.* 6*d.* per troop.

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* The officers of the commissariat, medical and military store department, likewise receive extra pay under certain circumstances. — See "Administrative Department of the Army."

8. *Acting Pay.*—Regimental officers, when temporarily acting as paymasters, adjutants, or quartermasters, receive extra pay for the performance of those duties at the following rates :— Acting pay to regimental staff officers.

To the subaltern acting as adjutant, 2*s.* a day.

Ditto, as paymaster to a reserve battalion - - - - } 5*s.* „

Ditto, to reserve companies - 4*s.* „

Acting serjeant-majors and quartermaster-serjeants receive the difference between their pay as non-commissioned officers and that of regimental serjeant-majors or quartermaster-serjeants.

9. *Field Allowance* is intended to enable officers to equip themselves for the field. It is of two kinds, *ordinary* for troops encamped in the United Kingdom or the colonies, and extraordinary for a force engaged in military operations in the field in time of war or insurrection. This allowance, which is issued quarterly in advance (except in the case of the first issue *extraordinary*, which is for six months) is extended to all classes of officers, whether regimental, staff, or departmental, who shall be actually serving with the troops, according to the following scale :— Field allowance.

	Per Diem.			
	Ordinary.		Extra-ordinary.	
	s.	*d.*	*s.*	*d.*
General in chief command of an army -	30	0	50	0
General commanding a distinct *corps d'armée* - - - - }	24	0	40	0
Lieutenant-general of division - -	18	0	10	0
Major, or brigadier-general commanding a brigade - - - - }	12	0	20	0

	Per Diem.			
	Ordinary.		Extra-ordinary.	
	s.	*d.*	*s.*	*d.*
Brigadier-general not in command, adjutant, quartermaster, and commissary-general, and inspector-general of hospitals	9	0	15	0
Colonel on the staff	6	0	10	0
Deputy-adjutant and quartermaster-general	4	6	7	6
Deputy-commissary-general or deputy-inspector-general of hospitals, if second in their department or in charge of a distinct corps	4	6	7	6
Ditto, if otherwise	3	0	5	0
Assistant-adjutant and quartermaster-general, staff-surgeon, 1st class, military-secretary and chaplains	3	0	5	0
Regimental field officer	2	6	4	6
Deputy-assistant-adjutant and quartermaster-general, assistant-commissary-general, assistant-military-secretary, brigade-major, aide-de-camp, staff-surgeon, 2nd class	2	0	3	6
Regimental captain, surgeon, and paymaster, staff-assistant-surgeon, deputy-assistant-commissary-general	1	6	2	6
Quartermaster and assistant-surgeon	1	0	2	0
Regimental subalterns and clerks ranking as such	1	0	1	6

Departmental officers not enumerated in the warrant draw field allowance according to the scale established for the corresponding ranks in other departments. Field allowance being issued at fixed quarterly periods, officers joining a force in the field become entitled to it from the commencement of the quarter, even though they do not join until towards its conclusion.

10. *Good-conduct Pay* is granted to deserving *non-commissioned officers* and *soldiers*. In the case of the former it is an annual allowance, to be drawn either while serving or after discharge, with or without the ordinary pension. The amount of each pension is limited to 20*l.* a year, and it cannot be forfeited except by sentence of a court-martial. The good-conduct pay of *soldiers* is a daily allowance, granted under certain conditions, at the following rates:— Good-conduct pay.

After 5 years' service, 1*d.* a day.
10 „ „ 2*d.* „
15 „ „ 3*d.* „
20 „ „ 4*d.* „
25 „ „ 5*d.* „
30 „ „ 6*d.* „

11. *Beer Money* at the rate of 1*d.* a day is allowed to every effective non-commissioned officer and soldier while serving on home stations. Beer money.

The charges for the current year under the head of allowances in the shape of additional pay are as follows:— Charges for additional pay.

	£
Command pay	13,660
Brevet and additional pay	24,000
Non-effective allowance	5,298
Contingent allowance	52,241
Extra pay, Royal Engineers	34,294
Acting pay, regimental staff officers	3,000
Riding allowance	1,685
Field allowance	21,000
Good-conduct pay	60,000
Beer money	98,000
Carried forward	£296,178

	£
Brought forward -	296,178
To this should be added sundry allowances to quartermasters of the foot guards for making up accounts, and of the household cavalry for paying the men* - - - -	456
Total for money allowances in the shape of additional pay -	£296,634

B.—General Allowances to Regiments or Corps.

Stationery.

1. *Stationery and Postage Allowances, &c.*—This is an annual allowance made to regiments to cover the expenses incidental to correspondence and accounts, the hire of guard-rooms and store-rooms, providing camp colours and pace sticks, &c. The rates allowed are as follows:—

	At Home.	Abroad.
	£	£
Household cavalry - -	45	29
Cavalry of the line - -	30	17
Foot guards - - -	55	37
Infantry of the line - -	40	25

There is an additional allowance of 15*l.* a year at home and 12*l.* a year abroad to paymasters of regiments for stationery and postage.

* The cost of the machinery for paying the household troops, inclusive of agency, amounts to 3,154*l.* a year. Considering that these troops are rarely out of England, and principally concentrated in and around London, a charge of 1¼ per cent. on the amount of pay issued appears unnecessarily large. One chief paymaster with an assistant would fully suffice for the duty; and since the interposition of an army agent has been dispensed with for paying the men of the Royal Artillery, scattered as the corps is, it is to be hoped that a more simple and less expensive mode of paying the household troops may be devised.

2. *Mess Allowance.*—This allowance, which was first established in 1811, is intended "to enable the officers of a regiment of every rank, but more especially of the junior ranks, to enjoy the comfort and advantages of a mess without incurring expenses which their pay is not calculated to meet."* It was originally confined to regiments stationed in the United Kingdom, but was subsequently extended to the West Indies, St. Helena, and the Western Coast of Africa.† Mess.

The allowance is fixed at 25*l.* a year for each troop or company of the cavalry and infantry of the line, and the West India regiments. A further sum, not exceeding 2*l.* 2*s.* a week, is granted to each regiment or battalion at home or abroad, for the hire of a mess-room when no accommodation can be afforded for the purpose in public quarters.

C.—Personal Allowances.

1. *Servant's Allowance.*—All officers of the army, who are not allowed, as regimental and to a certain extent staff officers are, the use of a soldier-servant, receive a daily allowance of 1*s.* a day at home, and 1*s.* 6*d.* a day on foreign stations, to enable them to provide themselves with a male servant. Servants

In the tropics, where the employment of European soldiers as servants is prohibited, regimental as well as staff officers (with exception of those belonging to West India regiments, who are allowed to avail themselves of In the tropics.

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* Queen's regulations.

† The extension of the mess allowance to other commands has been repeatedly refused upon the grounds that the duties on wines were not so high there as to render the allowance necessary; this plea is somewhat weakened by the fact that in the West Indies, where the allowance is drawn, *there is no duty whatever* upon wines imported for the use of military officers.

the service of black soldiers) likewise draw this allowance; not only, as in the former case, for one servant, but for as many as by the regulations they are entitled to draw rations of provisions for.

Table money.

2. *Table Allowance** is granted to general officers in command on the following stations, to enable them to meet the expenses of entertaining the officers of the garrison and others in a suitable manner:—

	£	s.	d.
Dublin - - - - -	1,476	18	8
Canada - - - - -	600	0	0
Jamaica - - - - -	1,000	0	0
Barbadoes - - - -	800	0	0
Corfu - - - - -	500	0	0

Equipment allowance.

3. *Equipment Allowance.*—Non-commissioned officers on being promoted to a commission receive the sum of 150*l.* in the cavalry, and 100*l.* in infantry corps, to enable them to provide themselves with an officer's outfit.

Remount allowance.

4. *Remount Allowance.*—Officers appointed to the Military Train and the Cape Mounted Rifle Regiment, receive an allowance for the purchase of horses, in consequence of the officers of those corps, although equipped as cavalry, drawing infantry pay only.

D.—Incidental Allowances.

Travelling.

Travelling, Detention, and Marching Allowance is intended to cover the expenses to which officers and soldiers are subjected on removal from their established quarters.

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* This allowance is of a very remote origin; reference is made to it in the days of Henry the Fourth; and in the scale of pay established under Queen Elizabeth it is fixed at 20*s.* a day for a colonel, *if a nobleman*, and 13*s.* 4*d.* a-day if otherwise.

Officers are entitled to repayment of the cost of conveyance actually expended by them when in the performance of duty in the United Kingdom, and 10*s.* a day for each day and night necessarily detained. General officers receive 20*s.* a day for detention.

Officers on a march with troops in the United Kingdom receive 5*s.* a day, provided they are unable to partake of a mess of their own regiment, and that the distance marched exceeds ten miles.

Non-commissioned officers and soldiers receive the following daily rates while on the march :—

	Cavalry.	Infantry.
England and Scotland - -	1*d.*	3*d.*
Ireland - - - - -	3*d.*	4*d.*

Passage allowances.

2. *Passage Allowance.*—When an officer ordered to proceed to another station cannot be provided with a passage in a public vessel, or at the public expense, he may receive a sum of money calculated upon the length of voyage to be undertaken.

In exceptional cases a sum of money is imprested to the officer in lieu of a fixed allowance being issued, and he is then required to account for the amount received by him, and to refund any balance remaining.

Fatigue pay.

3. *Fatigue or Working Pay.*—When troops are employed in public works, they are entitled to extra remuneration, at the following rates :—

	s.	*d.*	
Subalterns in charge of working parties - - - - -	4	0	a day.
Non-commissioned officers ditto	1	0	„
Non-commissioned officers and privates employed as artificers	1	3	„
Privates employed as labourers	0	9	„

E.—Money Allowances in lieu of Allowances in Kind.

Lodging money.

1. *Lodging and Furniture Money.*—All officers, non-commissioned officers, soldiers, and other persons borne on the effective strength of the army, are entitled, while on service, to be accommodated with quarters at the public expense, and with a certain quantity of barrack furniture. When, however, there are no public buildings available, they receive a pecuniary allowance in lieu of quarters.

On foreign stations.

On foreign stations the allowances for lodging money are regulated by a scale established in 1851, in which the officers and others of the army are classified under twelve heads, and the stations under nineteen heads, the rates for each class being fixed with reference to the accommodation to which the officer would, under the barrack regulations, be entitled if provided with a public quarter, and the current prices of house rent in the different colonies. There is thus a very great variety in those rates, which rise from 10*l.* a year for the twelfth class, comprising the non-commissioned ranks of staff and departments, to 400*l.* for the first class of general officers.

The highest rates of lodging money are allowed in the Australian colonies, and the lowest in the Ionian Islands.

At home.

In the United Kingdom a fixed rate of lodging money is established for each rank, this includes the commuted allowance for fuel and light, which abroad is issued in kind.

Rates.

The lodging money of staff officers ranges from 25*l.* to 300*l.* a year; that of the regimental ranks is as follows:—

	s.	*d.*	
Field officers commanding -	4	0	a day.
Other field officers - -	3	0	„
Captains - - -	2	3	„

			s.	d.	
	Subalterns - - - -		2	0	a day.
When permitted to live out of Barracks.	Staff serjeants	1st class - -	8	6	a week.
		2d class - -	4	3	„
	Non-commissioned officers and privates - - - -		1	2	„

General officers in command on home and foreign stations receive an allowance for furniture equal to two-thirds of the lodging allowance of their rank, when occupying a public quarter.

Officers temporarily detached from their established quarters on duty are allowed to continue in receipt of their lodging allowance.

2. *Commutation of Rations.*—When circumstances render it inconvenient to provide officers with rations of provisions or forage, a sum of money calculated to cover the cost of those articles in the proportion to which the officer or soldier is entitled to them is made. In some cases a fixed rate of commutation is established, in others it is varied periodically in accordance with the current prices of the article in kind. Commutation of rations.

F.—Exceptional and special Allowances.

1. *Colonial allowances* are granted on certain foreign stations in which the expenses of living, or other peculiar circumstances, render the ordinary pay of officers or soldiers inadequate. They are at present issued in several of the Australian colonies, the Mauritius, St. Helena, Hong Kong, &c., and are, in some instances, paid by the Colonial Government.* Colonial allowances.

* Until within a few years since not only officers, but their wives and children, received a pecuniary allowance from the Colonial Government of Jamaica. This is said to have originated in the social habits of the colonists in the days of their prosperity, and to have been offered as an inducement to officers ordered to serve in the island to bring their families with them.

Compensation allowances.

2. *Compensation for Losses.*—This is an allowance granted to officers, non-commissioned officers, and soldiers to enable them to re-equip themselves after having incurred losses of property, either by the hand of the enemy, by shipwreck, by fire, or by the voluntary destruction of articles or horses with the view of preventing the spread of infectious diseases. In all such cases a board of officers appointed by the general commanding is required to establish the nature, extent, and cause of the loss, and to recommend the amount to be allowed, within the following scale :—

Rates.

	Light Equipment in the Field.	Full Equipment in Garrison.
	£ s.	£ s.
General Officer, Adjutant, or Quartermaster-General	314 0	373 0
Deputy or Assistant Adjutant, or Quartermaster-General	154 10	190 0
Deputy-Assistant Adjutant or Quartermaster-General	140 10	172 0
Commissariat or Medical Officer ranking as Brigadier-General	207 0	241 0
Do. Do. as Field Officer	111 0	141 5
Do. Do. below that rank	87 10	112 2
Cavalry Regiments. Field Officer	171 10	204 0
Captain	154 10	183 0
Subaltern	143 10	172 10
Adjutant	150 10	179 10
Paymaster and Surgeon	139 10	168 10
Quartermaster	135 10	164 10
Assistant or Veterinary Surgeon	129 10	158 0

		Light Equipment in the Field.		Full Equipment in Garrison.	
		£	s.	£	s.
Infantry Regiments.	Field Officer - - -	123	10	155	10
	Captain, if a Brevet Field Officer	107	10	137	0
	Captain - - - -	86	17	113	17
	Subaltern - - -	91	7	101	17
	Adjutant - - - -	101	0	127	10
	Paymaster and Surgeon - -	80	2	107	2
	Quartermaster - - -	76	2	103	2
	Assistant or Veterinary Surgeon -	70	2	97	2

Horses.

The allowance for horses, whether killed in action, destroyed to avoid infection, or lost by other causes falling under the provision of the warrant, is as follows:—

			£
General Officer		first charger -	50
		second charger -	45
Cavalry	Heavy and Light Dragoons -	first charger -	45
		second charger -	35
	Riding horse of Paymaster, Medical Officer's, or Quartermaster's horse -		35
Infantry	Field Officer's charger - -		35
	Adjutant's, ditto - -		35
	Paymaster's, Surgeon's, Quartermaster's, or Assistant-Surgeon's horse -		25
Bât horses or mules, all ranks and arms - -			20

Staff and departmental officers draw this allowance according to their corresponding rank. No officer can claim compensation for a greater number of horses than he is entitled to draw forage for.

Losses on leave of absence.

No compensation is given to officers for losses incurred while they are on leave of absence, except in the case of

sick leave; and should an officer in proceeding to or returning from a station send his baggage by a vessel by which he does not himself proceed, and fail to ensure it, should he have the opportunity of doing so, then any loss incurred by shipwreck or fire will not be made good by the public.*

Non-commissioned officers and men.

The claims of non-commissioned officers or soldiers for the loss of clothing and necessaries are required to be established by a board of regimental officers, and compensation is given according to the actual value of the articles at the time of their loss.

Stock Purse Fund.

3. *Compensation for Stock Purse Fund.*—This is a special allowance of 158*l.* 5*s.* 6*d.* a year to each company of the three regiments of foot guards, for hospital and recruiting expenses. Up to the year 1834, when the pernicious practice of bearing fictitious soldiers on the regimental pay-rolls was abolished throughout the army,† this did not appear as a direct charge against the public, but was covered by the pay of eight non-effective men in each company of the foot guards.

Although granted for a specific purpose, this allowance forms a recognized source of emolument to the captains and field officers of the brigade of guards, yielding to

* This is a very important clause of the Compensation Warrant, which is not as generally known as it should be.

† Two non-effective men continue to be borne on the strength of each company in the foot guards, and the grenadier guards are allowed to charge the public with the pay of three hautboys, amounting to 77*l.* 12*s.* 6*d.* a year, which is a perquisite of the officers.

A stoppage of 10*d.* a day is paid by soldiers of the foot guards when they go into hospital, and every man is required to contribute 2*s.* 2*d.* a year for medicines; these deductions from the soldiers' pay are carried to the credit of the officer, and contribute to swell his emoluments. A portion of the sums paid by soldiers allowed to purchase their discharge is likewise placed to the credit of the Stock Purse fund.

each of these officers, on an average, from 70*l.* to 90*l.* a year, and the arrangement is thus decidedly a losing bargain for the public.

The privileges in point of rank, home service, and leave of absence, which are enjoyed by the officers of the foot guards, are so great, that as regards their emoluments they might certainly rest satisfied to be placed upon an equal footing with the rest of the army, or if it be indispensable that a guardsman should be better paid than a linesman, some less objectionable form of emolument should be devised than that derivable from the savings on the allowance made for the levy money of recruits and the maintenance of sick soldiers. Not that it is for a moment to be believed that the soldier suffers from this arrangement; on the contrary, the greatest attention is paid to the comfort of the sick in the brigade of guards; but there is no good reason for making in favor of this corps an exception to the system established throughout the army, and the practice of eking out the incomes of officers from indirect sources is to be condemned.

Total charges for money allowances.

The totals of the money allowances as voted for the present year are as follows:—

	£
For allowances in the shape of regimental pay, as detailed (*see* page 284) - - - - -	296,634
Stationery allowance - - -	7,450
Mess ditto - - - -	23,400
Servants ditto - - - -	48,196
Table money* - - - -	9,480
Carried forward - -	£385,160

* An allowance of 5,004*l.* a year is made to provide a daily dinner to the officers mounting guard at St. James's Palace and at Dublin Castle. This cannot, however, be classed as a personal allowance.

Brought forward - -	£385,160
Equipment allowance - - -	3,800
Remount ditto - - - -	3,218
Lodging money - - - -	66,566
Commutation of rations - - -	15,388
Colonial allowance - - - -	1,204
Compensation for losses - - -	3,000
Stock Purse fund - - - -	11,157
Total money allowances -	£489,493

This item thus represents an addition at the rate of 13 per cent. on the aggregate net regimental pay of officers, non-commissioned officers, and soldiers, raising the total pay and money allowances of the effective forces, to 4,237,499*l.*

CHAPTER VI.

NON-EFFECTIVE SERVICES.

Origin of military pension.

POLICY, no less than justice and humanity, demands that the State should provide in their age or infirmity for the support of those who have devoted the vigor of their lives to its service, and none have stronger claims in this respect than the members of the military and naval professions; who, while they are subject to greater vicissitudes and dangers than any other class of men, are, by the nature of their career, precluded from making any provision for their future wants.

The earliest examples which we have of public provision for discharged or disabled soldiers were the grants of land and money which the Romans made to their troops on disbandment, or after the completion of the prescribed term of service.* From the period, however, which elapsed between the fall of the Roman Empire and the extinction of the feudal system,—a period characterised above all others by the entire absence of administrative arrangement,—we find but few instances of the State assuming the responsibility of providing for its worn-out soldiers.

Earliest records.

In the early English records we occasionally meet with grants of money made by the sovereigns to individual officers or soldiers disabled by wounds received

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* Under Augustus the service of the prætorians was 12 years; that of the legions 16 years. It was subsequently increased to 16 and 20 years respectively.

Parishes taxed for support of wounded soldiers.

in action;* and a statute (43d of Queen Elizabeth, 3.) authorizes a tax upon every parish in the kingdom towards the support of "maimed soldiers and mariners;" the magistracy being charged with the collection of this rate, which was not to exceed 10*d.* a week for any one parish, and with the appropriation of these funds to deserving objects; common soldiers' pensions being limited to 10*l.*, inferior officers to 15*l.*, and officers above the rank of lieutenant to 20*l.* a year.

Under Charles the First, by an Ordinance dated 6 March 1643, every parish was rendered liable to be taxed to the full extent required for the maintenance of wounded soldiers, and of the widows and orphans of those killed.

Establishment of Chelsea Hospital.

These measures of relief were, however, very imperfect, if we may judge by the frequent complaints made against disbanded soldiers, who, in their turn, pleaded starvation as an excuse for violence and robbery. The establishment of Chelsea Hospital was probably the first attempt at a systematic provision for worn-out soldiers at the expense of the State.†

James the First had founded Chelsea College as a school of divinity, from whence the most learned and powerful ecclesiastics were to hurl their arguments at popery. This speculation failed, and the building was

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* In the ordinances of Edward the Fourth we find an allowance of four marks per annum to John Sclatter, a private soldier of foot, who lost his hand at the battle of Wakefield, and of 10*l.* per annum to another soldier for his gallantry at the battle of Sherborne.—*Rymer. Grose.*

† Several private institutions for the relief of worn-out soldiers had been established before this time. The first of these, according to Grose, was founded in 1614 in Hereford by Sir Thomas Coningsby of Hampton Court.

converted into a prison, and next into a receptacle for Dutch seamen; until Charles the Second, at the instigation, it is said, of his good-hearted mistress, Nell Gwynne, turned it to its present use.*

During his reign, however, and that of his successor,† the institution was far more indebted for its support to the benevolence of private individuals than to the Crown or Parliament; and it was under William and Mary, the founders of Greenwich Hospital, that it was established upon an efficient and permanent footing.

Half-pay.

During this reign, too, half-pay was first granted under a royal warrant of 16 March 1697, "to the officers of our said regiments and companies for their support, until they shall be fully paid off and cleared, and be otherwise provided for."

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* This story rests upon anonymous authority, but is very generally believed, and is by no means in itself improbable. Several French writers, Dupin among others, have attributed the foundation of Chelsea Hospital to a desire on the part of Charles to rival Louis XIV., who had shortly before commenced the establishment of the *Hotel des Invalides* in Paris; a motive far less likely to have actuated that monarch than the tears of a woman.

† A warrant of James the Second, dated 3rd July 1686, regulates the amounts to be paid to pensioners, and a "state of the Royal Hospital at Chelsea," presented to His Majesty 28th February 1687, recites that 16 wards were complete and capable of accommodating 416 men; but from Letters Patent of William and Mary, dated 14th August 1690, which state, "We have resolved that the disabled and superannuated non-commissioned officers and soldiers shall with all convenient speed inhabit the hospital," it may be inferred that the arrangements for their reception had not previously been completed.

The existing records upon the subject of Chelsea Hospital at an early period are very scant; the author is indebted for such information as he has been able to collect to the courtesy of Mr. Moorhead, the secretary of the institution.

Rates.

The rates of half-pay were then established as follows:—

		s.	d.						Total. £	s.	d.
Horse.	Colonel	13	0	a day, and	6	servants at	15*d.*	each	1	0	6
	Lt.-Colonel	11	0	„	3	„	„		0	14	9
	Major	9	9	„	3	„	„		0	13	6
	Captain	7	0	„	3	„	„		0	10	9
	Capt.-Lieut.	5	0	„	2	„	„		0	7	6
	Cornet	4	6	„	2	„	„		0	7	0
	Qr.-Master	3	0	„	1	„	„		0	4	3
	Chaplain	-		-	-	-	-	-	0	3	4
Foot.	Colonel	10	0	a day, and	6	servants at	4*d.*	each	0	12	0
	Lt.-Colonel	7	6	„	3	„	„		0	8	6
	Major	6	6	„	3	„	„		0	7	6
	Captain	4	0	„	3	„	„		0	5	0
	Capt.-Lieut.	2	0	„	1	„	„		0	2	4
	Lieutenant	2	0	„	1	„	„		0	2	4
	Ensign	1	6	„	1	„	„		0	1	10
	Chaplain	3	0	„	1	„	„		0	3	4
	Qr.-Master	2	0	„	1	„	„		0	2	4

The servants' allowance was subsequently abolished, and a nett rate of half-pay established at an uniform rate for the cavalry and infantry. According to a list of half-pay officers published by order of the House of Commons in 1739, the following were the rates then in force:—

	s.	d.
Colonel	13	0
Major	8	0
Captain	5	0
Captain-Lieutenant	3	0
Lieutenant	2	6
Cornet	2	6
Ensign	1	10
Quarter-Master	2	0
Chaplain	3	4

The total charge for half-pay during that year amounts to 39,124*l.*, a sum which was objected to by the Legislature as a most exorbitant item of military expenditure. Charges for half-pay.

With exception of special pensions granted for distinguished service, and the gratuities on discharge,* no provision had yet been made for private soldiers beyond such aid as could be afforded within the limits of Chelsea hospital. How our present pension list would have astonished the financial reformers of a century ago!

Under Queen Anne the pension warrant was revised, and out-pensions were now introduced for the first time. About the same time widows' pensions (long known under the name of Queen Anne's bounty) were established. These latter grants, however, were very limited, and subject to no distinct regulation until George the Second, by a royal warrant of July 1737, extended the allowance to all widows and orphans of officers killed or dying in the service. A fund to meet this outlay was formed by means of two fictitious soldiers borne upon the strength of each troop or company. It was not until the year 1806 that widows' pensions became a distinct charge in the army estimates. Widows' pensions.

The allowances for non-effective services are,—

I. Rewards for military service.
II. Pay of general officers.†
III. Pay of reduced and retired officers.

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* Cavalry soldiers on discharge were allowed to keep their horses, and received besides an allowance for their swords; and both cavalry and infantry received fourteen days' pay from the date of disbandment.

† This does not include the pay of general officers *for commanding regiments*, though the latter is certainly a non-effective service and ought not to be included, as it continues to be, among the charges for the regimental establishments.

IV. Widows' pensions and compassionate allowances and pensions for wounds.

V. Chelsea pensions.

VI. Superannuation allowances.

Rewards for military service.

I. *Rewards for Military Service.*—It was formerly the practice to confer upon "old and meritorious* officers" garrison appointments carrying a daily or annual rate of pay, but involving no performance of duty. There was hardly a fort or garrison in the United Kingdom, or in the colonies, which had not its staff of commandants, town majors, governors and lieutenant-governors, warders, chaplains, physicians, &c., each with emoluments ranging from 50*l.* to 200*l.* a year. In 1806 it was determined to abolish these sinecures as vacancies occurred, and to substitute for them annual pensions. To this end 21,000*l.* a year is granted under the head of rewards for military services to officers. This sum is now distributed among 72 generals, 35 colonels and lieutenant-colonels, 7 subaltern officers, and 17 garrison officers.

General officers.

The allowances to general and superior officers range from 91*l.* 5*s.* to 456*l.* a year; those of the subalterns from 50*l.* to 91*l.* 5*s.*, and the remaining garrison appointments (including the so-called "garrison of the Tower of London," which there is no intention of abolishing) absorb the balance of the amount voted under this head.†

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* "Merit" then, as now, was too often found to mean interest or family connexion, as will be seen on reference to a list of garrison officers fifty years ago.

† The following are the garrison appointments still existing, but to be abolished as vacancies occur :—

		£	s.	d.
Belfast - -	Town-major, pay and allowance - - -	88	17	8
Charles Fort -	Ditto ditto -	125	17	8
	Carried forward - -	214	15	4

General officers, on receiving the command in chief of a regiment relinquish the pension, but officers actively

		£	s.	d.
	Brought forward - -	214	15	4
Duncannon Fort	Fort-major - -	63	13	8
Hull - -	Lieutenant-governor -	173	7	6
Inverness - -	Fort-major - -	86	13	9
New Geneva -	Ditto - - -	159	4	0
Portsmouth -	Physician - - -	173	7	6
Isle of Wight -	Captain, Sandown Fort -	—		
Portland Castle -	Two porters - -	21	5	10
Isle of Wight -	One warden - -	12	3	4
Cinque Ports -	Lieutenant-governor, Dover Castle - - -	173	7	6
	Deputy lieutenant-governor, Dover Castle* - -	104	18	9
	Pay of the captains, officers, and gunners of Archcliffe Bulwark, and of Dover, Sandown, Deal, Sandgate, and Walmer Castles -	539	8	10
	Total - - £	1,722	6	0

The garrison of the Tower of London is established as follows, and absorbs nearly one-fifth of the total allowance for military rewards:—

	£	s.	d.	
Constable and governor - -	947	9	7	per ann.
Lieutenant-governor - -	1,063	1	8	„
Deputy lieutenant-governor - -	346	15	0	„
Tower-major - - -	173	7	6	„
Chaplain - - - -	122	4	0	„
Physician - - - -	173	7	6	„
Apothecary - - - -	10	12	11	„
Gentleman porter - - -	80	12	1	„
Gentleman gaoler - - -	66	18	4	„
Forty yeomen warders, each 1s. 2d. -	851	13	4	„
Miscellaneous expenses - -	68	8	9	„
Total - -	£3,904	10	8	„

* This office has been abolished since the above was written.

employed upon the staff of the army are allowed to retain it together with their other emoluments.

Non commissioned officers.

A further sum of 4,400*l.* a year is voted for rewards to non-commissioned officers for distinguished or meritorious service; this amount is distributed in pensions of 10*l.*, 15*l.*, and 20*l.*, among 275 sergeants, either while serving with their regiments, in addition to their ordinary pay, or after discharge, with or without a daily pension.

Unattached pay of general officers.

II. *Pay of General Officers.*—By a late warrant the establishment of general officers on the unattached pay of 25*s.* a day is fixed at one hundred.* An officer promoted to that rank for distinguished service in excess of the establishment, being placed on the supernumerary list with an allowance of 400*l.* a year; or if a lieutenant-colonel of cavalry with the nett full pay of that rank, until a vacancy admits of his being placed on the establishment of the unattached pay. Effective field officers of the foot guards receive on promotion to the rank of major-general 550*l.* a year if majors; and 600*l.* a year if lieutenant-colonels. A general officer on the unattached pay forfeits the same on being promoted to the command of a regiment, but *active employment* does not deprive him of this pay, which he may draw in addition to his emoluments on the staff and a good-service pension.†

At present there is still some variety in the unattached

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* Exclusive of twenty-one generals of the corps of artillery and engineers.

† It is very desirable that some reform should be made in this respect. We now find officers drawing pay in three or four distinct capacities, and one person monopolizing the emoluments which, if properly distributed, would furnish rewards for several deserving officers.

pay of general officers to be absorbed as vacancies occur; their numbers are as follows:—

		£	s.	d.	
2	Generals at	1	12	6	a day.
2	„ „	1	12	4	„
1	„ „	1	9	2	„
1	„ „	1	7	1	„
20	„ „	1	6	3	„
88	„ „	1	5	0	„
1	„ „	1	2	6	„
1	„ „	700	0	0	a year.
1	„ „	600	0	0	„
1	„ „	550	0	0	„
6	„ „	400	0	0	„

III.—*Pay of Reduced and Retired Officers.*

This is of three kinds:

1. Retired full pay.
2. Half-pay and military allowance.
3. Foreign half-pay, pensions, and allowances.

Retired full-pay.

1. *Retired Full Pay.*—The sum of 108,000*l.* a year is voted under this head in order to furnish a suitable provision for old officers from the rank of captain upwards, who are thus enabled to retire from active service upon the full pay of their regimental rank.

Of this amount 60,000*l.* is devoted to the guards, cavalry, and infantry of the line, and 48,000*l.* to the artillery and engineers.

The following are the numbers now upon the full-pay retirement:—

	Guards, Cavalry, and Infantry of the Line.	Artillery.	Engineers.	Total.
*General officers -	—	4	3	7
*Colonels - - -	—	9	13	22
Lieutenant-colonels -	36	44	10	90
Majors - - -	43	—	—	43
Captains with brevet rank - - -	66	—	—	66
Captains - - -	55	38	11	104
†Lieutenants - -	39	2	—	41
†Ensigns - - -	2	—	—	2
†Paymasters - -	1	—	—	1
†Quartermasters -	11	—	—	11
†Surgeons - -	1	—	—	1
Total -	254	97	37	488

Half-pay.

2. *Half Pay.*—In consequence of the changes which have from time to time taken place in the pay of officers a considerable variety exists in the rates of half pay. It would be useless to enumerate all these rates, and the

* These officers are in receipt of an annual pension of 600*l.* and 400*l.* a year respectively in lieu of a daily rate of pay.

† These classes of officers receive their full pay under obsolete regulations, and their vacancies will not be filled up, —the present warrant respecting full-pay retirement being applicable only to officers of and above the rank of captain. There are further 22 artillery and engineer officers on the full-pay retirement in excess of the establishment; officers of those corps when *seconded, i.e.*, temporarily withdrawn from duty to enable them to accept of civil appointments, have hitherto been likewise placed upon the retired full pay, or more properly speaking, allowed to continue in the receipt of their regimental pay; but, under a recent regulation, no officer will be allowed to draw regimental pay when seconded.

maximum and minimum of each will suffice to show the diversity in this description of allowance.

The following are the officers now upon half pay :— Rates.

		At Rates varying from			
		s.	*d.*	*s.*	*d.*
Regimental officers -	143 lieut.-colonels -	10	1 to	12	6
	218 majors - - -	9	6 „	15	0
	707 captains - -	3	4 „	10	0
	82 second captains -	7	0 „	8	4
	1 captain-lieut. -	7	0 „	—	
	725 lieutenants - -	2	4 „	1	9
	108 cornets or ensigns -	1	10 „	8	0
	76 paymasters - -	4	0 „	15	0
	13 adjutants - -	2	0 „	4	6
	137 quartermasters -	2	0 „	11	0
	10 surgeon-majors or senior surgeons -	11	6 „	21	1
	128 surgeons - -	2	0 „	17	6
	39 assistant-surgeons -	2	0 „	7	0
	15 veterinary surgeons	4	6 „	12	0
Staff - -	14 miscellaneous staff or garrison officers	4	6 „	17	6
Commissariat department	14 commissaries-general	29	3 „	15	0
	38 deputy „ „	14	8 „	19	0
	59 assistant „ „	7	6 „	9	6
	39 dep.-assist. „	4	11 „	6	4
Chaplains department -	11 chaplains - -	2	6 „	16	0
Medical department -	19 inspectors-general of hospitals -	20	0 „	30	0
	20 deputy „ „	10	6 „	30	0
	5 physicians - -	10	0 „	12	6
	74 staff-surgeons -	6	0 „	15	0
	9 assist. „ - -	3	0 „	7	6
	19 apothecaries and purveyors - -	5	0 „	8	0

		At Rates varying from			
		s.	*d.*	*s.*	*d.*
Field-train department	97 commissaries -	1	4	to 7	6
American forces -	7 officers - -	2	0	„ 5	0
Total	2,861 officers of all ranks and arms.				

Total charge for half-pay.

The charge for the half-pay of these officers is 375,233*l.*, giving on an average 133*l.* 5*s.* to each officer.

Special military allowances are granted to 199 officers of various ranks and services, either in lieu of or in addition to their ordinary pay, the charge for which amounts to 21,036*l.*, equal, on an average, to 105*l.* to each officer.

Foreign half-pay.

3. *Foreign Half-pay.*—This consists of allowances in the shape of half-pay or pensions granted to officers formerly engaged in the foreign legions,* or subsidiary forces in the service of Great Britain.

The charges under this head are as follows:—

	£	Average Rate to each. £	*s.*
Half-pay to 243 officers -	18,000	74	0
Pensions for wounds to 27 officers	2,140	79	0
Ditto to 184 officers' widows	7,563	41	10
Ditto to 57 children - -	524	9	5
Total - -	28,277		

* A preferable arrangement was made during the late war with Russia, when it was understood that officers of foreign legions should, on disbandment, have no claim upon the British Government beyond a gratuity calculated upon their rate of pay.

IV. *Widows' Pensions and Compassionate Allowances.*

Widows' pensions.

The regulations under which these allowances are now granted were promulgated by a Royal warrant of 13 June 1826, when the practice prevalent up to that time of charging a part of the pensions to the widows of military officers on the civil list was discontinued.

Widows' pensions* are not to be considered as a *right*, but as "a reward for good and faithful military service rendered by deceased officers;" and it is not intended that this allowance should be drawn by widows whose circumstances do not require such aid.

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* Sir Charles Trevelyan, in his scheme for the reorganization of the army (see pages 279 and 491 of the Report of the Commission on Army Purchase, 1857), objects to the grant of widows' pensions, except in the case of officers who die of wounds or disease contracted in the field; not upon economical grounds, but as being a measure which tends to relieve officers from the obligation to which nature subjects every individual, of providing for the support of his family, and thus encouraging imprudent marriages and fostering habits of improvidence. This reasoning might be conclusive could it be shown that military officers are, or are likely to be, in a position to avail themselves of the ordinary means of making a provision for their families by life insurance; but subject as they are to extraordinary risks, their pay is utterly inadequate to meet the high rates of premium which a career so greatly affecting the chances of life demands. A captain going to India or the West Indies, even in a time of profound peace, would find it a matter of some difficulty to live upon his pay after deducting the annual premium of insurance on a sum equivalent to the widows' pension and compassionate allowance for his children. As regards *military objections* to marriage in the army, they can be answered on *moral* grounds; nor can it for a moment be believed that the withdrawal of widows' pensions would to any sensible extent prevent officers from marrying. In the French and other continental armies these allowances are extended to the widows and children of non-commissioned officers and soldiers killed in action.

Conditions.

No widow is entitled to a pension whose husband at the time of his death shall not have served at least ten years upon full pay, unless he shall have been killed in action or died of his wounds within six months after receiving them.

In the event of his dying from the immediate effects of foreign service, however, and of his having at the time of his marriage been in good health, a full-pay service of five years renders the widow eligible for the pension.

The widow of an officer who shall have died under ordinary circumstances within one year of his marriage, or who shall have married after he had completed his sixtieth year, or who shall have exchanged to half-pay, receiving the regulation difference, has no claim to the pension.

All these pensions cease on the re-marriage of the widow.

Numbers.

The following are the numbers at present in receipt of widows' pensions :—

Widows of general officers	-	153
,, colonels	-	18
,, lieutenant-colonels	-	113
,, majors	-	136
,, captains	-	599
,, paymasters	-	95
,, subalterns	-	719
,, quartermasters	-	207
,, chaplains	-	19
,, veterinary surgeons	-	17
,, medical officers	-	299
,, commissariat officers	-	142
,, staff and garrison officers	-	16
,, officers of the field train	-	21
Total	-	2,556

The total charge* under this head amounts to 151,375*l.* a year, being an average of about 60*l.* each pension.

Compassionate allowances are granted to the children of deceased officers under the same regulations as apply to widows' pensions, provided they are left in such pecuniary circumstances as render the allowance necessary for their maintenance. This fund being limited, the claims of children are considered with reference to the services of the father, and in the following order:— Compassionate allowances.

1. Children of officers killed in action.
2. Orphans having neither father nor mother.
3. Children of officers dying on foreign service.
4. „ „ dying on full-pay at home.
5. „ „ dying on half-pay at home.

These allowances cease in the case of sons at the age of *eighteen*, or sooner, if provided for at the public expense; and in the case of daughters until they marry or reach the age of *twenty-one, whichever may happen first.*

No one family can receive in the aggregate for widows' pension and compassionate allowance a larger amount than the half-pay attached to the rank of the deceased officer.

The present charge for *compassionate allowances* is 22,160*l.*, which, distributed among 1,618 individuals, gives to each an average pension of about 17*l.* 8*s.* a year.

Special annuities are granted to the widows, or, if the officer died unmarried, to the mothers and sisters of officers killed in action, or dying of their wounds within six months of receiving them, and the widow of an officer so killed or dying may receive a gratuity equal to one year's pay of the officer's regimental commission, in addi-

* The rates of widows' pension will be found at the end of this article.

tion to her pension, and one-third of such gratuity to each of her children. The amount charged under this head is 22,171*l.*, which, divided among 240 individuals, or families, gives an average of 92*l.* to each.

Rates. The following are the rates of widows' pensions, special pensions, and compassionate allowances.

	Widows' Pensions.	Special Pensions.		Compassionate Allowances, each Child per Annum.		Aggregate Allowances to the Families of any one Officer.	
		To the Widow, in lieu of the ordinary Pension.	To the Mother or Sister.	If killed in Action.	If not killed in Action.	If killed in Action.	If not killed in Action.
	£	£	£	£ £	£ £	£	£
General officers - Commissary-General	120	According to circumstances.	120	25 to 40	16 to 20	500	300
Colonel - -	90	200	90	18 to 25	14 to 16	350	Not exceeding the officer's annual half-pay.
Lieutenant-Colonel - Insp. Gen. Hospitals -	80		80				
Major - - - Deputy Commissary-General - -	70	120	70	16 to 20	12 to 14	250	
Deputy Inspector General of Hospitals - Deputy Commissary-General (under 3 years' standing) - Captain - - Assistant Commissary-General - - Staff Surgeon, 1st class Surgeon Major - Paymaster - -	60	90	60	12 to 16	9 to 12	150	
Surgeon - -	45	55	45				
Lieutenant - - Adjutant - - Deputy Assistant-Commissary General Assistant-Surgeon -	40	50	40	8 to 14	5 to 10	80	
Second Lieutenant, Cornet or Ensign, Quartermaster -	36	46	36				

The total charge for widows' pensions, compassionate allowances, special pensions, is 190,378*l.*

Pensions and Gratuities for Wounds.

Pensions for wounds.

These allowances are granted to officers as a compensation for wounds received in action by which they have lost the use of an eye or a limb, or sustained other permanent injury equal to such loss.

In these cases the officer is entitled to receive a gratuity of one year's pay of the rank he held when wounded, and a pension, according to the scale annexed, the continuance of which depends upon subsequent examinations before a medical board; after having been held for five years under medical approval it becomes permanent.

In the event of the loss of more than one limb or eye, the officer may receive a pension for each.

For wounds of minor severity officers are allowed gratuities varying from three to eighteen months full pay of their rank.

Pensions for wounds "being granted as a compensation for the permanent disability sustained," may be held together with any other military pay or allowances.*

The pensions for wounds are as follow:—

	Per Annum.
Lieutenant-general - - -	£400
Major or Brigadier-general - -	350
Colonel, lieutenant-colonel, and staff and other officers of corresponding rank -	300
Major commanding - - -	250
Major and staff and other officers of corresponding rank - - -	200

* It is not quite intelligible how officers drawing a pension for wounds, supposed to disable them from military service, can yet be employed in military duties. Would it not be better in all cases of established disability from wounds to place the officer upon a high rate of *retired pay*, the receipt of which should involve a relinquishment of military service?

	Per Annum.
Captains and staff and other officers of corresponding rank - -	- £100
Lieutenants „ „	- 70
Cornet or ensign „ „	- 50

Three hundred and seventy-seven officers are at present in the receipt of pensions for wounds, the total charge for which amounts to 51,243*l.*, being on an average 136*l.* a year to each officer.

V. *Chelsea Pensions.*

Chelsea pensions.

These allowances are of two kinds. *In-pensions*, which consist of the provision made for soldiers dwelling within the walls of Chelsea Hospital, where they are furnished with food and clothing, and receive a small daily pay as pocket-money; and *out-pensions*, which are paid to discharged soldiers irrespective of their abode, and without allowances of any kind.

Management of Chelsea Hospital.

In-pensions. — The management and direction of Chelsea Hospital is confided to a board of commissioners, consisting of—

The President of the Council.
The First Commissioner of the Treasury.
The Four Secretaries of State.
The Paymaster-General.
The Governor of Chelsea Hospital.
The Lieutenant-Governor of ditto.
The Adjutant-General of the Army.
The Quartermaster-General of the Army.
The Deputy Secretary at War.*

* The first commissioners were appointed by letters patent of King Charles the Second, dated 17 May 1683. By the same instrument "Charles Fox, Esquire, paymaster-general of our land forces, was appointed receiver-general and treasurer."

By this board all claims for pensions and other matters connected with the affairs of the hospital are considered and decided upon, and no expenditure can be incurred but upon their authority.

The officers of the establishment consist of,—

A governor.
A lieutenant governor.
A major.
An adjutant.
A chaplain.
A physician and surgeon.
A deputy surgeon.
An assistant surgeon.
A dispenser.
Six captains of invalides.
A quartermaster.
With 64 subordinates and servants of various classes.

The financial and account duties are conducted by a secretary with 12 clerks.

Number of inmates.

The number of soldiers at present inmates of the hospital is 538, who receive a weekly allowance according to their rank and class, the maximum, that of colour-serjeants, being 5*s.* 3*d.* a week, and the minimum for private soldiers 7*d.* a week.

Vote of funds.

The funds for the support of Chelsea Hospital are voted annually by Parliament upon estimates prepared by the commissioners.* Formerly a portion of the expense of

* Chelsea Hospital has long ceased to answer its original purpose; formerly it afforded a retreat for the greater part of the old and wounded soldiers; now it cannot accommodate one per cent. of the number of military pensioners. The system of out-pensions and the superintending department which has been created in connection with it, tend to remove the necessity for a central place of refuge for discharged soldiers, and the policy of maintaining the institution, now that it has ceased to effect its object, is to be doubted.

the establishment was paid from the army poundage fund, and from a fund formed by the balances remaining in the hands of prize agents on account of unclaimed prize-money; at present, however, all revenues derived from the hospital are placed to the credit of the public, and the whole charge is borne on the army estimates.

The present expenses of the institution are as follow:—

Salaries of officers.

	£
*Salaries of officers and servants -	5,500
Secretary's department, salaries, and contingencies - - -	4,384
	9,884
Pay of 538 in-pensioners, provisions, clothing, &c., fuel, &c., expenses of artificial legs, &c., and household expenses - - - -	15,419
	£25,303

Average cost of each in-pensioner.

Thus the actual average cost of each in-pensioner amounts to about 25*l.* a year,* and if the expenses of the establishment are added, to 47*l.* 10*s.* a year; but the secretarial branch cannot fairly be included, since its duties extend far beyond Chelsea Hospital.

Kilmainham Hospital.

The "Royal Hospital at Kilmainham," may be considered a branch of Chelsea Hospital. It accommodates about 150 pensioners, at an average cost of 6,000*l.*

* The pay of the officers of the establishment, although it still appears somewhat out of proportion with the relief afforded, has been considerably reduced from time to time. In 1797 the expenditure of the hospital was 29,050*l.* and the inmates only 476, being above 51*l.* a year for each. It must also be borne in mind that the different offices of Chelsea Hospital are, as a rule, conferred upon old and meritorious officers as a reward for long service. As regards the Secretary's Department, the duties are not confined to Chelsea in-pensioners, but extend to the pay and accounts of the entire number of out-pensioners at home and abroad.

a year; one-third of which amount is for the pay and expenses of the staff. As it is in immediate contemplation to abolish this institution, it is unnecessary to enter into further details upon the subject.

Chelsea Out-pensions originated in the second year of Queen Anne (1703), at which time there were four established companies of invalids, the reduced members of which could not be accommodated within the hospital, and were accordingly authorized under His Majesty's royal warrant to receive a daily pension of 9*d.*, 7*d.*, and 5*d.* a day, according to their rank, until they should be provided for in the hospital. Out-pensions, their origin

This system seems to have been continued until 1806, when the statute known as "Windham's Act," which for the first time gave soldiers a legal claim to a pension, was passed by Parliament. The numerous warrants which have since been issued to regulate out-pensions have been all grounded upon this Act.

The following is the scale within which the Commissioners of Chelsea Hospital are now authorized to grant pensions to discharged non-commissioned officers and soldiers:— Rates.

—	If rendered incapable of Service by severe Wounds received in Action.				If become Blind in the Service.				If discharged after 21 Years' Service in Infantry, or 24 in Cavalry.				If discharged on account of permanent Disabilities under 14 Years' Service in Infantry, or 17 in Cavalry.			
	From		To		From		To		From		To		From		To	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
Sergeant -	1	3	3	0	1	3	2	0	1	0	2	0	0	9	1	3
Corporal -	1	0	2	4	1	0	1	3	1	0	1	6	0	7	1	0
Private -	0	8	2	0	0	9	1	0	0	8	1	2	0	7	0	9

In addition to these, temporary pensions may be granted to soldiers discharged on reduction after a service of 14 or 17 years.

Total charges for Chelsea pensions.

Chelsea out-pensions are payable quarterly, in advance. The number in receipt of this allowance at present amounts to 63,634. In 1744 it was 5,600; in 1782, 12,000; in 1795, 17,000; in 1816, 47,180: the charge for the current year is 1,136,552*l.*, being on an average of nearly 1*s.* a day to each man.†

VI.—*Superannuation Allowances.*

Superannuation allowances.

These comprise various classes of individuals attached to the army in capacities which do not bring them under the ordinary half-pay or pension warrants. Until very recently all claimants for superannuation were required to contribute from their salaries towards the fund for their future retirement; but this contribution was abolished by an Act of Parliament in 1857, and the charges are now payable exclusively out of the public exchequer.

The amount of superannuation allowances is in all cases founded upon the salary at the time of retirement, and is regulated by the provisions of an Act of Parliament.‡ There is accordingly the greatest variety in these rates, which range from 5*l.* to 2,000*l.* a year. The total charge under this head is 130,410*l.* a year.

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* They were formerly paid one year in arrear; the consequence was that the men were in the habit of mortgaging their pensions to professional usurers, who made fortunes while the soldier begged or starved. Under 28 George the Second (cap. 1.) an Act was introduced declaring all engagements made by pensioners with regard to their public allowance null and void, and directing that for the future pensions should be paid quarterly, in advance.

† This is the nett charge for pensions. The pay of the officers employed in the organization and payment of out-pensioners has been quoted under the head of "Administrative Departments."

‡ 4 & 5 William IV. cap. 24.

Total charges for non-effective services.

The following is a recapitulation of the sums voted during the current year for non-effective services:—

	£
Rewards for military service* -	25,330
Pay of general officers - - -	59,511
Retired full and half-pay - - -	531,207
Widows' pensions and compassionate allowances - - -	208,132
Pensions for wounds - - -	51,243
Chelsea and Kilmainham Hospitals	31,372
Out-pensions - - - -	1,202,863
Superannuations - - - -	130,410
Total for non-effective services -	£2,240,068

This amount stands to the charge for pay and money allowances of the effective military force as 55 to 100, and forms nearly one-fifth of the entire army expenditure.

* This includes the pensions granted to effective non-commissioned officers and soldiers decorated with the Victoria cross.

BOOK V.

MILITARY SUPPLY DUTIES.

CHAPTER I.

SUPPLY IN GARRISON AND IN THE FIELD.

Importance of a regular supply to an army.

THOSE who have taken part in active military operations cannot fail to have marked how much the efficiency of the soldier depends upon the regularity with which his various wants are supplied; how intimate the connection is between the material comfort and the discipline of troops; and how inevitably an army that is ill provided becomes not only physically weakened but morally disorganized.

To ensure under all circumstances a regular and sufficient supply of all that tends to maintain the soldier in health, comfort, and efficiency is the first duty of the military administrator; to effect this object with the greatest possible regard to public economy should be his next care; and the best administration is that which, in developing the resources of the country for the benefit of the army, succeeds in producing the greatest possible result at the least possible cost.

The wants of the soldier in themselves do not materially differ from those of mankind generally; he must be fed, clothed, and housed like other men, but his position is quite an exceptional one. It is the duty of the citizen, no matter what may be his station, to provide for his own necessities and those of his family. No one interferes

with him in the means which he adopts to this end; he may live where and how he pleases, eat, drink, and wear whatever he is able or willing to procure; his time is his own, except when he voluntarily disposes of it for the service of another, and his labor is regulated by his inclination or his necessities. The soldier, on the contrary, is bound to renounce all freedom of action; he is and must be helpless; from day to day, from hour to hour, he knows not where he may be, or what he may be required to do; he rises and sleeps, he eats and he works by word of command; his food, his quarters, and his clothing are prescribed by a superior authority, and he must rely upon that authority for their supply.

Exceptional condition of soldiers.

This dependence upon extraneous aid is a necessary condition of military service, and to justify it, to inspire the soldier with a full confidence in its power to supply all his wants, should be one of the highest aims of administration.

Confidence in administration.

While such a confidence exists, occasional privations, which under the most perfect system are unavoidable on service, will be borne without complaint or resentment. It is the suspicion that there has been apathy or indifference to his interest which makes the soldier so prone to grumble at the least failure in his supplies. A better acquaintance on the part of the army generally with the difficulties of administration, and of the exertions required to overcome them, would remove much discontent and groundless suspicion, create a greater mutual appreciation between the soldier and the administrator, and act as an additional incentive to exertion on the part of the one and to cheerful co-operation on that of the other.*

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* One of the great difficulties which the commissariat had to contend with during the late war arose from the inability of military officers (even among those in high commands) to

Human life and happiness are at the present time too highly considered in our country to admit of the soldier's health and comfort being considered merely as a question of profit and loss. Humanity and patriotism, no less than policy and economy, demand that no means should be neglected which may contribute to the physical welfare of the troops; but even setting aside higher considerations, and viewing the soldier only as a piece of machinery, upon which a certain sum of money has been expended, and which represents a portion not only of the national strength but of the national wealth, it is evident that whatever reduces or detracts from his labor power, diminishes to a corresponding extent the value of the investment; and that, on the contrary, whatever tends to give increased strength and durability to the machine, adds so much to the public wealth.

The soldier's health and comfort viewed as a question of economy.

Let this never be lost sight of by the military administrators; let it ever be remembered that the fraction saved in the quality of the soldier's clothing or food by ill-judged economy, is swallowed up by a proportionate loss of health and strength; that every day which the soldier passes in hospital from causes which, with proper care and foresight, might have been avoided, is so much time and money lost to the country, and that whatever contributes to the physical comfort and well-being of the soldier, contributes in an equal degree to the discipline of the army.

Mistaken parsimony.

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understand that in helping the commissariat they helped the soldier; and that to escort a convoy of provisions, or to mount guard over a magazine was as much a military duty as to work in the trenches, or to repel a sortie. To such an extent did this feeling exist that it was found almost impossible to get soldiers to perform any ordinary fatigue duty for the commissariat unless they received extra pay for it.

Responsibility of administration.

In this respect the responsibility of military administration is immense, for upon its exertions and its labors depend not alone the success of warlike operations, but often the lives of the troops who are dependent upon its energy and foresight for their every want.

Necessity for method in supply duties.

To render the exertions of a commissariat available, however, they must be directed by a common impulse to a common end. It is not sufficient to recognize military administration as a science; the science must be reduced to a *system;* without system the most fertile genius would prove powerless, and the most abundant resources insufficient. More depends upon the application of means than upon the means themselves; and a proper application can only be effected when action is founded upon fixed principles and conducted with method. Nothing could be more unreasonable than that outcry against *routine* which was so loud during the late war; routine is an element of order; it was not that we had too much of it, but too little. We tried to adapt the machinery of a state of peace to a state of war, and we dislocated our administrative system in the attempt to extend it beyond its powers of expansion. Let us hope that the lesson will not have been altogether lost, and that by assimilating as far as possible supply duties in peace and in war, the transition from one to the other may for the future be effected without any sensible shock to our military economy.

Supreme direction.

The Secretary of State for War is charged with the supreme direction of the supply of the army, the duties connected with which are distributed among different branches of his department, and practically carried out by the administrative officers of the army.

Supply on home stations,

In the United Kingdom, as well as on foreign stations, most supplies are obtained under contracts by public

competition, but the system adopted on home service differs considerably from that in the colonies.

On all foreign stations the officers of the commissariat enter into *local* contracts for every description of supply or service for the army, and wherever troops are quartered resident contractors provide their wants. and abroad.

In the United Kingdom, the War Office enters into contracts for entire districts, and as the tradesmen at the different detached stations are in general unable to undertake a service extending beyond their respective localities, they are practically excluded from direct competition for army contracts, which thus become monopolized by a few capitalists who sub-let them to the resident tradesmen. System of contracts in England

Commissary-General Sir George Maclean, in a memorandum submitted by him to the War Department in 1856, thus describes the effect of the present mode of contracting for army supplies in the United Kingdom:— condemned.

"The contract system as it now exists and has existed for many years past, is little short of a monopoly enjoyed by a few London capitalists who farm the army contracts from one end of the United Kingdom to the other, sub-dividing and sub-letting them until it frequently happens that three profits are levied on the food of the soldier before it reaches him.

"The wholesale way in which the contracts are necessarily entered into in the absence of district commissariat officers, excludes, in the first instance, all those not possessed of considerable capital. Thus, for instance, a respectable tradesman in Edinburgh, desirous and capable of supplying food to the troops quartered in that city, is prevented from tendering because his means do not enable him to contract for the whole of Scotland; he must, therefore, be content to act as sub-contractor, or even agent to a sub-contractor at a reduced price, and although practically the contractor, he is in reality twice, if not thrice, removed from the responsible government officer who enters into the contract on behalf of the troops; and the control of such an agent, through this circuitous

channel from a central commissariat in London, is necessarily divested of all promptitude and much efficacy.

"Nor do London speculators confine their operations to Great Britain, for one of them is at present under extensive engagements to supply the army in Ireland, whilst a person in Dublin is contractor for fresh meat for the whole of North Britain.

"It is evident that the wealth of these middlemen is derived either from the Government or the soldier—(perhaps, in some measure, from both, as the natural tendency must be to impose upon the soldier inferior food to that contracted for, owing to the necessarily diminished price at which it is furnished by the *bonâ fide* supplier)—and it might, with great advantage to the service, be directed to the more legitimate support of an extended commissariat that would supersede these persons by introducing local contracts, while the more thorough supervision that would thus be exercised would secure to the soldier the quality of food to which he is entitled."

System of contracting in the colonies.

In the colonies the commissariat is the department charged with entering into contracts for all army services. The system of tenders described with reference to raising money is strictly maintained with regard to supplies, and as separate contracts are formed at almost all distinct stations for each article of supply, the mischievous practice of "subletting" and "farming" contracts is almost unknown.

Tenders.

Although, as a rule, the acceptance of the lowest tender is obligatory, yet price cannot be allowed to be the only criterion in so important a service as the supply of military stores; and it is accordingly in the power of the commissariat officer to set aside a tender, although the lowest, whenever he has good reason for believing that the tenderer could not properly carry out the contract. The greatest caution should, however, be observed in the exercise of this power, and it is the duty of an officer, before adopting such a course, to satisfy himself by the most scrupulous inquiry that a deviation from the esta-

blished system can be in every respect justified by the circumstances of the case.

Contracts.

A tender being accepted, a contract in conformity with its conditions is drawn up. This document should be framed in the plainest possible language, and in accordance with the commercial usage of the locality; the article to be supplied, its quality and quantity, the mode, place, and period of delivery, and the conditions of payment, and lastly, the penalty attending a breach of contract being the principal points to be defined. A commissariat officer should be possessed of a sufficient knowledge of mercantile and general law to be able to draw up a contract without legal assistance, which cannot at all places be obtained or relied upon; and in foreign countries, or in those colonies where the English language is not generally spoken, it is always advisable to draw up the document in the vernacular as well as the English tongue. This is one of the many instances in which a knowledge of foreign languages is most important to a commissariat officer.

Compensation to contractors for losses.

A contract once concluded, its strict performance should be exacted. Circumstances may arise to place a contractor under extraordinary difficulties. A sudden and unexpected augmentation or reduction of the military force; the outbreak of war or insurrection, or other unforeseen circumstances, rendering it impossible for a contractor to fulfil his agreement without certain loss or ruin, may justify some relaxation in the terms of the contract, or even afford grounds for pecuniary compensation for well-established losses incurred in the service of Government. These must, however, be exceptional cases, and a commissariat officer, before recommending or forwarding such a claim, should carefully sift the grounds of the application, and satisfy himself that the claimant had exerted all possible foresight and

caution, and that the causes of the loss were such as could not have been reasonably anticipated at the time the contract was entered into. Large profits realized upon former contracts should form sufficient grounds for invalidating claims for compensation. A sudden rise in the price of an article of supply affords no claim whatever for compensation to a contractor, who would not be disposed to give the public the benefit of a corresponding fall of prices; and as a general rule he should be held to his bond, and be made to feel the consequences of failure. No mistaken feelings of good nature should be allowed to interfere in a matter of so much importance as the integrity of the system of public contracts, upon which the supply of an army and the character of its commissariat mainly depend.

On the other hand, every engagement on the part of the Government should be scrupulously fulfilled, and no assistance or encouragement should be withheld from a contractor who shows a disposition to do his work well.

Private intercourse with contractors.

In dealing with contractors any approach to private intercourse should be avoided. It is not always easy to repel advances which are made in the form of ordinary acts of civility, and the motives for which (if motive they have, which is not always the case,) are not apparent; but the acceptance of the most trifling obligation weakens the power of a commissariat officer over his contractor; a debt is incurred by the individual which the official is expected to repay, and even when civilities are proffered and accepted without any ulterior view on either side, a plausible pretext is afforded to that large class of detractors who are always too ready to avail themselves of an opportunity of indulging in scandalous suspicions against those placed in situations of trust and responsibility. The only relations which should exist between a commissariat officer and a contractor should be those of

official courtesy, and every care should be taken that the subordinates in the department do not accept of favors, or "compliments," as they are called, from contractors or their agents, on pain of dismissal.*

* The success no less than the reputation of a commissariat must be in a measure dependent upon the efficiency and the character of its subordinate staff; the blunders or dishonesty of storekeepers and issuers reflect upon the superior ranks of the service, and too much care cannot be taken in exercising a vigilant supervision over these men. From the fact of there being no trained corps of subordinates in the commissariat, the department is always, on the outbreak of a war, placed at a peculiar disadvantage. When the emergency arises, a number of untried men are hurriedly collected; as a rule they possess neither the requisite knowledge, experience, or character for the performance of duties always more or less responsible, and the officers find themselves embarrassed rather than assisted by such a body.

There can be no doubt that to keep up a permanent subordinate commissariat staff of civilians would cause an unjustifiable expense; but it may be worthy of consideration whether a certain number of soldiers from every regiment might not be trained in commissariat duties, remaining available for ordinary garrison service until required to be transferred to the department and formed into an administrative corps.

There is not a regiment in the service which could not supply its quota of butchers, bakers, masons, drivers, storemen, and laborers; while if the higher situations of storekeeper and clerks were to be exclusively conferred upon non-commissioned officers, numbers of these would be found anxious to qualify themselves for the duty. The saving to be effected by such a system would be very large, while one of the most essential wants of our administration would be supplied. During the late war we employed no less than four thousand subordinates, principally civilians; their expense was enormous, and the ignorance and insubordination of the greater number, and, it must unfortunately be added, the dishonesty of some, formed one of the greatest difficulties of the department.

Prompt settlements.

The importance of prompt settlements with contractors cannot be too strongly insisted upon; not only the success of the contract and the consequent comfort of the troops, but the credit of the Government is involved in this. Nothing more tended to create the eager competition for English army contracts in the East during the late war, than the regularity with which contractors' accounts were settled, and the strict performance of every public obligation.*

Direct purchases.

When circumstances do not allow of or require the formality of a contract, or of obtaining tenders, the usual course is to make the purchase directly, and to obtain the certificate of well-qualified persons as to the fairness of the charges. In garrison, however, it rarely happens that such a course becomes necessary to any extent.

Contracts for special services.

Occasionally commissariat officers are required to enter into contracts for services, the details of which they may not be acquainted with; as, for instance, for engineer and barrack services, fortifications, buildings, and repairs. In these cases they are furnished with specifications from the department immediately concerned; an officer of which is required to be present at the receipt of tenders, and to join in recommending those to be accepted; but the commissariat officers are not expected to interfere in the execution of the contract beyond enforcing its provisions, if called upon to do so.

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* In the French commissariat at the seat of war it was customary to make a deduction from the sums due to contractors for preparing their accounts. This practice, (which, though not sanctioned, was tolerated by the authorities,) with others of a similar nature, caused the French contracts to be taken on higher terms and to be less eagerly competed for than our own.

Difficulty of applying the garrison system of supply in the field.

The supply of troops in garrison is thus conducted in a perfectly systematic manner under established regulations, and according to forms calculated to facilitate the service; but when it is attempted to adapt the same forms and regulations to a perfectly altered state of circumstances; when the machinery created for the ordinary routine of garrison duty is suddenly introduced amidst all the confusion and hurry of active warfare, the system becomes deranged and the wheels cease to work. We might with as much justice expect a river boat to cross the Atlantic as to make our present garrison system of administration applicable to field duties.

But although the existing system is altogether devoid of that elasticity which should characterize a service required to operate under many widely differing circumstances, nothing can be more erroneous or mischievous than the prevalent impression that no training in time of peace can fit a commissariat officer for his duties in the field. The same argument might be used with regard to the soldier as an excuse for not training him for active service. It is a commonly-received saying that no troops are really efficient until they have been under fire, but this does not prevent their being trained as far as it is possible with the view to active warfare. It is very probable that a young regiment would not manœuvre as accurately under the enemy's guns as on the parade ground. But is that a reason why it should not be taught to manœuvre at all? In like manner a commissariat officer who has served with an army in the field will prove far more useful than one who has not had the benefit of such service, but surely this should be an additional reason for endeavouring to supply the want of practical experience by preliminary training and instruction approaching as nearly as may be to the actual requirements of war.

Assimilation of system in peace and in war.

A perfect assimilation between supply duties in the field and in garrison would be impracticable; nor would it be necessary any more than it is necessary to use ball-cartridge at a review; but the most prominent features of commissariat field service might easily be introduced in garrison,* and the system of account and supply, together with the details of the duties of subsisting troops, rendered applicable to the various contingencies of the service.

Duties of a commissariat officer in the field.

So varying are the circumstances attending active warfare, so much influenced by the character of the operations, the nature of the country, the climate and the season, the disposition of the population and the geographical features of the locality, that it is almost impossible to lay down any but the most general rules, and far more reliance must be placed upon the intelligence, the activity, and the zeal of a commissariat officer than upon the system established for his general guidance. It is in availing himself of every expedient, in seizing every opportunity, in guarding against all risks, and providing for all contingencies, that the highest qualities of a good commissariat officer are put to the test. He must not believe in reports or trust to probabilities; he must rely only upon his own energy, and by exerting all his foresight, judgment, and decision, anticipate the wants of the troops in whatever position they may be placed.†

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* Why should not our soldiers be required to kill their cattle—to bake their bread—to be practised in the different details of commissariat field service, instead of being rendered helpless and dependent by having their rations carried to their very mouths for them? How is it that in such admirable schools for training as our camps afford a commissariat system prevails which is utterly inapplicable to active service?

† There is, perhaps, no duty more wearing to mind and body than that of a commissariat officer in the field; his labor

Failure of local resources.

An undue confidence in the resources of the scene of operations is to be deprecated as much as too great a reliance upon aid from without. Under some circumstances the theatre of war yields absolutely nothing, as was the case in the Crimea; the commissariat is then rendered entirely dependent upon such supplies as can be obtained from the nearest depôt. There are, perhaps, no circumstances so little favorable to the exertions of a commissariat officer as these. His individual activity

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and responsibility are unceasing, and what renders his duties the more irksome is the knowledge that while the most trifling failure subjects him to certain reproach and censure, the most perfect success is rarely acknowledged or appreciated in the army. Sir Francis Head, in his "Defences of Great Britain," thus describes the daily routine of a field commissary's labors in the Peninsula :—

"Besides exertions such as have been described, the jaded commissary, after having managed to feed his division, had at night, through cantonments in a strange country, to search among innumerable camp fires for his own tent, around which he was almost sure to find a crowd of muleteers and peasants waiting to be paid. By candlelight he had then, under a system devised by the Treasury, voluminous, vexatious, and almost impracticable, to endeavour to make up his accounts, arrange his vouchers, answer letters, until, while his papers were still before him and his money chest by his side, all of a sudden the key-bugles, trumpets, &c. of the reveillée, at various distances and in all directions, would be heard to sound, echo, and re-echo, upon which the canvass over his head would obediently begin to flap in signal that his servant was striking his tent,—in short, that his office was about to vanish into thin air,—and thus, say at 3 a.m., the commissary had again to mount his horse, and actually before his division had continued its march, to search for, and transport to it, wherever it might halt, sustenance for men and horses for another day."

Commissariat officers who served with divisions during the late war cannot fail to be struck with the truth of this sketch.

has not fair play, since he must trust to the exertions of others at a distance for compliance with his requisitions, and probably rely upon water transport, which is seldom under sufficient commissariat control, for the conveyance of his supplies.

Depôts.

All that can be done under such circumstances is to form depôts wherever bodies of troops are likely to be stationed; to have the largest possible reserves at head-quarters; and to be prepared with a sufficient land transport establishment to carry all requisite supplies in the event of an advance or a change of position.

Supply by seizure, requisition, or purchase.

But this is an exceptional state of things; in general the country can be placed under contribution, either voluntary or coercive, for the supply of provisions and forage, and the commissariat officer then enters upon his legitimate functions. Several measures are open to his adoption; he may avail himself of the enterprise of local contractors; he may make his purchases directly from the owners at the market price; he may fix an arbitrary rate for the different articles of supply; and lastly, he may levy contributions on the people and compel them to furnish according to their means the provisions required for the army.

Resources of the country to be made available.

His own judgment must guide him in the choice of these measures. The employment of contractors, in time of peace undoubtedly advantageous, is attended with certain objections during a period of war. Sir Randolph Routh* says truly, "the best and surest contractor is the country occupied by the troops and its natural resources carefully and duly economised;" and he proceeds to cite instances within his experience of the inconvenience arising from too great a confidence in contractors "who swarm about an army when it is prosperous to prey upon

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* Commissariat Field Service, p. 25.

its wants, but are the first to fly in the event of a reverse."

Contractors in the field.

At the same time, the local knowledge and influence frequently possessed by these men must often prove of the greatest value in securing supplies; and although disinterested assistance cannot reasonably be expected from contractors whose only object is personal gain, and whose sympathies otherwise are as often with the enemy as with the army they serve, even their anxiety to enrich themselves may be turned to good account in stimulating them to exertion; and if a commissariat officer, in dealing with his contractor, be careful to exercise a strict supervision and to keep scrupulously good faith, he will generally find in these men a most useful class of auxiliaries.

Public competition to be encouraged.

It is not always possible on active service to adhere to the admirable principle of public competition in procuring supplies. To invite tenders by public advertisement may be opposed to local usage (and no people are so obstinately attached to their peculiar customs as the mercantile classes in all countries), or the means of publicity may be very restricted, or the commissariat officer may not be sufficiently acquainted with the characters of the individuals competing for contracts, and their capacity to carry out their undertakings; but the means are rarely wanting to prevent contracts from being monopolized; and by proclaiming the principle of open competition in the manner best calculated to prove effectual, improper combinations may at all times be defeated, and a sufficient number of candidates for contracts secured.

Different courses for a commissariat officer.

While the commissariat officer, then, should, whenever he finds it practicable, avail himself of the services of contractors as a convenient and economical mode of supply, it is by making the resources of the country occupied generally available that he must hope principally to supply

the troops; and here again there are several courses, the choice of which must be left to his discretion. He has to consult at once the wants of the army, the economy of the state, and the resources and feelings of the country in which he is acting. To seize supplies, unless from an enemy in arms, is to be deprecated; to pay for them more than their value is equally objectionable; unnecessary force creates an ill feeling which may defeat the objects of administration; to submit to imposition enhances the difficulty of the service; but conciliation and fair dealing, backed by decision, will never fail to prove a good policy and enable the army to procure supplies without unnecessary expense to the public or uselessly exasperating the population.

Resources of the country to be studied.

If the territory be that of a friendly or a neutral power, every effort should be made by the commissariat to arrive at a just estimate of its resources in grain, cattle, fuel, and other articles of supply, to ascertain their current market value, and having obtained all possible information on these points, the people should be invited, either through the local authorities or the agency of private individuals, to furnish whatever is required, with the understanding that the usual price will be paid for the supplies brought in, and that the headquarters of the army will prove a profitable market to them.

Confidence to be established.

When confidence in the good faith of the purchaser has been once established, the population of a country occupied by a military force will be willing enough to sell, and should a disposition to hold back supplies in the hope of enhancing their value be shown, the interposition of the local authorities should be sought in preference to the adoption of arbitrary measures. Conciliation and firmness, temper and justice combined, will seldom fail to induce the inhabitants, even when their sympathies tend in another direction, to contribute to the extent of

their means to the maintenance of the army quartered upon them.

Proceedings in a hostile country.

In a hostile country the difficulties are necessarily greater, but even then force should not be resorted to until fair means have failed of effect. The unarmed citizen should be taught that the invaders of his country do not war with him, and that while he displays no hostility he is entitled to claim the protection of his nation's enemy for his person and property. In return for such protection he is bound to contribute towards the maintenance of the invading force, and it is not until he shows himself determined to adopt the less prudent, though more patriotic course of refusing to furnish supplies to the enemies of his country, and attempts to remove or to destroy them, or to dissuade others from contributing, that he must renounce his claim to indulgence, and that his property becomes the lawful prize of the enemy.

Resort to force to be avoided.

But even amid a hostile population a conquering army should exercise its power with every possible regard to justice. Fair treatment may reconcile a people to the presence of a conqueror, and induce it to submit to superior strength. No effort should be left untried to produce such a result, since a resort to force, although it may provide for immediate wants, inevitably destroys the sources of supply.

Extent of available supplies to be ascertained.

The best course to be adopted in levying supplies in an enemy's country is, having first ascertained the resources of the district, to demand, through the local authorities, the head men of villages, or other channels, that certain quantities of provisions should be brought at a given time to the headquarters of the army, care being taken that the demand be not beyond the means of the district, and a fair price should be paid whenever a disposition is shown to comply promptly with these requisitions. Such a measure will rarely fail of effect, and when the

inhabitants feel certain that there is no alternative between selling their produce and having it seized they will submit to the necessities of war in its least aggravated form, and yield to a compulsion which, though it do violence to their national feelings, consults their individual interests.

Labor and transport.

Nor is it only in the supply of provisions that the theatre of war should be laid under contribution; labor and transport may likewise be attained by means of judicious administrative arrangement. The stern rules of war justify the exaction of all the resources within its influence; it is for administration to render these exactions as little oppressive as possible when dealing with a class of people which, as a rule, is the most innocent of the causes of war, the most exposed to its ravages, and the least benefited by its results. In proportion as tact and moderation are displayed by the agents employed in levying supplies upon the population, so will the resources of the country become available and productive. Violence and wrong will convert the peaceable peasant into a desperate and implacable foe; conciliation and fair dealing may make him, if not an ally, at least a profitable neutral. Interests far beyond the hour may be involved in the action of military administration under such circumstances, and the seeds of rancor or goodwill sown to day on the scene of contending armies may bring forth fruit to influence the destinies of nations long after the combatants themselves have ceased to struggle.

Strict compliance with all engagements entered into.

If it be necessary at established stations that a prompt settlement should be effected for all services rendered to the army, and that every engagement entered into by the commissariat should be most scrupulously complied with, how much more so is this the case in the field. The love of gain—that mainspring of human action under

all circumstances, and in all places—is seldom appealed to in vain; but the feeling must be supported by confidence; for one man who will run a risk for a remote prospect of reward, a hundred will toil for a certain remuneration, and it should be one of the first aims of administration to inspire all classes among which it is called upon to act, with a full and entire confidence in its good faith. No country has larger material resources for carrying on war than our own. Towards the close of the late war, when most of the nations concerned in it were exhausted by their efforts, England had only just commenced to feel her strength, and an English commissariat has the great advantage over most others of being able to command a sufficient supply of money, and of thus meeting every engagement in which it enters. A breach of faith involves more than immediate consequences; it permanently destroys *credit*, that invaluable representative of money, without which administration cannot reckon upon the support of the people upon whom it is dependent for supplies. A contractor who feels perfectly certain that on the completion of his contract he will receive the sum of money agreed upon, will exert himself to the utmost, and make every sacrifice to fulfil his part of the bargain; but once let him have reason to doubt that his services will meet with their reward, that payment will be disputed, delayed, or evaded, and every incentive for exertion ceases; he will seek another market for his goods or services, or dispose of them only at a price sufficiently large to cover the risk of loss.

It is not always practicable for a commissariat officer in scouring the country for supplies to carry money with him, and the practice of granting certificates or orders for payment upon headquarters, or the nearest established station, is accordingly resorted to; but this

is a practice liable to much abuse,* and whenever it is possible ready money should be the basis of all such transactions, not only as being the surest means of securing all available supplies at a reasonable rate, but as tending to maintain the national credit.

The principal wants of the soldier which it is the immediate task of administration to supply, are food, transport, clothing, equipment, and quarters; but before proceeding to consider in detail the duties connected with each of these, the remarks of M. Vauchelle on the means to be adopted for procuring supplies on active service may be appropriately quoted. Although made with reference to the French *intendance*, they are perfectly applicable to our service, and express so forcibly the duties and the difficulties of administration, that no excuse is required for substituting his admirable observations for original matter.†

"We have seen military administration in times of peace conducted upon a complete system of principles and regulations; services regularly organized, and efficiently supported by the natural resources of a fertile and industrious country; sufficient funds always available; the immediate supervision and protection of the war ministry; independence assured to the control of military expenditure and consumption by well-defined laws; nothing wanting, in short, to satisfy all

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* During the late war the French used to make payment throughout Bulgaria, and even in Asia Minor, by orders on the chest in Constantinople; a Turkish peasant could easily be persuaded by a wily Greek, that his order was so much waste paper, that it represented only one-half its nominal value, and a regular trade was carried on by these unscrupulous men in French Paper, with great profit to themselves and a corresponding injury to French credit.

† "Cours d'Administration Militaire," Introduction to Volume III.

the wants of the army, and to provide them with regularity, order, and economy.

"It is not so, it cannot be so, in a state of war. In the field the frequency of movements, the rapidity of marches, the uncertainty of events, the ever-varying chances, the imperfection of means, the insufficiency of resources,—the time ever too short for all that has to be provided and done,—embarrass, retard, and paralyse administrative action. Every emergency exacts its immediately appropriate measure, and the least foreseen accident may in a moment frustrate the most wise arrangement, and upset the surest calculations. The duties of administration now assume an entirely new character; they become immense in their extent, limited only, indeed, by the intelligence of the administrator himself, who is charged with their execution.

"The first of all rules, that which the greatest captains, and the most enlightened administrators, have never failed to enforce in their writings, and of which experience has everywhere proclaimed the value, is the formation of depôts beforehand, and to such an extent that the army may not only be subsisted during the opening of the campaign, but as long after as the interests of military operations may require, or as distance may permit.

"A certain mistrust of the country about to become the seat of war is indeed prudent, for it is generally a country unknown to administration, or perhaps little or ill known, and which cannot fail to be opposed to its operations, since they are so apt to wound it in its interests or in its feelings.

"The ignorance of the statistics of foreign countries has certainly been one of the most powerful causes of the faults committed by our administration whenever we have made preparations for taking the field; examples to this effect are not wanting.

"Yet the documents collected during the wars of the present century in the different countries of Europe, and the statistics which our diplomatic agents are able to contribute, afford us the means of obtaining the most precise and reliable information.

"The subjects of which a knowledge appears the most important are:—

"1. The divisions of the territory into governments, provinces, counties, or departments, into districts, cantons, &c.

"2. The organization of its territorial, military, civil, and financial administration.

"3. Its natural products.

"4. The periods of seed time and harvest of every description of grain, and the proportion between (local) produce and consumption.

"5. The localities of large markets and fairs, the periods of these commercial gatherings, and the more important objects of their traffic.

"6. The provisions which might most conveniently be substituted in lieu of those established by our regulations, and the relative proportion to be established in such substitution.

"7. The different branches of commerce and industry.

"8. The means of re-mount, both as regards cavalry and general transport.

"9. The manufacture of cloth, leather, and other material, suitable for the preparation of clothing, equipments, harness, &c.

"10. The articles of consumption drawn from other countries, the designation of those countries, and the objects of exchange in importations and exportations.

"11. The weights, measures, and coinage, with relative value to our own.

"12. The current prices of articles of consumption.

"13. Barracks, quarters, hospitals, magazines, and other establishments of administration, and their capacities, throughout the various towns and fortresses.

"14. The most convenient spots for forming temporary establishments.

"15. The principal points of communication by land and sea, with the distances between them, distinguishing the different routes, and indicating, as regards the

roads, the spots at which they cease to be passable for carriages; and as regards rivers and canals, the places where they cease to be navigable.

"16. In the large towns or fortresses the nature and quantities of the provisions stored therein, the means of grinding corn and baking, the principal mercantile firms, and the heads of large manufactories or workshops with whom it would be safe to deal for military supplies.

"One may easily conceive how useful such admirable statistics would be. On the outbreak of war the minister would feel no uncertainty either as to the nature or the extent of the arrangements he should have to make for himself, or as to the instructions to be given to his commissary-general. How many false moves would thus be avoided; how many useless and heavy expenses saved; how many unknown and lost resources would thus be discovered and employed for the benefit of the army and the relief of the country which has to support it.*

"A commissariat should regulate its arrangements on the double chances of presumed success or failure, according to the peculiar nature of the war to be undertaken.

"In the case of success, then in proportion to the advance into the enemy's country, it should form its depôts in the rear of the army, and establish by stages, on the line of operations, bakeries, magazines, hospitals, convalescent stations, regular convoys, &c., always taking care to select localities with reference to the most favourable means of communication and of defence. In the case of a reverse, the army falling back upon itself will thus find its administrative services secured by means of the supplies which prudence shall thus have collected.

"The rights of war, which are but the rights of the most powerful, tempered only by the interests of him who wields them, renders an army, wherever it may be, absolute master

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* We have even greater facilities than the French for acquiring all such information; and a concise digest of statistics on these points would form an invaluable handbook of administration.

of the provisions and other useful resources which exist, whether they have been provided as depôts by the enemy, or destined for other purposes.

" Administration requires a numerous *personnel*, active, intelligent, and faithful, always ready to avail themselves of supplies for future use, for transmission elsewhere, or for immediate distribution to the troops, wherever they may be stationed.

" A commissariat requires an extensive and perfectly organized transport ; this is the *sine qua non* to enable an army to subsist in the field. Transport is indispensable, and must be obtained at any price ; it must, moreover, be *well adapted to the locality*, in order to be able to follow or rejoin bodies of troops in all directions. Thus it is to be understood that the country occupied must be expected to furnish a large proportion of the requisite transport.

" Although acting in the midst of a state of things essentially inimical to fixed regulations and established forms, the commissariat should prescribe for itself a strict and scrupulous system. In the face of so many pressing and urgent wants, which, if not supplied with regularity, may disturb the discipline and compromise even the honour of the army, it is not enough for the administrator to prove himself intelligent and economical in the dispensation of resources obtained with difficulty and labor ; he should, further, courageously attacking all abuses and repressing with severity all wastefulness and fraud, secure to himself the means of justifying his expenditure and distribution by authentic accounts, a duty but too rarely accomplished, but which should never be permitted to be neglected.

" War, it is said, should feed war ; the axiom may be true, if not just, but in no case should it be pushed to extremes ; circumstances may occur, indeed, to render its application impolitic and dangerous. Under no circumstances, however, can the enemy's country under occupation be altogether relieved from the charges of war ; it must inevitably bear a large share, even though its contributions may occasionally be considered as advances only.

" But whatever their nature, these exactions from an enemy's country should be imposed with discernment and moderation,

with reference to the population and the nature of the produce, the geographical position, and the wealth of the country, and when possible, with consideration for the feelings of the vanquished. Pillage a country, and you reduce the inhabitants to misery, to despair, to flight; and thus not only deprive yourself of their useful assistance, but in the day of reverse you find in these same people implacable and cruel adversaries.

"Let us conclude this sketch by repeating a rule which our greatest commanders have proclaimed in their works and illustrated by their example,—an admirable rule, prompted no less by science than by humanity, and which consists *in subordinating military operations to the capacities of administration.* Contempt or neglect of this rule may be considered to have been the most grave reproach to the conduct of our recent wars, in other respects so characterized by genius and vigor."

CHAPTER II.

SUBSISTENCE.

Establishment of fixed rations.

WE have seen that in the most remote periods of history states had already assumed the obligation of providing for the subsistence of their armies; but it was not until military administration had made some progress that the distribution of food was reduced to a system, and the establishment of a fixed daily allowance of provisions probably originated in the armies of the Romans.

Rations in Roman armies.

Grain was at first the only issue made to the Roman soldier, the ration (*dimensum*) for fifteen days being four modii wheat for the legionary, and eight modii for the centurion.* The wheat was ground by means of a handmill which formed a part of every man's equipment, and for a long time no attempt was made to bake bread in the field, but the flour was simply worked into a paste called *puls*. As the use of bread became more general, bakeries for the use of the troops were established throughout the empire, but it was not until the days of Cæsar, under whom field ovens were first introduced, that bread and biscuit (*buccelatum*) became an established article of the soldier's diet. For a long time indeed it was the only supply for which the state held itself responsible, all other food being purchased by the soldier from the sutlers (*lixæ*) who accompanied the army. As luxury, however, began to spread throughout all classes the

* Vegetius III. 3. Sonnklar. The modium was equal to about 12½ lbs.

frugal fare of the soldier ceased to suffice for his wants, and the ration was gradually increased, until under Constantius it consisted of bread and biscuit, fresh meat and bacon, wine and vinegar, issued on alternate days.* This change necessitated a very great increase in the *materiel* of administration, and instead of every man carrying in his *folliculus* a supply of food for fifteen days, he now depended upon the commissariat train to provide for his daily and ever-increasing wants. To this departure from frugal and temperate habits may be attributed, among other causes, the decay of military discipline which ultimately contributed to the downfall of Rome.

Subsistence of modern armies.

The constitution of modern armies, and the peculiar character of modern warfare, render the soldier more necessarily dependent upon the cares of administration than was the case with the ancients. Armies now-a-days, it is said, march upon their bellies, and of none is this saying more true than of British troops, to whose moral as well as physical condition a regular supply of wholesome food is indispensable. The Spanish soldier, whose established fare is a moderate allowance of vegetable or farinaceous food, and who from habits of abstinence and constitutional disposition can march for days with no better sustenance than a few roots of garlic and a crust of dry bread; the Russian, whom a lump of oilcake maintains for a week; and even the Frenchman, whose excellent appetite can accommodate itself to the most frugal and the least tempting fare, are not so

* Sonnklar. Great attention was at all times paid in the Roman army to the system of distributing supplies. Cæsar himself was in the habit of attending the issues of bread and grain. Vegetius says: "Parum autem proficit plurimum collegisse, nisi ab exordio, dimensione salubri, per idoneos procuratores erogatio temperetur."—De Re Militari.

liable to become disorganized from the want of supplies as the English soldier, who, while he bears the other privations incident to military service with admirable fortitude and even cheerfulness, whose health and discipline withstand in a wonderful degree the effects of climate and the inconveniences of his clothing and equipment, breaks down when his rations fail, and is quite unable to make allowances for the difficulties of his commissariat. It thus becomes with us of essential importance to maintain a system of supply which, supported by our large national resources, should render the failure of the soldier's food, even under extraordinary circumstances, next to impossible.

Duties of a commissariat.

To maintain a regular and abundant supply of provisions for men, and of forage for horses, is the paramount duty of a commissariat. To this all else must be subordinate. To economize the public treasure, and to justify expenditure and distribution by well-vouched accounts are important considerations; but even these must yield to the one great object of military administration, to keep the soldier in fighting condition at all times and under all circumstances.

Composition and supply of rations.

The first step in subsisting an army is to decide upon the articles which should form the soldier's daily food. In garrison and established quarters it is usual to allow the troops to provide out of their own means a large proportion of their food. In France and other of the continental armies the state furnishes the soldier with a daily ration of bread only, and every other article of his diet is purchased by him under regimental arrangement. In England and in the colonies the soldier receives an established allowance of bread and meat, calculated, with some trifling additions, to furnish a dinner meal, and all that he requires above that is

bought by himself out of his pay ;* but in the field the facilities for purchasing supplies do not exist, and the entire responsibility of the soldier's subsistence devolves upon the commissariat officer, who has first *to fix the ration* (or rather to submit his advice upon this point to the general commanding, for an English commissary-general cannot originate any measure, but can only carry out superior orders) ; secondly, to *procure it;* lastly, to *distribute it.*

Food to vary according to circumstances

The composition of the soldier's ration must be influenced by many circumstances ; the first object must be that every article of diet be wholesome and nutritious; it next becomes important that it be easy to convey and to cook, and that it be not liable to deterioration ; the resources and climate of the scene of operations, and the nature of the service, with regard to the degree of exposure and fatigue to which the soldier is subjected, must be taken into account; lastly, the price must be allowed to weigh, though only in deciding between articles otherwise of equal quality, for it cannot be too strongly insisted upon that *that* food is the cheapest which best maintains the soldier in health and strength. Whenever it is possible further to consult the tastes of the soldier this should be done.

Dependent upon the locality and nature of service.

Few unprofessional men have sufficiently studied the properties of different articles of food to be acquainted

* It is at present under discussion to make the commissariat supply every article of the soldier's diet ; and it is difficult to conceive what reasonable opposition can exist to a measure calculated to ensure the soldier a more regular sustenance, at a lower price than he now pays, and at the same time to employ the commissariat in so legitimate a branch of their duties, and thus partly solve one of the greatest difficulties of our administrative system, that of justifying the maintaining in peace of a commissariat to be available in the event of war.

with the degree of nutritiveness belonging to each, and yet it is a subject of which a knowledge is most important to the military administrator, since each of the many countries in which it is the duty of our troops to act, and in all the varying services in which they may find themselves engaged, demand their peculiar diet. The ration that is suitable for England would be perfectly unsuited for India; the man employed in ordinary garrison duty would not require so large an amount of food as he who might be performing long marches or duties involving severe labor; and thus the allowance established for one state of things might prove excessive, insufficient, or deleterious for another.

Nutritious properties of food.

A commissariat officer should qualify himself to be in a position to estimate the quantities and descriptions of food most conducive to the soldier's health, under whatever circumstances he may be placed; to this end he should endeavour to acquaint himself with the peculiar properties of the different articles of food, their relative amount of nutriment, and the variations of diet which the influence of climate demands.

Extract from Dr. Christison's tables.

The following extract from some observations made by an eminent Scotch chemist,* is worthy of every attention on the part of the student of military administration:—

"In consequence of the advances made in physiology and chemistry, the nutritive value of any dietary, deduced from practical experience, may be tested with care and certainty by reference to its chemical composition. As this fact is little known to practical men, it may be well to explain the principles on which the method is founded.

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* Observations on a report by Sir John McNeill, relative to the rations for soldiers.—By Dr. Christison. From the report of the Crimean Commissioners. The following table, extracted from the same document, contains some of the

"1. All articles of food used by man consist of one or more, and generally several nutritive principles; and most of them contain water and an indigestible cellular tissue. The two latter must, of course, be deducted in estimating nutritive value.

"2. The nutritive principles consist of two sets, one of which maintains respiration, and the other repairs the waste constantly incurred by the animal textures in the exercise of their functions. As the respiratory principles commonly abound in carbon, they are sometimes called carboniferous, while the reparative principles, because they all contain nitrogen, are termed nitrogenous.

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information on alimentary principles which it is so desirable for a commissariat officer to possess:—

STANDARD TABLE of NUTRIMENT.

	Per-centage of Nutriment.		
	Carboniferous.	Nitrogenous.	Total.
Wheat flour	71·25	16·25	87·5
Bread	51·5	10·5	62·0
Oatmeal	65·75	16·25	82·0
Barley (pearl)	67·0	15·0	82·0
Pease	55·5	24·5	80·0
Potatoes	24·5	2·5	27·0
Carrots	8·5	1·5	10·0
Turnips	5·7	0·3	6·0
Cabbage	6·7	0·3	7·0
Lean of beef and mutton	0·0	27·0	27·0
Fat of meat	100·0	0·0	100·0
Average beef and mutton	15·0	20·25	35·25
Bacon	62·5	8·36	70·86
Skimmed milk cheese	0·4	64·6	65·0
White fish	0·0	21·0	21·0
New milk	8·0	4·5	12·5
Skimmed milk	5·5	4·5	10·0
Butter milk	1·0	6·0	7·0
Beef tea (strong)	0·0	1·44	1·44
Beef tea, and meat decoction of broth	0·0	0·72	0·72

"3. Experience has shown that the most successful dietaries for bodies of men, deduced from practical observation, contain carboniferous and nitrogenous food in the proportion of about three of the former to one of the latter, by weight. During two-and-twenty years that my attention has been turned to the present subject, not a single exception has occurred to me.

"4. Hence it is obvious that the least weight of food in the rough state will be required, first, when there is least moisture and cellular tissue in it; and secondly, when the carboniferous and nitrogenous principles are nearest the proportion of three to one.

"5. Of the various nutritive principles belonging to each set, some may replace one another; some are better than others; some are probably essential. This branch of the science of the subject is unfortunately still imperfect.

"6. Two things, however, are certain, that nitrogenous may replace carboniferous food, for supporting respiration, though at a great loss; but that carboniferous food (without nitrogen) cannot replace nitrogenous food, for repairing textural waste.

"7. The daily amount of nutritive principles of both sets must increase with exercise and exposure, otherwise the body quickly loses weight, and ere long becomes diseased. If the above proportion between the two sets be maintained, the weight of real nutriment per day varies, for adults at an active age, between seventeen and thirty-six ounces; the former being enough for prisoners confined for short terms, the latter being required for keeping up the athletic constitution, or that which is capable of great continuous muscular efforts, as in prize-running and other similar feats.

"8. Dietaries ought never to be estimated by the rough weight of their constituents, without distinct reference to the real nutriment in these, as determined by physiological and chemical inquiry.

"Keeping these principles in view, and with the help of a simple table, it is not difficult to fix the dietary advisable for any body of men, according to their occupation. It is, also, in general, easy to detect the source of error in unsuccessful dietaries. For example, any scientific person conversant with the present subject could have foretold, as a certain consequence, sooner or later, of their dietary, that the British

troops would fall into the calamitous state of health which befell them last winter in the Crimea.

"Soldiers in the field will be the more efficient the nearer they are brought to the athletic constitution. But as the demand for protracted, unusual exertion occurs only at intervals, the highly nutritive athletic dietary is not absolutely necessary. *On the whole, from experience in the case of other bodies of men somewhat similarly circumstanced, 28 ounces of real nutriment, of which 7 are nitrogenous or reparative, will probably prove the most suitable.* Any material reduction below 28 ounces will certainly not answer; and under unusual exertion kept up for days continuously, as in forced marches, or forced siege labour, the quantity should for the time be greater, if possible."

Neglect of this knowledge.

The reason of our commissariat officers having, as a rule, paid but little attention to this important subject, is probably that hitherto they have been considered to have *executive* functions only, and that to *originate* any measure would be to exceed the limits of their duties. An English commissary-general with an army in the field is certainly placed in a very false position at present; his instructions are to provide certain articles of supply, but he is distinctly forbidden to take the initiative in changing the established ration;* yet, in the event of that ration proving unsuitable or injurious, it is he who must bear the odium. Had the English commissary-general during the late war had the power of the French intendant en chef† we should probably have had a very different account to give of our commissariat; and in fairness to the service let it be hoped that in any future organization of the commissariat (which must necessarily

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* *See* Commissariat Regulations, article 488 of edition of 1852.

† *Vauchelle* thus describes the functions of the intendant militaire in the field, with respect to subsistence:—"Disposition du personnel, choix du mode d'administration, initiative et passation des marchés, requisitions, formation des approvi-

take place before a war could be carried on) a responsibility will not be exacted from its officers unless they be armed with a full power to meet it. When this desirable change shall have been effected, there is little reason to apprehend that commissariat officers will be found wanting in those branches of knowledge requisite for the efficient performance of their duties, and that the influence of diet upon the human system will become a prominent feature in the science of administration.

Origin of rations in the English army.

It is not clearly established when it first became a practice in the English army to ration the soldier according to a fixed scale of diet. We find in ancient records frequent orders addressed to sheriffs and magistrates to provide certain articles of food for troops stationed in, or passing through, their counties, and the earlier ordinances of war make mention of the allowance of food to which soldiers were to be entitled when taking the field.

Soldiers' fare under Elizabeth.

Sir James Turner, in describing the duties of the "Proviant master," (*temp. Elizabeth,*) enumerates the articles of provisions to be procured for the use of the army in the field as follows:—

"Corn, grain, and meal of severall kinds; stock fish and herrings, and all other salted fishes; salted and hung fleshes, especially beef and bacon; cheese, butter, almonds, chesnuts, and hazlenuts; wine, beer, malt, honey, vinegar, oil, tobacco; wood and coal for firing; and as many living oxen, cows, sheep and swine, hens and turkies, as can be conveniently fed; for which purpose he is to provide, as also for horses, straw, hay, and oats."

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sionnements, création des établissements manutentionaires, repartition et emploi des equipages, organisation des convois, dispensation des resources; tels sont en peu de mots les nombreux et importants devoirs que l'intendance militaire est appelée a remplir, en ce qui concerne le service des subsistances."

This sumptuous fare, when it was procured,—which appears to have been of rare occurrence,—was distributed in the following proportions:—

"They allow so much bread, flesh, wine, and beer to every trooper and foot soldier, which ordinarily is alike to both; then they allow to the officers, according to their dignity and charges, double, triple, and quadruple portions; as to an ensign, four times more than to a common souldier; a colonel commonly having twelve portions allowed him. The ordinary allowance for a souldier in the field is, daily, two pounds of bread, one pound of flesh, or in lieu of it one pound of cheese, one pottle of wine, or in lieu of it two pottles of beer. 'It is enough,' cry the souldiers, 'we desire no more!' It is enough, in conscience; *but this allowance will not last very long; they must be contented to march sometimes one whole week, and scarce get two pounds of bread all the while, and their officers as little as they.*"

So that the enumeration of dainties, including turkeys and chesnuts, served, after all, only to make the poor soldiers' mouths water while eating their small allowance of dry bread.

Bread. Bread, indeed, appears, as a rule, to have been the only ration provided directly and gratuitously by the Government; meat and other articles of food, though often obtained from the commissariat, were paid for by the soldier. Great irregularities must have arisen under this system. Officers commanding corps or companies purchased their supplies at the current price, and issued them to their men at a fixed price, calculated upon the maximum value of the different articles of food.

Regimental arrangements for supplying troops. From the circumstance that the supply of a company was recognized as a legitimate source of emolument to the captain, we may conclude that the stoppage made from the soldiers' pay was always in excess of the value of the supplies provided, and that it was exacted irrespectively of his being provided with sufficient food.*

* See Sir John Smythe's account of this practice, as quoted, p. 81.

The absence of a uniform system of supply must always have rendered the subsistence of our armies on taking the field a matter of peculiar difficulty; for not only had the whole machinery of a commissariat to be created whenever a campaign was entered upon, but every commanding officer had been accustomed to his own peculiar method, and was little disposed to co-operate cordially in carrying out a system, the immediate effect of which was to reduce his emoluments, and the necessity for which in other respects he was, perhaps, unable to appreciate.

Bread supplied by the commissariat.

During the wars of the eighteenth century, regimental arrangements continued to be adopted to a great extent, even in the field, for the supply of food to the soldiers, the commissariat acting as wholesale merchants to commanding officers, who retailed their purchases to their men. Bread appears, however, at all times to have been a direct commissariat supply; Symes, in describing our operation during the Seven Years' War, says, "Besides your *regimental bread-waggons*, the commissary should be provided with *caissons* capable of conveying a month's subsistence;" and at this time, as well as at a later period, the contract for bread-waggons was one of the most important in the gift of the Government.

The young Duke of Marlborough, writing in 1758, says:—

Bread waggons.

"Seventy bread waggons are absolutely necessary even for one delivery of bread to the army. I hope the bread will be of wheat, or half of our men will die of fluxes on the march; 1½ pound per day is the constant allowance."

Lord Ligonier, who was consulted by the Treasury upon the subject of the bread ration, writes on 15th July 1758:—

"With regard to the article of bread I attended their Lordships in 1743, when my sentiments on that head differed from

General Honeywoods'; that it was true that the Duke had rye bread in the time of Queen Anne, but that I believe that more men were lost by this kind of bread than by the sword of the enemy, and therefore I recommend to their Lordships that the troops should be fed with bread made of wheat only."

The use of biscuit does not appear to have been so general in the army in the field as it has since become. Symes says :— Biscuit.

"Besides waggons we had several iron ovens,* the number of which being found insufficient was afterwards increased. You should bake bread as often as you halt; on every expedition you should be provided with bread or biscuit for ten days: biscuit is an excellent thing; but our soldiers do not like it in their broth, and are in general unacquainted with the use of it."

The lapse of a century has worked little change in this respect. Biscuit is still an unpopular food in our army, and although it recommends itself by its reduced bulk and its portability, its use should be as much as possible restricted to rapid marches, or other circumstances precluding the possibility of carrying or baking soft bread, of which a continuous supply should, as a rule, be maintained.

In established quarters this is attended with no difficulty; there bread can always be obtained by contract, by purchase, or by manufacture in a Government establishment; but in the field these resources fail, and the Soft bread.

* Portable field ovens had been introduced into the French army under Louis XIV. by Louvois. They were of simple construction, being composed of iron bars, the intervals of which were filled with stones; each oven was capable of baking 450 rations of bread at a batch, or 2,250 rations in twenty-four hours.

Marshal Saxe speaks, in his Memoirs, of an *oven on wheels* having been invented and used during one of his campaigns; but it was found to be too expensive for general adoption in the army.

commissariat is called upon to improvise the means of baking.

Government bakeries.

Government bakeries are maintained only in Gibraltar and Malta, where there is always a large force concentrated within a small compass. At other stations it is customary to enter into contracts for bread with private individuals, either at a fixed price per ration, or by the exchange of Government flour for bread at a per-centage to be agreed upon.*

Supply of bread in the field neglected.

In most of the continental armies bread forms the principal article of the soldier's food.† Our troops rely more upon their meat, and look upon bread only as an accessory; hence, perhaps, has arisen some neglect of the means of providing this ration in the field, and too great a readiness to make a continuous issue of biscuit, which should be considered strictly a substitute for bread to be used only under exceptional circumstances.

There were doubtless circumstances which rendered the manufacture of bread in the Crimea a matter of some difficulty when the army first landed; but it may be doubted whether the superiority of bread over biscuit

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* Good flour should produce a gain on its conversion into bread of between 30 and 40 per cent. In the manufacture of biscuit there is a loss of about 10 per cent. Thus 100 lbs. of flour should produce on an average 135 lbs. bread or 90 lbs. biscuit.

† The established ration of bread in most of the continental armies is 24 ounces, but in addition to this the soldier usually purchases 16 ounces, making his total consumption of bread 2½ lbs. a day. It is principally supplied by Government bakeries established throughout the country and worked by soldiers, who are also taught to construct field ovens and to bake bread in camp. There are no bakeries in our camps of instruction, and even in the Government bakeries at Gibraltar and Malta civilian workmen are employed in lieu of soldiers.

as an article of diet was sufficiently recognized either by the authorities in England or by those on the spot.*

When the war first broke out an officer of the commissariat† proposed the construction of a floating mill and bakery to accompany the expedition to the East, with the view of regularly supplying the troops with soft bread of a good quality. The plan, admirably conceived and most ingeniously worked out in all its details, was not, however, carried into effect until nearly a year had elapsed, and after the want of bread had contributed, among other causes, to the disease and mortality which so terribly weakened our army during the first six months after our invasion of the Crimea. In the early part of 1855 two screw steamers were fitted out in accordance with Mr. Julyan's plan and under his direction, the one as a flour mill the other as a bakery, and both continued to be employed with the greatest benefit to the troops down to the close of the war.

Floating mill and bakery.

Sent to the Crimea.

The mill machinery of "The Bruiser" was very similar to that ordinarily used on shore in this country, with only such modifications as were necessary to adapt it to its novel position, and to counteract the constant and varying motion of the vessel at sea.

These difficulties were successfully overcome, and the

Successful experiment.

* Biscuit, particularly when salted meat is the principal article of diet, is very apt to produce dysentery and scrofulous complaints; it becomes, moreover, unpalatable when continuously used; and so eager were our men for soft bread that they used to exchange 5 lbs. of biscuit for 1 lb. of bread with the French soldiers, whose first work, after pitching their camps, was generally to construct field bakeries, and whose supply of soft bread seldom failed. Sallust tells us (De bello Jugurth. 44) that the Roman soldiers used to sell their ration of *grain* for a trifle in order to purchase bread, which at that time they had not the means of manufacturing.

† Assistant Commissary-General Julyan.

mill was found to answer admirably in moderate weather at sea, grinding at the rate of twenty bushels of flour per hour, while the vessel at the same time made seven and a half knots, both mill and ship machinery being propelled by the marine engine of only eighty-horse power.

Machinery.

The grinding machinery was driven from the screw-shaft of the vessel; and without the aid of manual labor the wheat was taken from the hold, winnowed, and carried to the hoppers, and the flour cooled, dressed, and delivered into sacks.

Produce of mill.

In harbor the daily produce of flour was about 24,000 lbs., and that from very hard wheat, full of small gravel, and consequently the more difficult to grind.

It was originally intended that this mill should be capable of producing sufficient flour to make 20,000 lbs. of bread per diem; but it proved equal to a considerably larger productive power, and not the least of its many admirable qualities was, that it never once got out of order during the whole period of its service.

Cost of flour produced.

The cost of the flour made on board this vessel contrasted favourably with that of other flour delivered at Balaclava for army use, and was not exposed to that risk and uncertainty of delivery which attended the conveyance of flour from American ports.*

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* The cost of the several kinds of flour delivered at Balaclava was as follows:—

	Per 100 lbs.
Ship-made flour (including wages of ship's company and incidental expenses) - -	25*s.* 3*d.*
Trieste flour	34*s.* 4*d.*
Turkish flour } including freight - -	30*s.* 0*d.*
American flour	25*s.* 0*d.*

Trieste flour was that principally used; the American did not arrive until towards the end of the campaign.

Bakery.

The bakery ship "Abundance" was converted into a very complete workshop, containing four ovens of fourteen bushels each, fitted with coal furnaces, hot and cold water cisterns, steam machinery for kneading the dough, and every known modern appliance calculated to increase the efficiency of such an establishment.

Produce in bread.

This bakery was originally intended to produce, at a low estimate, 20,000 lbs. of bread per diem, in 4 lb. loaves, which was easily accomplished; but it was subsequently found convenient, for purposes of subdivision into rations, to bake loaves of 3 lbs. each, thus the daily produce of the ovens was reduced to an average of 18,000 lbs.; and at this rate the bakery yielded excellent bread from the time the vessel arrived in Balaclava until the war ceased, without a day's interruption.

No repairs required.

The ovens were built of bricks placed in strong iron casings to enable them to withstand the concussions and motions caused by heavy seas, and this plan was found to answer so well that not the slightest repair was necessary during the absence of the vessel from this country; and on her return the ovens had all the appearance of being fit for two or three years' further service before they would require repairs.*

Ship and bakery sold at the conclusion of the war.

Unfortunately, when the war was over, both ships shared the fate of other portions of the commissariat establishment that had done good service. No sooner had they returned from the East, on the evacuation of the Crimea, than they were sold; and when the officer in charge of the commissariat of the China expedition, who had had practical experience of the complete success of the two steam factories, applied for a "floating bakery,"

* The cost of *manufacturing* the bread (including wages of crew, &c., and incidental expenses of ship) was $\frac{3}{8}d.$ per lb. The total cost of the bread made from ship mill-flour was $2\frac{3}{4}d.$ per lb.

it was found that too much time would be required to prepare a new ship, and his request could not be complied with.

Desirability of maintaining establishments of this kind.

It is of the greatest importance, however, that we should be prepared, on the outbreak of any future war, with the means of so materially adding to the soldier's health and comfort, and that the appliances of army administration should be ready at hand, instead of being hurriedly created at the latest moment, at a greatly increased cost, and without that deliberation and care necessary to ensure good materials and workmanship. The success of the floating mill and bakery has been established beyond all question: why should we not possess at least two of these vessels, complete in every respect, capable of making bread or biscuit for thirty or forty thousand men, and always ready for any expedition where it might be useful? Such a vessel should be so built as to give ample accommodation and draw but little water, which would enable her to navigate small rivers and bays, keeping as near the army as possible. So long as the base of military operations rests on navigable waters, such a bakery would secure to the troops a regular supply of soft bread; and when the distance of the army from the shore became too great, then the manufacture of biscuit might be proceeded with, and depôts of this kind of food formed at the most convenient points.

A considerable number of troops would, moreover, generally be found on the sea-board, and reinforcements going out, or the sick coming home, would find soft bread very acceptable; even in times of peace such an establishment would find employment in the vicinity of our soldiers and sailors at Woolwich or Portsmouth, or even by accompanying a fleet.

Field ovens.

Valuable as a marine bakery establishment must always prove, the chief reliance, however, must be upon

local resources. Mills and ovens exist in some form or other in all countries, and they should be made available whenever an army halts for a sufficiently long period to admit of their being worked; but as the enemy frequently destroys these means of contributing to the soldiers' comfort, the use of hand mills and field ovens must under such circumstances be resorted to; and to construct these in the most rapid and at the same time the most effectual manner, should be one of the first endeavours of a commissariat officer on taking the field.

The description of camp ovens must necessarily depend upon the permanency of the encampment. If the army be likely to remain in position for any length of time, they should be constructed of durable materials, such as bricks; but for hurried operations a mere excavation of the earth suffices in the course of a very short time to produce an oven capable with a little care of baking bread.

American ovens.

The impromptu ovens used by the American backwoodsmen, as described by Sir Randolph Routh, are perfectly adapted for the field:—

"These ovens are usually raised upon a platform about 3 feet high, and 5 or 6 feet long, by 4 feet broad, and on this they construct the circular form of the oven by means of forest twigs and boughs of sufficient strength to receive and support the cement, which is made of common clay soil and water, mixed to a proper consistence, and put on in successive layers until it acquires the necessary thickness. An opening is left to introduce the bread, and a common piece of wood with a handle supplies the place of a door until it is baked."*

There are, however, many other contrivances for baking, and it is very desirable that our troops should be taught to construct ovens in different descriptions of

* Commissariat Field Service.

soil, and practised in baking bread under difficulties, and without all the usual appliances.

Established bread ration.

The ration as now established is 1 lb. of bread or ¾ lb. of biscuit. In the field it is increased by ½ lb. of bread or ¼ lb. of biscuit.

Meat.

The English soldier requires and receives a larger allowance of animal food than any other troops do; but ample as the ration is, consisting of ¾ lb. on home service and 1 lb. abroad (increased sometimes in the field, when the meat is poor, to 1½ lbs.), the defective system of cookery which has long prevailed in our army renders it frequently insufficient to maintain the soldier in health and strength. The French or Sardinian soldier's allowance rarely exceeds ½ lb. of inferior meat, yet he manages, by judicious cookery, not only to make it suffice to furnish him with two meals daily, but he varies his food from day to day; while our men, with rare exceptions, continue from one year's end to another to live upon a dish prepared in utter defiance of the most elementary principles of the culinary art, and in a manner the least calculated to develop the nutritive qualities of the meat, or to render it palatable. The attention recently drawn to this subject will, it is hoped, have the effect of introducing a thorough reform in our system of cooking, and afford the soldier the full benefit derivable from his ration.*

Defective cookery.

Supply of meat on home stations, and

The supply of meat in garrison is conducted by contractors; each regiment or detachment receiving its share daily at an appointed hour, and in the presence

* The dietary scheme submitted to the Commission of Inquiry into the Sanitary State of the Army, 1857, by Sir A. M. Tulloch, seems well calculated to effect this object. (See Appendix D.) But the first step must be to instruct our soldiers in the rudiments of the art of cooking, of which they are now lamentably deficient.

of the orderly officer, who is required to satisfy himself that it is of good quality. The commissariat thus exercises only a general supervision over this important supply, and does not interpose its authority between the soldier and the contractor except in the case of complaint.

In the field the case is quite different; there the commissariat can but partially rely upon the aid of contractors, and to scour the country for cattle is one of the first duties of the division or brigade commissary on taking the field; even when the supply is obtained by contract, it is under his immediate direction, and by his arrangements, that the cattle must be taken care of, slaughtered, and issued. It is then the mischief is felt of the system to which the soldier had been accustomed in garrison, and that the commissariat officer feels the want of practical experience.* in the field.

Nothing is more important in the field than to keep up the supply of fresh meat. It is the only article of the soldier's ration that provides its own transport, and though a supply of salted provisions is indispensable as a reserve in case of accidents, and to provision fortified places in the event of a siege or blockade,† it should be economised

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* It is established beyond doubt that were cattle supplied *in bulk* at our camps of instruction, instead of meat being issued in detail, the necessary experience would be acquired, both by the commissariat and by the troops, with a positive saving of money to the public.

† In our large fortresses ample supplies of salted provisions and biscuit are at all times maintained; but in many of the smaller military posts, such as the Channel Islands, for instance, which from their geographical and political position would prove important acquisitions to an invading army, due precautions have not been taken to provide against the possibility of a siege by maintaining reserve magazines of provisions.

Once that a garrison is cut off from outward communication

as much as possible, and issued only in cases of necessity, not only as being more expensive and absorbing a great deal of transport, but as the frequent use of salted provisions is invariably detrimental to the health of the troops.*

Every want in the field supplied by the commissariat.

At present bread and meat are the only articles of food that the commissariat is required to provide for troops in garrison; the rest of the soldier's diet, such as vegetables, beer, tea, &c., being purchased under regimental arrangements. In the field, however, the commissariat has to

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and thrown entirely upon its own resources, its preservation depends more upon its magazines than its fortifications. The history of sieges may satisfy us that more is to be apprehended by the besieged from the failure of supplies than from the shot or sword of the enemy; and for every one capitulation dictated by crumbling walls there are ten extorted by the pangs of hunger.

* Dr. Christison, in the paper before referred to, condemns the use of salted meat as an article of the soldier's diet; he says:—

"The standard difficulty in regulating the dietary of soldiers in the field is the present necessity of substituting salt meat for fresh, when it becomes necessary to use only store provisions. The difficulty arises from the known tendency of salt meat to engender disease, or at least to favour its development, and the supposed impossibility of storing effectual substitutes for it. A third difficulty must be here admitted; neither by physiological experiment, nor by chemical analysis, is the nutritive value of salt meat scientifically known.

"If soldiers could be supplied with what people in civil life know as salt meat, there would be less difficulty; but military authorities ought to disabuse their minds of this very natural comparison. The salt meat for soldiers in the field has always been highly salted, in order to keep for two years or more in every climate. Now, my persuasion is that, apart from the tendency of the protracted use of such food to favour the development of disease, its nutritive value has been much overrated. And the science of the question has been sufficiently looked into for an explanation; because meat highly salted must be so thoroughly steeped in cold water, to remove

furnish everything, and the ration then becomes more complicated in proportion as the difficulties of supplying increase.*

Instead of simply giving orders upon the contractors for certain quantities of bread and meat, the commissariat officer has now to establish his bakeries, to procure his cattle, and to maintain supplies of every article of food or drink that, under other circumstances, the soldier purchases in the market or in the canteen.

Vegetables.

The importance of providing the soldier with vegetables is now universally admitted. When salted provisions are much used, it is essentially desirable to counteract the tendency to scrofulous complaints induced by such diet by means of vegetable food; to obtain fresh vegetables in the field is, however, a matter of considerable difficulty, their liability to spoil and their bulk are obvious objections to their use by an army in movement; but the process of compressing vegetables, which has now been brought to perfection, enables a commissariat to keep up this supply at the cost of but little transport, and in the most convenient form for immediate use.

Rice.

Rice is an admirable article of diet, more particularly when there is any tendency to bowel complaints. It

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the salt, before it is eatable in large quantity, that much of its most nutritive constituents must be washed out, viz., its albumen, and sapid extract called osmazôme."

In lieu of salted meat, he suggests the issue of "preserved meats," hermetically secured in vacuo; "pemmican," which is meat dried up by a cooking heat, and prepared with fat, and which contains the nutriment of three times its weight of fresh meat, and "meat biscuit," which could either be converted into nutritive broth, or eaten in its natural state. These preparations, however, though no doubt excellent as occasional substitutes for fresh meat, soon pall upon the taste.

* For the Scale of Rations in the field, see Appendix E.

contains more nutriment than wheat flour, is easily conveyed and cooked, and is not liable to suffer from exposure. There would, probably, be no difficulty in making a preparation of rice which would greatly reduce its bulk and still further facilitate its cooking.

Oatmeal and pease.

Oatmeal and pease are likewise excellent articles of food; but the latter should, if possible, be issued in a ground state, as it otherwise requires more soaking to render it fit for use than there is time for on the march.

Tea and coffee.

The supply of coffee or tea should never be allowed to fail. Dr. Christison says :—

"It is difficult to over-value the proposed addition of tea and coffee to the men's rations. They possess a renovating power, in circumstances of unusual fatigue, which is constantly experienced in civil life, and which I have often heard officers, who served in the Spanish campaigns, as well as in the late Burmese war, describe in the strongest terms. This, however, is not all, for it has been recently shown by a very curious physiological inquiry, that both of them, and especially coffee, possess the singular property of diminishing materially the wear and tear of the soft textures of the body in the exercise of its functions in an active occupation."

Cooking coffee.

Whenever it is practicable it should be endeavoured to make the coffee by companies, instead of requiring every man to cook his own allowance, by which a great waste of time and fuel is incurred. A twelve-gallon boiler would suffice for this purpose.*

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* The author is member of a committee appointed by the War Department to devise a *cooking cart* for accompanying regiments on the march, and cooking their dinners *en route*. The great difficulty which the committee has experienced is in reducing the weight of the proposed contrivance sufficiently to render it available on bad roads without too many draft animals. Could this difficulty be overcome, these waggons would prove of inestimable benefit to the soldier; and even if not used for cooking on the march, they would enable a

The use of malt liquor is generally recommended in preference to spirits, but there are many objections to its being made a part of the soldier's ration in the field. It is only under the most favorable circumstances that beer could be conveyed in sufficient quantities in-land. A regiment would consume about two hogsheads a day (allowing only a pint per man), and as a hogshead is a good cartload, for no cart on the march should be required to carry more than six cwt., it would require twelve carts to carry a single day's allowance of beer for a division. Nor is this all; the beer becomes muddy and heated, and is neither palatable nor wholesome at the end of a day's march. Malt liquor.

It may be worthy of consideration whether a good suttling system might not be introduced into the army with great advantage to the soldier. The commissariat should be required to provide every article of food necessary to maintain the soldier in health, but it should not be saddled with the supply of his extra comforts, which, indeed, troops should not be taught to expect on active service. At the same time facilities might be afforded by Government for enabling the soldier to procure in the field the comforts he has been accustomed to in garrison, by recognizing to some extent those enterprising traders who are always ready to follow in the wake of an army; thus, with every division or brigade there might be a marching canteen, at which such articles as groceries, beer, spirits, tobacco, &c. would be sold at prices to be fixed from time to time, and under established regulations. Water transport, and when it could conveniently be done, even land transport, Suttling.

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regiment to dress its rations immediately on halting, without having to collect utensils, search for fuel, to fetch water, and to light open fires perhaps in wet weather or with a strong wind blowing.

might be furnished to these men for the conveyance of their stores; but, as a rule, they should be required to rely upon their own resources, and to expect only such general protection and encouragement as would be necessary to enable them to keep up with the army.

Should, under such arrangements, any accident cause a failure of supplies, the soldier will not feel aggrieved, as he would do if the failure had been on the part of a public department; he would always be ready to help his canteen man when in difficulties; the man, in his turn, would feel that his profits depended upon his exertions, and what with the love of gain on the one hand, and the love of beer and tobacco on the other, a mutual good feeling and co-operation would arise between them.

Fuel.

Fuel is only issued in the field under exceptional circumstances. It is always very difficult to keep up this supply on account of its bulk, and whenever it is possible to obtain it on the spot by means of working parties, the commissariat should be relieved from the duty of this supply. When, however, no fuel can be obtained by such means, the necessity of a public allowance being granted must be at once recognized, and the supply maintained at any sacrifice, since the means of cooking food are almost as indispensable as food itself.

Forage.

To maintain a regular supply of forage is one of the most important duties devolving upon the commissariat, since upon this depends not only the efficiency of cavalry and artillery, but of every department charged with ministering to the general wants of the army. A failure of forage thus paralyses both military and administrative action, and renders the most perfectly organized force impotent and helpless.

Forage master.

Up to a comparatively recent period cavalry officers were required to provide forage for the horses of their

regiments, receiving an additional rate of pay to defray the cost. The "forage master," who figures in our military establishments from the time of Queen Elizabeth to the beginning of the present century, was employed when an army took the field in collecting "hay, grain, and grass for such purposes as the general commanding should ordain." He was required to accompany foraging parties, and to receive and grant acquittances for forage obtained by requisition. When depôts were formed, he was placed in charge of them, and was in some instances authorized to dispose of the forage to officers in command of cavalry corps; but as a rule horse soldiers were responsible for the sustenance of their horses, and it was the duty of the muster master to report upon their condition, and to certify as to their being properly fed.

Supply of forage by the commissariat and the ordnance.

Towards the end of the last century the commissariat was first charged with the supply of forage, and a fixed scale was then established, the pay of cavalry officers and soldiers being at the same time reduced. On the abolition of the commissariat in the United Kingdom, the Board of Ordnance undertook this supply on home stations. On all foreign stations and in the field the commissariat continued to be charged with the duty.

The established forage ration is at present as follows, on home and foreign stations:—

Composition of forage ration.

12 lbs. hay.
10 lbs. oats.
8 lbs. straw.

The food of horses, like that of men, must, however, be regulated according to the nature and the extent of the labor in which they are engaged, and with reference to local influences and resources, and it therefore becomes frequently necessary to modify the standard ration to make it suit existing circumstances by changing the established proportions, or substituting one article of food

for another. It thus becomes important for a commissariat officer to acquaint himself with the effects of the different descriptions of food upon the condition and working powers of horses, in order to be in a position to estimate the relative value of the substitutions which it may be found necessary to make.

Every officer and soldier is entitled to draw forage from the public magazines for the number of horses which he actually keeps within the limit fixed for his rank by the regulations.

Stoppage for forage ration in the cavalry and horse artillery.

Cavalry officers are subjected to a stoppage of $8\frac{1}{2}d.$, and officers of the horse artillery of $6d.$ a day for each ration of forage drawn by them,* but staff, artillery, or mounted infantry officers are subject to no deduction from their pay on this account.

Commutation of forage.

When it becomes more convenient to issue to staff or infantry officers a money allowance in lieu of the ration in kind, the amount is fixed from time to time with reference to the local prices of forage, but a commutation of this ration should only be made under exceptional circumstances.†

Horses of officers on leave of absence.

Mounted officers proceeding on leave, or on any duty not requiring the use of horses, may claim forage for their horses, within the regulated number, during their absence, provided they place them at the disposal of the officer commanding on the station, to be used for the public service.

Forage of brevet officers.

Brevet field officers are not entitled to draw forage unless actually in the performance of the duty attached to the superior ranks.

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* The deduction from cavalry officers answers no good purpose ; it would be better to give them a nett rate of pay and a free ration of forage.

† The commutation of the forage ration in England has been of late permanently fixed at 2*s.* a day.

Supply of forage in the field.

Forage in garrison or established quarters is ordinarily obtained under contract; but in the field the resources of the country occupied must be made immediately available through the direct agency of the commissariat. War deranges the proportions commonly maintained between demand and supply, and cripples agricultural industry. It is for the military administrator to counteract as far as possible this tendency, and not alone to seize upon all the resources of supply, but to render them continuously productive. Under the very best commissariat arrangements, however, few countries when they become the theatre of contending armies can long support the drain upon them and afford sufficient sustenance for the immense number of animals which accompany an army,* and a partial supply must under the most favourable circumstances be drawn from without. While the army is acting in the immediate vicinity of the sea-board there is little difficulty in maintaining this supply, but when

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* A single infantry division, consisting of six regiments and two batteries of artillery, will require forage daily for nearly 1,000 horses; and an army of 30,000 men, including one division of cavalry, would probably comprise (including transport animals) no less than ten thousand horses, which would consume nearly one hundred tons of forage daily. The French instructions to the Commissaires des Guerres quote the number of horses required with an army of 30,000 men, as follows:

Cavalry	6,000
Staff	200
Artillery	2,400
Victualling service	2,400
Hospital service	200
Baggage train	2,400
Total	13,600

it advances inland, and the means of water transport fail, it becomes a matter of extreme difficulty to provide the requisite transport for so bulky an article as forage.

Carriage of forage.

The artillery can render some assistance in this respect, and should be required to carry in their waggons at least three days' supply, but the cavalry soldier cannot always encumber himself with his forage ration, and at best can only be expected to carry three days allowance of oats or barley, relying upon the commissariat for his supply of hay.

Supply of hay from England.

In most of our recent wars we have drawn large supplies of hay from England, under contracts entered into by and carried out under the superintendence of the Admiralty. Shortly after the outbreak of the late war, however, the extent and urgency of the demands made by the army were so great that the Admiralty found itself unable to perform the duties connected with this supply, which was accordingly transferred to the War Department, and executed under the superintendence of the commissariat.

Compressed hay.

Although the hay that had up to this time been contracted for was packed by hydraulic pressure, the commissariat officer charged with this supply, who was fortunately possessed of great mechanical knowledge, saw the necessity of a further reduction of bulk both as a question of economy and of convenience; through his exertions accordingly a number of steam hay pressing establishments of a magnitude before unheard of were speedily constructed in favorable localities throughout the country, and from that period to the end of the war upwards of 27,000 tons weight of hay had been sent off to the East.*

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* To give some idea of the extent of this undertaking, of which the entire credit is due to Assistant Commissary-General

Amalgamated field forage.

But great as was the improvement effected by these means, it was still evident that the cost of freight was altogether disproportioned to the value of the commodity. This consideration, and representations of the waste incurred at the seat of war in the unloading of grain, and its transport to the front, led Mr. Julyan to apply his inventive mind to the manufacture of what is now known as the "Amalgamated Field Forage."

This consisted of a preparation of chopped hay, bruised oats, bran, &c. in the proportions usually issued to cavalry horses, thoroughly mixed together, subjected to a chemical process for the expulsion of fixed air, and compressed by hydraulic power into thick cakes of great solidity.

It was cut up into rations of 22 lbs. each, and four of such pieces were packed in one canvas cover, which was convertible into a nosebag.* From these bags the horses were to have been fed after the fashion of the London carriers' horses, the forage being first restored to its original bulk and condition by moderate friction and a few minutes exposure to the air.

This preparation thus combined the advantages of extreme portability, full nutritious property, cheapness,† and (from its being almost impervious to air and fire, as

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Julyan, it may be mentioned that whereas this hay, as packed under the Admiralty system would have required 121,500 tons of shipping for its conveyance to the Black Sea, and cost in freight upwards of 300,000*l.*, the improved machinery reduced the bulk so much that 75,250 tons of shipping sufficed for its transport; this effected a saving in freight of about 118,000*l.*

* The want of nosebags was one of the causes of the sufferings of our cavalry horses in the Crimea.

† During the war this forage was offered to be delivered on the wharf at Balaclava, bags included, at 3*d.* per ration less

well as from its peculiar form) exemption from the accidents, deterioration, and losses to which forage in its ordinary state is subject.

Unfortunately Mr. Julyan's proposal to supply the army in the East with this description of forage was not favorably entertained; and when after some delay he succeeded in obtaining a trial for his invention, and a board of military officers reported in the most favorable terms (see Appendix F.), and recommended the adoption of the amalgamated forage throughout the service, the war had come to a close and the want had ceased. Had it been adopted at an earlier period, the deterioration and loss of our cavalry and transport horses might have been to a great extent avoided and a very large saving in money would have been effected. Let it be hoped that in the event of another war this valuable invention will be kept in view.*

Annual cost of provisions,

The total cost of provisioning 130,135 men abroad and home is estimated for the current year at 1,141,290*l.*; of this amount the soldier contributes from his pay 755,658*l.*,

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than we were then paying for the ordinary rations,—a difference amounting to about 200*l.* per diem at the then average consumption.

* M. Aubertin, an officer in the French cavalry, who has patented an invention similar to Mr. Julyan's, has met with very different treatment, having as a reward received from his government the sum of 100,000 francs and a royalty. He has recently submitted his forage to the notice of the British Government, and it is now undergoing a trial, under far more favorable circumstances than were allowed in Mr. Julyan's case. Should, however, this description of forage be adopted for field service, it is to be hoped that Mr. Julyan's will be allowed the preference, not only on the grounds of nationality, but of priority of invention and greater portability, since it occupies one half the cubic space of M. Aubertin's, and is far less liable to waste and damage.

leaving 385,632*l.* as the nett cost of provisions to the public.

The charge for fuel and light, for which no deduction is made from the soldier's pay, is estimated at 173,885*l.*, being about 26*s.* per head. and fuel and light.

The number of horses for which provision has been made for the current year is 12,644, and the estimated cost of their forage is 343,228*l.*, being about 27*l.* per horse per annum, or 1*s.* 6*d.* per diem; but forage is an article of supply which undergoes great varieties of price, and during the late war the maintenance of 46,099 horses was estimated at no less a sum than 4,861,928*l.*, being about 105*l.* 10*s.* per head, or nearly 6*s.* a day. This great difference may, however, be partly accounted for by the necessity of providing larger quantities of forage than were immediately required. Number of horses foraged, &c.

The total nett cost to the public (deducting the stoppages payable by the soldier for his rations) of provisions, forage, fuel, and light for the army at home and abroad is estimated for the current year at 922,755*l.*, equal to about $7\frac{4}{5}$ per cent. on the grand total of the army estimates.

According to existing regulations every officer,* non-commissioned officer, and soldier actually doing duty in garrison, in camp, or in the field is entitled to receive a personal allowance of provisions, and fuel, and light. Regulations with respect to rations.

No individual can draw more than one ration of provisions for his own use; but officers are allowed to draw rations for the number of civil servants to which they

* Except in the United Kingdom, where officers do not receive rations of provisions. In most of the continental armies officers draw rations in the field only; an arrangement which, if compensation in the shape of additional pay were awarded for these allowances, might with advantage be introduced into our service.

Free rations to soldiers' wives and children.

are by their rank entitled; and non-commissioned officers and soldiers may receive rations for their wives and children within the regulated number.*

The ration of provision is the same for all ranks; but the allowance of fuel and light is regulated according to the barrack accommodation to which the recipient is entitled.

Rations to civilians attached to the army.

Persons temporarily attached to the different departments of the army in the field, where it may not be practicable for them to purchase provisions, are allowed to draw rations, but the privilege ceases in garrison or under circumstances favourable to their providing for their own subsistence.

Ration returns.

All regimental rations, whether of provisions, forage, or fuel and light, are drawn upon three daily returns,† prepared by the quartermaster, and countersigned by the commanding officer and the paymaster. These returns show the strength of the regiment, distinguishing the different classes of officers, non-commissioned officers, and men, and the quantities of provisions, forage, fuel, and light to which the corps is entitled for the ensuing three days. A separate column shows the number of stoppages, corresponding to the total of the rations claimed, which are chargeable to the regiment. By this means the number of rations drawn and the number of days' pay charged must agree at the end of the month.

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* Six women and their children per company are entitled to the receipt of free rations; they must be the wives of non-commissioned officers and soldiers, and married with the permission of the commanding officer. In the Tropics the wives and children of officers are likewise entitled to draw free rations of provisions.

† Staff officers usually draw their rations upon bi-monthly returns.

Upon these returns the commissariat officer grants checks, in favour of the quartermaster, upon his contractors or storekeepers, who either issue the quantities at once, or in the case of perishable supplies, such as fresh meat or bread, keep a running account with the regiment. Checks.

This system acts perfectly well in garrison, but is not well suited for field service, where a perfect regularity of supply cannot always be ensured. A commissariat officer, for instance, having examined the returns and given the orders for the issue of the total quantity claimed, charges it at once in his accounts as an *issue*, although it may happen that the contractor or storekeeper to whom the regiment presents the order is not in a position to comply with it. By this means a discrepancy occurs in the accounts, and a regiment is charged with supplies which it never received.* Objections to the system of provision accounts in the field.

The object of accounts is to ensure the application of public resources to their prescribed ends and within regulated limits. This is perfectly feasible under ordinary circumstances; but on active service it is not always possible to procure vouchers and receipts according to the established forms, and it is far better to establish, by

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* This was of frequent occurrence in the Crimea; the commanding officer's requisition with the quartermaster's anticipatory receipt formed the commissariat officer's voucher, though it probably turned out that only one-half the quantity demanded could be issued. Thus, while not more than 5,000 lbs. of hay was in store, 10,000 lbs. might be charged as issued. In addition to complicating accounts, such a system tended to open the door to obvious abuses, and even frauds, on the part of the issuers and other subordinates of the commissariat department; while, when dealing with contractors, it may have led to the public paying for supplies which had never been received.

means of a well-organized department of control, a strict and efficient local supervision over the conduct of supply duties in the field than to exact accounts, which, however correct in their outward form, can but rarely represent the actual transactions as conducted during the hurried and ever-changing events of active warfare. A judicious system of musters and inspections would do more to check waste or malversation in the field than the most ingenious accountability that could be devised; and if a commissariat officer were simply required to furnish the head of his department with a periodical "state of supplies," showing where and how obtained and issued; and officers commanding corps a return of the number of men fed, noting any deficiency of supply; both reports being subject to verification by means of personal inspections and musters, the object in view would be attained with far greater certainty than under the present complicated system of returns, abstracts, and vouchers, the preparation of which occupies much of the time of a commissariat officer that might be more profitably employed for the benefit of the troops, while their subsequent examination, probably after a lapse of one or two years, answers no possible purpose except to find employment for a staff of clerks.

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* D'Argenson, minister of war to Louis XV., said: "Il n'est dans l'administration militaire qu'une seule garantie; *elle est toute entière dans la probité des agents et dans l'honneur des officiers;* au lieu de nous fatiguer à les surveiller, appliquons nous à les bien choisir."

BOOK VI.

ON THE TRANSPORT, THE CLOTHING AND EQUIPMENT, AND THE QUARTERING OF TROOPS.

THIS, the concluding book, will be devoted to the consideration of three most important branches of military administration, which, as affecting in a most material degree the health and the comfort, as well as the efficiency of troops, are deserving of a far more extensive notice than can be comprised within the limits of this work. To elucidate these subjects with anything like minuteness, to convey even an outline of the knowledge necessary for conducting the duties attaching to them, is beyond the author's powers or objects; his aim is rather, while presenting a general view of those services as they exist, to draw attention to their importance, and to impress upon the student of the military sciences that there is no detail of the various functions comprised in the administration of armies that he should fail to investigate, and to study, if he would contribute to the usefulness and the happiness of the soldier.

CHAPTER I.

TRANSPORT.

Transport; its importance.

Transport is to an army what steam is to the engine, —the motive power without which the most perfectly organized machine is useless for practical purposes.* It is an essential element in all services of supply, and its formation, maintenance, and management call for the exercise of unremitting intelligence and activity on the part of the military administrator.

The transport of an army is of several kinds, and each should be formed with a view to the peculiar functions devolving upon it.

Carriage of provisions.

The most important want is the carriage of provisions, to which a very large portion of all military transport must be devoted. There is nothing in this service, however, which demands that the means of conveyance should be of any peculiar description. Strong carts or waggons, or good pack animals, with the saddles they are used to bear, are, each in their way, perfectly adapted for the carriage of all kinds of provisions; and the resources of the scene of operations may be in most cases to a great extent relied upon for supplying such transport; but the machinery of superintendence and direction must be imported, in order that this service be properly carried on.

Hospital transport.

Next in importance is the hospital transport, consisting of ambulances for conveyance of the sick and wounded,

* "Le service des transports est l'âme d'une armée, puisque lui seul il lui communique la vie et le mouvement; et c'est un objet qu'un sage administrateur ne perd pas un seul instant de vue et auquel il doit donner une attention particulière; car le succès de ses opérations, et par conséquent son honneur, en dépendent presque toujours."—*Vauchelle.*

and of carts to carry surgical instruments and medical stores. This is a description of transport which every army should carry into the field with it, since it cannot be improvised, and not only must the conveyances in themselves be of a peculiar construction, but the persons who manage them require to possess considerable practical experience to fit them for their duty. Our medical service* has hitherto been placed at a great disadvantage in this respect; instead of an effective hospital transport being at all times maintained and held in readiness for active service, we have preferred waiting for the emergency before commencing to form this indispensable branch of administration. Shortly after the outbreak of the late war, an attempt was made to organize a small ambulance establishment, but the men selected to act as drivers proved thoroughly unfit for their work. The army

* The French ambulance service is very well organized. To each division of an army there is attached an "ambulance," consisting of five *caissons*, three of which are ordinary waggons, containing each dressings for 2,000 men, one a light waggon for 1,400 men, and the other a magazine or hospital depôt; thus each infantry division in the field carries with it dressings and implements for 9,000 men, and further a complete set of surgical instruments for each sixty dressings. This establishment is independent of the spring waggons or other contrivances for the conveyance of the wounded from the field of battle, such as the "ambulance volante" and the "cacolet," which is a description of easy chair slung on each side of a mule. The whole is under the direction of the *intendance militaire*. The improvements made of late years in the ambulance service have led to the abolition of a class of men who continue to be very usefully employed in the Prussian service; these are the "broncardiers," or litter carriers, who, taught the more simple surgical operations—such as applying splints and bandages, were employed in picking up the wounded on the field and conveying them to the nearest hospital. It is said to be in contemplation to revive this class of medical attendants in the French army.

actually landed in the Crimea without a single hospital waggon, and the commissariat transport was weakened to supply in a most imperfect manner the means of carrying the sick and wounded.*

Ordnance transport.

The carriage of ordnance and siege train stores absorbs a large quantity of transport, but this is as a rule provided for by the waggons permanently attached to the batteries and parks of artillery, and the train of the corps of engineers; but the conveyance of camp equipage, regimental and staff baggage, as also of reserve small-arm ammunition, has hitherto devolved upon the commissariat, as the department charged with the duty of providing general military transport.

Organised trains of transport.

In most foreign armies the nucleus of a trained transport corps is maintained in times of peace, organized with especial view to its facile extension for the purposes of war, so that when a force takes the field it carries with it the means of conveying its most essential supplies; while whatever transport can be drawn from the country under occupation, whether by hire or purchase, by requisition or by seizure, can at once be amalgamated with the trained and organized corps, and brought under the influence of military order and discipline.

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* After the battle of the Alma the wounded had to be conveyed from the field for embarkation on the coast in open country carts, which, when they had deposited their living or dying loads, were to carry back supplies to the camp. On the march upon Sevastopol, a great number of provision carts broke down and were left on the road with their contents, in consequence of their being overloaded with men, who, unable, from sickness, to march, had no other means of being conveyed; and it was no uncommon occurrence to find half a dozen soldiers, dead or dying of cholera, lying on the top of the biscuit or other food destined for the use of the troops. Every regiment should have been accompanied by one or two covered waggons, for conveyance of the sick on the march.

In our own army we have in this, as in other respects, too much neglected to prepare in peace for the exigencies of war. Relying upon our financial resources, and believing that while money abounds the *matériel* of war will not be wanting, we have overlooked the necessity which exists in every branch of the military service for preliminary practice and training, in order to turn our means to good account.

Transport, to be effective, must be organized and trained to a systematic performance of duty, and this cannot be the work of a day. The few regular military transport establishments that we have until recently possessed, were hurriedly formed in the midst of war, and as hurriedly disbanded on the return of peace. The wars of the early part of the present century were of sufficient duration to enable us to train all our administrative establishments, and the Royal Waggon Train formed during that time became latterly a most efficient corps. It was only to a very small extent, however, available for commissariat purposes,* and the greater portion of the transport re-

Royal Waggon Train.

* "The British commissariat, nevertheless, has no waggon train exclusively attached to it and under its orders, either to be employed when occasion requires, or even to form the nucleus of one if it should be necessary. There is, it is true, on the establishment of the British army, and attached to the Quarter-Master General, a corps called the Royal Waggon Train, but it is now principally, if not altogether, composed of spring waggons intended for the conveyance of sick or wounded, and as these waggons do not bring back supplies, when they go to the rear with men, and as they remain stationary when they might without inconvenience to the service be usefully employed, they are of no assistance to the commissariat, whilst the men and horses must be fed, and other transport employed to do that which they might otherwise occasionally do for themselves."—*Sir John Bisset's Commissariat Field Service.*

This train was disbanded in 1833.

quired for maintaining military supplies was obtained by local contracts,* the execution of which was attended with unusual facilities in Spain and Portugal. Even there, however, in spite of the ample means of transport possessed by the country, and our own resources in money and credit, military operations were frequently retarded and impeded for want of an effective establishment under proper control. On the outbreak of the war with Russia, we had neither the *matériel* nor the *personnel* of a transport corps of any description. When the army landed in the Crimea, there were no means of conveyance whatever beyond a few Maltese mule carts, and had the Russians availed themselves of the ample time allowed them, and swept every description of draught or pack animal from the coast, our advance upon Sevastopol, even along the sea coast, would have been attended with considerable difficulty. Fortunately for us, no such measure of precaution was adopted, and the country people, hampered by no attachment to their rulers, and dazzled by the prospect of a rate of wages infinitely beyond their ordinary earnings, freely placed their vehicles, principally arabas drawn by oxen, at our disposal, and continued to serve us until the exposure and hard work of the winter destroyed their beasts. Useful as this transport was, country waggons driven by peasants can only be considered as an auxiliary resource; had we possessed the nucleus of a trained corps even of superintendents and conductors only, it might have been sufficiently organized

Transport in the Crimea.

* During the Seven Years' War we obtained all our army transport by contract. A Treasury Minute of 1762 refers to an offer of Mr. Dundas, then contractor for waggons in Germany, to transfer to the Government his 500 waggons, with horses and drivers, for the sum of 88*l.* 10*s.* each, it having been for the first time proposed to form a public transport establishment.

to suffice for the more immediate wants of the army; but for many months the Commissariat could procure no such assistance, and the Greek and Turkish superintendents and drivers who were at a later period imported, were not more efficient, and were far less trustworthy, than the Crimean Tartars.

It was not until this defective and unorganized transport had completely failed that the necessity of forming a trained corps of enlisted men was recognized.

Land Transport Corps.

It might have been expected that the most natural course to suggest itself at this juncture would have been to strengthen the Commissariat by placing at its disposal the necessary establishment of officers, men, horses, and waggons; but instead of this, the Land Transport Corps was placed under the command of independent military officers, and one of the most essential branches of the Commissariat service was virtually withdrawn from its control. On the conclusion of the war this corps was broken up, and the Military Train, organized on yet more strictly military principles, and thus rendered more independent of the Commissariat was substituted. In this respect our system differs totally from that of other armies in which the Train, though commanded by military officers, is strictly subordinate to the Commissariat.* It is obviously impossible to hold a Commissary-general responsible for the supplies of an army while the means of conveying these supplies are dependent upon another, and to him irresponsible, depart-

Should be subordinate to the Commissariat.

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* "L'Intendance Militaire exerce l'autorité non seulement du contrôle, mais du *commandement* sur les hommes et sur les choses qui constituent ces moyens et qui les font mouvoir."—*Vauchelle, du Service des Transports.*

The same system prevails in Austria, Sardinia, and Belgium, where the commandants of the military train act immediately under the orders of the Intendant.

ment.* The least want of concerted action between a Commissariat and a Transport officer would necessarily lead to a failure of supplies, and each would be able to excuse himself by imputing the blame to the other. Unfortunately experience does not justify the expectation of a complete unity between any two distinct services of our army when brought to act together, and the difficulty in this case is increased by the circumstance of the officers of the Train holding substantive military rank, and being thus the less likely to submit to the authority of a civil department.

There does not appear to be any absolute necessity that the Commissariat should control the entire transport of an army, although such an arrangement would undoubtedly tend to an unity of action and concentration of responsibility, besides furnishing greater security for the exercise of economy in a most important and extensive branch of expenditure; but that portion required for Commissariat purposes must, to be effective, be exclusively under its orders. The Military Train might be thus retained to act on services connected with the quartermaster-general's, the medical, and the store department,

* The French military authorities are of all others the least disposed to submit to civil control, yet the "train des equipages," which has a purely military organization, and is commanded by officers holding substantive military rank, submits, as a matter of course, to the direction of the officers of the Intendance, who without interfering in the details of discipline, direct every movement of the corps. Vauchelle says, "Si l'intendance militaire n'avait pas, surtout aux armées, la libre et entière disposition des transports affectés aux services administratifs, et conséquemment des equipages militaires, il faudrait la supprimer, car elle serait hors d'état de remplir sa mission." The French have too thoroughly mastered military administration in all its branches not to recognize the truth of this doctrine.

and a distinct corps commanded by officers of the commissariat formed for supply duties. Sir John Bisset's remarks upon this subject are worthy of all attention:—"Had I a waggon train to form, I would divest it of all useless military equipment, and clothe and drill the men as waggoners, because it is labor and not military parade that is required; though, of course, strict subordination and regularity should be carefully enforced. . . . . A most useful description of transport may be formed under the exclusive direction of commissariat officers; and to facilitate such a direction, the nucleus should exist in this country, which would be very easily accomplished by having on the establishment of the Royal Waggon Train* a certain number of corporals and waggoners clothed, drilled, and appointed in the way I have stated to be on any emergency transferred to the orders of the commissariat."

Local transport to be made available.

It must not for a moment be thought that it is necessary or even desirable to rely exclusively upon a home-made transport establishment; the resources of the country under occupation must in this respect, as in others, be as amply as possible developed, and under most circumstances the larger portion of the commissariat transport should be derived from local means; but it is of the utmost importance that the power should exist of rapidly organizing whatever transport may be thus secured, and this can only be afforded by having such a nucleus as has been suggested to form the ground-work whereon all auxiliary transport should be grafted, and whence it should derive its cohesion and discipline. A

* This was written while that corps still existed. At the present time it would probably be quite feasible to keep such a nucleus at our camps of instruction, to be employed strictly in commissariat duties.

small transport establishment under proper control, and ready to act by word of command under all circumstances, is worth one ten times as large deficient in the element of order and discipline, and this is a want which can only be supplied by preliminary training and practical experience.

Management of transport.

Whatever the nature or organization of the transport, however, a commissariat officer should devote his best exertions to maintaining it in a state of efficiency. The men, whether English soldiers or natives of the scene of operations, should be as much as possible encouraged to attach themselves to the service. Exposed, as they necessarily are, to so many fatigues and hardships in all weathers, they should be suitably clothed and well fed, and be rendered as comfortable when off duty as circumstances may allow. In the case of native drivers, their peculiar habits should be consulted as far as may be practicable; and while a strict discipline should be maintained and misconduct immediately and severely punished, good behaviour, steadiness, and attention to duty should be noticed and rewarded. *Esprit de corps* is to masses of men what self-respect is to individuals, and should be fostered by all possible means, since it tends to impress men in every position with a sense of their duty. A commissariat officer who fully understands the importance of his functions will not find it unworthy of his attention to study the character and disposition of the most humble individual under his orders, with the view of developing his good qualities and abilities to the greatest advantage of the public service. In dealing with people of different nations this becomes peculiarly necessary, and as a large portion of the *personnel* belonging to the transport of armies is generally drawn from the local population, care should be taken not to offend unnecessarily feelings or even prejudices which,

if properly directed, may, as a rule, be turned to good account. There is a tendency on the part of Englishmen, and more especially among our soldiers, to treat foreigners with a haughtiness and contempt which is seldom reasonable and never beneficial; this feeling should be repressed, and when native drivers are employed under the direction of our non-commissioned officers and soldiers, the latter should be strictly enjoined to abstain from violence or unnecessary harshness. The influence of their own people should be as much as possible brought to bear upon them, and with this view it is advisable to appoint a certain proportion of the more intelligent natives to act as superintendents, and to become the medium for conveying orders and enforcing discipline.

Local usages to be respected.

Another error to be avoided is unnecessary interference in the attempt to improve indiscriminately upon local practices and habits. Both men and animals will work best in the way they have been accustomed to, and even the most obvious improvements should be effected gradually and cautiously, lest in endeavouring to teach a new method before the old has been unlearnt, only the worst features of each should be the result. As a rule the practice in force, however opposed to our notions, is founded upon some sufficiently valid reasons. In this respect we have generally more to learn than to teach, and a little careful observation will probably serve to convince us that practices which at first sight we are disposed to deride or condemn are, under the peculiar circumstances of the case, preferable to anything we could substitute.* It would be as unwise to place an

* This remark applies particularly to the mode of packing baggage animals and the description of pack saddle used. The greatest possible variety exists in this respect in different

English saddle and bridle on a Spanish mule as to ride an English horse in a Spanish saddle and bridle, and the attempt to introduce the customs of an English stable in a foreign country are pretty nearly certain to end in failure.*

Inspection of transport animals.

But while unnecessary interference is to be deprecated, the importance of attending to the conditions of transport animals cannot be too strongly insisted upon. A commissariat officer in charge should satisfy himself by frequent personal inspection that the animals are properly stabled, fed, cleaned, and shod; the state of saddlery and harness should be carefully attended to, and on the march no halt should be made without the waggons being examined, and, if necessary, repaired.

The break down of a single waggon may, on a narrow road, seriously obstruct the whole line of march, besides causing the loss of its load.

Every cart or waggon should be required to carry the necessary tools for effecting repairs, as also the means

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countries, and each is probably the one best calculated to answer its peculiar purpose. Many officers carried English pack saddles to the East; but these were soon thrown aside, and a curious-looking local contrivance, which would not fail to raise the angry derision of an English groom, was readily substituted.

* Many curious illustrations of this disposition, so characteristic of our race, to force our own habits upon foreigners was observable during the late war. The author was witness to the indignation of a zealous corporal of dragoons at the dirty condition of some dromedaries employed in the Crimea. In vain the unfortunate driver urged that his animals were not accustomed to be *groomed;* the corporal insisted upon the use of the curry-comb, and the scene ended by the astonished and tortured dromedary sending his owner sprawling by a well-directed kick, while the soldier who was "holding his head" under the operation received as severe a bite as so gentle an animal can inflict.

of greasing the wheels, by which the draught is greatly diminished and much wear and tear saved.

These are trivial details, but nothing is unimportant that tends to maintain the efficiency of army transport.

Loading. In loading, the greatest care should be taken to adapt the weight to the capability of the animal or vehicle, and full allowance must be made for the chances of heavy roads or forced marches.

Mules. Mules, which for mountainous roads are by far the best pack animals, can carry continuously 2 cwt. for long marches;* they are moreover more hardy and less dainty in their food than horses, and, with common care, can withstand any weather. Mules also work well in draught when no great speed is required; but whenever supplies are expected to keep up with cavalry or artillery, light waggons with two horses are preferable to any other kind of transport. Light waggons.

Horses. A good horse should, over even roads, be able to draw 10 cwt.,† vehicle included; but over mountainous or heavy roads 12 cwt. (including the carriage) is more than a full load for a pair of horses.

Ox waggons. For the baggage and supplies required to accompany armies *en masse* on their ordinary marches, common country waggons drawn by oxen do excellent service; they are slow, but can carry large loads, and the beasts get through a great deal of work upon small quantities of food.

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* The dragoon and artillery horse carries from 250 to 260 lbs. exclusive of rations for man and horse; but the same weight in a dead load would prove excessive.

† In the French artillery the maximum weight drawn by each horse is about 700 lbs., and in the trains des equipages half a ton. According to the "Handbook for Field Service," four horses are requisite for drawing 21 cwt.

Objections to wheeled vehicles.

The employment of wheeled vehicles of any kind is, however, as much as possible to be avoided when an army is marching inland. A well-organized train of pack animals, though a greater number is requisite than would suffice for draught, is the most manageable transport that can be devised, and for rapid marches far preferable to any other.

Estimates of transport.

The transport required for carriage of the ordinary material of war, and for hospital purposes, can always be computed with tolerable accuracy, since its extent is little affected by local circumstances. But it is different as regards consumable stores. In a country rich in resources, and with a friendly population, a small commissariat transport suffices even for continuous marches; but if the scene of operations yield little or nothing, if, as in following up a retreating force, the progress of the army be through a desert of ruined fields and burning villages, it would be necessary to provide transport for the carriage of provisions and forage, and perhaps even wood and water, for the full number of days that the march is calculated to last. The commissariat officer must in these cases exercise his own judgment, in concert with the officer commanding the expedition.

Increase of supplies arising from transport establishments.

It must be borne in mind that every additional transport animal calls for a corresponding addition of supplies. It was computed, during the organization of the Land Transport in the Crimea that it would require about 9,000 men and 12,500 animals to carry the rations, ammunition, and hospital establishments for 58,000 men and 30,000 horses for three days. At this rate additional provision would require to be made for one-third as much forage and one-fifth as many rations as may be requisite for the actual combatant force in order to subsist the transport establishment. In other words, every three horses would have to be calculated as four,

and every five soldiers as six, to cover the additional demands of the transport attached to the force.

The military train, as at present constituted, is of too recent a creation to allow of a fair estimate being formed of its capabilities; but the maintenance of such a corps during time of peace indicates an improved recognition of the true principles of military administration. Experience and practice will probably lead to certain changes and modifications in this branch of the service which would appear desirable to ensure its efficient working. But while we may rejoice at having formed the nucleus of an organized transport corps, let it not be forgotten that it is, even when expanded to its utmost limits, only sufficient to supply a small portion of the wants of the army. Let the military administrator never relax in his exertions to develop to their fullest possible extent the resources of the country in which he is called upon to act, and let him consider that to keep up the recruitment of his transport is as necessary as to keep up the recruitment of the army itself. It is even more so; a reduced army may be effective while its transport is complete; but the largest and best army will break down when this important support fails.* It cannot be too strongly urged that to form, to maintain, and to economize an efficient transport should be the ceaseless endeavour of a commissariat officer in the field.

Importance of maintaining transport.

On home stations and in the colonies, the transport of

Movement of troops at home.

* Major-General Sir Hugh Rose, an officer as distinguished for his administrative talents as for his military achievements, says, in a report on the French transport system:—

"An army deprived of one of its regular 'arms' can make a good fight if it take advantage of ground; but an army without transport is lost in the interior of a Russian province, where there is nothing but wood, water, and grass, and not always that."

armies is attended with none of the difficulties attaching to this service in the field. Railways and steam-boats, with the managers of which periodical or special contracts are entered into, afford the principal means for the conveyance of troops and of military stores and baggage, and agreements for the hire of every description of cart or carriage, can always be made on the most economical terms. Within the United Kingdom the Mutiny Act further confers upon officers of the army the power of impressing carts for military purposes.*

Impressing carts.

The movements of troops on home stations are conducted under the immediate direction of the quartermaster-general's department, from which all routes and orders for conveyance, whether by train, steam-boat, or carriage emanate. In the colonies the commissariat interposes in these duties as far as their execution and cost is concerned, that is to say, it is the department which enters into contracts with the railway or steam-boat companies, and which pays all claims incurred for transport. Requisitions for conveyance are accordingly addressed through the quartermaster-general's department to the commissariat, and the latter gives the order for their being complied with, having first ascertained that the demand is in all respects comformable with established regulations. A proper financial check, which is wanting in this respect in the United Kingdom, is thus maintained.

Movements of troops in the colonies.

Sea transport.

As regards sea transport, the quartermaster-general makes his requisitions upon the Admiralty, which provides whatever shipping is necessary. On foreign stations,

* This is an old law, which owes its preservation rather to the habitual moderation of our army which has prevented its becoming oppressive in operation, than to any necessity which now exists for resorting to such a measure. It does not extend to our colonial possessions, and might without detriment to the service be abrogated.

where there is no local agent, the commissariat is required to engage sea-going vessels upon the demands of commanding officers.

The conveyance of troops by sea, although looked upon as a branch of naval rather than military administration, is a subject in which the comfort of the soldier is so materially concerned that more attention should be devoted to the subject than it has hitherto met with. When we consider that a portion of our army is almost always on the seas, either proceeding to or returning from some of our numerous colonies, it appears surprising that a more effective and economical system of transport has not been established. Notwithstanding our unmatched naval resources, a war invariably finds us unprepared with the means of conveying our troops from these shores and from our more remote possessions; and even in times of peace the vessels employed in this service are, as a whole, ill-adapted to the accommodation of large bodies of soldiers.

Employment of ships of war as transports.

In most foreign armies, ships of war are as much as possible used for the transport of troops, and although the presence of soldiers may, to a certain extent, interfere with the economy and discipline of a vessel, this objection, particularly in time of peace, is not so powerful as to justify the employment, at a large cost, of private ships, while numbers of our own are making objectless cruises over all the oceans of the globe or lying idle in harbor. A naval officer very naturally dislikes to be encumbered with some hundreds of soldiers with their wives and children, or to have a number of idle officers lounging about his quarter-deck; but there are interests to be consulted beyond even the most praiseworthy professional *amour propre*, and it may be doubted whether the country is willing to keep the decks of its ships of war

clean and tidy at the enormous cost involved in the employment of hired transports.

Cost of movement of troops.

The cost of the movement of troops by land, at home and abroad, inclusive of inland navigation,* is an item which undergoes considerable variation. On an average of the last three years the charge under this head amounted to 137,000*l.* per annum, being above 1*l.* per man, taking the average estimated numbers for the same period.†

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* The charge for sea transport is not included in the army estimates, but is defrayed by the Admiralty as being a naval service.

† The average charge for the movement of troops, "*service de marche*," in France is about 5 millions of francs; of this $1\frac{1}{2}$ millions is for sea transport between France and Algeria, leaving a sum equal to 140,000*l.* for the services charged in our estimates under the same head; this would give about 10 francs per man.

CHAPTER II.

CLOTHING AND EQUIPMENT.

WHILE armor was in general use, and a scarf or an arm-band was the only distinctive badge worn by the soldier, clothing did not form a branch of military administration; even in the armor and weapons there was only that degree of uniformity which was necessary for maintaining their adaptability to a particular service, and their form and material were regulated more by the means or opportunities of the men or their leaders than by any established rules or recognized principles. Clothing of troops in olden time.

Prior to the formation of a standing army in Great Britain, the Government but rarely interfered in the clothing of troops. Lord Lieutenants were answerable for the national forces raised in their respective counties being properly armed and accoutred, and when mercenary troops were employed, they were, as a rule, required to clothe themselves or to submit to a deduction from their pay to meet the expense incurred by their officers in providing them with the necessary articles of dress. Nevertheless, there are instances at a very early period of the State assuming the direction of the clothing of troops. Grose quotes from Rymer an order addressed by Edward the Third to the Sheriffs of North and South Wales to provide a dress, consisting of a tunic and mantle, for 1,000 men about to be raised in their counties; and under Henry the Fourth we find several sums charged against the privy purse under this head.

The Ordinances of War of Henry the Eighth are the first that make mention of a distinguishing uniform in the army; an Act of the same reign strictly enjoins the Uniforms introduced.

wearing of the established dress by all officers and soldiers, and by way of enforcing the order, even the murder of soldiers out of uniform is declared not to be punishable. The prevalent colors of the clothing at this time were white, and "sadd grene or russet."* Under Queen Elizabeth, red cloaks were introduced principally in the Cavalry.

Officers' outfit.

An officer's outfit as described by Sir John Herrington, anno 1599, is not extravagant:—

	£	s.	d.
A cassock of broad-cloth - -	1	7	7
A doublet of canvass, with silk lining and buttons - - -	0	14	5
Two shirts and two bands - -	0	9	6
Three pairs stockings at 2*s.* 4*d.* -	0	7	0
Three pairs shoes at ditto - -	0	7	0
One pair venetians (trousers), with silver lace - - - -	0	15	4
Total - -	£4	0	10

Under Charles the Second, the cost of clothing of private soldiers was as follows:—

Prices of soldier's kit.

	£	s.	d.
Foot soldiers - - - -	2	13	0
Dragoon - - - - -	6	10	0
Horse - - - - - -	9	0	0

A Treasury Minute of November 1689 fixes the following prices for the different articles of an infantry soldier's kit:—†

* Grose.

† The rates allowed one hundred years later for the kit of privates of infantry, as quoted in the Appendix to the Twenty-first Report of the Select Committee on Finance, 1789, shows

	£	s.	d.
1 pair shoes	0	3	6
1 hat	0	5	0
1 shirt and 1 cravat	0	3	4
1 pair stockings	0	2	6
Coat and breeches	1	10	0
1 pair gloves	0	1	6
1 scash	0	1	2
1 waist belt	0	3	6
1 sword	0	5	0
Total	£2	15	6

Clothing conducted by commanding officers.

The clothing of soldiers formed, until very recently, a recognized source of profit to commanding officers or captains of companies.* The practice was originally to make an arbitrary deduction from the men's pay; if this sum fell short of the actual expense, the difference was charged against the soldier; any profit that arose was pocketed by the officers.† The worse the soldier was

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no considerable difference in the cost of clothing; they are as follows:—

	£	s.	d.
Coat and breeches	1	2	4
Shirt and stock	0	1	9½
Hose	0	4	6
Hat	0	1	3
Shoes	0	4	0
Sword	0	4	2
Watch coat, once in four years	0	2	10
Total	£2	0	10½

* This practice was authorized by Act of Parliament, 18 Henry 6. c. 18.

† According to the Report of the Commissioners on Army Expenditure in 1746, it appears that the clothing funds formed

dressed the better was the officer paid. Numerous abuses naturally arose under such system, and about the middle of the last century attempts were made to abolish the practice, by withdrawing the duties of clothing the men from captains of companies and handing it over to the nominal commandants of regiments. This was but a transfer of the objectionable practice, since the savings effected on the sum granted by Government for clothing the corps were to be considered as the legitimate emoluments of these officers. It is true that a pattern was established to regulate the quality of materials and the workmanship,* but the speculators who soon monopolized the clothing of the army had ample means of evading a satisfactory performance of their duty, and there were no means left to regiments serving in the colonies to remedy the defects they might discover in their annual supplies of clothing. Another strong objection to this system was that the annual amount allowed for the clothing of a regiment was calculated upon the effective strength, so that the weaker the corps was the greater were the profits accruing to the clothing colonel.

Objectionable in practice.

This practice has within the last few years been abolished, but not without having been strongly remonstrated against for a long time past.†

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by deductions from the soldier's pay, were frequently greatly in excess of the cost of the clothing. In the 1st Horse Guards the fund amounted in 1745 to 2,823*l.* and the clothier's account to 1,946*l.*, leaving a profit of 877*l.* to the colonel.

* The appointment of a board of general officers to establish the patterns of clothing, and to certify that all supplies received from the clothiers were in conformity with such patterns, originated in an Act passed in Queen Anne's reign.

† The artillery was the only arm in which this practice did not prevail. All clothing for that corps was furnished upon the requisition of commanding officers by a board of officers which contracted for this supply.

The report of the Commissioners of Accounts in 1783 states :—

" The off-reckonings being calculated on the full establishment, including the non effectives, contingent, and warrant men, and clothing being produced for the effectives only, a surplus must accrue from this fund to the colonel, and the more defective the regiment, the greater will be that surplus. We do not mean to convey the most distant idea that we have the least reason to imagine that any undue advantage has been taken of this mode of clothing the army by any person whatsoever, but we are well-grounded in suggesting a reform when an usage is open to abuse."

The thirty-first report of the Select Committee on Finance in 1798 is to the same effect :—

" Your committee are not, however, prepared to say that the profits attached to the command of a regiment are derived from a source which it is expedient to continue, as it appears from the foregoing part of this report, that they principally, if not wholly, arise from the disproportion between the effective strength of a regiment and the numbers borne on the establishment, and that the more that the effective numbers fall short of the establishment, the greater such profits will necessarily be. This principle of reward your committee do not hesitate to say is the very reverse from that which would the most conduce to the advantage of the public service."

The Committee proceed to recommend that the entire clothing of the army should be supplied under contracts entered into by the executive; compensation being granted to colonels for the stoppage of this source of emolument.

Notwithstanding these and many subsequent recommendations to the same effect, together with the representations of the colonels themselves, who felt that they were entitled to claim a less fluctuating and more dignified description of income than that derivable from the " off-reckonings," the system continued in force until 1854, when the Government directly assumed the duty of clothing the troops.

Clothing under the War Department.

At present the War Department provides the clothing of the army, partly by means of a Government factory, but principally through contractors, who furnish clothing according to patterns approved under royal authority, and deposited in the Commander-in-Chief's office. Contracts for clothing are renewed annually; they are open to public competition, and the contractors on being furnished by commanding officers with requisitions and size-rolls, are required to provide all materials, and to supply the clothing within a given period, in a complete state. Before being dispatched to regiments, the clothing is inspected with the view to its being ascertained that it is in all respects conformable with the sealed patterns.

Government clothing factory.

A Government clothing factory, originally intended for the brigade of Guards, but subsequently extended for the use of other corps, was recently established in London, and hitherto it has been attended with complete success; the clothing being of an excellent quality, and produced with greater regularity and promptitude, and at a less expense than under contract.* There exists a perfectly intelligible objection to Government manufactories, which in the absence of the stimulus of private interests are apt to stagnate, and to prove deficient of that vigor and activity which characterises commercial enterprises. But the maintenance of a public establishment of this nature, not to supersede the employment of contractors, but to stimulate them

* The cost of manufacturing 5,250 suits of infantry clothing in the Government establishment, including the pay and expenses of the staff, rent of premises, &c. was 7,746*l*, ; the cost under contract for the same number of suits would be 10,789*l*., showing a difference in favor of the Government factory of 3,043*l*., or about 70,000*l*. a year on the average strength of the army.

in the efficient performance of their undertakings, acts very beneficially to the service. Each establishment is a check upon the other. When the Government factory becomes more costly than the open market, the contractor is resorted to; when, on the other hand, the contractor is unwilling or unable to furnish a good article at a reasonable rate, the Government can prove itself independent of his aid. The State is thus in a position to judge accurately of the cost of an article of supply, of the difficulties attending its production, and enabled to maintain at all times a proper standard, both as to quality and price.

French clothing system.

In France and most foreign countries, as before stated (page 197), the executive, through its direct agency, furnishes almost all materials of war and military supplies. Clothing, especially, is manufactured exclusively in Government establishments, and there is no doubt but that the material and workmanship are excellent, and the price, as compared with our contract rates, very reasonable. It is true that conscription contributes to this result, since no private individual can command labor at so cheap a rate as the Government by means of this law is enabled to do; but even with this advantage good materials and workmanship, regularity of supply, and low prices could not be maintained, but for the admirable machinery of control and supervision which is furnished by the *Intendance* and its subordinate *Corps d'Administration*, but to which nothing at all analogous exists in our service.*

* Such practices as were recently discovered in our clothing establishment at Weedon could not by possibility have occurred in France, where a system of checks is established by means of the corps of Intendance, under which nothing but a completely organized system of fraud, in which officers of all ranks would be required to share, would enable Government

Advantages of making soldiers maintain their clothing in repair.

There is another feature in the French clothing system calculated to enable this service to be economically performed. It is the practice of giving the soldier a direct interest in the condition of his clothing. Government credits every man on enlistment with a certain sum for outfit money (première mise du petit équipement), and a daily allowance for repairs (*prime journalière d'entretien*);* any surplus which arises from this fund becomes the property of the soldier, and is actually handed over to him on the completion of his term of service, or before that period, should the fund exceed a fixed amount. A somewhat similar practice obtains in the Sardinian and Belgian armies. By this means the soldier is practically taught the value of being careful of his clothes, and the tunic, which with us is renewed annually as a matter of course, frequently with them lasts for four years. It is true that it is very superior in quality to that of our army, yet the price is but a trifle higher; the English infantry tunic costing on an average 18*s.* 10*d.*, and the Sardinian 19*s.* 2*d.* If at any time an article of dress is found to be unfit for further use, captains of companies have the power of ordering it to be immediately replaced at the cost of the soldier. On active service, however, or on duties rendering clothing peculiarly liable to deterioration, the Government makes an additional allowance.

The practice of allowing soldiers to wear, according to

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stores to be diverted from their lawful uses without certain and speedy detection.

* Regimental master tailors are required to perform all repairs at a fixed annual contribution from the soldier's pay; this does not often exceed 80 centimes (8*d.*) a year. The amount of the première mise is 40 francs, the daily allowance towards maintaining the clothing 10 centimes. For the Sardinian clothing system, see Appendix G.

the season, their linen or great coats on ordinary duties, enables them to save their more expensive articles of dress, but the durability of foreign clothing is chiefly attributable to the precautions taken to ensure good materials from the manufacturers by whom all the cloth for the use of the army is supplied under contracts entered into by the War Department for periods extending from three to seven years. Not only is every yard of cloth when delivered into store subjected to several distinct and most minute examinations by boards of officers, assisted by *experts* appointed by the Intendant of the district, who submit it to various tests; weighing it, shrinking it, viewing it inch by inch against a strong light, so that the slightest flaw can be detected, and applying a chemical process to test the quality of the dye; but the manufactories are at all times open to the inspection of the Intendant, who has the means of watching the fabrication in every stage; and the mere circumstance of inferior materials being found on the premises, subjects the contractor, if there are grounds for suspecting that he intended to apply them to Government use, to severe penalties or the loss of his contract.

Superior materials of foreign clothing.

Once that clothing is manufactured, it is hardly possible to ascertain, with any degree of accuracy, the quality of the materials employed, since a skilful clothier can give certain appearances to his goods when made up which will deceive even a practised eye. We need not, therefore, be at a loss to account for the fact that the clothing of most foreign armies lasts double and treble the time of our own.*

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* The tunic of the French infantry soldier is calculated to last three years and a half, the shell jacket two years, the great coat three years, trowsers one year. In the Sardinian and Belgian armies the great coat is calculated to last eight

Making up clothing.

The foreign system of making up clothing is as follows. Officers commanding regiments make their requisitions for the regulated quantities of cloth and other materials necessary for the clothing of the number of men under their command. The Intendant having checked this demand gives an order for the issue, and the materials are made up by soldiers in the regimental workshops under the direction of the clothing captain, an officer holding an appointment in some respects analogous to that of our quartermasters; a fixed rate being paid for each article.†

Facilities for conducting the clothing economically in foreign armies.

Organized as the continental armies are, there are peculiar facilities for the performance of all kinds of handicraft labor, since among those troops there is always a large proportion of skilled workmen undergoing their term of military service; but it is not so with us. Good tailors or shoemakers are not likely to leave a profitable trade for the sake of enlisting in the army, and even were it otherwise, our regiments are not organized in such a manner as would ensure the efficient management of military workshops. Still there are many points in the continental system of clothing the troops which might, with advantage to the soldier and with economy to the public, be adapted to the wants of our service.

Inconveniences of the military dress.

There is a fatal but unfortunately very prevalent tendency to sacrifice the convenience of clothing to

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years. There is hardly an article of the English soldier's uniform which survives beyond one year without the most evident marks of premature decay. The tunic, indeed, is often in a rapid decline after six months service.

* This is the French system, which has been adopted, with some trifling modifications, in most other continental armies.

† The price paid to the regimental tailor for making up the tunic of a private of infantry is three francs and twenty-five centimes.

appearance, and to attach an undue weight to fashion or custom to the prejudice of comfort and health. This remark is not confined to the army; it applies in an equal degree to civil life, as anyone who will reflect upon the hideous absurdities of female attire of the present day, or the equally hideous and unmeaning head-dresses worn by men, will admit. But there is this difference: men and women in civil life are voluntary victims, and of their own free will submit to suffer for fashion's sake; they can, moreover, when convinced of the folly, the inconvenience, or the danger of their style of dress, change or modify it, and they can at all times adapt it to particular seasons or climates. The soldier has no such means of adapting his clothing to circumstances. It was not his choice in the first instance, and however unsuitable it may prove, he has nothing to do but to wear it. He may feel convinced that to march under a tropical sun in a red cloth coat and a stiff leather stock will be his death; but it is a death he dare as little flinch from as from that more mercifully inflicted by the enemy's hand.*

Health and comfort to be consulted.

Since, then, the soldier cannot under any circumstances divest himself of the dress prescribed for him, it becomes the duty of those charged with deciding upon the character of his various articles of clothing to consult his health and comfort, as far as is possible to reconcile these

* Baron Larrey, the distinguished French surgeon, strongly condemns the use of the stock, or even a tight collar, as being liable to produce congestion, and insists upon the neck being kept as free as possible. He further recommends the use of flannel bands to be worn around the abdomen; the value of these as a preventative of dysentery was experienced in Bulgaria and in the Crimea, where few officers neglected the precaution of wearing them; latterly they were issued to the men.

with efficiency, and to allow no prejudices or traditions, no love of parade or show, to interfere with the legitimate object of dress, which is to cover the body in the manner most convenient and most useful.

There was a time when officers would as soon have seen their men without their muskets as without their queues, and who considered hair powder almost as indispensable as gunpowder. There are still some well-meaning officers to be found who would at any risk, and under all circumstances, compel the men to shave their upper lips, and who view with serious alarm every proposition to abolish the most mischievous article of the present dress, the stock; but these are, happily, now exceptions.

There is a growing tendency throughout the army to acknowledge the true principles of military dress, which consist not in producing at any sacrifice an outward appearance of smartness, but in protecting every part of the body from external influences, with the least possible restraint upon muscular or respiratory action; in reconciling soldierlike neatness with comfort and usefulness, and in adapting every article of clothing to the various circumstances of climate and service.*

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* Some excellent suggestions on the dress of our infantry soldiers were published in the "United Service Magazine" for September and October 1851, by Colonel E. Napier, who advocates the abolition of all those articles which impede free action or require the use of "pipeclay, black ball, or polishing." He proposes "that the British infantry soldier be provided with two scarlet tunics or blouses, one of good woollen cloth, the other of serge, or any other similar light material; the former to be worn in temperate, the latter in hot weather, both made to fit so loosely as to give the soldier full freedom of action, and to admit also of their being worn together, one over the other, in very cold and inclement weather, or during sentry or out-post duties at night. The trowsers—of

Recent improvements in dress.

It is true that the clothing of our army is still open to many serious objections, but it is perfect when compared with the dress of a comparatively recent period. Tight garments are discarded, and a freedom formerly unknown has been given to the limbs of our soldiers; the ugly and encumbering coatee has given way to the more serviceable tunic, and the leather stock may be considered as virtually abolished; even the shako, faulty as it is, and utterly unsuited to many of the climates in which our troops serve, is a marked improvement upon the head-dress of earlier periods. The cloth in use is also of a somewhat better description than formerly, though in this respect much remains to be done before it shall be equal to the materials used for the clothing of foreign armies, or to the requirements of our service; the great coats in particular are most inferior,

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a peculiar construction, easily described—to be made like those of the French soldier, loose and easy at the knee and thigh. The 'stock' and 'chaco' to be forthwith drummed out of the army, not only as useless, but as highly prejudicial both to the health and comfort of the soldier; no further proof of which can be required than that as soon as he is engaged on service, he invariably takes the earliest opportunity of either destroying or losing these cruel and useless incumbrances, for the former of which, I substitute a black cotton neckcloth; for the latter, a felt helmet ventilated at the top; though I firmly believe that a common Glengarry forage cap (with a good peak and small waterproof flap to let down behind when required, in order to protect the back of the neck from rain) would be the more useful of the two; but the public like to have a little show for their money, in which I suppose they must be indulged."

He further suggests the substitution of a cape of waterproof cloth for the clumsy and inconvenient great coat now in use. Leather gaiters, rising to the knee, to be worn, Zouave fashion, over the trowser, or else high ankle-boots, capable of being laced over the trowser in wet weather or on muddy roads, would render the proposed dress yet more serviceable.

affording no protection against either wet or cold, the cloth of which they are made being of that description which absorbs the wet like a sponge; and a man marching in a shower of rain carries an ever-increasing weight upon his body. It would certainly be desirable, if only in an economical point of view, to improve the material of military clothing and extend the period prescribed for its duration.

Impossibility of devising a dress to resist the weapons of modern warfare.

The possibility of guarding, by the peculiar form of any article of dress, against the weapons of the enemy has passed away. The ever-increasing employment of artillery and the range and power of the deadly Minié rifle tend to render hand to hand combats exceptional events in a campaign. The naked breast of the savage is not now more vulnerable than the cuirass of the life-guardsman; and for one man who is saved from the effects of a sabre cut by his helmet, his stock, or his shako, ten are sacrificed to the continuous inconveniences and the obvious dangers of those articles of dress. The hideousness, the absurdity, or the unsuitability of clothing or accoutrements can no longer be defended and excused on purely military grounds. Many of our most eminent officers, far from being fettered by the traditions of a byegone day, are strenuous advocates for disembarrassing the soldier of every portion of his present dress which does not answer some obviously good or useful purpose, and are willing, if necessary, to sacrifice even the national color* to increased health and efficiency, should circumstances demand it.

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* We may yet live to see our rifle corps clothed in a more suitable color than the dark green, which renders them such conspicuous objects when in the open field. A regiment of the Italian legion, raised during the late war, was dressed in a silver-grey suit, which was admitted by many competent judges to be the color best adapted for riflemen, besides being very serviceable and becoming.

Clothing to be adapted to climate.

It surely stands to reason that the dress that is adapted to Canada is hardly suited to India, and it is obviously absurd that the troops should parade in Jamaica in the identical uniform that they wear at Aldershott; yet the regulations admit of no material modification to meet those varieties of climate. On active service,* this in course of time corrects itself, and commanding officers, upon their own responsibility, frequently tolerate a deviation from the established orders, from motives of humanity, if not of policy. But there should be no occasion for leaving so important a matter to the discretion and responsibility of individual officers, and even at the risk of breaking that uniformity of dress so desirable in an army, the clothing to be worn in the different colonies, in which the extremes of temperature are represented, should be established strictly with reference to climate.†

Local clothing depôts to be formed.

It may be worthy of consideration whether depôts of the articles of clothing suited to the locality should not be formed under the direction of the military store-

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* During the latter part of the Caffre war the unsuitability of the established clothing and equipment for bush-fighting and desultory skirmishing was so practically admitted, that red and blue flannel shirts were almost universally substituted for the coatee.

† The French troops in Algeria and the Spanish troops in Cuba cast off their cloth uniforms from the hour they land in those colonies and assume light clothing. With us a regiment embarks at Quebec for Barbadoes without making any change in the dress. In the French and Russian army the shako is never worn on active service. The Report of the Commissioners appointed to inquire into the sanitary condition of the army, 1858 (one of the most interesting documents on military questions that has ever been produced) contains strong recommendations on the subject of varying the dress of soldiers according to climate.

keepers at the principal stations abroad. It will probably be found that these articles can be manufactured more perfectly, and at a cheaper rate, in the countries in which they are in common use than in England, and the delay and expense of transport would be saved. A regiment landing from England in India or the West Indies might, under such arrangements, be required to deliver their red coats and shakos into store, receiving in return a more suitable equipment; on re-embarkation their original clothing could be restored.

Free kit.

Every recruit on enlistment receives from Government a complete set of clothing, accoutrements, and necessaries free from charge. His uniform, consisting of a tunic and a pair of trowsers, together with a pair of boots, is renewed annually; his great coat is renewed every three years, except on service or in colonies where it is much used, when it is not required to last above two years.* All infantry accoutrements† are expected to last twelve years, and are not renewed at the public expense at shorter periods, unless under extraordinary circumstances. The necessaries which the soldier is required at all times to possess, such as under-clothing, fatigue suits, knapsack, mess tin, &c., which are enumerated in detail in the War Office regulations, are, after the first free kit is exhausted, maintained entirely at the soldier's expense, the quartermaster issuing every article at a regulated price, which is deducted from the soldier's pay by a daily stoppage not exceeding 2*s.* 7*d.* a week in the cavalry, or 1*s.* 6*d.* a week in the infantry.

Duration of clothing.

Renewal of necessaries.

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* The tunic is the soldier's property and may be sold by him at the expiration of the year, but the great coat continues to be the property of the public, and when unserviceable is returned into store and sold for the benefit of the public.

† In cavalry corps the expected duration of the different accoutrements and appointments varies from five to twenty years.

Owing to the want of a sufficiently organized machinery of inspection the necessaries issued are frequently of a very inferior description. A dishonest contractor may compensate himself for the low rates at which he tenders by delivering bad articles, and many of these, shoes and boots for instance, can only be fairly tested by the minute examination of practical men or by actual use. Whenever the Government does not manufacture its own stores, the strictest supervision should be exercised over the contractors. It is not sufficient to have goods examined when they are delivered into store; the materials and the whole process of manufacture should be open to the inspection of competent and responsible officers, and while the soldier is compelled to purchase his necessaries in a certain market and at a fixed rate, it is surely the duty of the State to insure him the full value for his money. Necessity for superintendence.

The cost of clothing and accoutrements varies very materially in different branches of the service, the equipment of a cavalry soldier being more than double that of an infantry man;* the cost to the public on an average of the last three years may be approximately Cost.

* The following is the average resulting from the charges estimated for the clothing of all ranks during the current year :—

	£	s.	
Life Guards	8	0	per man.
Royal Horse Artillery	4	0	„
Cavalry of the Line	7	2	„
Royal Artillery	3	18	„
Royal Engineers	5	0	„
Military Train	5	5	„
Foot Guards	5	0	„
Infantry of the Line	3	7	„
Colonial Corps	3	1	„

This does not, however, include the cost of great coats or of clothing materials in store.

stated at 4*l.* 4*s.* per head,* and the proportion of the charge for clothing to the total army expenditure during the same period at nearly seven per cent.

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* The clothing of the French army does not directly cost the State more than 32*s.* a head per annum, for the non-commissioned ranks of all arms, but the *prime journalière d'entretien,* though charged as pay, is virtually a disbursement on account of clothing, and brings the charge to about 3*l.* 2*s.* per head.

CHAPTER III.

QUARTERS AND ENCAMPMENTS.

Objections to quartering troops on inhabitants.

THERE is no portion of our military expenditure which the English taxpayer should less begrudge than that devoted to the construction and maintenance of barrack-buildings. Not that this service has always been judiciously or economically conducted; on the contrary, under few heads of army services, has there in times past been so large an expenditure, with a less satisfactory result; but there are some things which the most avaricious Englishman values even above his money, and foremost among these is the sacredness of his home, and exemption from interference with his domestic comforts.

Its effects.

There is hardly a period of our earlier history, in which we may not trace the indiscriminate quartering of troops upon the inhabitants, among the prominent causes of discontent and disaffection; and from the days of King John* to those of Washington, the people have again and again remonstrated against the practice as an intolerable grievance.

Laws to prevent excesses.

Laws more or less stringent† were from time to time enacted for the protection of the citizens against the

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* Under the earlier Norman kings, monasteries were principally used for the quartering of troops, partly perhaps to avoid collisions between the conquering and the vanquished races; but more probably because of the superior conveniences afforded by the monastic establishments for the accommodation of large bodies of men.

† The billeting system prevailed to some extent in the Roman armies, more particularly in the provinces; but under the civil code of the empire the exaction by the soldier of anything beyond the stipulated accommodation of straw, salt,

oppression or excesses of soldiers quartered upon them; but even in its most mitigated form the system is one calculated to wound an Englishman in a most tender point, and one moreover very detrimental to military discipline.

Causes of its discontinuance.

It is surprising that a law at once oppressive to the people and mischievous to the army should have survived so long as to the middle of last century; its repeal* was probably owing rather to a regard for the liberties of the people than to considerations of military policy. Be this as it may, from the hour that it was declared illegal, and rendered a penal offence to quarter troops upon private houses, the State assumed the obligation of providing barrack-buildings for the army, and the people tacitly submitted to be taxed for this purpose in purse instead of in comfort.

Foreign barracks maintained by municipalities.

The practice of making the inhabitants of a town or other locality contribute directly to the construction or maintenance of military barracks, which prevails in most of the continental states, has never been adopted in England, although it is perhaps open to no valid objections, more particularly in cases of troops being quartered in a place with especial reference to local interests. The advantages derived by trade from the presence of a military

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fire, and water, was rendered a serious military offence.—(Corp. Jus. Civ. LXII. Tit. 41 & 42.)

* The enactment rendering it penal to quarter troops upon private individuals in England was passed in 1745, though under William the Third the practice had already been deprived of its most obnoxious features. At present licensed victuallers only are liable to provide billets, receiving in return for board and lodging furnished a small and by no means remunerative rate of payment. In Scotland the practice of quartering troops upon private houses was in force until last year; the billeting laws in both countries have now been assimilated.

force are considerable,* and the community which immediately profits by it, may without injustice be required to contribute to some extent towards its cost. It is on these grounds that, in many foreign countries a certain proportion of the barracks are required to be constructed at the expense of the different municipalities, who bind themselves in consideration of a garrison being maintained to keep the buildings in proper repair. Of course this arrangement does not apply to barrack buildings in fortresses, or other places permanently maintained as military stations for the public interests.

Barrack system in the British service.

In this country all barracks are the property of the State, and are kept in repair at the public expense. They are built upon the plans and under the directions of the corps of Royal Engineers, by contractors who enter into special agreements for these services. Of late years so much attention has been directed to the subject of military architecture in connexion with sanitary science, that our Engineer officers have made it a special study; but such was not the case formerly, and the defective arrangements, the inconveniences, and the unhealthiness of many of our barracks are owing to their having been planned and built under the superintendence of a highly educated but by no means practically experienced body of men. Even when the building itself was free from objection, the site frequently proved unhealthy or inconvenient in consequence of its having been selected by the military authorities without reference to local or medical experience.

Neglect of sanitary precautions.

Among the many important results of the application of sanitary science to the circumstances of domestic life, those which demonstrate the influence exercised over the

* The annual local expenditure of a line regiment may be moderately estimated at £10,000 a year.

physical condition of man by the nature of his dwelling-place are, perhaps, the most prominent and useful. Many calamities and sufferings, which in our ignorance we have too long been willing to accept as the visitations of Providence, we are now by improved knowledge enabled to trace to our own folly or imprudence and to a disregard of the most ordinary rules of health; and those who have devoted themselves to the investigation of this subject, have so clearly established the connexion between cause and effect, that they can, under ordinary circumstances, estimate with tolerable accuracy the average rate of mortality in a given number of men, from a mere description of the dwellings they have been accustomed to occupy.

Sanitary science.

Sanitary science, the object of which is to *prevent* disease, need not, like medical science, which purports to *cure* it, be made a special study and profession by a distinct class of men. Based upon the common law of nature, our daily experience and observation suffices to teach us its broad principles; and as every man knows that to eat tainted meat or to drink tainted water will produce certain injurious results, so he should know that to breathe tainted air, as he must do if he live in ill-ventilated, ill-drained, or overcrowded dwellings will necessarily detract from health and strength, and in proportion as these influences are weaker or stronger affect the chances of life. Yet many a military officer, who would indignantly reject meat or bread of an inferior quality if offered to his men, will without remonstrance allow them to live in an atmosphere more poisonous than the worst food that could be eaten, and simply from being unaccustomed to estimate the inevitable effects of the evil, neglect the most ordinary precautions for overcoming the obvious dangers and inconveniences which continue to beset our soldiers in many of their barracks.

Importance of air, space, and ventilation.

It is considered that the minimum space which should be allotted to each soldier in barracks is 600 cubic feet,* a smaller space being insufficient to furnish the quantity of pure air necessary to health; hitherto our regulations have allowed to each soldier in his barrack only 450 cubic feet, and even this minimum has not in a majority of cases been attained. In some barracks, indeed, the space per man does not exceed 220 cubic feet; and from the construction of the buildings, even this small allowance of breathing room is deteriorated in consequence of free ventilation being too commonly sacrificed to other considerations. The importance to health of a free passage of external air is perhaps little appreciated by the class of men from which our soldiers are principally taken, since even in agricultural districts where economy of space is not so great an object as in cities, we find the working man and his family too much disposed to huddle into small rooms, and to exclude fresh air as an enemy to comfort.† Military officers would perform an act of humanity and kindness in endeavouring to demonstrate the inevitably mischievous effects of this error, and in inducing the soldiers themselves to counteract, by attention to the ordinary rules of health, the defective construction of their dwelling places.

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* See the Report of the Commissioners on the sanitary condition of the army.

† The labors of sanitary reformers need not be confined to cities; even among the better class of farmhouses there is frequently displayed an astonishing defiance of the common principles of health. Small windows, too often hermetically closed, low ceilings, neglected drainage, and a dunghill with its teeming mass of decayed animal and vegetable matter in the closest proximity to the house, combine to produce an atmosphere in-doors which must go far to neutralize the natural advantages of a country life.

Day rooms and accommodation for married soldiers.

The absence of day rooms (to obviate the necessity of the men breathing throughout the day the vitiated atmosphere of their dormitories) and the want of suitable accommodation for married soldiers has long been seriously remonstrated against by military officers who recognize in the domestic comforts and decencies of life one of the most powerful means of raising the moral standard of the army. The attention of the Government has of late been directed to this subject, and as a strong disposition exists on the part of the people to improve the soldiers condition, it may be anticipated that these serious defects will before long be remedied.*

Means of recreation and healthful exercises.

The means of healthy recreation are also wanting in most of our barracks. Gymnastic exercises, which in foreign armies form part of every young soldier's education, are entirely neglected with us, and although our military authorities cannot be insensible to the inevitable effects of an idle life in quarters upon the character of a body of men, few practical measures have hitherto been adopted by the Government for providing employment combined with recreation for our soldiers when off duty. Many regimental officers have out of their private means endeavoured to supply this want, but a matter of such vital importance to the efficiency of an army should not be left to the chances of individual generosity or energy. If every barrack were, as a matter of course, provided with a racquet or five's court, and those that might admit of it, with a cricket ground, the canteen and public-house would soon lose their attraction, and more

* It is stated in the Report on the sanitary condition of the army, that out of 251 barracks in the United Kingdom only 20 contain separate accommodation for married soldiers, and even in these exceptional instances the space afforded for an entire family is not more than is requisite for the suitable accommodation of a single individual.

would be done by these means to diminish crime than by all the punishments that could be devised.

Reading rooms and libraries.

In regard to intellectual recreations great progress has been made of late years, and the institution of barrack libraries and reading rooms cannot fail to exercise a beneficial effect.

Barrack masters.

All military buildings are under the charge of barrack masters, who are required to allot quarters to officers and men according to their ranks and numbers, and to hold periodical inspections with the view of ascertaining and assessing the value of damages done by the troops, and to bring all requisite repairs under the notice of the engineer department. They also receive into their charge, from the principal government stores, all articles of barrack furniture, implements, and utensils which are issued in fixed proportions to the troops in occupation of barracks.

Barrack furniture.

All barrack furniture, &c. is obtained by contracts entered into by the War Department, and is maintained in repair at the cost of the public. The system adopted in this respect in most foreign armies where barrack furniture is not exclusively manufactured for the Government, but supplied on hire by contractors at a certain rate for each set of articles in actual use, is attended with considerable advantage to the public, and might probably be found worthy of imitation in this country. The accumulation of a large quantity of Government stores involving considerable expense for their use, custody, and storage is avoided by these means, whilst the superintendence exercised by the *Intendance* ensures the service being conducted with regularity and economy.*

The annual charge in the French army for the hire of barrack furniture, including bed linen, paillasse straw, washing, &c., is about 15 francs per man per annum; with us this

Suggestions for its supply under contract.

The principle of requiring our colonies to contribute to the maintenance of the military force quartered for their protection is now to some extent acted upon, and there would be no hardship in making each colony provide, in addition to barrack accommodation, the regulated allowance of barrack furniture, while in the United Kingdom contractors would be found willing and able to undertake the supply. This would, in the course of a few years, effect a considerable saving, even were the existing supplies of Government barrack stores gratuitously handed over to the different colonies or contractors upon the condition of their maintaining them in proper repair at a rate to be agreed upon, and renewing them at their own cost when rendered unserviceable.

Encampments.

Attention to sanitary rules is quite as indispensable in the arrangement of a camp as in barracks. It is probably more so, since the men are more exposed to external influences in the field than in garrison. Strategical considerations must, of course, in a great measure decide the selection of ground for an encampment, but there are other points which cannot with impunity be overlooked, and the practice hitherto prevalent in our army, of allowing a staff officer to select the site of a camp, without the concurrence of medical or administrative officers cannot be too strongly condemned.* A

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service amounted on an average of the last three years to about 25*s.* per man. In the Sardinian and Belgian armies, where the French system prevails, the charge varies from 14 to 18 francs per annum.

* Among the recommendations of the Commissioners of Inquiry into the Sanitary State of the Army, is the appointment of an officer, subordinate to the medical department but attached to the quarter-master general, to advise upon all questions connected with the sanitary arrangements of camps. The necessity of military officers consulting with medical

quarter-master general may be thoroughly acquainted with his professional duties, and in choosing a position may be fully able to estimate the various advantages of the ground as regards military arrangements and operations, but he may be at the same time thoroughly ignorant of sanitary science, and he would probably be apt also to overlook the importance of administrative considerations, such as facilities attending supply duties. In the French army the intendant * and the medical officer are invariably consulted in matters which bear ever so remotely upon their respective services, and it is to be hoped that a truer recognition of the principles of the military art, which every day's experience tends to foster, will lead to a similar system being adopted in our service.

Opinions of Baron Larrey.

Passing by the strategical considerations, which should influence the selection of the site for a camp, there are certain obvious conditions of a non-military character which should not, unless for the most urgent reasons, be overlooked. A recent Report, made by Baron Larrey, on the sanitary arrangements of the camp at Chalons, so perfectly comprises all the most important points to be considered, with reference to the health and the comfort of troops in the field, that a few condensed extracts from that document will prove far more interesting and instructive than any original remarks that could be

officers on subjects that bear upon the health of armies, is also strongly urged.

* So thoroughly are the principles of administration identified with military operations in the French army, that the *intendant-en-chêf* is as a rule elected a member of every council of war. Many examples could be cited of the mischievous results arising from the want of concerted action between our generals and their commissariat, owing to the latter being kept in ignorance of military projects.

offered; and the following observations may accordingly be taken to embody the opinions of that distinguished authority.

A camp, especially if permanent, should be selected so as to be accessible to the troops by easy marches; it should occupy a spacious plain, in a province exempt from both epidemical and endemical diseases; the soil should be dry, but not too hard, so that it may quickly imbibe the rain; because it then becomes fit for military operations a few hours after the most violent shower. This prompt absorption, moreover, preserves the troops from the baneful influence of dampness without exposing them to the inconveniences of want of water, since in such a soil wells may be easily dug and water found at an inconsiderable depth, as is the case at Chalons. A good camp should not be intersected by streams or ditches, nor enclosed by large forests. The tents should not be too closely packed, in order to insure good ventilation throughout, diminish the probability of epidemics, and facilitate the concentration of an infection within a limited space.

When a river is too near a camp, and its banks are somewhat marshy, the breaking out of intermittent fevers should be prevented by deepening the bed of the river, cleansing it as much as possible of all putrefying vegetable and animal substances, raising the banks and giving them at the same time a greater inclination, making channels for carrying off the water, and establishing tents and barracks at a sufficient distance, and as much as possible on rising ground.

When the supply of water to a camp is derived from a river the latter ought to be divided into three sections, the first and upper one to be exclusively used for drink by the men, the second to be reserved for the horses, and the third and lowermost for washing the linen of the

troops. These demarcations should be strictly guarded by sentinels stationed at the proper places. To drive off dampness, bivouac-fires ought to be lighted in the evening; each tent, moreover, should be surrounded with a gutter communicating with a main ditch to carry off rain-water; the space occupied by certain corps should also be sanded over, to facilitate the absorption of humidity by the soil. In pitching tents care should be taken to maintain between them a distance of at least two metres; those of the general officers should be situated in the healthiest quarter. Tents made of white stuff are prejudicial to the eyesight in summer, and should be therefore discarded. A tent being liable to infection like a room, it ought not to be hermetically closed, as is the custom with soldiers, but, on the contrary, well aired; and the ground ought not only to be scraped and swept, but should also be well rammed. The men ought not to sleep in the tents with their heads near the centre and their feet towards the circumference, but in the contrary position, else they breathe a vitiated instead of a pure air.

A tent, generally calculated for 16 men, ought never to contain more than 12 or 13 infantry, and 8 or 10 cavalry. Of the different kinds of tents the conical Turkish tent is the best; for ambulances the marquee is preferable. The *tente-d'abri*, which is made by joining two camp-sacks together by means of a wooden pole, and keeping them stretched by small stakes stuck into the ground, is a most precious invention. Four men can find shelter under it, and the weight it adds to their kit is trifling, but it can only be used in provisional encampments. The tents of the cavalry ought to be freed from the encumbrance of saddles and accoutrements, which vitiate the air, and should be placed under small sheds in front of the tents, or, better still, in the stable barracks.

The men should be encouraged to cultivate little patches of ground around their tents as gardens, it is both an amusement and a means of purifying the air, only they must not be allowed to manure the soil. As regards sleeping, each soldier should fill a camp-sack with straw and lie down on it as on a mattress, with his blanket to cover him, or, better still, he should get into the sack filled with straw—a much better plan than allowing the men to sleep together in couples on two sacks spread out on the straw, and with the same blanket to cover them. The ground on which the men sleep ought to be swept daily and sanded over, for it easily gets infected, in which case it becomes necessary to shift the tents, a measure which is often sufficient to stop an epidemic at its outbreak. A reserve of planks and trestles ought to be kept in store for extempore bedsteads when the ground has become too damp; or waterproof canvas may be spread over to protect the straw from humidity. In autumn a single blanket is not sufficient, each man should be provided with two.

Barrack expenditure.

The expenditure incurred on account of the erection and maintainance of barrack buildings at home and abroad, forms a very large item in our army estimates. During the last five years the following are the sums voted for this service:—

1854–5	-	-	£495,755
1855–6	-	-	846,719
1856–7	-	-	1,269,444
1857–8	-	-	522,715
1858–9	-	-	665,329
			£3,799,962

This amount includes the cost and repairs of hospitals as well as the purchase of land and erection of buildings in the permament encampments, but the proportion devoted

to the actual accommodation of soldiers is only about one-fourth of the total expenditure, the remaining three-fourths being absorbed by the cost of officers' quarters and the various offices and premises attached to military barracks.* Taking the average barrack expenditure† and strength of the army (excluding the proportion in India) during the last three years, the annual cost of quarters per man would appear to amount to 4*l.* 17*s.* 6*d.*, but the expenditure immediately chargeable to the soldiers' lodging would probably be found on investigation not to exceed 20*s.* annually per man. The charge for barrack and hospital furniture, straw, and washing and repairing bedding amounts on an average for the same period to 3*l.* 15*s.* per man, and the united items of barrack buildings and furniture amount to nearly seven per cent. on the total army expenditure.

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* This disproportion is curiously illustrated by an item in the army estimate for 1858–59, in which we find the cost of barrack accommodation for 500 men at Dover estimated at £29,163, or about £60 per man, while the erection of quarters for 44 officers at the same place is estimated at £40,600, or £925 for each.

† Exclusive of the charges for fortifications and civil buildings, (such as magazines, military factories, store houses, &c.) which amounted during the last three years to nearly a million and a half, viz., for fortifications £942,453, and for civil buildings £491,853.

APPENDIX.

Appendix A. (Page 42.)

State of the Commissariat Establishment, with the British Auxiliary Force during the Seven Years' War, and Plan submitted by Commissary-General Hatton for an increased Establishment.

(*Extract from Treasury Minutes, April* 1761.)

"State of the Present Commissariat."

		Employment.
"1. Colonel Pierson	- Supervisor and Director of Commissaries.	At Prince Ferdinand's head-quarters.
2. Mr. Hatton -	- Commissary-General.	Ditto.
3. Mr. Blackeney	- Commissary-General.	With General Wangenheim.
4. Mr. F. Halsey	- Commissary	- At Munster with the Hereditary Prince.
5. Sir James Cockburn	Commissary	- With the British Cavalry at Pyrmont.
6. Mr. Thomas Halsey	Commissary of Accounts.	Hamelen.
7. Mr. Hatton -	- Ditto -	- Paderburn.
8. Mr. Fuhr -	- Commissary of Forage.	——
9. Lieutenant Gun	- Assistant Commissary.	In the Schaumburg country.

President Masson is named by the Duke to assist the whole without appointments. In all, 9 Commissaries.

N.B. Mr. Fuhr acts without a commission."

"PLAN of the COMMISSARIAT as Mr. Hatton thinks H.S.H. the Duke wants it."

"1 Colonel Pierson - -	To be free of all military employment, to direct the commissaries and attend solely to the supplies of the army.
1 Commissary-General -	To be always at headquarters.
1 Commissary of Accounts	
1 Cashier - - -	
1 Commissary - -	To attend the corps commanded by the Hereditary Prince, Mr. Halsey not being able to attend to supplies and accounts.
1 Commissary of Accounts	
1 Cashier - - -	
1 Commissary - -	To attend the cavalry where Sir James Cockburn now is.
1 Commissary of Accounts	
1 Cashier - - -	
1 Commissary - -	To attend the cavalry where Mr. Blackeney now is.
1 Commissary of Accounts	
1 Cashier - - -	
1 Commissary - -	To attend General Lukener's corps.
1 Commissary of Accounts	
1 Cashier - - -	
1 Commissary - - -	To attend the transport of the guns.
1 Commissary - - -	On the Weser.
2 Commissaries - -	To attend the deliveries of contractors, and to inspect magazines."
20	

APPENDIX B. (Page 64.)

EXTRACTS from STATEMENTS submitted by SIR C. TREVELYAN to the SELECT COMMITTEE on ARMY and ORDNANCE EXPENDITURE.—Report, 1 Aug. 1850.

Page 491.

"As soon as any demand arises for the service of the troops in the field, or on the occurrence of serious disturbance, the experienced officers of the commissariat must be had recourse to, as was the case in 1848 in Ireland, and in the camp formed

at Liverpool and Manchester, in the expectation of Chartist disturbances; and it is extremely desirable that the same agents should be employed, and, as far as possible, the same system followed during peace as during war. At such a time everybody should know his place and the part he has to perform, and the commissariat officer should have everything in readiness both as regards his arrangements with his contractors, and his knowledge of the further resources of the country upon which it may be necessary for him to draw. A sudden change of men and system at such a time can only be productive of confusion and waste, besides increasing the risk of military reverses."

Pages 1043–4.

"In order to meet the serious emergencies of war, and to keep in check the heavy expenditure arising from them, the Treasury should have at its disposal able and trustworthy men of business for all the more important posts, and it is therefore indispensably necessary that we should have full previous experience of our agents, in order that we may know how far each can be trusted, what officers are possessed of the sagacity, prudence, and moral courage which qualify for the higher and more responsible charges, and who are possessed of the activity and executive ability which fit them for the practical duties connected with the supply of the troops in the field. This most important object is at present fully attained, for the senior officers of the department have been tried and proved under so many different circumstances of peace and war, in many different parts of the world, that no doubt remains as to the manner in which they would acquit themselves in any situation in which they might be placed; and the same remark applies to some of the younger officers who have had more than usual opportunities of showing the qualifications they possess.

"The consequence of bringing together a large number of untrained persons unacquainted with the regulations and practice of the service, unknown to their superior officers, and unaccustomed to act together, was seen in the waste and profusion which characterized the commencement of the Peninsular war; it was also seen on a smaller scale in the Canada insurrections and the Caffre war, when it became necessary to employ a large number of inexperienced persons in subordinate, although in

many cases, important situations. . . . . The habit which the trained officers of the department have of dealing with the public money in a variety of ways, as if it were any other commodity with which they have to do in the course of their business, is only acquired by degrees. . . . . .

"It must also be remembered that when officers have to be taken on a sudden from other professions, the persons who offer themselves are generally the least worthy and able members of those professions. Those who have been successful remain in their own business, while only those who have been unsucessful from any cause seek a new profession.

"The least efficient of all the departments of the Indian Government is the Commissariat, which is mainly owing to the Indian commissariat officers being taken from the army without any previous experience. The business of the commissariat is one which requires for its successful performance the experience of a life, and the devotion of the faculties more than most other professions. It is concerned with important and various objects; it brings the officers of the department into close connexion with many different kinds of persons both in and out of the public service (the firm deference due to the commanding officer in laying before him representations relating to unauthorized expenditure, and the caution required in dealing with sharp men of business of all sorts, who are striving to forward their own interests at the expense of the public, are instances in point); it is the subject of a detailed system of regulations extending to those of several other departments of the public service; and the difficulty, trust, and responsibility, especially in time of expected or actual war, are such as to call for the exercise of the highest mental and moral qualities."

Page 1167.

"The reasons for keeping a branch of the department in a state of efficiency in the United Kingdom are not, however, confined to the exigencies of the home service. The great reserve of the British army for service in every part of the world is in this country; and it is as necessary that a proportion of trained experienced commissariat officers should be in readiness to accompany any expedition which may at any time be sent to any quarter, or to reinforce the department in any of the colonies in which rebellion or invasion is appre-

hended, as that there should be experienced medical officers, or officers of artillery, engineers, or of the civil branch of the ordinance in reserve. An army is quite as helpless without a properly organized commissariat (that is, without a certainty of being regularly provided with food, forage, transport, and money,) as without ammunition.

"Commissariat officers able to supply troops in movement in the face of an enemy, familiar with all the intricacies of the military and ordnance regulations, accustomed to act with military officers of various grades, and habituated to the consideration that the economy of the public money is to be enforced by every means consistent with the due execution of the public service, require many years for their formation.

"*It is at the commencement of a foreign war or domestic insurrection that the greatest liability exists to profuse expenditure, and consequently the greatest necessity for being prepared with the measures of precaution which experience has proved to be the best. It is hardly too much to say that millions might have been saved if there had been a sufficient number of well-trained commissariat officers, of proved integrity and ability, at the beginning of the Peninsular war, leaving only the subordinate situations to be filled by new appointments.*" It would also have been a great advantage if, at the breaking out of the Canadian insurrection and the Kaffir war, there had been a small branch of the department at home from which four or five experienced commissariat officers might have been detached: in fact, the experience of the last forty years has demonstrated that upon the occasion of any great and unforeseen movement of a military force, the extraordinary expenditure for the military service is considerably increased, the proceedings of the commissariat impeded, and much confusion and loss caused, by the want of a sufficient number of experienced officers to meet the urgent and important services required. The advantage of having such a reserve was experienced in 1826, when an expedition was suddenly sent from this country to Lisbon. On that occasion assistance was obtained from the commissariat establishment serving in Ireland, and from the half-pay list (which had not then been exhausted of efficient officers),and the consequence was, that during this service the business of the commissariat was carried on in a very regular and satisfactory manner; a large expenditure was materially economised, and an improved system of account

was successfully introduced, which became the foundation of the simple and concise system established in 1843 throughout the department."

Appendix C. (Page 125.)

Composition of Foreign Legions.

"The German Legion was composed of the following nations:—

2,544	Prussians.
1,018	Bavarians.
816	Hanoverians.
548	Badeners.
488	Holsteiners.
464	Hessians.
412	Belgians.
356	Saxons.
324	Hamburgers.
284	Mecklenburgers.
264	Luxemburgers.
180	Brunswickers.
136	Wurtembergers.
126	Natives of Gotha and Saxe Weimar.
92	Dutchmen.
56	Nassau.
472	Austrians and Swiss.
700	Germans raised in America.
Total - 9,312	

"The Italian Legion raised in Sardinia consisted of:—

837	Natives of Lombardy.
1,719	„ Piedmont.
218	„ Parma.
114	„ Modena.
85	„ Tuscany.
59	„ Rome.
25	„ Naples.
27	„ Hungary.
Total - 3,129	

APPENDIX D. (Page 362.)

SCHEME of DIETARY for SOLDIERS proposed by Colonel Sir A. M. TULLOCH, K.C.B.

BREAKFAST.

Bread	- - - -	8 oz.
Coffee	- - - -	$\frac{2}{3}$ „
Sugar	- - - -	1 „
Milk	- - - -	1 gill.

SUPPER.

Bread	- - - -	8 oz.
Tea	- - - -	$\frac{1}{4}$ „
Sugar	- - - -	1 „
Milk	- - - -	1 gill.

DINNERS.

No. 1.

Irish Stew	Mutton - -	12 oz.
	Potatoes - -	16 „
	Onions - -	$\frac{1}{2}$ „
Rice Pudding	Rice - -	$2\frac{2}{3}$ „
	Milk - -	$2\frac{2}{3}$ gill.
	Sugar - -	11 drams.

No. 2.

Salt Beef or Pork	- - -	12 oz.
Pease Soup	Pease - -	$\frac{1}{3}$ pint.
	Onions - -	$\frac{1}{2}$ oz.
Colcannon	Potatoes - -	8 „
	Greens - -	8 „
Bread	- - - -	$5\frac{1}{3}$ „

No. 3.

Mutton, baked	- - -	12 oz.
Potatoes	- - - -	16 „
Yorkshire Pudding	Flour - - -	5 „
	Suet - - -	$\frac{1}{2}$ „

No. 4.

Beef, boiled	- - - -	12 oz.
Soup, containing	Vegetables - -	8 „
	Rice or Barley - -	2 „
Potatoes	- - - -	16 „
Bread	- - - -	$5\frac{1}{3}$ „

No. 5.

Beef, baked		12	oz.
Potatoes		16	„
Plum Pudding	Flour	$2\frac{1}{2}$	„
	Raisins	1	„
	Suet	1	„
	Sugar	1	„

No. 6.

Mutton, boiled		12	oz.
Soup containing	Vegetables	8	„
	Rice or Barley	2	„
Potatoes		16	„
Bread		$5\frac{1}{3}$	„

No. 7.

Beef, stewed		12	oz.
Vegetables		8	„
Potatoes		8	„
Bread		$5\frac{1}{3}$	„

No. 8.

Soup made of the head, shanks, and feet.
Roast Heart.
Fried Liver,
And Tripe.

Note.—Since Dr. Christison's analysis of this diet has been communicated to me, I propose to substitute, on the first day, suet for rice pudding, composed of 3 oz. of flour, one of suet, and about one of sugar; also to add, to the seventh day's dinner $\frac{1}{2}$ lb. of potatoes and 2 oz. cheese, to be eaten with the extra bread charged on that day, which would bring the nutritive properties of the diet to about the same average as for the rest of the week, and add only a small fraction to the expense.

(Signed) A. Tulloch, Col.

It is computed that the ordinary garrison ration, with a weekly outlay by the soldier of 1*s.* 2*d.*, would suffice to carry out this scheme.

Appendix E. (Page 365.)

Scale of Rations allowed in the Field during the late War.

	Bread.	Meat.	Rice.	Sugar.	Coffee.	Spirits.	Salt.	Pepper.	Vinegar.	Lime Juice.	Sour Kreut.	Peas or Barley.
	ozs.	ozs.	ozs.	ozs.	ozs.	gills	ozs.	ozs.	gills	gills	ozs.	ozs.
English - - -	24	16	2	2	1	1	$\frac{1}{2}$	$\frac{1}{4}$	—	—	—	—
French - - -	$29\frac{1}{2}$	$10\frac{9}{16}$	$2\frac{1}{8}$	$2\frac{11}{16}$	$\frac{9}{16}$	$\frac{7}{16}$	$\frac{3}{4}$	—	—	—	—	—
Sardinian - - -	26	$10\frac{9}{16}$	$4\frac{1}{4}$	$2\frac{11}{16}$	$\frac{9}{16}$	—	$\frac{1}{4}$	—	—	—	—	—
Turkish - - -	33	13	3	—	—	—	$\frac{3}{4}$	—	—	—	—	$\frac{1}{4}$
Russian - - -	16	16	—	—	—	—	$\frac{3}{4}$	—	2	—	3	$\frac{1}{2}$

In the French and Sardinian armies the allowance of salted meat is about one-fourth less than the fresh meat ration. The Turkish rations quoted are not those issued by the Government of the Porte, but those established by the British authorities for the Turkish contingent attached to our army

Appendix F. (Page 374.)

Report on Amalgamated Forage.

Proceedings of a Board of Officers assembled by Order of the Commander-in-Chief on the 19th January 1856, for the Purpose of inquiring into the Desirability of issuing Forage, compressed upon a new Principle, to the Horses of the Cavalry and Artillery.

President—Colonel Douglas, C.B., 11th Hussars.
Members—Colonel Barker, C.B., Royal Artillery;
Principal Veterinary Surgeon Wilkinson.

The Board, having assembled according to the order, proceeded to examine some oats and hay and bran compressed into one mass by a plan submitted by Assistant Commissary-

General Julyan; each mass consists of one day's forage, with marks to indicate how it should be divided into three feeds. The weight of each ration is 22 lbs., in the following proportions, viz., 12 parts of hay, 10 of oats, and 2 of bran, which is equal to the present cavalry ration at home and abroad.

The board are of opinion that the forage, as submitted to them, has many advantages over that at present issued to the service in consequence of the great facility with which it can be carried both by sea and land, occupying as it does, one-third the space required for the same forage as now compressed in this country for use in the Crimea, in consequence of which a very great saving would accrue to the Government notwithstanding any additional expense which might attend its preparation, and there would be a considerable saving in the forage itself, as little or no waste would take place in either the subdivision or feeding.

It is proposed to send this compressed forage abroad in light canvas bags capable of containing the allowance for four days, and which may be made available as nose-bags to hold the increased bulk, rendered necessary by this new mode of feeding.

The above canvas bags, however, are not to supersede the present nose-bags, which must still be retained for the ration of barley or oats when issued as heretofore.

The board are also of opinion that, as far as they can judge, the nutritious qualities of the forage are not at all impaired by the mode of preparation, and that the proportions of hay corn, and bran in each ration are good, they therefore recommend that it may be immediately tried by both the cavalry and artillery, with a view to testing its qualities as an article of food, as well as to determine the best mode of carrying and distributing the weight on the horse's back, and should the reports be considered satisfactory the board suggest its immediate adoption in the service.

(Signed) S. Douglas, Lt.-Col. 11th Hussars.
(Signed) G. R. Barker, Lt.-Col. R. A. and Col.
(Signed) J. Wilkinson, P. V. Surgeon.

APPENDIX G. (Page 404.)

CLOTHING SYSTEM IN THE SARDINIAN ARMY.

The Sardinian soldier is credited on joining with the sum of 80 francs, out of which he is required to purchase his regulated kit, the cost of which is about 76 francs, including his uniform tunic and trowsers and his shako, the balance goes into the regimental clothing fund, which is further maintained by a daily stoppage of from 14 to 22 centimes a day (according to the arm in which he serves), this sum, amounting thus to *1l.* 2*s.* 10*d.* per annum, suffices to keep the soldier, if commonly careful, complete in clothing and necessaries during the entire term of his service (4 years), and sometimes a small balance even remains to the man's credit. The entire cost of the Sardinian infantry soldier's clothing and necessaries for his full period of service does not accordingly exceed 8*l.* 3*s.* 3*d.*

The Belgian system is very similar to the Sardinian, both differing from the French in respect to the *uniform* not being provided and renewed by the Government but from the regimental clothing fund.

APPENDIX H. (Page 155.)

UNDER THE ROYAL WARRANT of 1st October 1858, the Medical Department of the Army is constituted as follows :—

Grade.	Relative Rank.	Pay.			Half-Pay.†
			£ *s.* *d.*		£ *s.* *d.*
1. *Inspector-General of Hospitals.*	*Brigadier-General* After 5 years' Full-Pay Service in that rank - -	After 30 years' Service*	2 5 0		1 17 6
		„ 25 „ „	2 5 0		1 13 6
	As *Major-General*	„ 20 „ „	2 0 0		1 10 0
2. *Deputy Inspector-General of Hospitals.*	*Lieutenant-Colonel* After 5 years' Service in that rank -	„ 30 „ „	1 14 0		1 5 6
		„ 25 „ „	1 10 0		1 2 6
	As *Colonel* - -	„ 20 „ „	1 8 0		1 1 0
3. *Staff or Regimental Surgeon.* After 20 years' Service to be styled *Surgeon-Major.*	*Major* - - -	„ 15 „ „	0 18 0		0 13 6
		„ 10 „ „	0 15 0		0 11 0
	Lieut.-Colonel - but Junior of that rank - -	„ 15 „ „	1 5 0		0 18 6
		„ 10 „ „	1 2 0		0 16 6
4. *Staff or Regimental Assistant-Surgeon.*	*Lieutenant* - - After 6 years' Full-Pay Service -	„ 10 „ „	0 13 0		0 10 0
		„ 5 „ „	0 11 6		0 8 0
	As *Captain* - -	Under 5 „ „	0 10 0		0 6 0

* Full Pay Service only.

† In consequence of reduction, or physical or mental incapacity; after 25 years Full Pay Service officers are entitled to retire upon seven-tenths of the daily rate of pay in which they are in receipt, provided they shall have served three years in the rank from which they retire, or ten years in all in the colonies or five in the field.

A successful examination after five years' Full Pay Service, of which two must be passed in a regiment, is required to be passed to entitle an Assistant-Surgeon to promotion to a Surgeoncy; a Surgeon must have served ten years in the army, and at least two years as Regimental Surgeon, and a Deputy-Inspector five years at home or three abroad, before being eligible for promotion. It is, however, in the power of the Secretary of State to dispense with these conditions in cases of emergency.

Promotion above the rank of Surgeon is to be made by selection. Good Service Pensions will be awarded to a certain number of medical officers, and six will be named Honorary Physicians, and six Honorary Surgeons to the Queen.

Appendix I. (Page 154.)

Royal Warrant establishing the Constitution and future Organization of the Commissariat Department.

1. The duties of the Commissariat shall be superintended and directed by an officer of that department, with the designation of Commissary-General-in-Chief, acting under orders from Our Secretary of State for War.

2. The ranks of Commissariat officers in Our Army shall be as follows, viz. :—

Commissary-General;
Deputy Commissary-General;
Assistant Commissary-General;
Deputy Assistant Commissary-General, including a probationary class of Acting Deputy Assistant Commissaries-General.

3. To be eligible for promotion, an officer must have served on full pay during the following periods, dating from his first entrance into the probationary class :—

A Commissary-General thirteen years, and at least three years thereof as Deputy Commissary-General.
A Deputy Commissary-General ten years, and at least two years thereof as Assistant Commissary-General.
An Assistant Commissary-General, five years.

4. All first appointments to the Commissariat shall be made from the subalterns of Our army, provided a sufficient number of qualified volunteers, duly recommended by their commanding officers, can be procured. Volunteers shall be of not less than two years' service as commissioned officers, and under twenty-five years of age; they shall be subjected to an examination, and, if found competent, shall be placed on a list according to their merits, and in their order thereon shall be employed by the Commissary General-in-Chief, under the authority of Our Secretary of State for War, as their services may be required. These volunteers shall be subjected to a probation of six months, with the rank of Acting Deputy Assistant Commissary-General; at the termination of which period, if found competent, and still willing to serve in the Commissariat, they shall be required to resign their military commissions, and shall be furnished instead with commissions as Deputy Assistant Commissaries-General.

5. The establishment of the Commissariat shall be fixed, from time to time, on the same principle as that of Our army; and in order to furnish a reasonable preparation for war, it shall be maintained to such an extent as to provide suitable employment in peace for officers, not only in the colonies, but also at the several camps and large military stations at home, according to the ordinary requirements of the service.

6. In selecting officers for promotion, provision shall be made for the advancement of those who have shown special aptitude for their duties, or have distinguished themselves by zeal and ability in the performance of them; but such selection shall be mainly guided by length of efficient service. The promotions in the Commissariat shall take place, as in other branches of the public service, as vacancies occur.

7. On reduction of the establishment, the junior officers of the respective ranks shall be the first reduced; and on restoration to full pay, the reduced officers who are senior in their rank shall be the first restored, except in cases in which a strict adherence to such rule would be manifestly detrimental to the public service.

8. In order to obviate the necessity for an undue augmentation of the establishment in time of war, and the consequent

inconvenience arising from a large reduction on the termination of hostilities, the commissariat shall be allowed to avail itself of the temporary assistance that may be afforded by officers drawn from Our regular army, or from the half pay of Our army, to be selected under regulations which shall be framed for the purpose by Our Secretary of State for War and Our Commander-in-Chief, to act in the capacities of assistant and deputy assistant commissaries-general. The officers of Our army thus placed on the commissariat staff shall be considered supernumerary in their regiments, retaining their proper places in their respective corps, and participating in regimental promotion as opportunities offer, but they shall be employed exclusively in the duties of the commissariat, and shall not be at liberty to withdraw themselves from those duties so long as their services may be required, except in cases of promotion to the rank of field officer in their regiments.

9. The relative rank of the commissariat officers of Our army shall be as follows, viz.:—

Commissary-general, as major-general;
Deputy commissary-general of five years' standing, as colonel;
Deputy commissary-general under five years' standing, as lieutenant-colonel;
Assistant commissary-general, as major;
Deputy assistant commissary-general, as captain;
Acting deputy assistant commissary-general, as lieutenant in the army;

and their quarters and military allowances, including pensions for wounds, and allowances to their widows and families, shall be regulated accordingly.

10. The commissariat shall be allowed to draw subordinates, such as clerks, storekeepers, issuers, butchers, bakers, &c., from the soldiers of Our army, to be maintained permanently on the commissariat establishment, to the necessary extent. These subordinates, when they shall have been detached for a sufficient time on probation, shall be wholly withdrawn from their regiments; but their names shall be retained on the rolls as supernumeraries, in order that they may be sent back to their regiments or depôts in case of misconduct or inefficiency.

The individuals thus employed shall be occupied exclusively in the public duties of the department, and shall be appropriately clothed, and placed under the charge and direction of the commissariat officers wherever they may be employed, who shall be answerable for the discipline and regular payment of the men, whose places in their regiments shall be filled up by recruits.

11. The rates of pay of the different ranks of the department shall be regulated according to the following scale:—

SCALE of Full, Half, and Retired Pay.

RANK.	Full-Pay.				Charge Pay.		Half Pay.			Retired Pay.			Length of Full Pay Service to give a Claim to Retirement.	Age at which, in the absence of exceptional circumstances, retirement shall be compulsory.
	On attaining the Rank.			After five years' Service in last Rank.										
	£	s.	d.	£	s.	d.	s.	d.	£	s.	d.	£	s.	d.		
Commissary-General -	3	0	0	3	0	0	—		1	10	0	2	0	0	30 Years.	65 Years.
Deputy Commissary-General.	1	10	0	1	10	0	10	0	0	15	0	1	5	0	„	60 „
Assistant Commissary-General.	0	15	0	1	0	0	5	0	0	10	0	0	15	0	„	55 „
*Deputy Assistant Commissary-General.	0	10	0	0	12	6	2	6	0	6	3	0	9	4	„	55 „
Acting Deputy Assist. Commissary-General.	*0	7	6	—			—		—			—			—	—

* In case of Military Officers, to be made up, on confirmation, to 10s. a day, from the date of entering on their probation. A Commissary-General, with an army in the field, to receive a special rate of pay, proportionate to the magnitude of charge.

12. It shall be competent to Our Secretary of State for War to place commissariat officers on the retired list at the rates specified in the preceding scale, after a meritorious service of twenty years in the department as commissioned officers, including the period of service on probation, if, by reason of mental or bodily infirmity of a permanent nature, to be certified by a medical board, they shall be unfit for further duty; and all officers shall be at liberty to retire after thirty years of such service.

13. A roster shall be observed of home and foreign service, not to be departed from except in cases of necessity. With respect, however, to the west coast of Africa, officers are to

be allowed to volunteer, receiving such special pecuniary advantages as may be fixed by Our Secretary of State for War.

Given at Our Court at St. James's this 28th day of October 1858, in the twenty-second year of Our reign.

By Her Majesty's command,

J. PEEL.

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