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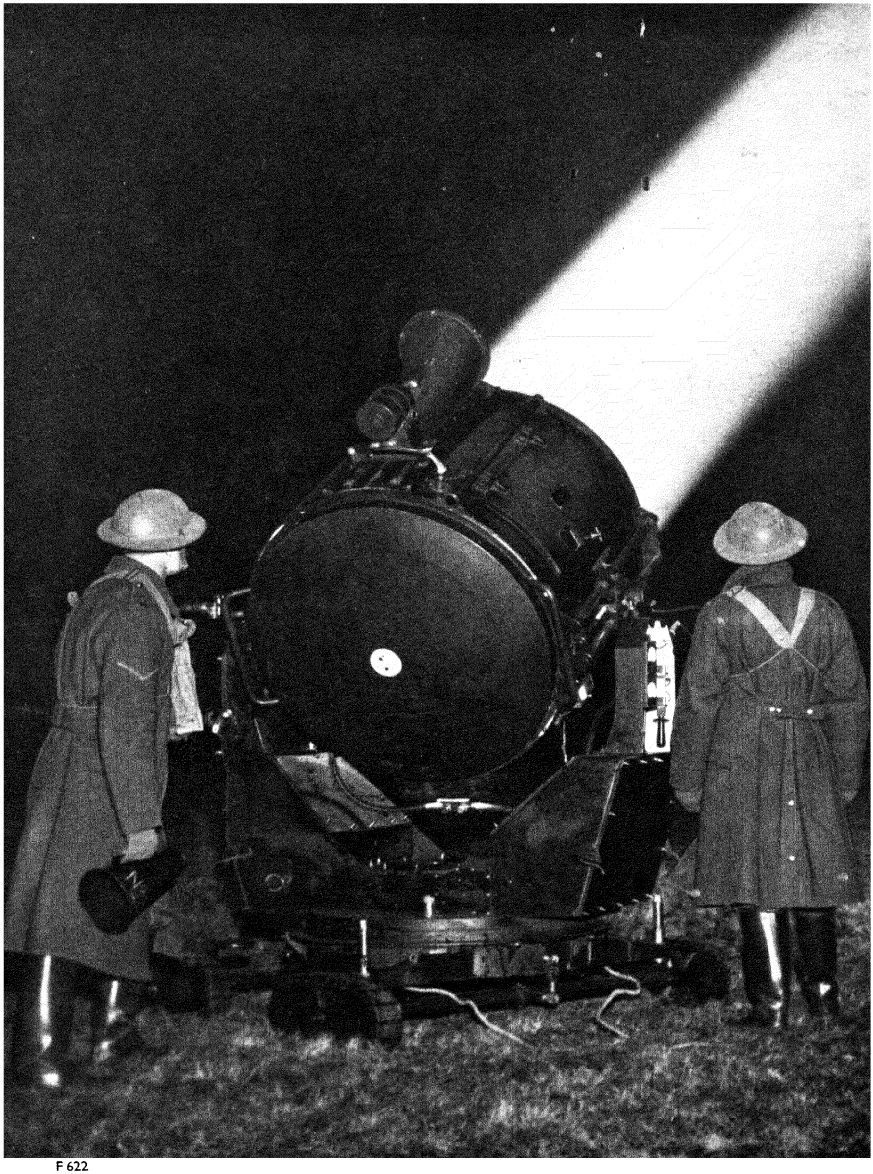
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THE ARMY OF TO-DAY

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ROYAL ARTILLERY WITH ANTI-AIRCRAFT SEARCHLIGHT

Frontispiece

THE ARMY OF TO-DAY

BY

MAJOR J. T. GORMAN

With Sixteen Half-tone Plates

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FOREWORD

BY

IAN HAY

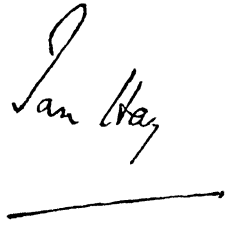
Here is a history of the British Army which can be recommended to all readers, and without reserve. Having had some small experience in work of this kind myself, I am in a position to recognize and admire, firstly, the immense industry Major Gorman has brought to the collection of his material, secondly, the meticulous accuracy of his statements, and thirdly, the skill and discrimination with which he has condensed all into a single volume, without omitting a single essential point on the one hand, or declining into mere statistics on the other.

What an admirable text-book this volume would make—and I hope will make—from which to answer a General Knowledge paper on the history of our Army. Everything is here—the origin of each arm of the Service; regimental beginnings, achievements, and traditions; up-to-date information upon modern conditions of Army life—all told with clarity, conciseness, and the human touch.

Perhaps the most fascinating—certainly the most fantastic—story that our author has to tell is that of the genesis and development of our modern mechanized Army. The horse a thing of the past—only two cavalry regiments left besides the Household Cavalry—the 1st Royal Dragoons and the Royal Scots Greys! Instead, Cavalry Armoured Car and

Light Tank Regiments. Perhaps the infantry-man will feel the change most, and for him it will certainly be a change for the better. In 1914 he took the field carrying equipment which weighed sixty pounds. To-day most of that equipment is carried for him, in a platoon truck: he is frequently carried in the truck himself. One prophecy can safely be made regarding the military operations of the future—they will be carried out at high speed and, it is to be hoped, with short, sharp, and decisive results.

As Director of Public Relations in the War Office, whose duty it is to introduce the Army to the Public, I can imagine no better or more attractive medium of introduction than *The Army of To-day*.



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THE ARMY OF TO-DAY

CHAPTER I

The Development of the British Army

SECTION 1—THE ARMY BEFORE 1660

The British Army was not created by magic, like that in the Greek legend, when soldiers sprang from the furrows sown with dragons' teeth. It grew by degrees and is still growing, rather like a lobster, which at different stages sheds its old coat of mail and appears in a bigger and better suit of new armour.

It is that latest mail-coat which is called the " mechanization " of our army, yet it is not the first time that British soldiers have been mailed and mechanized. Even the Roman invaders of Britain were met by armoured cars in the shape of Boadicea's scythe-wheeled, metal-covered chariots: the very word " mael " in the British tongue meant iron.

Not that the idea of armour-plating was new to the Romans. They wore mail themselves and one of their war-tactics was to form a " testudo " or tortoise, the men crouching under the heavy shields held overlapping above their heads like the shell of a tortoise, protecting them from arrows or missiles thrown

down from the walls of a besieged town. They had met living "tanks" too, when Hannibal's mailed elephants clanked into Italy over the Alps: such tanks, with the great animals themselves serving as engines, were used in Indian warfare until a century ago, trampling men and horses underfoot, battering down obstacles with their spiked iron frontlets.

For where chariot or car, elephant or tank, man or machine is concerned, armour-plating has always the same purpose—protection.

The first English national army was raised for defence against the Danes by Alfred the Great. Every landowner between the ages of sixteen and sixty was bound to join up, armed at his own expense, at the King's summons and serve for the whole campaign.

When the Danes conquered and Canute reigned, he formed the first Household troops, a picked bodyguard of some 5000 men, called the House Carles. This bodyguard fought later with Harold at Hastings armoured in their mail and surrounded with a hedge of sharp-pointed stakes, like the barbed wire of later wars.

The first English bowmen appeared in the reign of Henry I, but so far the army comprised infantry only, until about 1141 when Norman horse came into the field. Tournaments, too, were introduced from France, serving the same purpose as our present military tournaments, to train horse-soldiers in drill tactics and discipline.

In 1181 Henry II reorganized a National Militia by the Assize of Arms, ordering all citizens to be ready for service, armed according to their rank. Edward I raised armies by a

new scheme called Commissions of Array, much as local regiments later came into being, for the King authorized several leading men in each county to " muster and array " military forces.

For three centuries the country remained sharply divided into Saxons and Normans; under Edward III the two races began to feel themselves Englishmen. Then, too, what is called Chivalry first appeared, a spirit which, without ending wars, insisted that force was not everything, that men should be readiest to fight in a good cause, defending the weak and helpless, as shown in those two great books of chivalry, Froissart's *Chronicles* and the *Mort d'Arthur*.

The men-at-arms of the Middle Ages, so called because they were sheathed from head to foot in armour, were in themselves like small tanks, especially after 1298, when their chargers too began to be covered with heavy armour-plates, these being known as " barded " horses.

Armoured men and steeds were a defence against the growing skill of archers: now the problem changed and something must be invented to pierce this armour, a need which took shape in early firearms. But such harquebusses or hand-guns and small mortars were still very crude in the days of Crécy and Poitiers, or even when Agincourt was fought nearly a century later.

Mediæval armies fought in three divisions, the Vanguard, Battle and Rearguard: they were sub-divided into " Banners " which roughly equalled our battalions. A " banneret " commanded a banner and a knight's promotion was marked by cutting off the forked tail of the pennon which knights carried,

leaving a square flag. This distinction survived until the present day in some of our cavalry corps, the pennons on lances being *forked*, while the regimental standards were *square*.

The method by which Henry V raised armies for France, surviving after the feudal system ended with the Magna Carta, is shown in the curious " Indentures " between John of Gaunt, Duke of Lancaster and his retainers. These, whether nobles, knights or squires, promised to " serve the Duke for life in peace or war, wherever he wishes, suitably arrayed for war. In time of war to receive for himself and as many men-at-arms and archers as he shall bring, by the Duke's command, such wages as the Duke receives from the King."

By 1480 times had changed. Now, it was Parishes who each provided, when called upon, a " Town " or " Parish " soldier, whose equipment was kept in the vestry. Entries in church registers show that this soldier was sent off, when summoned to fight, wearing a " whyte cote ", with six-and-eightpence journey money and a cart for his baggage.

During the Tudor period some officers' titles came into use which bring those armies nearer to our own day. The word " Colonel " was adopted and the men " under his regiment " or rule became shortened to Regiment. So the Colonel's Lieutenant, to whom the care of the colonel's own company was handed over, became Lieutenant-Colonel, while Majors were originally called Sergeant-majors or chief sergeants, and a Lieutenant meant a locum-tenens, holding the place of a captain.

The word infantry, from the Italian *fante*, boys or children, also came into use, and Stuart times saw new introductions of

terms and formations from the wonderfully drilled troops of the Swedish King, Gustavus Adolphus, such as peloton or platoon and battaglia or battalion.

This all led up to England's first Regular Army, called, like our lately reorganized and mechanized army, the New Model, created for service in the Civil War by Oliver Cromwell and the Parliamentary ordinance of 15th February, 1645. The raw recruits were knocked into shape in Windsor Park, just as men drilled in Hyde Park for the new armies of 1914, and there is another curious link between the " armoured " soldiers of that day and this.

In 1643 the last fully mailed men-at-arms went into action at Roundway Down as Sir Arthur Hazelrigg's regiment, nicknamed the " Lobsters ". Later, we shall see " Hazelrigg's Lobsters ", part of Monk's Coldstreamers, becoming one of the original regiments in the first British Standing Army.

SECTION 2—THE EVOLUTION OF BADGES

Before the British Army wore uniforms its soldiers were distinguished by badges.

Each man who fought at Crécy or Agincourt was the follower of some noble or knight and carried a device on sleeve, breast or headgear, often reproducing his leader's cognizance or " crest ", worn on the summit of his helmet to serve as a rallying-point in battle.

The heraldic " wreath " on which crests stand in pictures

may be the survival of an even older military badge: commanders among the Ancient Britons wore, as an old record tells, " a golden torc or wreath made of several strands twisted together ".

A nobleman's crest used as a badge can still be seen in that of the Duke of Wellington's West Riding Regiment, adopted in 1852 after the Iron Duke's death. The banner held in a lion's paw represents the flag given yearly by his descendants to the sovereign on Waterloo Day as quit-rent for the estate of Strathfieldsaye.

Sometimes the badges worn by mediæval citizen-soldiers were those of a town. Froissart speaks of these " different devyses to tell one city from another: some, chevrons of white on blue coats; others, a black lozenge on a red coat ".

Badges played leading parts in the Wars of the Roses; Warwick the King-maker's soldiers displayed the Bear and Ragged Staff, long a badge of the Royal Warwickshire Regiment. The Yorkist white Rose is still worn by the East Yorkshire Regiment and the King's Own Yorkshire Light Infantry, while the red Lancaster Rose is the badge of several corps in Lancashire.

Distinctive devices did not always distinguish. At the battle of St. Albans confusion between the badge worn by the soldiers of Warwick and York gave victory to the latter. Incidents like these made a more unmistakable uniform necessary.

During the Crusades the cross had become the recognized badge for all Christian European soldiers as opposed to the Saracens. Each nation's cross was a different colour, white in the case of England, and these identical white crosses were worn

by the English Free Companies under Bertrand Du Guesclin in 1366. At the same date, however, in the Black Prince's army every man wore the red cross of St. George, and this fashion was continued until about 1573. The red cross distinguished Henry VIII's followers at the Field of the Cloth of Gold, while the French soldiers wore a Salamander badge. Henry's two bodyguards, the Gentlemen Pensioners and the Yeomen of the Guard, wore—and still wear—the Portcullis and the Tudor Rose respectively.

Sir Denzil Holles in his Memoirs, written in the reign of Charles II, says that his grandfather went to Court accompanied by a score of soldier-retainers, all wearing blue coats with his badge of a holly-tree uprooted on the sleeve. So this fashion persisted in Elizabethan days.

The regiments of the Civil War were still raised by individuals, but something more unmistakable than badges was again needed to distinguish the opposing armies when all were men of the same race and dressed much alike. For this reason scarves were adopted, worn round the waist or over the shoulder, red or blue for the Cavaliers, orange for the Roundheads: sometimes a brassard of the same colour was tied on the arm. These scarves were probably the origin of the sashes worn by officers and sergeants in the army to-day.

With the establishment of a Standing Army under Charles II badges came to the fore again. The King's new regiments of Foot Guards, later to become the Grenadier and Coldstream Guards, were allotted Royal Badges, one for each company, to be borne on their colours. When later regimental colours were restricted to two, the badges remained and are still to be seen

on the small company colours of the Guards on certain ceremonial occasions, such as Trooping the Colours. The Scots Guards, when they became part of the Household Brigade, also had Scottish Royal Badges allowed to them. These badges from the company colours are used in rotation in the centre of the Guards' Regimental Colours when they are renewed.

Other Royal Badges—the Lamb, Dragon, Lion, St. George, Antelope and Tudor Rose—were given to the 2nd, 3rd, 4th, 5th, 6th and 7th regiments of the Line, and are still worn by the Queen's, Buffs, King's, Royal Northumberland Fusiliers, Royal Warwickshire Regiment and Royal Fusiliers. But most regiments were still privately raised, and wore their founder's badge and his livery in the colour of their facings.

Renewed civil war made some broader distinctions necessary between the followers of King James and those of William of Orange. At the battle of the Boyne those regiments who followed the latter adopted green sprigs in their hats; the Jacobites fastened scraps of white paper into their headgear.

Marlborough's campaigns, being on foreign soil, did not add much to the evolution of badges; the uniform which now distinguished British soldiers from the rest was sufficient distinction. But 1st July, 1751, is an important date in the history of military badges: it marked the issue by George II of regulations for regimental clothing, and this ended any adoption of the devices or liveries of individual colonels.

From this time badges were often worn engraved on the breastplate of the cross-belt and by officers on the gorget at their throat—which, by the way, was the last survival of the

body-mail of mediæval men-at-arms. The breastplate was abolished in 1855 and gorgets in 1830.

Badges as battle-honours are many: we shall hear more about these later. But regimental badges and their evolution almost sum up in miniature the whole history of the British Army.

SECTION 3—THE FIRST STANDING ARMY

Cavalry

At the restoration in 1660 two troops of Cavalier horse returned with Charles II from exile and became his bodyguard, or Life Guard. In January, 1661, another regiment was added, now the Royal Horse Guards (the Blues). Since these "Oxford Blues" were partly recruited from Crooks's disbanded regiment of Ironsides, the Life Guards and Blues together—that Household Cavalry whose sentries mount guard in Whitehall—actually united Royalist and Roundhead troops.

Their representative, Gold-Stick-in-Waiting, appointed to defend the Sovereign's person, still accompanies him on State occasions.

These regiments alone in the British army retain the old cavalry title "Corporal of Horse" instead of sergeant. The former name "Cornet" for cavalry ensigns is older still: its origin was the "cornette" or horn-shaped flag carried by Cardinal Wolsey's standard-bearer.

Charles II's new guards, horse and foot, had barely been

formed when their disbandment was demanded by Parliament. But a rising of fanatical ex-soldiers, called "Fifth Monarchy Men", made this inadvisable; that beginning of our first Standing Army remained—and still remains.

Other famous cavalry regiments were soon added. The Tangier Horse, raised to defend that town in 1661, came to England in 1684, becoming the 1st Royal Dragoons, and were granted six royal badges to display upon their crimson standards. In 1681 the Scots Dragoons were formed, to become later the Royal Scots Greys, so called from the colour of their first uniform and subsequent chargers.

Monmouth's rebellion in 1685 made more regiments necessary: among these were many troops of Horse, and Dragoons or mounted infantry, so named from the dragons' heads on their musket-butts. Of these some eight regiments survive, although in several cases as linked corps: we still have the 1st and 2nd Dragoon Guards, the latter better known as the Queen's Bays, from the long-tailed bay chargers ridden since 1767. The 4th Royal Irish Dragoon Guards were then called the Blue Horse, the 5th Dragoon Guards the Green Horse, while the 6th Dragoon Guards, now 3rd Carabineers, wore uniform facings of sea-green colour, which was the livery of Charles II's Queen, Catharine of Braganza. The name Carabineers was an honour bestowed by William III for the battle of the Boyne.

Three troops of the 1st Royal Dragoons were also detached to form a new corps, the Queen Consort's Regiment of Dragoons, now 3rd King's Own Hussars. At Dettingen they captured a pair of silver kettledrums, and as a great honour George II

ordered that these should never be covered on parade and allowed the regiment an extra kettle-drummer, who also wears a silver collar presented later.

The 7th Dragoon Guards, raised in 1688 and known as the Black Horse or Ligonier's regiment, distinguished themselves at Dettingen, when Sir John Ligonier was created Knight Banneret on the battle-field by George II, and their boy-cornet, Richardson, received thirty wounds when defending the standard, remarking afterwards: "Sure, if the wood of the pole hadn't been iron, 'twould have been cut to pieces."

The defence of Enniskillen created another great cavalry regiment in 1689. The 6th Dragoons, now 5th Royal Inniskilling Dragoon Guards, wear the badge of the castle of Inniskilling. Originally the flag shown flying on the castle was St. George's Colours: later, this was replaced by the Union Jack. In the famous Union Brigade, the Inniskilling Dragoons represented Ireland, with the Royals and Scots Greys for England and Scotland. In the charge of the Union Brigade at Waterloo the last two regiments won the French "eagles" still worn as badges.

The additional cavalry regiments raised for Marlborough's campaigns were mostly disbanded when the war ended, but several Dragoon corps were reformed in 1715 when the Jacobite rebellion made extra troops necessary.

All these afterwards became Hussar or Lancer regiments. At first, about 1755, "light" or Hussar troops were added to many regiments to serve as scouts. During the Peninsular War several corps were equipped entirely as Hussars, with the distinctive uniform copied from the Hungarian Light Horse. Other

regiments became Lancers about 1816, distinguished by their weapons and peculiar flat-topped lancer caps. The change from Light Dragoons to Hussars or Lancers was completed by 1861.

The 10th Light Dragoons in this way became the 10th Hussars in 1806, a regiment which was a great favourite with its colonel, the Prince Regent. Indeed it was nicknamed the "Chaney" or "China" 10th, because the rest of the army declared as much care was taken in moving the troops as if they were porcelain figures. This regiment's distinguishing mark was the white cowrie-shells worn on the chargers' trappings.

The 11th Hussars also date back to 1715, but only became Hussars in 1840, as a "wedding present" for their services as escort when the Prince Consort arrived to marry Queen Victoria. Their nickname is "Cherry-pickers" or "Cherubim", probably from the crimson of their overalls.

One famous British cavalry regiment did not become the 17th Lancers until 1823, but their well-known badge and title "Death or Glory Boys" belongs to the time when they were raised as the 18th Light Dragoons by Lieut.-Colonel Hale. This officer brought the despatches from Canada announcing the capture of Quebec, and the Death's Head and Crossbones with the words "or Glory" were embroidered as a badge upon the tunics of the new regiment to commemorate the death of General Wolfe. In India their nickname was *tot wallahs*—"Bone Merchants", and they were also called the "Horse Marines", because, in 1796, the regiment served as marines on H.M.S. *Hermione*.

After the Indian Mutiny in 1857 several of the European cavalry regiments of the Honourable East India Company were added to the British Army. One of these was the 19th Hussars, another the 21st Lancers—now linked with the "Death or Glory Boys"—whose chief anniversary is 1st September, when they charged the dervishes at Omdurman.

The Great War saw no additions to our cavalry; on the contrary, many famous regiments, even the Life Guards themselves, fought dismounted in the trenches.

Now, except in the case of a few regiments, the horses who played their part gallantly in the many historical charges of the past must go, and the name "Cavalry" loses its real meaning with the Army's mechanization.

But as long as the names of regiments last, their deeds will be remembered and the men who join them feel proud to carry on the old traditions, though in a new way.

Infantry

The first infantry of the British Standing Army, like the first cavalry, consisted of Royalist and Roundhead troops. The First Guards, now the Grenadiers, were raised by the Cavalier, Colonel Russell, and soon joined by a "New Model" regiment. Monk's Regiment of Foot, on 14th February, 1661, laid down their arms as Commonwealth soldiers, to take them up as the Lord General's Foot Guards, now the Coldstream Guards.

A new regiment recruited from both parties sailed to garrison Tangiers that same year and were joined by a corps from the Scots Brigade in France. Later these regiments returned to

England, becoming the 1st and 2nd of the Line, the Royal Scots and the Queens.

On the outbreak of the Dutch War in 1685, English soldiers who had served there since Elizabethan times were required to swear allegiance to Holland. Refusing, they re-entered English service as the Holland Regiment, the 3rd Foot, or Buffs, from the colour of their facings.

Next added was the 4th Regiment of Foot, now the King's, raised in 1680 for Tangiers. Then came that rush of new regiments in 1685 made necessary by the Monmouth Rebellion. Troops summoned from Holland formed the 5th and 6th Foot, now the Royal Northumberland Fusiliers, the "Fighting Fifth", and the Royal Warwickshire Regiment, whose antelope-mascot is a live reproduction of their badge.

Nine more fresh corps became the 7th to the 15th Foot, the 7th, now Royal Fusiliers, being armed with fusils or flintlock muskets. Another weapon came into use. The Queens, followed by the Foot Guards, first used a bayonet clumsily forced into the gun-barrel in 1685. In 1689 it was screwed into a separate socket.

About this time it became customary to add an extra grenadier company to the twelve companies usual now in each regiment, consisting of the tallest, strongest men. The white plume, now worn by the Grenadier Guards, was supposed to represent the smoke of a grenade fuse. They wore, too, caps instead of hats, for convenience in slinging off their firearms before throwing bombs.

Three of these new regiments, the 11th, 12th and 13th, wear "Fortress" badges. The Devonshire Regiment bears

Exeter Castle, with the motto *Semper Fidelis*, won by that city in the Civil War. The 12th, Suffolk Regiment, wears Gibraltar Castle and Key in memory of the siege, 1778–83, while the Somerset Light Infantry's title, "Illustrious Garrison", and mural-crown badge commemorate their defence of Jellalabad in 1842.

Once more, in 1689, a new war brought new regiments. The 16th and 17th Foot—now Bedfordshire and Hertfordshire and Leicestershire Regiments—were raised by James II when William of Orange landed, but the other additions, nine regiments in all, were made by the new King, including the 18th Royal Irish Regiment. The 25th Regiment, the King's Own Scottish Borderers, was raised by Lord Leven against Claverhouse, 800 strong in two hours: the 26th Foot, the Cameronians, were formed from the strictest Covenanters under an 18-year old colonel, Lord Angus.

In Ireland, the Enniskillen Protestants mustered the 27th Regiment, the present Royal Inniskilling Fusiliers; the 28th, 29th and 30th Foot, later the Gloucestershire, Worcestershire and East Lancashire Regiments, raised in 1694 and disbanded at the Peace of 1698, were recalled permanently in 1702 when the war of the Spanish Succession demanded new regiments for Marlborough's Campaign. Nine survive, numbered the 31st to the 39th of the Line, and others again were added during the first half of the eighteenth century for the wars in America and on the Continent. Of these, several corps raised before 1748, such as the Essex, Sherwood Foresters, Loyals and Northampshire Regiments, were originally employed as marines, since at this time land regiments were often told off for sea duty.

In 1751 great changes were made in the army. Regiments ceased to be called by Colonels' names and received numbers, a system which lasted till Territorial or County titles were introduced by the Cardwell scheme in 1881.

The Napoleonic wars brought further new regiments and methods. Castlereagh made an important reform when he discouraged " pressing " men for the army, introducing instead " bounties " for recruits from the militia, as well as a limited form of compulsory service. In 1794 barracks replaced billets, while Shorncliffe in 1801 saw Sir John Moore inspiring his famous Light Division with a new spirit of self-respect and initiative.

The best-known regiments raised from 1793 onwards were Irish or Scottish; the Connaught Rangers, Royal Irish Rifles, and Royal Irish Fusiliers—the Argyll and Sutherland, Cameron and Gordon Highlanders.

In 1858 certain infantry units of the East India Company were transferred to the British Army, becoming the Royal Dublin Fusiliers, the Royal Munster Fusiliers, and the Leinster Regiment.

The last great remodelling of the army took place when Mr. Cardwell, War Minister from 1868–74, abolished, among other things, the purchase of commissions and linked all line regiments in pairs—except those numbered 1 to 25—as 1st and 2nd battalions under new titles, one usually serving at home and the other abroad.

During this century two regiments have been added to the Brigade of Guards, the Irish Guards by Queen Victoria during the Boer War in 1900 and the Welsh Guards at the beginning

of the Great War in 1915. The huge additions needed in 1914–18 were in the form of service battalions attached to existing regiments.

After the treaty with the Irish Free State in 1922, five famous Southern Irish regiments were disbanded, the Royal Irish, the Connaught Rangers, the Leinster Regiment, the Royal Munster Fusiliers and the Royal Dublin Fusiliers.

In this same year the Royal Irish Fusiliers would have been lost to the army but for the generosity of the Royal Inniskilling Fusiliers, who gave up their second battalion that their brothers-in-arms might remain in existence. For fifteen years these two regiments were linked as The Royal Inniskilling—Royal Irish Fusiliers; in 1937 they were reconstituted and the "Faughs" are again the 1st and 2nd Battalions, 87th and 89th, The Royal Irish Fusiliers.

The nickname of the 87th comes from their war-cry "Faugh-a-Ballagh"—Clear the way!—with which they charged at Barrosa and won the Eagle of the French 8th Regiment. The 2nd Battalion has another unique badge, the Coronet of Princess Victoria, granted in 1833 when the 14-year-old Queen-to-be gave the regiment new colours. This coronet—with the Fusilier grenade—is the only instance in the army, except the Seaforth Highlanders, where two collar-badges are worn.

Artillery

In the earliest British Armies archers were, strictly speaking, the artillerymen of the service. The old French word *artillerie* meant an engine or instrument which propelled missiles, as a bow does arrows. Thomas de Rolderston, a master archer, in

1344 is described as " Custodian of the King's Artillery ". The translators of the Authorized Version of the Bible in the reign of James I used the word in this sense, for Jonathan's bow and arrows in the Book of Samuel are spoken of as his " artillery ".

English bowmen were formidable from early times, as an organized force under Saxon Kings and before that when the Ancient Britons tormented Roman invaders with their arrows. The long-bow was our native weapon, not the heavier and more complicated cross-bow used chiefly on the Continent, and archers of the Middle Ages could shoot, with these weapons, fully 240 yards, piercing inch-thick timber.

A company of archers is mentioned as fighting with Henry I at Beaumont, and King Stephen's bowmen routed the enemy at the Battle of the Standard in 1138. Two centuries later at Crécy, English archers, shooting from " nests " behind hedges, were still deadly marksmen, and heavier armour for men and horses was needed to repel them.

This, in its turn, led to the development of artillery, in our modern sense, as the *hackenbuchse*, a one-man weapon fired first from a fork or hook, later fitted with a stick. This primitive kind of machine-gun was used from 1365 onwards.

Henry V's force of 1415 was the first English army to use real artillery, though his siege guns played no part at Agincourt. They had such pet names as " London " and the " King's daughter ", and were served by German " gun-masters ". Ten years later the Regent, Bedford, took a powerful artillery train to France and introduced something like field-guns, small " hand-cannon " firing stone shot of two pounds' weight.

During the Wars of the Roses, Richard, Duke of York, em-

ployed 3000 gunners, and *hackenbuchsen*, the weapon later called harquebusses, began to take the place of bows.

Henry VIII was the first English king really to see the possibilities of artillery. He encouraged gun-makers to settle in England, and at the siege of Tournai in 1573 used some of the new cannon, huge weapons called after the Twelve Apostles. Unfortunately, " St. John " was bogged and captured by the enemy.

Field guns were little used in the Civil War, although both sides had siege trains, and a Royal Warrant of Charles II fixed the duties of garrison and train gunners in his new standing army. Fresh ideas were introduced from the Continent, where the Scottish gunner of Gustavus Adolphus, Sir Alexander Hamilton, experimented with light artillery. These guns could be carried on pony-back or stacked in carts: they were made of leather, hooped with iron, and had a core of tin.

In 1685 the Master-General of the Ordnance had in readiness for active service a train of 16 brass pieces, and such a train was sent to Ireland in 1689 by William III, the gunners wearing coats " lined with orange bayze ". Gunners at this time seem to have been overloaded with equipment: they carried powder-horns, compasses, plummets, measuring-tapes and levelling-tools, besides daggers, muskets and half-pikes. Drivers, on the other hand, then and for more than a century, were not soldiers at all, but civilians attached to the wagon-teams furnished by the firms of carriers who undertook gun transport. These " contract carters " must have looked very unmilitary, for they wore smock-frocks, loose neck-kerchiefs and steeple-crowned hats. At this time all gunners actually

ranked as officers, for they received commissions signed by the Master-General of the Ordnance.

Artillery made great advances under Marlborough, who saw every gun fired at Blenheim laid under his own eyes. In 1716 the Royal Regiment of Artillery was formed, wearing the blue uniform associated with gunners and already established in quarters at Woolwich, although the Royal Military Academy, the famous " Shop ", was not founded until later.

Horse Artillery was introduced in 1793 by the Duke of Richmond, then Master-General of Ordnance, through something like an accident. Some French prisoners mutinied on board ship off Southampton and messengers were sent to Winchester in great haste for guns to frighten them into surrender. Two six-pounders were sent off, each drawn by four post-horses, ridden by postilions hell-for-leather. The guns arrived in time and this is supposed to be the origin of that Royal Horse Artillery, whose Musical Rides have thrilled so many spectators at Olympia during the Military Tournament.

Certain batteries were already famous in 1794: at Vaux in Flanders one distinguished itself so highly that the Duke of York ordered it to march past the whole of the Allied forces, drawn up under arms to honour guns and gunners. Both siege and field guns did splendid service all through the Peninsular and other Napoleonic wars.

In 1838 William IV granted the Royal Artillery their two fine mottoes, " *Ubique* " and " *Quo fas et gloria ducunt* ", with orders that the word " *Ubique* " should be substituted for all other terms of distinction. For " *Ubique* "—everywhere—covers everything, even the services all the world over of the Royal Regiment.

Since those mottoes were granted British gunners have fought in many other wars, the Crimea, the Indian Mutiny, last and latest, the Great War of 1914–18. Here, field batteries were in action from the beginning, holding up the Germans during the Mons Retreat: "heavies" and guns of all sizes and calibres took part in barrages and bombardments unheard of before.

Many more battle honours would have been added to those on their colours if the Royal Artillery carried such emblems. But the guns are the standards of the gunners, entitled to all the honours on parade paid to the colours and standards of other corps; in old days there was even a flag-gun, usually the heaviest piece in the train or battery to lead the way. And the Royal Regiment has another and even prouder honour: are they not "Right of the Line" of the whole British Army?

Engineers

The Royal Engineers seem to have grown into existence as part of the army by degrees, just because such men-of-all-work were badly needed. As long ago as the days of Edward III, Froissart recorded that Englishmen did not like digging. He had noticed the reluctance of their fighting men in France to use the pick and shovel, yet such spade-work for trenches or to dig saps for mining operations is always necessary in warfare, and was especially important when sieges of towns or fortresses were the greater part of a campaign.

The soldiers of Shakespeare and other dramatists of Elizabethan days are made to grumble bitterly at being obliged to "play the mole", for no regular corps of army engineers existed in the Middle Ages or Tudor times. The Plantagenet

kings employed gangs of Cornish miners when there was a town to be invested or troops to be entrenched, just as later, in the Dutch Wars, Yorkshire colliers were engaged for these purposes and paid by contract.

There were other engineering jobs, however, like making bridges and causeways over marshes, which the fighting troops had to do for themselves; also to build the palisades of sharpened stakes or *zarebas* of thorny brushwood, the forerunners of barbed wire for protective purposes.

Henry of Lancaster, Earl of Derby, may be called one of the earliest great English military engineers, for in 1345, the year before Crécy, he first taught the troops under his command how to set about taking fortified towns during the French campaigns, using saps and tunnels and mines to approach and blow up the walls.

At this period young boys were often employed by these army engineers as " Listeners ". This was a most dangerous and unpleasant task, for it meant that when a tunnel had been dug under or near to the enemy's position, one of these lads was posted at the end of the sap to listen for knocking or other sounds which might show that miners of the opposite side were also working underground and likely to take the besieging force by surprise.

Besides the likelihood of being discovered or blown up by enemy mines, there was always the chance that a tunnel-roof would collapse upon the unfortunate listener. This happened one night when the English were besieging a town in France, but the boy who had been posted to listen at the end of the sap managed to scramble clear of the ruins and found himself in

the cellar of a house *inside* the besieged town. Stealing out into the street, he discovered a postern gate which could be opened from within and through this he admitted the besiegers.

It was because engineering was chiefly concerned with investing and taking fortresses that the first Sappers were attached to the Siege Train and under the control of the Master of the Ordnance. The engineers remained part of the artillery branch of the army all through the Civil War, the shaping of the " New Model " and the institution of the Standing Army in 1660. They were still attached to the Ordnance organization in 1717, but went through changes from time to time until 1757, when commissions were given to their officers. These had such titles as Chief Engineer and Engineers-Ordinary and Extraordinary.

In 1772 the Commanding Royal Engineer at Gibraltar found the civilian labourers working on the defences so unsatisfactory that he enlisted a company of military artificers, who wore a scarlet, orange-faced uniform and buttons with the Ordnance Arms, three guns and three cannon-balls.

These men were most useful during the siege of Gibraltar, and in 1788 the military officers of the department became the corps of Royal Engineers, apart from the Royal Artillery, and used to command the companies of Royal Military Artificers which were now raised for home service.

These last were mechanics and wore a white undress uniform with round white hats. The officers were at first dressed in blue, like the gunners, but this was changed to scarlet, with the " Garter-blue " facings still in use, about 1793, owing, it is said, to their having been mistaken for enemy troops in the Flanders trenches.

When Napoleon invaded Egypt a detachment of Royal Military Artificers were sent to teach the Turks how to dig trenches, and in 1813 the artificer companies received the new title of Corps of Royal Sappers and Miners, and after splendid services in the Peninsular and Crimean Wars the two corps were united in 1856 as the Corps of Royal Engineers.

Since that time the Sappers have served the Empire in war and peace in the spirit of the two mottoes which they share with the Gunners, "*Ubique*" and "*Quo fas et gloria ducunt*". They are the bridge-builders, the road-breakers, the map-makers of the army, as well as carrying out a thousand other duties. Many famous soldiers, General Gordon and K. of K. among them, have been proud of the title "Sapper", and the Great War only added more honours to those already earned by the Royal Engineers.

From Scarlet to Khaki

One of the curious things about the dress of the British Army is that until after 1815 uniforms were not uniform, that is, of one form or colour.

We have already seen that the followers of different leaders and nobles were distinguished by badges or sometimes coats or cloaks of various colours, but probably this was as far as uniformity went. During the Crusades, the troops of each Christian nation wore their own particular colour. That of England was white, and, curiously enough, white facings were worn until quite recent years as part of the full-dress uniform of all English line regiments of the regular army.

All through the Middle Ages and down to Tudor times this

" Whyte cote ", as it is called in old records, seems to have been the mark of an English soldier, worn later with his surcoat emblazoned with the red cross of St. George. But this was more a means of national identification than the King's uniform, properly speaking.

The first troops to wear this last seem to have been certain Welsh spearmen who, in 1337, were provided with " mantles and tunics of the same material and colour " at the Royal expense, but whether white was the colour in question is not specified.

The famous red-coated English soldiery do not come into the picture until the end of the fifteenth century, when during the Wars of the Roses the garrison at Calais was clothed in scarlet jackets. These were probably the earliest English troops so distinguished, but it was Henry VIII who first brought a " thin red line " into the field. His bodyguard wore tunics of this colour faced with yellow, at the siege of Boulogne, and by 1573 the old red-crossed white coats seem to have disappeared.

The shires or boroughs who sent " town soldiers " for national service dressed them in red or blue coats or cassocks, which soon developed facings, generally in the same colour as their borough livery or that of some local leader.

At least once, however, in Elizabethan times, as is shown by the State Papers of 1581–90, such bright hues were judged to be too conspicuous for active warfare conditions. There is a foretaste of later field-service in the suggestion that troops sent to Ireland should be dressed instead in " dark or sad colour such as russet ".

At the beginning of the Civil War there was a great deal

of confusion in dress between the two parties in the field. On both sides regiments still showed the colonel's colours, in name as well as attire: we have Newcastle's white-coats, Byng's green-jackets and so on, but nothing like a definite uniform to distinguish Royalists from Parliamentarians. On the contrary, leaders of both parties, Prince Rupert on one side and Lord Fairfax and Colonel Hutchinson on the other, are described as *all* wearing scarlet cloaks, then called *monteros*.

It was Cromwell's "New Model" of 1645, England's first Regular Army, which was also the first to wear scarlet as a whole. Probably the practical common sense of the future Lord Protector saw the value of such uniformity and the prestige it conferred. Facings of the various colonels' colours distinguished the regiments: the senior corps wore the blue of Fairfax's livery in this manner, while Cromwell's own two regiments of horse and foot were also dressed in scarlet and blue.

These same scarlet coats faced with blue were retained by the First Regiment of Guards when they were raised in 1660 by order of Charles II, who shaped his standing army mainly on the New Model. Monk's Coldstreamers wore in the first place the Lord-General's green facings on their red coats, but at his death in 1670 these were changed to blue, corresponding with those of the First Guards.

From this time scarlet coats were for two hundred and fifty years the invariable distinction of British Infantry, but uniformity went no further. The facings were of the colonel's colour, but other parts of the dress varied considerably with different regiments. For instance, at its formation, the men of the Suffolk Regiment wore purple breeches and stockings;

the Somerset Light Infantry grey stockings, yellow breeches and hats tied up with yellow ribbon; while the Royal Scots Fusiliers were dressed in accordance with their nickname, " The Earl of Mar's Grey Breeks ".

Rather later, a contemporary writer says that in Marlborough's army there were " as many different cocks to the hats as there were regiments ".

The British soldier has always had a habit, too, of modifying his uniform to suit his fancy or his needs. The long cassock-shaped scarlet coats of the first standing army, reaching below the knees, were found very cumbrous and inconvenient by the soldiers in the trenches during Marlborough's campaigns. Accordingly, they folded back the fronts and buttoned them to the middle of the back below the waist, leaving the legs free. And those two buttons on the back of the coats remained as part of men's dress for centuries after they had ceased to serve any useful purpose.

In much the same way, the soldiers of 1914–18 found their khaki great-coats too long-skirted for the mud and water-logged trenches of Flanders and ruthlessly cut them shorter, evolving a garment of the " British Warm " description which came into general use.

A good many of the best-known regimental nicknames originated during the period of these different facings. The 56th of the Line, now the 2nd Battalion, The Essex Regiment, were called the " Pompadours " from their purple facings, this being the favourite colour of Madame de Pompadour. The 19th or Yorkshire Regiment owes its name of Green Howards to the grass-green livery colour of the Honourable Charles Howard,

who commanded it from 1738. Then there is the Royal Sussex Regiment, the old 35th, raised at Belfast in 1701 for the service of William III. From him as a special mark of favour the regiment was given those facings of his national colour which earned the nickname " Orange Lilies ".

When white became the regulation colour for facings in 1881, the Buffs, an honourable exception, were allowed to keep the " buff " shade, which gave them the name, derived from the buffalo-leather coats worn by the original Holland regiment. All " Royal " regiments, too, were distinguished by blue facings: among them was numbered as a special honour the Somerset Light Infantry, who obtained this right and the title " Prince Albert's Own " in 1842 for their services at Jellalabad.

When Highland regiments came into existence, their dress showed even less uniformity than English corps. The Royal Highlanders, better known as the Black Watch from their dark tartan, were raised in 1739, and thirty years later an officer described the dress of the regiment as " sombre in the extreme ", and told how some of the men replaced the strip of black bear-skin provided by government for their blue bonnets with " ostrich feathers in the modern fashion ".

Even Wellington's soldiers still showed surprising individuality in their dress. Grattan, who was with the Connaught Rangers in the Peninsula, describes privates wearing grey, brown or lavender trousers with their red coats, while officers of this and other regiments appeared in velvet waistcoats, according to their private taste, or even in braided or laced jackets with fur collars taken from the enemy.

The Iron Duke himself often wore a small civilian cocked

hat on active service, with a dark overcoat, and does not seem to have imposed many dress regulations. But he drew the line at seeing certain Guards officers carrying open umbrellas when their regiment was in action on a wet day, and sent strict orders that this was not to happen again.

After the Napoleonic Wars George IV, both as Prince Regent and King, gave a great deal of thought to smartening the uniforms of the British Army, especially in certain regiments of which he was Colonel-in-Chief. One of these, a cavalry corps, appeared in tunics which the Prince did not think nearly close-fitting enough, so he ordered the regimental tailor to tighten up all the seams, under his own eyes, until not the faintest wrinkle could be seen. It is said that this was the origin of the piped seams afterwards worn on the full-dress uniform of Lancer regiments.

Altogether, the period which now began was one of over-stiffness and uniformity in the army, a kind of reaction time. Collars were immensely high and tight, headgear hard and heavy, the prevailing white trousers were very unserviceable, and there were numberless buttons, belts and pouches to keep polished and pipeclayed.

This lasted until the middle of the century, and it was troops dressed like this who fought in the Crimean War and discovered the inconveniences for active service of such uniforms.

Modifications were introduced, probably often, as formerly, by the troops themselves, but our army wore the traditional red coats in war as well as peace for another thirty years.

The change from scarlet to khaki came by degrees, as a

kind of protective coloration, adopted to avoid notice as in the case of many animals and insects. The sensible suggestion of Elizabethan days concerning "sad coloured" uniform for the Irish Expeditionary Force was neglected for many centuries: only in 1857 is khaki just hinted at, although in the Danvers Letters of 1611 an English official in the East asked for "very fine brown calico to make me clothes".

Even before the Indian Mutiny certain Punjaub regiments wore uniform of the colour called in Hindustani khaki or "dust-coloured", and its convenience was so obvious that it was soon imitated. Hodson of Hodson's Horse is supposed to have been one of the first to use it for his men in 1849. One officer, Harry Lumsden, commanding the Guides, finding the white clothes of his men over-conspicuous, had them soaked in muddy water to a brownish colour. The Lucknow garrison dyed their uniforms to a similar hue with a mixture of black and red ink, and both the word and the material seem soon to have been commonly used in India, for a Madras Army order in 1859 says: "The undress clothing will be entirely khakee".

Practical experiments had caused the adoption of khaki for tropical warfare to a limited extent: a more tragic lesson was taught by the Zulu and Boer wars of 1879 and 1881 when our red-coated men fought at a terrible disadvantage against naked savages and farmers in brown or grey homespun, almost invisible against their surroundings.

Yet scarlet was still worn in the Nile campaign of 1884–5. It is said that the last occasion which saw it actually in action was at Giniss during the Soudan operations in 1886, the Green Howards being the regiment in question.



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ROYAL ARMOURED CORPS: A SECTION OF THE ROYAL TANK REGIMENT

After that date the new Field Service uniform came into general use: the " twenty thousand horse and foot " who went to the Boer War of 1899 were " Gentlemen in Khaki ". *The Times* said that even the batteries were to be " painted with the *kirkee* colour to render the vehicles invisible "—a misspelling which shows how unfamiliar the word still was.

In the Great War khaki was universally worn by British and Imperial forces: it still remains the uniform of the Army in general, only the Household Brigade and regimental bands having reverted to their pre-war garb, although various dress-experiments are being made in the " battle dress " of the Army.

These so far have inclined perhaps almost too much to informality. Probably in time, unofficially aided by the troops themselves, something will evolve which combines ease and comfort with the traditional smartness of the British Army.

CHAPTER II

The Army of To-day

SECTION 1—ARMOURED CARS AND TANKS

Sir John Fortescue in his *History of the British Army* said that no nation loved military reform so little as our own, or hated so much to think that the glory of our army must be "eternally renewed with strange weapons and by unfamiliar methods".

A much bigger change is taking place now in the British fighting forces than the great military historian ever imagined when he wrote these words, so with some people it is sure to be unpopular. The archers of the Middle Ages hated the idea of firearms, the soldiers of the Civil War thought field artillery new-fangled and cumbrous: even the wisest military authorities did not foresee to what extent high explosives would be used in the Great War of 1914–8, while most refused to believe in the possibility of chemical warfare until gas was actually being used.

We have seen how each war in past days added regiments to the British Army, but the latest and greatest did more than that, by altering all the old ideas, even while returning to one of the most ancient, the use of armour.

Up to the time of Waterloo or even the Crimean War, a commander-in-chief like Wellington or Raglan could watch a battle and see more or less what was happening all the time.

That is why we have so many battle-pieces by the artists of those days, pictures which now it would be quite impossible to paint.

Armies of other times were full of colour, scarlet uniforms, gleaming helmets, waving plumes, brilliant-hued colours carried high, sleek-coated chargers with splendid trappings, the whole spectacle planned to impress the enemy. Now, it is just the contrary: visibility, so to speak, is purposely almost nil. A modern army dressed in khaki, with all the guns and vehicles painted the same colour, every scrap of metal dulled, even the buildings and roads it uses camouflaged, is using all available means to conceal itself from its opponents, to melt into the background, to be as little spectacular as possible.

Warfare is inclined to rise above the clouds or dive under the sea in aircraft or submarines. Even on land, it takes place largely underground, or hidden by the smoke of shells and artillery barrages.

The days of cavalry charges like those of Balaclava and Omdurman, of "thin red lines" of infantry or "British squares" are as much things of the past as bows and arrows or slings. But the main idea of warfare is the same always, in spite of the many changes in methods that have taken place through the centuries, and that idea, put quite simply, is to beat the enemy and to defend oneself. War and games like football, hockey and cricket have much in common: in both, attack and the protection of one's own goal or wicket from enemy assaults are the things aimed at, and the stronger the attack the more powerful the means of defence must be.

Belgium discovered that in August, 1914, when the fortresses of Namur and Liége went down before the still newer siege-

guns of Germany. Now, the most modern fortifications are below the surface, like huge concreted rabbit-warrens.

The return to armour in the Great War was made necessary by the tremendous artillery developments and increase of machine-guns, with the reintroduction of those ancient weapons, hand grenades and trench mortars. These, with the new peril of bombing from the air, gave the attackers at first the best of the game, so fresh means of defence were invented.

Trench helmets, shields, metal guards for the eyes and neck, even a certain amount of chain mail, all these were tried out. Much more important was the introduction of armoured cars and tanks, for this led to the latest and perhaps the most complete change ever made in methods of warfare. These armoured vehicles have made possible the complete mechanization of the cavalry, and to some extent the infantry of the British Army.

It was the invention of the internal-combustion engine which made the tanks of to-day a possibility. Since quite early times people have experimented with the idea of such a vehicle, but the puzzle was to make it combine mobility with protection. In the reign of Richard II the French, planning to invade England, sent over on ships an enormous protective wooden wall, moved on wheels or rollers, 3000 paces long and 20 feet high, with 10-foot high towers every 12 feet. English vessels, however, captured this contrivance, brought it back to Sandwich and used it against the invaders.

Then Charles I in 1625 actually granted to one Will Drummond the sole making and vending of certain warlike machines. One of them was a " car of congregated muskets " called the

Thundering Chariot, by which one or two soldiers could oppose a hundred guns. This sounds quite like the modern idea of a tank, but unfortunately Will Drummond could not invent driving power for his vehicle.

Armoured cars as known at the beginning of the war in 1914 were a further advance and did valuable service, but being wheeled vehicles they were of little use away from roads.

But the cleverest brains in this particular direction which Great Britain possessed were at work. As early as the winter of 1914 experiments were being made, and soon something became extremely solid fact which before had only existed in the prophetic imagination of such writers as Jules Verne and H. G. Wells.

The idea of armoured cars, with their protective shields and armament, was combined with that of the huge " caterpillar " tractors, already in use for the transport of heavy guns. The tracks, that kind of movable platform revolving with the wheels, had been seen, some time before, in a much simpler form under the name of " sand-plates ", on the carriages used for moving lifeboats over shifting and sandy ground.

There was much patient testing in secret trial-grounds, many rumours and whispers of great surprises, planned by the military authorities, for the enemy, but the secret was well kept and the real facts did not leak out. Huge crates travelled across the Channel, marked innocently and misleadingly " Tanks ", but their contents were not exactly as described, although the name was suggested by some likeness to certain oil-tank vehicles seen in the streets.

However, from the moment when the new " mechanically

propelled armoured vehicles" first made their appearance on the battlefields of France, these prehistoric-looking monsters were greeted as "Tanks" by the British Army and public, and tanks they remain to the army and the world in general to this day.

These first tanks were cumbrous affairs, with a pair of large steering wheels forming a kind of wagging tail behind, which inclined to make them unwieldy and slow in movement, while their uses were limited by the fact that they could not cover much more than twenty-five or thirty miles on their own petrol.

Mr. Winston Churchill is said to have made the suggestion that two steam-rollers lashed together might be used to crush down trenches. The actual original "Caterpillar Landships" were evolved from the idea of R.N.A.S. armoured cars mounted upon such caterpillar tracks, as had been seen on the motor sleighs made for Captain R. F. Scott's Antarctic Expedition some six or seven years before.

The first official experimental heavy tank was H.M.S. Land Service *Centipede*, known as the Tritton-Wilson Tank from the two actual inventors of this type, or by the affectionate pet-names of "Big Willie" and "Mother". Later models showed definite improvements, but were still unwieldy, difficult of access and barely bullet-proof.

All the same, there can be no doubt of the enormous sensation the tanks made on their first appearance during the Battle of the Somme on 15th September, 1916. It was the Flers-Courcellette section, and it is enemy eye-witnesses who bear the strongest testimony to the devastating effect of that debut with its surprise element. Nothing remotely like them had been seen

or expected before; 49 tanks took part in the attack, of which 16 or 17 broke down. The rest advanced through the barrage, lumbered across No-man's Land, crushing wire, trench parapets and other obstacles. The tanks were instrumental in taking High Wood, Flers and other places, but their moral effect was even more powerful.

These monstrous, impersonal machines, showing no sign of humanity, affected the German soldiers like nightmares. General von Ludendorff spoke of them as a terrible weapon; General von Zwehl later said that it was " General Tank who won the war ".

It is certainly a matter for great pride that the first tanks and their crews were all-British productions, and that in spite of the inevitable failings of those early specimens, we went on breeding and perfecting them.

By April, 1917, many improvements had been made, and our tanks had a prolonged and successful duel with the noted Hindenburg Line. In July of the same year they became a Corps, having been first modestly known as the Heavy Branch Machine Gun Corps.

But the greatest tank action of the War was at Cambrai on 20th November, 1917, a date which, a recent military writer says, should be noted as marking a new epoch, that of the Mechanical Engineer, or, so far as our army is concerned, of Mechanization.

The tanks were brought up very secretly under cover of night. They made a surprise attack at six o'clock in the morning, and the first the Germans knew of the British plan was through the arrival of over 400 tanks in their advanced lines.

No such numbers or weight of tanks had been brought into action before. They were commanded by Brigadier-General H. J. Elles in his own tank, and as he led that amazing Armada of landships in action, looming through the fog of a November dawn, he signalled, in the same spirit as Nelson at Trafalgar or Keyes at Zeebrugge: "Every tank is to do its damnedest."

British eyewitnesses tell of the spectacular advance of the 400, crawling at an astonishing pace, breaking down wire as if it was clover.

Ten miles of the Hindenburg Line were broken down, 8000 prisoners were taken and 100 guns. More satisfactory still, the losses among British infantry were uncommonly small for such an important operation.

Nor did the tanks rest on their laurels when the Line was broken. They were seen later coming to the help of the infantry in another way by hauling ammunition on extemporized rafts across to the newly-occupied trenches.

"Whippet" tanks, those of a smaller and lighter type, made their entry upon the scene during the great German push of March, 1918, and a little later tanks were first manœuvred in squadrons, with much the same methods and formations which are universal now.

During the strenuous fighting of the early months of 1918 there was little breathing time to develop new mechanized tactics. But when the enemy retreat began, the tanks came into their own again, and their greatest success of the war was at Amiens on 8th August, 1918.

Four hundred and fifteen British fighting tanks of the newest types were engaged that day, and a week later the

Colonial troops took their turn. The tank *Dominion* led the Canadian contingent into action, with the piper of a Manitoba regiment sitting astride its top.

By now, British tanks were not alone in the field, and there had been hurried inventions of anti-tank weapons and such devices as widened trenches, deep holes, and improvised land-mines.

Curiously enough, in far more recent warfare we have seen the Ethiopians in Abyssinia "killing" Italian tanks by wild-beast-trapping methods, digging deep pits and covering them with brushwood and earth. German tanks made an appearance in April, 1918, and on the 24th of that month the first duel between these and their opposite numbers took place when a single British monster routed four enemy tanks. The last time tanks were in action was 4th November, 1918.

In 1923 the Royal Tank Corps was created by King George V, with, as its badge, a tank surrounded by a laurel wreath, surmounted by the imperial crown with the motto "Fear Naught"

It is tanks that really shape the new mechanized army. If infantry, as authorities say, are still the backbone of the fighting forces, tanks and other armoured and motor vehicles must be used to stiffen that backbone.

The newest tanks are adapted to many kinds of warfare: on occasions they can be a great offensive weapon, able to ride roughshod over obstacles, climbing banks, striding ditches and to keep up a steady fire while moving.

Apart from their work as cavalry and combined with infantry, Tank Battalions must first be imagined in action as a separate force.

Until lately the Royal Tank Corps consisted of both Tank Battalions and Armoured Car Companies, but in 1933 the latter were converted into Light Tank Companies and Tank Battalions. In the following year, 1934, the first Tank Brigade was formed on permanent lines.

A Brigade is made up of Headquarters, 3 Mixed Tank Battalions, and 1 Light Tank Battalion. Mixed Tank Battalions consist of Headquarters and 3 Companies of Medium, close support and Light Tanks. An Army Tank Battalion includes Headquarters, Mixed Tank Companies and 1 Light Tank Company.

When a mixed tank battalion goes into action in formation the smaller tanks scout in advance. Companies are formed with the leading tank, two close-support and five medium or fighting tanks: when going into action, the company commander rides in the leading tank and controls the movements of the others by radio, through the wireless masts at the back of each. The only difference between the close-support and fighting tanks is that the former, instead of three-pounder guns, are armed with mortars discharging smoke bombs, with which they make a screen to conceal them from the anti-tank weapons of the enemy.

For as tanks improve, more and better ways of attacking them are being invented: besides anti-tank guns and rifles, there are land mines, ready to explode under the weight of the tank, or with time-fuses worked by electricity. In the new kind of warfare mine-fields are laid, just as they were at sea in former wars, and probably some kind of vehicle will come into use to act as mine-sweepers, in the same way that trawlers and other small

craft served their country so splendidly by mine-sweeping in the North Sea and Dardanelles.

The speeds of the newest types of tanks vary. Some by the very strength and weight of their armour are slow movers, at from five to six miles per hour. Others have a possible cross-country speed of fifteen to eighteen miles per hour, with a road rate of almost double.

Obstacles four and five feet high are nothing to these tanks, and they can cross ditches six to eight feet wide with ease, their caterpillar tracks forming a kind of self-contained portable bridge. The internal arrangements are better and more roomy, although when it is closed for action, the crew of a tank can still see for only a very short distance and feel rather like sardines soldered into a tin.

Improvements in tank-planning will continue. There are bound to be certain disadvantages just because they are such very big game. The size which makes them so formidable also gives visibility, and they cannot, like elephants and hippopotami, hide in forests or under water—at least not yet. All the same, they have the good taste positively to prefer travelling over rough, soft ground to roads with a hard surface, which wear out their tracks much more quickly. This is a great advantage when big bodies of troops and their transport are in movement, since it frees the roads for wheeled vehicles.

Tanks are easily put out of action by direct shell-fire, when stationary, although they give good protection against rifle and machine-gun fire. They are not first-rate hill-climbers, and anything more that a comparatively shallow water obstacle will bring them to a standstill. The noise which they make

when moving fast is apt to prevent a surprise attack. Also, although their "tracks" do not leave tracks on made roads, the traces of their progress across country are so deep and marked that they are easily spotted by aircraft.

The life of a tank's crew in action is rather like that of the crew of a submarine at sea, uncomfortable, arduous, dangerous, close quarters in every sense of the word. But none of these things has ever deterred men from volunteering for submarine service, and it is just the same with the land-sailors of the Royal Tank Corps in their jaunty black berets.

There is the thrill of joining the newest of all branches in the service, the excitement which always belongs to such pioneer work, besides the tremendous appeal which mechanically propelled vehicles of all kinds have for almost all modern boys.

Armoured-car companies have both wheeled and caterpillar tracked vehicles for road and cross-country use, as well as six-wheelers, half-track motors and motor-bicycles. But armoured cars have a more definite place in the mechanized cavalry, as we shall see later.

In the Royal Tank Corps everyone is a man-of-all-work, since all jobs are more or less interchangeable. During their thirty-five weeks' preliminary training at their depot at Bovington every recruit receives a thorough education in the driving, maintenance and running repairs of all the types of vehicles in use. He also learns the use of wireless and the different weapons which make up tank armament.



MECHANIZED CAVALRY: LIGHT TANK, SIDE VIEW
(ROYAL ARMOURED CORPS)



F 622

MECHANIZED CAVALRY: LIGHT TANK AND CREW
"A STAND EASY"

SECTION 2—CAVALRY OF THE NEW ARMY

It is the cavalry of the British Army which will be most completely transformed by mechanization, that change, immensely quickened up, which in the early days of motor-cars turned a coachman into a chauffeur. For now the once well-known order should be: " Make much of your motors ", instead of " your horses ". It is rather as though the figure of St. George of the Cavalry Memorial in Hyde Park exchanged his charger for the conquered Dragon, and quite appropriately, since one type of motor-vehicle in the new scheme is called by that very name.

Of all the famous cavalry regiments in the Army list the only ones to keep their horses will be the Household Cavalry, the 1st Royal Dragoons and the Royal Scots Greys: all the rest of the cavalry is now mechanized. The great and historic names of other days cannot be forgotten, but the *esprit de corps*, the spirit of the regiment, must take another shape and become motor-spirit. After all, as Kipling pointed out, there is a " new romance ", the kind that " brings in the 9.15 " instead of carrying on horseback " the good news from Ghent to Aix ", the romance of cars and aircraft, in short, of mechanization.

Curiously enough, there seems to be some ancient connexion of tanks with horses. One of those experimental warlike machines which Will Drummond made for Charles I in 1625 was called an " Equestrian Instrument by which a single horseman should be equal to fight five or six men with common arms ". It would be interesting to know if this equestrian instrument was at all

like a tank or armoured car in the form of a horse, and, if so, how it was propelled.

After all, to go farther back in history, what was the famous Wooden Horse of Troy but a type of super-mechanized cavalry, an enormous tank in the shape of a horse which the crafty Greeks pushed into the besieged city, pretending that it was a gift. And then from the inside—just like the motorized cavalry of to-day—soldiers poured out, to seize Troy and end the ten-years-long siege.

There are two main types of mechanized cavalry—Cavalry Armoured Car Regiments and Light Tank and Divisional Cavalry Regiments, these being interchangeable.

Cavalry armoured car regiments are especially valuable for reconnaissance and for outflanking or cutting-out expeditions where roads can be used—for the possibilities of armoured cars and tanks must not be mixed up. Generally speaking, the former are *wheeled* and cannot accordingly undertake such strenuous cross-country work as tanks, or tackle obstacles like hedges and wide ditches.

The cars used for mechanized cavalry are not built like tanks or caterpillar-tracked, although their armour gives a large amount of protection against rifle and machine-gun fire and they can negotiate desert or hilly country, their climbing powers being actually better than those of tanks.

These take on, more or less, the same duties as the old mounted cavalry, only on a much bigger scale, covering longer distances at a faster pace. The armoured car cavalry are also useful for convoy duty, to escort columns of other vehicles, and here take on rather the nature of armed cruisers, steel sea-

horses, as it were. This naval atmosphere is increased by the fact that the squadron commander of armoured cars gives his orders by hoisting signal flags of different colours, according to a code: these are answered with the same " Nelson touch " by troop commanders or other subordinate officers. The personnel of armoured cars, too, are known as " crews ".

There is no question of riding " shoulder to shoulder and blade by blade " with mechanized cavalry: a car's crew might find themselves at any time, in the event of war, isolated, or in strange situations where escape or the safety of others depended on quickness of initiative or perhaps on their power to stay motionless under cover, camouflaging the steel charger with green boughs, so that it appears part of a thicket or hedge.

The old terms of " horse " days are still kept up in the names of formations in light tank regiments. These are made up of three squadrons, each squadron having three troops of three sections each.

Light tanks carry crews of three, a commander, a driver and a gunner for the light machine-gun. Each has a pivoted wireless mast. These regiments also have armoured carriers with crews of one non-commissioned officer and four troopers, armed with an anti-tank rifle and light machine-gun. A mechanized cavalry brigade consists of three of these light tank regiments.

All this new scheme of mechanization gives the reorganized cavalry speed and a much bigger field of action than horse cavalry ever possessed.

In the same way, the new weapons have greater range and striking power than the old lance and sabre. When machine-guns came in, playing the important part they did in the Great

War, everything was changed, and cavalry could not be used for " shock " or surprise moves as in the old days. Then, too, to a very great extent, aeroplanes have taken over the cavalryman's job of scouting and reconnaissance, and have become the eyes of the army, spotting from overhead and sending the information gained by wireless to a point where it is needed.

Mechanized cavalry is more independent, too, not being limited by the strength of flesh-and-blood horses: there have been a good many times in history when pursuit of the enemy has been given up at an important moment, just because the cavalry chargers were utterly worn out. Now, the petrol supply would be the only thing to consider in the way of actual fodder and watering.

In the newly named Mobile Division, an entirely mechanized formation, all arms are trained in co-operation, since this division has something of everything.

There are two Cavalry Brigades, each consisting of three Cavalry Light Tank Regiments. There is a Brigade from the Royal Tank Corps of three Battalions, three Mixed Tank Battalions, each consisting of medium and light tanks with those special duties which have been described before.

There are, besides, a proportion of all other arms—Artillery, Engineers, Corps of Signals and the administrative services who attend to the needs of the rest of the troops such as Royal Army Service Corps, Royal Army Ordnance Corps, Royal Army Medical Corps, and so on.

Last, but by no means least, since experts still say that military movements can never be really successful without foot soldiers, there are the divisional motor battalions, carried in

motor troop-carriers and intended both to take and also occupy positions, since armoured vehicles are of little or no use for the latter purpose. The special infantry regiments selected for serving with the armoured formations are home battalions of the King's Royal Rifle Corps and the Rifle Brigade, units which have much in common.

The motto of the King's Royal Rifles, which was traditionally given to them by General Wolfe, is *Celar et Audax*—"swift and fearless"; it is particularly well suited to a corps which is destined to be part of a mobile division.

Rather curiously, this regiment was raised in New York as the Loyal American Provincials or Royal American Regiment of Foot in 1755, when the United States of America was still united to England and New York one of the chief cities of a British colony. In 1757 the regiment became the 60th Foot, and saw a great deal of service in Canada and the West Indies.

Returning to England at the beginning of the Napoleonic Wars, the 60th became a Rifle Corps, modelled on the famous German jagers or sharpshooters. The regiment developed into the King's Royal Rifle Corps in 1830.

The Rifle Brigade is younger, born in 1800 from detachments of fourteen different regiments who were trained in Windsor Forest with that new weapon of those days, the rifle, and sent out at once to join the Ferrol Expedition as the Rifle Corps, to become three years later the Rifle Regiment. For services in the Peninsular War and at Waterloo the regiment was rechristened the Rifle Brigade, and carries "Waterloo" as its chief battle honour.

Both regiments alike wore from the beginning of the nine-

teenth century the rifle-green uniform, which was, like khaki, adopted as a kind of camouflage colour, supposed to make its wearers invisible against foliage and so suitable for snipers. Both corps have as badge the Maltese Cross, said to have come from their connexion in early days with the riflemen of General Count von Hompesch, who was a nephew of the Grand Master of the Knights of Malta, and himself a Knight.

On these badges are engraved in close lettering the long roll of battle honours won by the two regiments, worn thus because Rifle Corps do not carry colours—honours which might be summed up, both for the past and for the future under its new conditions, in the words spoken by William IV when he reviewed the Rifle Brigade at Plymouth before his accession: "Wherever there has been any fighting you have been employed and wherever you have been employed, you have distinguished yourselves."

CHAPTER III

The Infantry of the New Army

SECTION 1

Military writers of some twenty years ago, when the present schemes of army mechanization were not much more than a dream, declared that it was infantry which really won battles.

Even now, one of the latest text-books, while saying that success in war comes through the co-operation of *all* arms, speaks of infantry as being still the most adaptable and generally useful of those arms, the one which must, when all is said and done, occupy and hold the ground taken by tanks, armoured cars, or through the use of artillery.

Men find or take cover far better than machines or motors, which cannot dig themselves in: also, not being robots, they have the advantage of being able to think and plan as well as act. This makes infantry a strong means of defence and even of attack in the right conditions, but to get such conditions nowadays foot as well as horse soldiers must be speeded-up, made more mobile by motorization.

The mechanization of the British infantry really began when the Expeditionary Force was mobilized in August, 1914. One of the most striking things at the beginning of the war was the sight of those long lines of London motor-omnibuses, some still

covered with destination-boards and advertisements, some hurriedly camouflaged with brown or grey paint, carrying loads of soldiers from railhead to their destinations in billets or trenches along the level roads of France and Flanders.

A survivor of those London General Omnibuses, the famous "Old Bill", is still sometimes seen at Armistice and other celebrations. The buses played as honourable and gallant a part in the early days of the war as did that Armada of taxi-cabs in which the Governor of Paris, General Gallieni, despatched French troops from one front to another to take part in the victory of the Marne.

Perhaps it is in memory of those days that in the modern transport of motorized infantry the terms "embussing" and "debussing" are constantly used, even though the vehicles in which the men travel now may not be omnibuses, but the large motor-carriers built especially for the purpose.

These vary from trucks of fifteen hundredweight, which will carry eight men, up to five-ton lorries with a capacity for thirty, besides a driver, fully equipped and with their kits. And it is not only the transport of the men themselves which has to be considered: when troops are moved from one place to another modern organization demands that *all* the first-line transport must go with them too, and a "tyred" army, if it is not to be a "tired" one, needs an enormous amount of this.

The motor transport of a new mechanized infantry battalion is made up of a number of cars, trucks and lorries: the old horsed transport of a battalion, consisting of thirty waggons, carts and cookers, only occupied nine hundred yards of road space with the marching infantrymen included, while the motor



MECHANIZED INFANTRY: PLATOON TRUCKS

Wm. May & Co., Ltd

transport *alone* of a mechanized battalion takes up fifteen hundred yards.

But then, on the other hand, the old transport could only move at about two and a half miles an hour: motor vehicles can do something like twenty-five miles in the same time, which makes a big difference.

In the last war, even when the men were embussed rapidly to some advanced point, the machine-gun limbers, ammunition, water-carts, cookers and so on were obliged to follow, mainly as horsed traffic, at a far slower pace. This meant that sometimes the troops found themselves separated from such necessities as their great-coats and other baggage, a thing which cannot happen when all transport travels with the men themselves.

Another of the great changes made by mechanization is that infantry on foot could move only one and a half miles in the time which it will now take to carry them, embussed, ten miles.

Where there are railways, it is still cheaper and quicker to use them for infantry movements, but buses and lorries can go on their own wheels wherever a road exists and this cannot be said of railway trains. Above all, motorization saves the men those long marches which tired them out, burdened as they were with equipment and often wearing over-new, over-tight, or over-loose boots.

Feet, in fact, overshadowed much else in the last war: they were of great importance because so much depended upon them. The necessity for foot-inspection was constantly impressed on young officers, the new disease " trench feet " filled hospital wards; " save your feet " was quite a slogan. Oddly enough,

even now officers-to-be seem to have this idea stamped on their minds. In one of the latest examinations for O.T.C. Certificate A, examiners note the tendency to think inspections a cure for everything: "many candidates began to inspect feet before posting sentries or arranging for defence".

Of course, mechanized transport has some disadvantages, and the work of the mechanical transport officers will be more important and difficult than ever. All sorts of trouble may arise if roads are not carefully surveyed beforehand and piquetted afterwards; otherwise an unexpectedly steep hill might hold up a whole lorry-column of troops, or a leading vehicle taking a wrong turning mean a terribly serious delay.

Then there is the question of repairs. All motor-cycle or car owners will see the importance of that and realize that mechanized infantry, with such numbers of transport vehicles, must take with them, in addition to first aid, regular travelling workshops, otherwise that old ryhme beginning "For the want of a nail a shoe was lost", leading to the loss of an army, might quite well be replaced by "for the want of a nut a tyre—and a war—was lost".

Many problems are being worked out during manœuvres and training. Some knowledge of traffic control is becoming as important for soldiers as for police. Drivers must know what to do in the case of an air-attack, whether to make for cover, if any exists, or to run the vehicles to the side of the road, well spaced out.

It is probable that developments in aviation will lead to troops being regularly transported by air instead of on land, although at present this is rather too dependant on weather,

the presence of known landing-places and other conditions, to be used for large forces.

However, experiments have already been successfully made by which small bodies of infantry, in light service order, carrying rifles and iron rations for one day, were moved by air in Vickers-Valentia twin-engined troop-carriers. This represented troops hurried into action and showed how valuable air-transport might be in an emergency, where roads were few or bad, other vehicles lacking and speed necessary. The distance of 250 miles was covered in two hours, compared to the two days which mechanized road transport would have taken.

SECTION 2—THE TRAINING OF MECHANIZED INFANTRY

The Perfect Platoon

The name peloton or platoon for a unit of forty-eight men was introduced by Gustavus Adolphus before 1630. In 1631 at Leipzig the firing of this new formation by Sir John Hepburn's regiment, the Royal Scots, saved the Swedish flank. This was the first appearance of platoon firing, and it took Tilly's Imperial Army entirely by surprise. Where our army is concerned the word "company" for about fifty men seems to have been substituted for platoon during some hundred years.

Throughout the eighteenth century a platoon was a drill formation; by 1794, a varying number of men, formed in three ranks and divided into four sections. In or about 1811 sub-divisions took the place of sections, with the best-trained soldiers

in the front rank and on the right and left of the formation to set an example to the rest.

Parties were told off in squads or divisions in 1824, and in 1859, after important army reorganization, a parade platoon exercise made its appearance and firing by files, front rank first, rear rank next.

During these years a company consisted of thirty privates: ten such companies, with a grenadier company and a light company in addition, made up a battalion.

Then came the South African War of 1899, when companies were divided into sections, and in 1913, just before the Great War, the four-company-to-a-battalion organization had been created. But it was not until 1914 that the infantry platoon really came into its own again, in a new and self-supporting shape.

This recreated platoon was a quarter-company of fifty privates, commanded by an officer, divided into sections under a sergeant and housed, fed and treated as a separate body, just as companies were in the past.

Warfare sharpened and polished the new tactical unit into something exactly suited to the character of British soldiers. Platoon leaders and their men had many chances of showing what they were worth and displaying initiative and coolness in awkward situations. Their discipline and perfection of musketry training often turned the tide of a fight, even though it was at the cost of the platoon itself, which had hung on in some section of a trench or disputed position to the last round and the last man.

This latest form of platoon is important as being a British

infantry regiment in miniature and, at the same time, easier to study. Companies, battalions and regiments all show the same qualities as the platoon and its sections and have gone through the same training. Each man of the infantry platoon of 1914 took the field with rifle, bayonet, 150 rounds of ammunition, water-bottle, haversack, a pack containing his kit and great-coat, and a portable entrenching tool, besides the unexpended portion of his day's ration and his emergency or iron ration—a weight of about sixty pounds. When the platoon of the new armies which succeeded the "Old Contemptibles" rested where they stood on 11th November, 1918, they had so increased their equipment as to be practically a small ordnance store.

Their Lewis guns, periscopes, steel helmets, rifle and hand grenades, gas-masks, Verey lights and trench mortars, with other devices, were evolved by the needs of 1914. As far as military invention had gone up to then, they were now perfect platoons.

The platoon is still the basis of British infantry; mechanization has made it more than ever self-contained and self-sufficient. Complete with new weapons, equipment and transport, the result of twenty years of experiment and a complete reorganization, this small unit, mechanized but not mechanical, takes on fresh duties under new conditions with that humorous sang-froid which has always distinguished the British soldier.

Mechanization and rearmament of an army on such a colossal scale is necessarily transitionary. In the years previous to 1914 the war equipment of the expeditionary force was considered almost perfect. Mobilization experts inspecting the equipment of a regiment reported adversely if the tiny screw of

a heliograph or a machine-gun pin was not up-to-date. Yet so constant were the alterations and improvements that a pamphlet still in use was published known as *Changes in War Material*, which authorizes each variation of pattern from the stud on the cocking-piece of the rifle up to some complicated mechanism of a gun-howitzer.

An example of this transition period is seen in the present reorganization of the infantry of the British Army.

This still consists mainly of infantry battalions, made up of companies and platoons of three sections, each of six men under a commander.

There are also machine-gun battalions which include a light (Bren) machine-gun platoon, an anti-tank company and three machine-gun companies with their weapons. The whole machine-gun battalion is carried in trucks and carriers. One such battalion is allotted to each infantry division and one to every infantry brigade.

In infantry battalions each platoon is motorized by the possession of its own truck. This platoon truck carries a surprising variety of things. These include one anti-tank rifle, three light (Bren) machine-guns—with their ammunition, grenades, flares, besides the men's kit, greatcoats, groundsheets, entrenching-tools, platoon cook-box and even, probably, light rubber boats, pumped up like a tyre and holding two men apiece.

In case of necessity this general-utility truck can be used as a troop carrier and might even carry the platoon into action, taking it up to advanced positions in emergencies. Ordinarily the truck so relieves the platoon of all superfluous weight,

that its members are much better off than the overburdened forerunners of twenty years back.

Not only is there less than half the weight for each man to carry, but the whole equipment is better arranged and distributed.

Practically everything is above the belt, which is the ideal arrangement. A light haversack is hung between the shoulders, and this holds the owner's water-bottle, mess-tin, emergency ration, a cardigan jacket and other immediate necessaries. A certain amount of ammunition is carried in a kind of flexible pouch, which will take any sort likely to be required, or even bombs.

The bayonet is about the only thing now carried on the belt, reduced to about one half its former size and weight.

This light-weight platoon with its three sections is the unit, too, round which the new, simplified drill movements are being built up into very flexible formation. Everything is planned to ensure quick movement: it is much the same change—then thought so revolutionary—which came about 150 years ago, with the introduction of Light Infantry.

Troops may now move in " threes " as well as " fours ".

An interesting demonstration of how tanks and artillery work in co-operation with infantry in a mechanized force was given at Aldershot during the first visit of His Majesty King George VI in April, 1938.

Nothing unmechanized appeared on that mimic battlefield. The commander-in-chief and staff arrived in motor-cars; members of the press travelled in 15-cwt. army trucks; His Majesty's bodyguard were not cuirassed and plumed Household

Cavalry, but a squad of soldiers on motor-cycles, one carrying the Royal Standard.

The mechanized artillery began the attack with a series of barrages and then lifted their fire to bombard distant targets. From other positions machine-guns sent bursts of fire, and then what are known as " I " tanks crept along searching the ground, letting off a gun now and again.

But the mechanized infantry was, so to speak, the *pièce de résistance.* Up the slope towards the position to be attacked, taking cover wherever possible, came light armoured vehicles, caterpillar-wheeled platoon carriers with crews of three and a Bren gun. The crews debussed and took up positions ostensibly in support of points selected by the " I " tanks. After these " Bren Carriers " appeared the infantry, those known in military parlance as *marching personnel*, to consolidate these positions.

The whole attack was soon over, short and sharp, as mechanical warfare must be, contrasting strangely with that actual battle, nearly two centuries ago, which another King George, the second of that name, witnessed in person—the last British monarch to command his army in the field. At Dettingen there were marches and counter-marches, sorties and advances, altogether a more leisurely plan of operations, but modern methods speed up manœuvres like everything else.

In the meantime, the rifle remains the principal weapon of the British infantryman. But—and it is an important and far-reaching " but "—every rifleman is now trained also in the use of the light machine-gun, and the headquarters company of a rifle battalion includes a light (Bren) machine-gun platoon.

Many people believe that before long machine-guns of this

type, or even lighter, will oust rifles. They are already more portable and easily handled than the Lewis guns of the last war, which needed a crew of at least three.

This light (Bren) machine-gun, with magazines holding 30 rounds each, can be fired from the shoulder or from a bipod or tripod, so that it is an adaptable weapon. The weight is only 22 lb. It weighs more than double this, however, when the tripod, 26 lb., is used, but in this form it can be elevated and swung about to serve as an anti-aircraft gun.

All the men in a section or platoon are taught to use the light (Bren) machine-gun *individually*, and trained in the methods of cleaning it and putting faults and " jams " to rights. This is necessary because this gun, with its bipod attachment, can be operated and even moved from place to place by *one* man only, if the supply of ammunition is within reach. Otherwise, there must be a second man to " feed " him. So each soldier has to learn not only the use of the gun, but how to make use of every scrap of cover or smallest fold in the ground, to conceal both weapon and man, how best to flatten down out of sight, how to crawl unobserved from one point to another, dragging the gun.

In this way, each member of a section or platoon becomes a sniper, not only with the rifle but with the machine-gun, and the latter weapon, of course, has a much higher rate and volume of fire, with an average of 120 rounds a minute.

The rifle which the mechanized infantryman uses is still the famous M.L.E. or Magazine Lee-Enfield, with an effective range of some 600–1000 yards for individual shots. From this rifle fifteen rounds a minute can be fired, and it was this wonderful rapid fire which held up the enemy in the Mons retreat.

It was platoons shooting in this manner, with this weapon, which had been trained before the Great War by men who had graduated in one of the finest Schools of Instruction which ever existed in the British army, and which is still, with its reputation, a living thing. The School of Musketry at Hythe, which trained those who trained in their turn the officers, N.C.O.s and privates of the British Expeditionary Force, had been in existence since 1853.

In those days, before the Crimean War and the Indian Mutiny, the weapon of the army was the muzzle-loading Enfield rifle, and soldiers had to make their own cartridges, using cylinders of paper into which two and a half grains of black powder were poured, the bullet being inserted first, point foremost, and tied into position with string.

The bullet end of the cartridge was then dipped into a lubricating mixture of bees-wax and tallow and the cartridge paper had to be torn—usually with the soldier's teeth—before using, so that the powder could be poured down the barrel.

The Royal West Kent Regiment, once the 50th Foot, amongst their other nicknames have that of the " Dirty Half-Hundred ". This was probably partly owing to the black facings which they wore until granted those of " royal " blue, but also because at the Battle of Vimeiro the men of the 50th had been biting off the ends of cartridges so vigorously that their faces were all grimed with gunpowder, almost to the blackness of their lapels and cuffs. Another queer survival of this complicated cartridge-making and breaking is in the term " cartridge " paper, still used for a certain stiff variety.

Primitive as this kind of musketry sounds, it was an advan-

tage to have any organized training at all, and the Hythe School was a great improvement on anything which went before. In fact, little or nothing had been done, unless by exceptional soldiers such as Sir John Moore in his famous Shorncliffe training camp, and a few other enthusiastic commanding officers.

Another advance took place just previous to 1914. Instruction in army musketry on Hythe methods was perfected through a remarkably efficient system. Officers and sergeants underwent a very thorough course at the school itself, learning the mechanism and whys and wherefores of the rifle and machine-gun, how to recognize and describe targets, how to indicate distant objects by the " clock-face " method; in fact all the newest ideas on the subject. Standardized courses were held for commanding officers, majors, adjutants and regimental sergeant-majors, with refreshers for those who held earlier certificates. These all went back to their regiments with a kind of musketry obsession, and this particular training, which had formerly been considered a bore, became a matter of keen interest, taking on the importance which rightly belonged to it and which became of such value on the outbreak of war.

The cool, deliberate shooting of our Hythe-trained soldiers played a great part at the beginning of those four years. Later came further developments, when trench or " position " warfare brought about the introduction of snipers and the institution of the S.O.S. School for sniping, observation and scouting under that famous sportsman, Hesketh Pritchard. Big-game hunters, backwoodsmen, frontiersmen, marksmen from all the Dominions, members of many irregular forces—these were

some of the types who trained or were trained as " snipers ".

Much more than actual shooting ability was needed: all these men had to pass strict observation tests, be quick to note minute indications, with the eye of a hawk, the ear of a hare and the nose of a hound.

Sniping was a difficult, dangerous business. Some concealed themselves in No-man's Land inside the skins of dead horses; others were camouflaged as trees, standing motionless for hours to secure a shot; others again wore canvas " sniper's robes " painted to blend with the background, or lay concealed but in full view, on the trench parapet, imitating sandbags!

Much useful information, too, was secured by these picked marksmen during such watches, concerning the enemy's position and movements.

The value of such " lone " shots was recognized in the war, and is still the idea behind the new musketry training. More care than ever before is taken to choose rifles fitted to their users, " made to measure ". Landscape targets have been improved upon and rendered more real, increasing accuracy and quickness of fire. Learners begin on the old-style bull's-eye target, but in their second course comes the turn of the " battle shooting range ", where moving figures of men, tanks and other vehicles are used. This gives much greater reality and introduces difficult aiming problems, such as would be actually present in warfare, when the targets are more likely to be aeroplanes or armoured cars than stationary objects.

For though rifle fire will not penetrate armour, it compels armoured vehicles to close the visors of their turrets, so that, like men-at-arms of old with their helmet-visors up, they are

more or less blinded, making the firing-powers of their crews so much the less dangerous.

All this latest training aims at teaching men to think for themselves, to judge their own distances, rather than know beforehand the exact range, to take cover and select their own targets while observing the result of their own fire.

Care of the rifle and machine-gun is another all-important part of the training. A dirty rifle can be worse than useless, as was discovered when weapons became clogged with trench-mud, and worthless when needed. And it is not only mud, dust, sand or wetness which must be guarded against; another newer danger was introduced by gas attacks.

After a bombardment by blister-gas or mustard-gas all parts of the rifle or machine-gun which are touched by the hands must be carefully wiped, or serious injuries may result.

Where each man is schooled on such lines, when it is considered that every mechanized infantryman must also have a certain knowledge of the motor vehicles used by the battalion, it will be seen that adaptability and proficiency in all directions are needed, and should result in an even greater and wider degree of perfection in that all-important infantry unit, the platoon.

SECTION 3—INFANTRY WEAPONS

Long before the Great War grenadiers ceased to exist in British armies except as the name of a famous Guard's regiment. The grenadier companies in every regiment with their

distinctive caps had been given up, although these dated back to the early days of our standing army.

In June, 1678, Evelyn's Diary tells of a review before Charles II on Hounslow Heath, where there first appeared "a new sort of soldiers called granadiers who were dextrous in flinging hand-grenades, every one having a pouchful; they had furr'd caps with coped crownes like janizaries which made them look very fierce, and some had long hoods hanging down behind, as we picture fools, their clothing being likewise piebald yellow and red".

But the spirit and methods of the men in the "loupéd clothes" of the old song was not dead.

European war and the trench warfare of 1914–5 reintroduced British grenadiers. Men made improvised grenades from meat-tins and other receptacles, filled with explosives and bits of scrap metal, and these rough and ready contrivances were quite effective. Soon similar weapons were designed and manufactured as the Mills and other types of bomb. Though the term grenade is used, the name *grenadiers* was replaced by that of *bombers*. Bombing-schools and courses were part of war-training, and daring bombing raids an important means of taking enemy prisoners and obtaining information about the opposite trenches.

In fact, the new-style grenadiers were, as of old, often the most daring and physically fit men in the regiment.

The perfected grenades now in use for our infantry, with their delicate mechanism, were the result of countless experiments during the later years of the War. The principal kinds are hand grenades, which can also be fired from a discharger-

cup attached to the rifle, by means of a blank cartridge charged with high explosive. These can be thrown by an expert bomber a distance of thirty yards or discharged from the rifle about eighty to two hundred yards. Smoke grenades are also fired in the same way from rifles, and although the chief use of grenades is in trench warfare, they can also be quite effective at close range against armoured cars.

Another queer fact about the name "grenade" for these deadly little objects is that it comes from the Spanish word for pomegranate, "*grenada*", possibly because they were supposed to be like that harmless fruit in shape.

Another revived weapon is the mortar, for these squat wide-mouthed objects throwing their large projectiles nearly upwards and with an effective range of about 1500 yards, are in shape very much like the clumsy leather metal-hooped cannon of the Middle Ages, which were later cast in metal.

Being small and easily moved, mortars are useful when quick support is needed for rifle battalions in an attack, either with high explosive projectiles or smoke to make a fire screen. They are not of much use against buildings, although when wanted for "position" warfare they can be dug-in to bring a fixed fire on the enemy trenches.

Besides these revived weapons, there are the new ones which modern warfare made necessary, the anti-aircraft and anti-tank types.

The light (Bren) machine-gun, on its tripod, may be used against aircraft, as we have already seen, and the rifle is also effective. Anti-aircraft training is an important part of a present-day musketry course, and special targets are used, with

silhouette models of aircraft. Machine-guns and rifles are also fitted with spotlight projectors for practice. This teaches quick aiming and rapid fire, which is essential against aircraft. The light projected takes the place of a bullet, so that the marksman can see the exact course this bullet would have taken and what would have been the result of his fire.

Rifles and Bren guns are effective against aircraft at a range up to 600 yards. It is interesting to know that at this distance aeroplanes appear only as silhouettes: national markings may possibly be visible, but not distinguishing colours. Details can only be seen at much closer range, so that it is very necessary that, as far as possible, the *outlines* of the aircraft of different countries should be memorized by marksmen. At any rate, all are taught to recognize the shapes of our own aeroplanes at sight, although even this is not always easy when a machine is coming towards one, head on.

Anti-tank and anti-armoured car weapons are another and even newer departure.

There are the .55-inch anti-tank rifles, a new invention fired from the shoulder with especially large armour-piercing bullets. This has been called a weapon of surprise: the range is about double that of an ordinary rifle and the bullet can penetrate light armour at 500 yards. This rifle weighs about 36 lb., it is 5 feet 4 inches long and has a magazine with 5 rounds. It could only be carried by a single man for a short distance, and, with its ammunition supply, it is supposed to be transported on a platoon truck.

There are anti-tank mines, where there is time to lay them, and they are as effective against armoured vehicles as against



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THE RIFLE BRIGADE—MOTOR BATTALION—WITH ANTI-TANK RIFLE

armoured battleships. Some are fired at once by contact, others are wired and quite safe until made active by turning on an electric current.

But on land, as at sea, there is always the danger of mine-fields turning traitor and being fired by the troops of the side which has laid them, unless very great precautions are taken to prevent such accidents.

The other weapon which the Great War unfortunately introduced into common use is one of the most terrible ever invented, so much so that it was and still actually is forbidden by an International Convention.

Ancient nations used something of the same kind, when they employed Greek Fire, stink bombs, smoke and fire bombs, but modern science has improved upon these methods—if such a word as improvement can be used—and made the various forms of gas far more deadly. So much so that protection against gas attacks is one of the most important problems of modern defence.

There are two kinds or rather types of gas, persistent and non-persistent. The last can be rendered harmless enough, if proper gas-masks and respirators are worn and the effects of it soon clear away, especially if there is any wind to help.

The persistent gases, generally what is called " blister gas " are really far more dangerous, all the more so because the effects may not be noticed for some hours. With blister gas the attack is made not only on people, but places: whole districts sprayed with it may be contaminated for weeks.

It will penetrate through boots and clothing when gas-infected ground is walked over; it can be used to make water-supplies undrinkable or pastures unfit for animals to graze

upon; while food dumps and other supplies may be poisoned.

This sort of gas can be dropped in bombs from aeroplanes, fired from guns—but these projectiles contain less gas and are not so deadly—or sprayed by hand when the enemy wants to cover his retreat by making the district in his rear uninhabitable. There are also what are called " beam " attacks, which are made from containers carried in quick-moving vehicles, but this can rarely be done except under cover of darkness or a smoke screen.

When there is any chance of attacks with persistent gas, those in authority order all gas-masks and respirators to be handy—that goes without saying.

One of the newest precautionary devices is a detector which turns red in the presence of gas.

But besides this, everything that is to be eaten, drunk, worn or even touched by the hands, such as weapons or clothes, is covered up with tarpaulins or something weather-proof of the kind, for even tinned foods may not be absolutely safe when exposed to gas spray.

Troops are not allowed to sleep in the open at such times. If there are no tents or billets, bivouacs or shelters of some kind are improvised, even if it is only under hedges or thick trees, and when the attack is over, everything which may have suffered is thoroughly cleaned—" decontaminated " is the word used.

CHAPTER IV

The Artillery of the New Army

SECTION 1—THE MECHANIZATION OF HORSE AND FIELD ARTILLERY

The mechanization of the British Army may really be said to have started in the muscles of the artillery arm—its biceps, so to speak. That is, if we agree with the lecturer who said recently that the whole object of mechanization was to provide hard-hitting, mobile troops—an army with a punch.

From the beginning of the Great War it was plain that modern motor transport had made it possible to use far larger guns in the field than ever before, those known as " heavies ", which could not be dragged by horses and had, therefore, scarcely been used except in fortresses for defensive purposes.

The introduction of huge caterpillar tractors changed all this. Siege-guns could be moved by their means to the concrete emplacements prepared for them and brought into action with surprising quickness. One such, which became famous, was the German " Big Bertha ", which, after dropping shells into Paris out of the blue at a range of nearly thirty miles, was discovered and destroyed by the Allied artillery. We ourselves had a " granny " of somewhat similar type which was moved from village to village and used with much effect. The size of the projectile fired by these huge guns, one cannot help thinking,

would rather startle Saint Barbara, the patroness of gunners. This girl-saint is always represented, as those who have seen her pictures and statues in museums or galleries will remember, holding a cannon-ball about the size of an orange in her hand. In the British Army, the "heavies" and "super-heavies", more or less stationary weapons fired from fixed platforms or "emplacements" well behind the lines, were hauled into place by immense tractors. They did good service against bridges, and especially strongly defended points, but were a very expensive kind of artillery. These enormous guns are short-lived and wear themselves out very quickly: each of their shells, too, is very costly.

But in spite of this partial mechanization, gun horses played a most important part in the war of 1914–8. Long after that war was over, indeed, the Royal Horse and Field Artillery kept their horses: it is only during the last few years that the tide of motorization has swept them away at last. Now, practically all batteries are dragon-drawn instead of horse-drawn, except for the few which keep their horse teams for ceremonial purposes only.

No longer, in answer to their own stirring order, can our Horse Artillery gallop into battle "Action front!"—a display which Napoleon, himself one of the greatest of all gunners, once described as the finest sight on earth. That is a thing of the past, although a past not much more than twenty years old. In the last Great War, as in many others, those famous "horse gunners" made history. Owing to their mobility and the speed with which they could be moved by highly-trained teams, these batteries were used chiefly in combination with horsed cavalry.



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ROYAL ARTILLERY: 18 25 POUNDER GUN

During the Mons retreat they performed marvels, limbering and unlimbering with extraordinary rapidity for rearguard actions, often extricating the batteries from hopeless situations. After all, the horse gunners were only keeping up their reputation, showing that character which a brave enemy had noticed just a hundred years before. General Foy, one of Napoleon's finest artillery officers, wrote in his *History of the Peninsular War* that the British artillery holds the first rank in the army, " the gunners are distinguished from other soldiers by the excellence of their spirits ".

No doubt the khaki batteries of 1914, both men and guns, already lost some of their picturesqueness in the field: Foy saw bombardiers in blue and white, with tallow-greased well-curled hair, for in those days curling-tongs were part of an artilleryman's kit and the sergeants were told to see that they used them.

But all those who have seen the Musical Ride at the Royal Military Tournament, who were thrilled when the six 13-lb. guns and thirty-six horses swung clattering into the arena at Olympia, will remember the splendid full-dress uniform of the Royal Horse Artillery—dark-blue, for that has always been the gunners' colour, covered with looped yellow braid; the curious " lines ", yellow cords twisted several times round the busby, passed round the neck and finished with two acorn tassels, or " flounders ", dangling from the shoulders.

The shape of those short jackets dates from Waterloo days: those of the officers, covered with gold lace, are even more striking and interesting, too, for another reason. It is the great ambition of a young field artillery officer to " get his jacket ",

like a barrister who " takes silk " or a public school Rugger player who is " capped ".

And speaking of caps, the officer's full dress busby matches the famous jacket in splendour, of black sable, with a scarlet bag, gold lines and a white egret plume, fifteen inches high, with vultures' feathers at the base.

The new dragon-drawn batteries, guns and men alike the same grey-brown, advancing at seven to eight miles an hour, grim and steady as steam-rollers at work, are not such a splendid picture, full of colour and glitter. Yet those who saw the first review on a large scale in which mechanized artillery took part, that at Aldershot during the Silver Jubilee celebrations of King George V, will agree that there was something immensely impressive in their march past.

Probably Napoleon, who would certainly have been the first to change with the times and mechanize his own " Grand Army ", would still have decided it was the finest sight in the world.

Horse-power has given place to dragon-power, yet the traditions which grew up around the horse batteries remain and cannot be mechanized away. Even the very letters used to distinguish batteries or troops—" A ", " F ", " O "—hold history for gunners, much more so those other names and titles gained by gallant deeds and prized as battle-honours. One of the oldest of all Royal Horse Artillery batteries owes its name to the one-time colour of its horses. This is the famous " Chestnut Troop ", which dates from 1793 and distinguished itself in Holland in 1799—as in many wars since.

A very noted gun-team of another colour at the outbreak

of war in 1914 was the " Old Blacks "; formerly the property of " F " Battery, they were transferred to " J " Battery when the Royal Horse Artillery mobilized. They all survived the War, though several horses of the team were wounded, and, wearing on their brow-bands the three war-medal ribbons to which their service entitled them, the " Old Blacks " had the honour in November, 1920, of drawing the gun-carriage which bore the coffin of the Unknown Warrior to Westminster Abbey.

" F " battery, first owners of the " Blacks ", has a fine history, some of which is told under its other name of " Sphinx " battery. Raised in India in 1800, it was sent to Egypt in 1801 as part of the bodyguard of Sir Ralph Abercromby, who was commanding there against Napoleon and defeated the French at the Battle of Alexandria. Here " F " battery distinguished itself so much that the officers and men were allowed to wear the " Sphinx " for Egypt on their uniforms and appointments. At first this was only to be a personal decoration; later, the battery itself was granted the badge and the title.

" Sphinx " battery has a mascot brass gun which accompanies it everywhere. This was cast at Dum Dum near Calcutta in 1840, and its " twin " is at Meerut. That weapon recalls early days in India when the guns of this battery, like those of many others, were no doubt drawn by tractors as heavy and ponderous as the modern motor-dragons.

For those were the times of gun-elephants, less mobile but more powerful than those horse-teams, who dragged the guns into action, with sometimes a leading beast known as the " flag elephant " who carried the battery colours as a rallying-

point. These gun-elephants make a striking part of the scene in the Indian battle-pictures painted during the early nineteenth century.

Another noted battery which began life in India is "N", or the "Eagle Troop", which was originally the 1st Troop Bombay Horse Artillery. The battery captured an Eagle Standard when pursuing the enemy at the Battle of Hyderabad in 1843, and was, as a reward, allowed to wear an eagle on all appointments.

"O" battery, or the "Rocket Troop", has at least two unique distinctions. One is that this is the only Royal Horse Artillery battery which has ever served as Marines. At the capture of Algiers they happened to be stationed upon a warship as a Rocket detachment, with this type of gun, or rather mortar; hence the name which has belonged to them ever since.

But the especial anniversary of the Rocket battery is Leipzig Day, the date of that great fight in 1813 which is sometimes called the Battle of the Nations. On this occasion, when the Allied powers of Europe united in arms against Napoleon, the Rocket battery alone represented the British Nation, which is certainly a high distinction. The Rocket troop has also the right to the honour "Waterloo".

Another "day" kept in especial honour by "I" battery, or Bull's Troop of Royal Horse Artillery, is 5th May, the date of the Battle of Fuentes d'Oñoro in 1811.

The hero of that day was Captain Norman Ramsay, of Major Bull's Troop. During the battle he and his two guns were surrounded and entirely cut off by French cavalry, a

disaster which almost always means the loss of the guns. Everyone, friend and foe alike, expected young Ramsay to surrender, but suddenly those who were watching from a distance heard shouts and commotion.

Then the surrounding masses of French cavalry gave way, as Norman Ramsay, drawn sword in hand, crashed through them at the head of his battery, the horses galloping madly, the guns clattering behind, while the mounted gunners yelled and cracked their whips.

Every 5th of May "Bull's Troop" commemorates how Ramsay saved the guns: on this occasion, too, the latest-joined driver in the battery used to stand at the head of the table and read aloud to his comrades the story of that fine exploit.

Certain troops and batteries had other curious distinctions now no longer kept up. There was one which behaved so gallantly in the American War of 1812 that it was allowed to carry "Niagara" on its appointments. Another noted as the "Battle-axe Company" carried before it a battle-axe mounted on a tall pole, an honour which dated back to Martinique in 1809. Here, this company so distinguished itself that it was given the battle-axe among other trophies, with the right to have it carried by the tallest gunner in the company, who was also privileged to wear moustaches.

These are some of the honours and traditions which survive mechanization in the Royal Regiment, together with their "Standards", the guns, which also remain, although with such an increase both in power and mobility.

SECTION 2—THE NEW WEAPONS

The need to provide new weapons for use against aircraft and heavily armoured vehicles such as tanks has made the rearming and reorganization of the artillery a big business.

There are certain changes, too, in names within the Royal Regiment. " Brigades " will in future be " Regiments "; the new 12-gun fire units " Batteries ", and the lesser units " Troops " and " Sections ".

All medium, anti-aircraft and heavy batteries are now mechanized, and the whole of the artillery reformed in two groups, the Field Branch and Coast Defence and Anti-aircraft Branch.

To the first belong all Royal Horse and Royal Field batteries, with medium and mountain units, as well as the 1st Heavy Regiment and the Survey Company and Section. The Coast Defence branch includes all the rest of the Heavy Artillery, with all Coast Defence and Anti-aircraft units and Searchlight regiments and batteries. These with their large motor vehicles, carrying the huge searchlights, reflectors and other apparatus, with all the responsibility for coastal defence, have been transferred from the Royal Engineers to the Royal Artillery in the latest reorganization.

The aim is to centralize and concentrate the artillery arm. For this reason fire units have now twelve instead of six guns, needing fewer personnel, formed entirely into regiments, except for a few isolated batteries.

Modern artillery knows two main types of weapons, " guns " and " howitzers ", answering to the machine-guns and mortars

of the infantry. Guns fire lower, farther and faster: howitzers, with their upward-pointing muzzles, can throw heavier shells over higher obstacles, and so are easier to place and bring into action behind high ground or tall buildings, which would not be cleared by the flatter-firing guns.

Experts, after many experiments, have now found a weapon combining the best qualities of gun and howitzer, giving the longer range of the former, with the greater power of the latter.

These new 25-pounders, " gun-hows ", are replacing the old 18-pounder quick-firing guns and the 4.5 quick-firing howitzers in all mechanized Field Artillery regiments, and they will also supersede the 13-pounder guns of Royal Horse Artillery units. This will simplify questions of transport, ammunition and gun-crews, by making them all alike.

The most mobile artillery units in the field will be the Anti-aircraft Brigades. It is very necessary that anti-aircraft units should be easily and quickly moved, when troops and strategic points must be protected against attacks by hostile machines. A quick-firing 3-inch gun, whose projectiles reach a height of from 10,000 to 8000 feet, used at present by these regiments, is being supplemented by new 2-pounder " pom-poms " to answer the menace of low-flying aircraft. These, with crews of 5, fire 100 rounds a minute, and are formed into very mobile units of 8 guns each.

A wonderful fire-control instrument has lately been introduced in connexion with this kind of gunnery. This Vickers " Predictor ", which has already been experimented with successfully in the Spanish Civil War, looks like an enormous camera on a tripod—and behaves like a wizard! Two

operators train the machine on the hostile aeroplane, upon which the instrument starts making auto natic calculations as to just where a shell should be fired ir order to reach the mark. These aiming directions are then gi ven to the man at the anti-aircraft gun by electric cable. He just keeps two pointers together and fires without ever seeing the target, but it is said to be almost impossible for him to miss unless the enemy plane takes a zigzag course, like that which is supposed to baffle a crocodile or a submarine.

Both super-heavy guns and super-heavy howitzers are more or less stationary weapons, fired from fixed emplacements or from carriages which in themselves form a kind of firing platform and are provided with rails on which to run back. This is necessary because of the terrific recoil or " kick " which occurs when these giants are fired.

One of the newest and most important developments in gunnery is in the means now used to find the position of enemy batteries. This is done in two ways, by " sound ranging " and " spotting ", and the work is carried out by the Survey Company Royal Artillery. Both systems can be worked by day or night.

The idea of " sound ranging " or locating sound was suggested by the fact that the artillery bombardments during the Great War could be heard at such a great distance. Experiments have gone on for twenty years, and now by the use of " hot wire " microphones, together with other very complicated apparatus, the sound waves from the guns can be picked up and recorded, and their position " plotted " much in the same way that bearings are taken to establish a point on a map. Several cross-bearings of sound waves are taken up by the microphones,

which record them by means of a camera on a strip of film: the point where tl ey cross gives the position of the battery which is firing.

"Flash spotting" is locating by sight, and it is carried out by a number of observers from as many different posts. The instrument used is like a pair of binoculars, with great magnifying powers. When a gun-flash is "spotted" the observer presses a key which lights an electric bulb at headquarters of the Supply Company, and at the same time makes a buzzing sound.

At this headquarters the position of each observer is shown on a board marked out in bearings by a drawing pin with a loose thread attached. As each "spotter" sends in his bearing, this is marked on the board with his own thread. When *all* the bulbs light up at one moment, it shows that all are "spotting" the same battery, and the point where their threads cross is its position.

SECTION 3—THE USES OF ARTILLERY IN MODERN WARFARE

The part of artillery in warfare is mainly played from behind the scenes. With modern long-range guns the target itself can rarely be seen, and the batteries are often concealed behind hills or folds in the ground.

As this is the case, someone at a distance from the guns acts as their "eyes" to give direction and the range or distance. This work is often done by artillery officers from "O.P.s"

or observation posts, within view of the points to be shelled, who communicate with the batteries by wireless, field telephones or "runners". A mobile mechanized O.P., moved quickly forward with the advance, mounted on a light armoured vehicle, is now in use.

Aeroplanes also work with the guns, to take photographs and "spot" the objectives, for it is seldom that guns, except those of anti-aircraft brigades, fire "over open sights", that is to say, at a visible target.

The main duties of artillery in modern warfare, besides anti-tank and anti-aircraft tasks, is to knock out enemy guns and destroy strong positions; to shell the roads and railways behind hostile lines along which the enemy's troops and supplies are brought. Also to support their own forces, and especially the infantry, by preliminary bombardment of forts, trenches, gun positions and barbed wire protections to break down opposition to an advance or attack.

Two words which came newly into use during the Great War, but are now part of our language, especially apply to the job of artillery: these are "barrage" and "camouflage".

A "barrage" really means a dam or embankment, like the Nile barrage, that marvellous engineering work which helps to irrigate Egypt.

The term "artillery barrage" came to be used for a bank or belt of dropping shells, fired by the guns to protect their own infantry in an advance towards the opposite trenches. It is a kind of safety curtain of fire lowered in front of them, through which nothing living could come to attack them.

A "creeping barrage" moves with and in advance of the

troops and is usually in several belts. That *nearest* the infantry is fired by field batteries; those farther on in advance by the longer-range guns.

Barrages are also used in defence and to protect against counter-attacks. There are *smoke* barrages, too, when the artillery batteries fire curtains of harmless shells, throwing out smoke when they burst to hide troops or movements of transport from enemy observers or aeroplanes.

" Camouflage " really means hiding things by making them seem different, a kind of " make-up " on a big scale, and it was used in the first place, as regards modern warfare, to hide guns and gun positions from enemy aeroplanes. Sometimes boughs and brushwood are used, sometimes nets with bunches of leaves tied on at intervals, or again material is coloured to make the things covered appear like sandhills or grassy mounds. Several famous artists, Sargent and Orpen among them, went to the Front in 1916–7 to paint huge canvasses with which batteries were screened, to look like parts of the landscape. One ingenious battery commander even built up an erection of light woodwork and painted tarpaulins over his guns, turning them into a realistic cottage, while in another case a sandy path wound over a heather-covered hillock—beneath which hid the battery.

CHAPTER V

The Engineers of the New Army

SECTION 1

In one of the many books written about the Great War a story is told of an officer of the Royal Engineers who was being questioned about his work by a civilian friend. " The trouble seems to be that you sappers are asked to do things that are almost impossible," the friend said, but the young officer answered: " Oh, there isn't any difficulty about those! It's the *absolutely* impossible jobs that sometimes give us a spot of bother."

That is what the task of the Royal Engineers really amounts to, especially in wartime; just one absolutely impossible thing after another to be done. And the extraordinary part of it all is that they manage to do them.

If one judged only by printed rules and regulations, sappers would have an easier time than ordinary infantry. They are supposed to be a supporting force, a *reserve* of fighting men, trained as such like the infantry, over and above their ordinary duties as engineers, but only to be used to deliver a counter attack, or hold trenches in a case of emergency, as a last resort, and to be relieved by other troops as soon as possible.

This sounds all very well, but as a matter of plain fact the Royal Engineers act up to their motto of *Ubique*—" everywhere "

—very thoroughly, and " everywhere " for them includes many extremely tight corners and almost all the difficulties and dangers that are on any front—and underneath it.

For the sappers are the engineering brains as well as the handymen of the British Army: they are noted for their skill in overcoming difficulties and can be applied to for almost anything.

Just to give an idea of the sort of job theirs is, imagine a field squadron, or field company of Royal Engineers (according to whether they are attached to a cavalry or infantry division) with the advanced guard of an army, which is close behind a retreating enemy.

They would be conveyed in motor troop-carrying vehicles, for the engineers, like the rest of the army, have been almost entirely mechanized, with accompanying lorries containing their first-line transport and the gear, tools and appliances needed for their particular specialized job.

Now, an army in retreat employs its *own* engineers to hold up enemy pursuit by every means in their power, and these are some of those obstructionist methods which *our* sappers would be called upon to tackle and overcome.

Railways or bridges across rivers might be blown up and need to be replaced, roads would probably be blocked by felled trees, or pits dug or blasted, whole tracts of country might be inundated by cutting dams, or stretches of woods and heather fired. Or again the water-supplies would very likely be destroyed or contaminated and land mine-fields laid, all of which matters must be put right very quickly if the advance is to go on.

Of course Royal Engineer detachments could not do all the

necessary spade-work alone. Infantry and other arms when available are always supposed to help, but the sapper officers are responsible and must direct all operations which come under their department.

In case of a *withdrawal* from occupied country, as we have seen, things are reversed, and our own military engineers would devise obstacles and plan demolitions of roads, railways and bridges.

If forces are advancing into unknown country, it is the sappers again whose duty it is to collect information by means of forward reconnaissance parties. Also, they make roads, lay light railways, or find out where rivers may best be forded.

Engineers may be needed to improvise a road across the desert by laying down endless rolls of wire-netting, or a foot-bridge with planks and petrol-tins to supplement the rubber aero-boats and collapsible assault boats carried by the infantry, and allow of their rapid crossing to establish a bridge-head.

When this footing on the river-bank is made good, the engineers must bring up heavier pontoon equipment, either to use as rafts for a ferry, or to form into a bridge for the mechanized troops to pass over in support of the infantry.

This folding-boat bridge is strong enough to bear infantry trucks, armoured carriers and light tanks over a wide stretch of river, although it is put together with astonishing speed.

The equipment is divided into a number of parts, and sufficient units to make up 240 feet of bridge are carried in huge motor vehicles with each infantry division by the Field Park Company, Royal Engineers.

In position or trench warfare, the sappers are, if possible,

even more indispensable to their comrades. While the infantry or men of the Labour Corps may be called upon to do the actual digging of trenches, all such works are designed and planned by the Royal Engineers field companies, who also construct concrete dug-outs and shelters, make huts, observation posts and machine-gun emplacements, as well as laying down trench tramways and supervising the drainage, water-supplies and communication trenches. The engineers, too, are responsible for the position of dumps of supplies of all kinds and for many important jobs of camouflage.

Then there are all the new problems set by mechanized warfare and the consequent vast increase in motor armoured and tracked vehicles of all kinds. These cut up roads in a manner unthought-of before, and the resulting wear and tear make them constantly in a state of repair. Also it is necessary to construct bridges and viaducts far more strongly and at the cost of more labour and material than in the days of comparatively light traffic.

Far behind the lines, and at the base itself, the engineers are continually at work with their electrical and mechanical companies and workshops units, making and mending, inventing, preventing and circumventing. And if they are as busy as beavers in the rear of the armies, they are still more ubiquitous in the forward trenches.

Their work at the front is never done, night or day, for it is in the darkness that elaborate jobs of wiring and such tasks are undertaken between the lines. Even when things seem fairly quiet at the front and the guns are silent, the Royal Engineers may be at their busiest literally under foot—for there, beneath

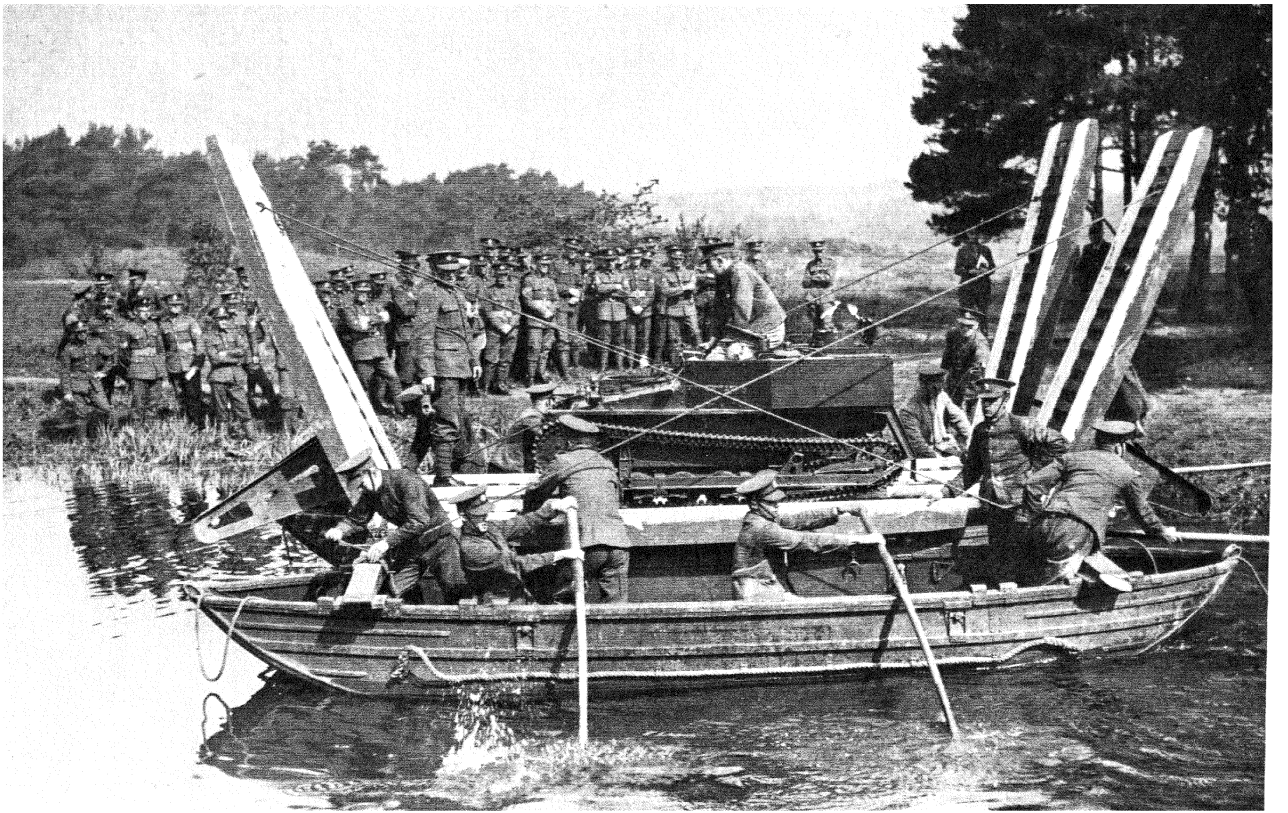
the ground, is the most difficult and dangerous part of their work.

In their other duties, the sappers may be just the untiring helpers of their comrades, the men who clear the way and make the roads and railways and tidy up generally. But there is yet another side to the work of the Royal Engineers, that which is described in the second part of their ancient title, " Sappers and Miners ".

As an example of this work, take only one single outstanding engineering exploit in the Great War, that of the mining of the Messines Ridge. From first to last, it was a magnificently planned piece of work, magnificently carried out, all the more so that it was something which could not be hurried: time, a great deal of time, had to be taken in preparation.

For weeks, the engineers had been at work, driving saps far under the enemy lines in utter silence and secrecy. To what an extent this silence and secrecy was preserved is shown by the fact that out of twenty mines in all, only one was discovered and destroyed by the German counter-miners, and they seem to have been quite satisfied that by doing this, everything was made safe.

But the work of the British engineers went on, unceasing, uninterrupted as far as the main job was concerned, although there must have been many anxious moments when failure seemed almost certain, such as when that twentieth mine was found by the enemy. In the nineteen undiscovered saps nearly a million pounds of high explosives were packed and fused, ready for use. At the appointed moment of the appointed day the series of mines were fired by an electric spark and the whole



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TRANSPORTING LIGHT TANK ACROSS RIVER, BY ROYAL ENGINEERS AND WILTSHIRE REGIMENT

Fox Photos , Ltd

of the Messines Ridge went up in one vast eruption with a roar which was heard across the flat lands of France and Flanders, across the Channel, in London itself.

The Ridge which had been a landmark for miles was destroyed, the whole shape of the landscape changed in a moment. It was probably the most important exploit of its kind in the war, and certainly the greatest mining achievement in all military history up to now, in its unexpectedness and completeness.

But while the story of Messines stands out in this respect, it must not be forgotten that it was only one of the many mining accomplishments, large or small, of the sappers, on a bigger scale and making a bigger noise, but not probably requiring otherwise any less individual toil and risk than minor operations.

Underground work is always perilous and arduous; how much more so when there is the risk every moment of being discovered by hostile counter-miners? Extraordinary stories are told of stern fights in the saps, when the tunnel walls between broke down, discovering the rival mining parties to each other.

Wonderful instruments have been invented for detecting the presence of enemy engineers in the neighbourhood. One of these, called the seismo-microphone, can pick up the faintest sound of countermining activities and transmit them to a central listening-station.

In sapping there is always the danger of subsidences, the even worse dangers of bad air and poisonous gases, often most fatal when there is no smell which human beings can detect.

Here is where those mice and canaries must not be forgotten, who by their acute senses helped to save many mens'

lives. Both in underground operations and in submarines, the reactions to bad air of these creatures warned the men of danger.

These small comrades-in-arms are rightly commemorated with other beasts and birds of war in the beautiful Scottish War Memorial at Edinburgh.

The tasks of the Royal Engineers go on in peace as in war; indeed their peace-work is a tremendous asset to the pacification of the world in general. In wild districts like the north-west frontier of India, roads, railways, bridges and aerodromes are some of the best means of bringing turbulent tribes to live quietly with their neighbours, and all these things come within the jobs undertaken by the sappers. They are carpenters and builders into the bargain; these are two of the trades taught in the Royal Engineers, and villages of hutments and bungalows with gardens all complete spring up in all the remote places where the British Army makes its settlements, thanks to the men-of-all-work of that Army.

SECTION 2—THE ROYAL CORPS OF SIGNALS

For centuries such signalling as was used by the army was part of the duties of the Royal Engineers. But as this branch grew more important, and electricity introduced so many fresh ways to signal by telegraph and telephone, a new "Royal Corps" was formed to take over all such work, and this is now one of the most interesting subdivisions of the British Army.

Nothing can be more important than a signaller's job; the

fate of armies and the results of battles may depend on a message being dispatched and received with absolute accuracy, and on the Royal Corps of Signals falls the full responsibility for establishing and keeping up communications in all the many different manners which modern science has invented. To do this, officers and other ranks alike must have great intelligence, technical knowledge, adaptability and efficiency: a high standard, but it is well kept up by the Corps.

Message-sending in old days was chiefly dependent on manpower, like the famous Greek runner who brought the news of the victory of Marathon, only to fall dead when he had delivered the tidings of the battle, leaving the name " Marathon Race " to be used for an athletic event of this kind in our own days.

Men carried messages on foot or horseback, pigeons or sometimes swallows and other birds carried them by air, and it is interesting to notice that in spite of every modern scientific invention, these means of communication are all still in use.

Dispatch riders on push bicycles and motor bicycles were as active as ever in the Great War, and it does not look as though they would ever be really superseded.

There were messenger dogs, trained for inter-trench work: the " pigeon post ", carrier birds, taken where required and worked from travelling pigeon-houses are still on the strength of the Army. They and their trainers did grand service by land and sea between 1914–8; many stories are told of the life-saving exploits of these V.C. pigeons. One of these famous birds may be seen in the Royal United Services Museum, with an account of how it was killed in the act of carrying a message, which was safely delivered.

The next stage in communication to be reached was by means of visual telegraphy, signals which can be seen with the eye. These, too, are still used in various ways, but beacon-fires, smoke signals, such primitive methods as the " Fiery Cross ", that flaming torch carried through the Scottish Highlands to summon the clans to war—all these might be called forms of visual telegraphy.

Then came the semaphore, tall posts with movable arms, set up at fixed intervals on high places, to send on messages from one point to another. This system was invented during the eighteenth century and used by Napoleon's armies and government. We too had a chain of these semaphores or telegraph stations, worked mostly by army or naval pensioners, from Portsmouth to London and other parts of Great Britain. The memory of such stations often survives in names like " Telegraph Hill " or " Semaphore Hill ". This method of signalling transmitted messages with surprising rapidity, but it was useless at night or in foggy weather.

The same is true of messages sent according to a code by means of coloured flags. This, at first purely a naval method, is now also employed by our latest fighting " landships," the tanks, for communicating the leader's orders or movements to his own or other squadrons.

" Flag-wagging ", too, by Morse and other codes is a means of signalling which has lasted for centuries. At present it is worked with two-feet square flags on a pole three feet six inches long: they can be read with the aid of a telescope at a distance of three miles.

Heliographing—writing with the sun—was a still newer

development of signalling, much used in the South African War of 1899. The Heliograph is worked on a system of two reflecting mirrors which send the sun's rays on to a distant point. This instrument, under good atmospheric conditions and with a bright sun, can be read at a distance of seventy miles—but heliography depends too much on the presence of the sun to be counted upon in European countries with a big percentage of cloudy days.

This is not the case with lamp signalling. Two kinds of lamps are used for this type of daylight communication: one for short, the other for long distances. The former can be read two miles away with the naked eye and three to four miles with a telescope in the daytime. At night, it has a visibility of six miles with the naked eye and twice as far with the telescope. For night use a screen is employed and coloured discs which enable stations to be easily recognized.

Rocket apparatus, either by day or night, has often been used by besieged garrisons, messages being transmitted by means of the different colours and frequency of the rockets. Verey lights, fired from a Verey pistol, were a development of this idea much employed during the Great War, in the trenches.

Then there are the various other ways of communication between ground and air. Balloons dropped messages into Paris during the Franco-German War of 1870–1: now their place is taken by swiftly-moving aeroplanes in message-dropping while signals are transmitted from the ground to the air by means of ground-slips.

But in spite of its many uses, and although there are always bound to be occasions when only visual messages *can* be sent,

"sight" signalling has been gradually superseded by those other wonderful means of communication, telegraphy and telephony, reaching their peak in radio or wireless telegraphy and telephony.

The first time a dispatch announcing victory came direct from the scene of battle by field telegraphy was in 1882 when the news of Tel-El-Kebir was telegraphed to Queen Victoria and the Prime Minister.

One of the finest stories of the corps is recalled by the royal throne of Ashanti in the Signals' headquarters mess at Catterick. This commemorates the day in 1895 when Prempeh, surrounded by his bodyguard at Kumasi, was startled by the appearance of three men in tattered uniform who erected a telegraph pole with the Signals' blue-and-white flag and sent a wire to the Queen that Kumasi was taken. The Signals detachment, after a toilsome cable-laying jungle march, had arrived ahead of the fighting troops to capture Prempeh's capital!

This is a contrast to the newest mechanical telegraph cable-layer, a motor-truck from which the line is paid out *sideways* as the vehicle moves, to lie along hedges and trees. This apparatus recovers the cable after use, equally quickly, dispensing with the long forked stick of older days.

Still newer is the one-man pack for short-distance wireless communication, which is being perfected for the use of infantry. This is carried on the back and has a directional loop-aerial for picking up messages.

It is with these modern inventions naturally that our Royal Corps of Signals of to-day is mainly concerned.

A comparison between our own homes and the organization

of the British Army seems rather like one between a pin's head and the globe itself. All the same, when we possess a telephone and a wireless set—when we have only to lift the receiver to send or take a message perhaps from the other side of the world, or can receive by radio in our own room reassurance about something of the most tremendous importance to ourselves and others—that is really what the Royal Corps of Signals does as regards all the many units and divisions of an army in the field.

All the means of communication operated by the corps are employed to keep up connexion between different parts of that army, to make what is called liaison. But while the whole system of telegraphy, telephony and radio is a permanent, more or less stationary affair, pressing a button, dialing a number or switching off and on, the Signal Corps has to run a travelling show, a mobile system centred and settled in one spot perhaps for only an hour, perhaps for weeks or months, according to where the army goes into billets or prepares to give battle. And yet, for however long or short a time, everything must work with perfect smoothness, there must be no break in these real lines of communication made by electric cables and wireless waves.

Apart from message-carriers and visual signals, this system of keeping in touch is carried on by several methods. There is what is called Line Telegraphy and Telephony along field cables and field telephones, sent by Morse code or conversation, which is active at four to eight miles. The Morse code is quicker than conversation or a phonogram, but does not give quite the same feeling of confidence as a more intimate talk.

Some of the most dangerous tasks undertaken by army

signallers are those of laying or repairing cables across country exposed to shell or machine-gun fire.

Then there are wireless telegraphy and radio-telephony. The former is the sending of wireless signals by Morse code. This system will often be heard on household sets, picked up from ships at sea. Radio-telephony is sent by wireless, and the term " wireless " is popularly used to include both methods.

One of the disadvantages of wireless in the field is that the enemy can intercept signals made by this means and locate the position of the transmitting sets. A great advantage, which will appeal to those who live near such wireless fans or fiends as use their sets to the extreme volume of sound possible, is that in the army, if a force is advancing and does not wish its presence to be known to the enemy, the general commanding can order a " wireless silence " among his own units.

All the intercommunication system of signals, if it is to be brought to such a fine art in wartime, must have dress rehearsals at manœuvres. So it is quite possible to get a sort of slow-motion idea of the part actually played by the Royal Corps of Signals if we try to visualize its members taking their share in mock warfare.

An important personage known as the Director draws up the general plan of the operations in which two Armies—say of Northland and Southland—are to take part, and a narrative is issued of what is supposed to happen. Then each general commanding his force of all arms begins to try to solve the problem set, passing on his particular share in it to brigade commanders, from whom it filters down, through all superior grades, to platoon commanders.



Courtesy of Headquarters, Signal Training Centre, Catterick Camp, Yorks

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ROYAL CORPS OF SIGNALS

Field Radio Telephony set in operation

When active operations begin, the Director would be seen, seated in his large motor-car, surrounded with maps and a bodyguard of small cars with wireless apparatus, motor-cyclist orderlies bringing messages, while "spotting" aeroplanes may drop communications from the skies, and the instruments of telegraphists and telephonists tap and buzz unceasingly.

All the resources of the Corps of Signals, in fact, are being set in motion by the Director to move dragon-drawn artillery from one position to another, to send tanks lurching forward under cover of a smoke screen, to establish machine-gun posts and despatch cavalry armoured-cars to the flanks, while bodies of infantry are launched, with the support of a barrage, to clear the enemy from their positions. And no matter what extent of country is involved in the scheme, the Royal Corps of Signals would be concerned in every inch of it.

Then let us suppose that the Director is satisfied with the result of the operations and suddenly decides to bring them to a close. Once again the Corps of Signals is called upon to put through the job.

The Chief of Staff receives an order from the Director; in his turn he passes it on, just a few terse words on a slip from a message-book: "Operations concluded AAA Troops return to permanent quarters AAA."

Through various general staff officials this message eventually reaches the chief signal officer. With all the apparatus at his disposal, over miles of cable, by wireless or visual signals he transmits the change of programme to the commanders, who then issue orders to their divisional brigade and battalion signal units. The news spreads, widening like circles when a stone is

thrown into water, until it reaches the most distant batteries, infantry platoons holding posts on a far-away ridge, or an armoured-car or light tank formation doing reconnaissance work at some equally remote point.

The Royal Army Service Corps must be notified by signal regarding supplies and transport: one division to embus, another to entrain, together with complicated road movements which supply a lesson in traffic control. Two thousand or more vehicles, tanks, gun-carriers, lorries and trucks pass along the allotted roads, regulated by officers in charge of posts. These must solve difficulties of sudden obstructions: perhaps the breakdown of a tank, perhaps a lorry stranded across the highway, diverting a great stream of mechanized transport to another route, and all necessitating quick decisions on the part of the Provost Marshal and his mobile military policemen.

All passes off without a hitch by the clockwork methods of the general staff.

CHAPTER VI

The Other Services of the Army

SECTION 1—THE ROYAL ARMY SERVICE CORPS

One of the earliest mentions of hastily improvised food transport for a large force must be the story in Exodus of the Children of Israel leaving Egypt, carrying unleavened dough in their kneading troughs, wrapped round with cloths.

Glancing through history, we shall always find that it was—as in this case—the supply of *bread*, either as corn, baked loaves or biscuit, with which military commissariat officers were most concerned. Evidently the army, like others, considers bread the staff of life.

The Roman armies, while acting on the principle of "living on the country" they conquered, had also a wagon-train, and some commanders were thought to carry far too many food luxuries when on campaigns to Britain, Gaul and elsewhere.

The Ancient Greeks were more abstemious: the Spartans went to war with only a kind of "iron" or emergency ration of sun-dried goat's flesh, which seems to have been about as appetizing as strips of leather.

The commissariat arrangements of the Scottish armies in the time of Edward III were very curious, as described by Froissart. They carried raw oatmeal in a bag under their

saddles, warmed through by contact with the horse's back and the friction of riding—and this was all the cooking it got! Still more queer was their system of army catering. A herd of bullocks was driven behind the fighting troops. When halted for the night, some of these beasts were slaughtered and skinned; from these fresh hides, cooking-pots were made, by slinging them on four wooden stakes over huge camp-fires. The hides were filled with water in which lumps of the ox-flesh were cooked.

Edward III showed himself a true general when, during the French campaign of August, 1346, he proved his grasp, more than four centuries in advance of Napoleon, of that other great soldier's famous saying, "an army marches upon its stomach".

Before the Battle of Crécy, the King, finding the district they were marching through very rich in foodstuff, ordered all the men of his armies to halt and eat a hearty breakfast. "For," said Edward to his generals, "it is a well-known thing that the English fight best when full."

A hundred years later the supply and transport arrangements of another British army in France caused a battle. This was in 1429 when the English forces were besieging Orleans. It was Lent, and a convoy of wagons, escorted by soldiers under Sir John Fastolfe, were carrying loads of herrings to the army, the men's Lenten rations.

On the way, the convoy was attacked by the French, but Fastolfe made the wagons into a kind of "lager" or "zareba", as it would have been called in later wars, from behind which the English archers fired so steadily that the enemy fell back

with heavy loss. The rations of the British Expeditionary Force in France were saved by Fastolfe's action, and the engagement is still known as the Battle of the Herrings.

During the fifteenth and sixteenth centuries the mercenary armies of those days received no rations: they bought food—or stole it—from the local inhabitants; when they got their pay—always a matter of uncertainty—they spent it on provisions supplied by sutlers who followed the armies, as a private speculation.

In the seventeenth century, things began to be better organized; both in the Swedish and Dutch armies there was a table of rations for all ranks and also a wagon-master, who saw that the outside food contractors did not cheat the soldiers too badly.

The "New Model", the first English regular army of Cromwell's formation, was equal, as far as the commissariat went, to those of Gustavus Adolphus or the Dutch Stadtholder: sutlers and tradesmen followed the Parliamentarian forces and were allowed to open markets and sell food to the soldiers.

Also there were new military officials especially appointed to look after the feeding and quarters of the men. One of these departments was that of the Commissary—General of Horse Provisions.

The makers of the first standing army of 1661 were not practical organizers like Cromwell, and their commissariat arrangements were not nearly as good as those of the "New Model" of 1645. During the campaigns of Marlborough the welfare of the soldiers in this respect was very badly looked after: even the Duke himself, a most humane commander in

many ways, does not seem to have realized the need to consider his men's feeding, quarters or comfort in general.

Things did not much improve during the whole of the eighteenth century: the Duke of York's campaigns towards the end of it were scandalously mismanaged, so much so that a new corps, the Royal Wagoners, was created to tackle the situation, but lasted only a year. Later in the same campaign, however, during 1794, at the beginning of the French revolutionary wars, the Royal Wagon Train was formed under a Wagon-Master General, and this lasted until 1833.

Even so, it needed Wellington to knock things into shape where this branch of the service was concerned. During the Peninsular War he worked marvels with the untrained material and the rough organization at his command. He came to Spain, as the "Sepoy General", with his vast Indian experience behind him, where he had already tackled and mastered the question of commissariat and transport, using almost as many varieties of draught animals as did his successors in this particular department a century later.

By the time of Waterloo and the Peace, the Duke had made immense improvements, but during the next great war in which the British Army was engaged it seemed as though the lessons he taught had been more or less forgotten.

The Royal Wagon Train had been abolished in 1833, but the Land Transport was formed in 1854, the name being changed to Military Train after the war. This proved to be in the end the first germ of the Royal Army Service Corps. But the organization was new and untried; probably for that reason it worked badly and the troops suffered in consequence. There

were great scandals connected with army clothing, feeding and medical stores in the Crimea: contracts had been mistakenly given to dishonest firms in many cases, and the unfortunate soldiers were badly found in almost every way.

The services of transport and supply, too, completely broke down when put to the test of rigorous winters, torrid summers and epidemic diseases in the Crimea. The Military Train had replaced the Land Transport Corps—but not for the better. The Train worked on wrong lines from the first, for it placed transport on a different footing to supply and increased the general muddle. It was not until 1868 that the two were united, as they should be, under a single head.

In 1853 Aldershot came into existence, not the great military camp that it is to-day, but a small training ground, a mushroom growth of hutments in the middle of wide stretches of heath. The commissariat had its corner there, establishing bakeries and making bread far superior to that produced in London. Butcheries, too, were set up and a bread and meat ration issued on the lines which were to be adopted in wartime. This was apparently the forerunner of that scheme which in 1914, on the eve of War, established field bakeries and butcheries on railway lines to turn out daily supplies of fresh bread and meat for the troops.

1858 saw the commissariat department reformed on a military basis; in the following year a warrant authorized the formation of an Army Service Corps. Finally, in 1887 it became, through the influence of Sir Redvers Buller, a wholly military regiment.

At the beginning of the Great War the corps consisted of

500 officers and 6000 other ranks. During the following four years, a system was created which is still unchanged and the world's record established that not once did the troops lack their rations. At the War's end the personnel of the corps was 150,000 officers and men, and they were catering for a ration strength of over two millions.

Even that figure does not give an idea of the tremendous tasks shouldered by the corps.

Many races had to be fed in their own particular way. Indians must be supplied with *atta* and *ghee*, flour and clarified butter; Fijians and Chinese of the Labour Corps required coconut oil; Egyptians, lentils and cheese.

Then there were the complications of transport. From 1914 to 1918 over 6500 lorries and tractors and 7000 motor cars were dealt with in the Heavy Repairs Workshops.

A mere list of where the Army Service Corps served would be a lesson in geography: the Balkans, Basra, East Africa, Archangel, Gallipoli, India, Egypt, Palestine, Italy, Mesopotamia—with almost as many and varied means of transport as there were countries. Dogs, donkeys, camels, elephants, oxen, mules, horses; native carriers, motor boats, sleighs, queer native craft of all kinds for water transport; then the stupendous mechanical transport and last, not least, the Auxiliary Omnibus Park which came into existence in 1916, and must be more fully described.

By a marvellously efficient system bus columns were ready to move within an hour: embussing and debussing seldom took more than half an hour, and the record for a brigade was four and a half minutes. There were many of these moves to be

carried out, and often the drivers were at the wheel for sixty hours at a stretch.

The Auxiliary Omnibus Park was the only Army Service Corps unit in the British Expeditionary Force to be distinguished by mention in dispatches during the War, but many individual members of the corps were decorated. In the spring of 1918 Private R. G. Masters, driver attached to the 141st Field Ambulance, won the Victoria Cross for conspicuous bravery and devotion when communications were cut by an enemy attack and our wounded could not be evacuated. Private Masters made repeated journeys, under heavy shell and machine-gun fire, bringing in many wounded. His was the only car that got through.

No wonder that the 10,000 casualties of the corps included 3700 dead.

The Army Service Corps became " Royal " in 1918. Already it takes a high place for efficiency: mechanization for this corps is no more than amplification, since it was largely motorized even in 1914.

The Supply side deals with food, forage, petrol, fuel, lubricants for engines, light, disinfectants and medical comforts; the transport services with all mechanical vehicles in R.A.S.C. units.

Technical transport is provided for R.E. bridging material; ambulance car companies for transport of casualties from train to shipboard are run entirely by the R.A.S.C., which also conveys ammunition from railheads or dumps to forward areas.

But its chief concern is with the distribution of supplies to fighting troops. Units in the field must have two days' supplies

within easy reach, besides emergency rations, and these stocks are replenished daily by an unsurpassed system.

Reserve transport companies are available for general duties: one is to "lift" or embus the infantry or marching personnel complete with their equipment, packs, greatcoats and ammunition, bringing them to some important tactical point in the scene of operations fresh instead of fatigued after long wearisome marches.

Supplies from ships are taken into the R.A.S.C. main supply depot, loaded daily into railway wagons and forwarded through different formations, taking in field bakeries and butcheries. So by stages to the Brigade Supply officer, on whom regiments depend for rations.

Nowadays the R.A.S.C. is not much concerned with forage, but petrol is an enormous item, considering that a tank uses 75 gall., dragons 45, armoured-cars 12, lorries 10, and a motor-cycle 1 gall. per every 50 miles.

A soldier receives a pound of bread a day—hence the old army slogan, "'listing for his pound". On active service his ration is more varied than in peace-time, with bacon, cheese, jam, even two ounces of tobacco and two boxes of matches a week.

This daily ration weighs about four pounds, and when it is considered that over 3,000,000 tons of food alone was shipped to France from 1914 to 1918 it gives some slight idea of the work of this most efficient corps.

SECTION 2—THE ROYAL ARMY MEDICAL CORPS

The badge of the Royal Army Medical Corps shows how old the study of medicine is. It comes from Ancient Greece, where Æsculapius, son of Phœbus Apollo, was God of doctors. Legends told of his going to teach health and hygiene to the Romans in a serpent's shape; sacred reptiles were kept in his temples and the Rod of Æsculapius with its twined snakes, with the Æsculapian Oath, are still symbols of medicine.

But what Æsculapius taught was almost forgotten for centuries, especially in wartime. In Norman, Plantagenet and Tudor days armies were disbanded when hostilities ended: the civilian surgeons or " leeches " were very ignorant, badly paid, and with no standing. The wounded were terribly neglected unless they happened to be men of importance, whose own followers cared for them, carrying them from the battlefield in litters, as Froissart describes.

Private soldiers were mostly left where they fell: there were no dressing-stations or hospitals, and although sometimes local country people helped the wounded, if they happened to be hostile no mercy was shown.

Later, during the Civil War, contemporary writers tell of two women, Lady Halkett on the Royalist side and " Parliament Joan " on the other, who worked hard for sick and wounded soldiers, helped by a few of their comrades. But surgery then was a rough and ready business, with no anæsthetics, and boiling pitch used to stop the bleeding of amputations.

When the Standing Army began to be formed in 1660, colonels

actually owned their regiments, and the surgeons who were appointed to look after the men's welfare were treated as the colonel's paid servants. Things did not much improve, although there was an attempt to form " flying " or " marching " hospitals. But transport was difficult, organization often broke down, the only orderlies or " mates " were ignorant men attached to the army and navy indiscriminately.

During Marlborough's campaign a " bread wagon ", one of those used by the contractors for the army's bread, was allowed to each regiment as an ambulance.

A curious survival of early first-aid methods is the officer's red sash. This was made very wide and long, with two slits through which pike-staves could be run, turning it into a kind of stretcher.

In those days, a saw and knife used to be laid on an army doctor's coffin, together with his sword and pistols.

It was two French surgeons, Barons Larrey and Percy of Napoleon's army, who made the first great changes. Up to then, rough unsprung carts were used for the wounded, and travelling must have been torture. Larrey introduced light-horsed ambulance wagons during the Austrian campaign; Percy formed the first companies of stretcher-bearers. In the British Army, too, Sir J. McGregor, head of the military medical organization, brought in certain reforms during the Peninsular War.

But things were still very bad down to the middle of the century at the outbreak of the Crimean War, when Florence Nightingale began those great reorganizations which changed the army medical service. It was not only her nursing genius

as shown in the Scutari Hospitals; she established a depot there for medical stores and clothing, proving herself to be, as a soldier-historian wrote lately, " an ordnance officer of the finest type ".

In 1854, the Hospital Conveyance Corps was started, but it consisted of old disabled army pensioners, who can hardly have been good " conveyors ". The wounded at the Alma were carried on stretchers by sailors.

But things were moving. In 1855 the Medical Staff Corps was created for home service, and in 1857 the Army Hospital Corps. For some time after this doctors were appointed direct to regiments, and there were separate regimental hospitals, but this system ended in 1873 when the Army Medical Staff was formed.

Each new war showed the need for changes and improvements in the care of sick and wounded soldiers. In the Boer War of 1899 the first means of identification were used, in the shape of a marked strip of linen carried in a tunic pocket. But this was useless if the soldier who owned it happened to change his coat, and it was replaced in 1906 by the identity disc hung round the neck.

Two years later, in 1908, the Royal Army Medical Corps came into existence, and is now one of the finest organizations of its kind in the world.

The corps was enormously enlarged during the Great War. At mobilization there were 9000 officers, warrant officers, non-commissioned officers and men; the strength in 1918 was 133,000, and they dealt with 9,000,000 casualties—2,000,000 on the Western Front alone; 6,000,000 were carried in ambulance transport from August, 1914, to November, 1918.

743 officers and 6130 men gave their lives in the War, a wonderful record for a non-combatant service, and the corps had a splendid list of honours. There were 7 V.C.s—one of them that rarest of all distinctions, a Victoria Cross with bar won by Dr. Martin-Leake, 499 D.S.O.s, 1484 Military Crosses, 3000 Military Medals and 395 Distinguished Conduct Medals.

Even at this time, in 1914, the Royal Army Medical Corps was already largely mechanized. A great fleet of motor ambulances were used, but war, as it always does, made many makeshifts necessary and out-of-date forms of litters and stretchers were often taken into service; canal barges and river boats had to be employed to carry the wounded, however unsuitable. It was a case of making the best of even the worst things available, but many lessons were learnt, which only such experience could teach.

But the corps is not only concerned with the sick and wounded in war: both then and in peacetime, its duty is to keep the army healthy and prevent disease. It is plain that the officers must not only be clever at medicine and surgery, but also thoroughly understand soldiers, their life and work.

Not only this: army doctors in the field must know something of tactics, so as to keep in touch with the operations of the fighting troops. This is very necessary, and such knowledge will be tested during battles, for the medical officers should be able to judge where the worst fighting will take place, which dressing-stations and casualty clearing-stations and field hospitals will be overcrowded in a stream of casualties.

It is a great organization, a chain of help and healing which stretches link by link, from the regimental stretcher-bearer to

the hospital in England, an organization so complete and wonderful that it is interesting to trace all the different phases.

On active service each officer and man carries a " First Field Dressing ", a packet of khaki cotton cloth containing two dressings of two and a half yards of bandage each, some gauze, a phial of iodine and a safety-pin. This was used first by the Prussian Army in 1870 and adopted by us in 1884.

When a soldier is wounded he either uses this dressing himself or this is done by the first regimental stretcher-bearers to find him, who then carry him to the Regimental Aid Post, where he is attended by the medical officer attached to the regiment. This aid post has everything possible to treat wounded brought from the front line—blankets, hot-water bottles, spare stretchers, hot drinks.

The " casualty " whom we are following is ticketed to show the nature of his wound, and then taken by ambulance to the Advanced Dressing Station, the most advanced post in the field where wounded are given urgent treatment. This station is formed by the Field Ambulance, who collect casualties from the Regimental Aid Posts.

From now on, wounded are in charge of the medical organization, which carries them by motor ambulance to Casualty Clearing Stations, Hospital Trains, General Hospitals and Hospital Ships, with connecting links of hygiene sections and bacteriological laboratories.

Motorization will make changes in the R.A.M.C. as in all branches of the army, giving greater mobility in other ways than is afforded by motor ambulances. There were cavalry ambulances to keep up with quickly moving formations, but for the

infantry only the regimental stretcher-bearers who distinguished themselves so often in the trenches or in the fire-swept zones between the lines. One can imagine these stretcher-bearers under mechanization, transported in light motor-trucks, the medical officer moving with front-line troops in his own car, the aid post also motorized—like the mobile workshops where first-line repairs to vehicles are executed.

More than ever, equipped with all the latest inventions of science and mechanics, this corps gives opportunities to intelligent boys and men to learn a trade which is interesting at the time, and qualifies for good employment in civil life.

One thing is certain. Whatever changes may be necessary, the Royal Army Medical Corps will be equal to meeting them, with ingenuity and adaptability, with that devotion to duty, and to their sick and wounded comrades, which has earned them their motto "*In arduis fidelis*".

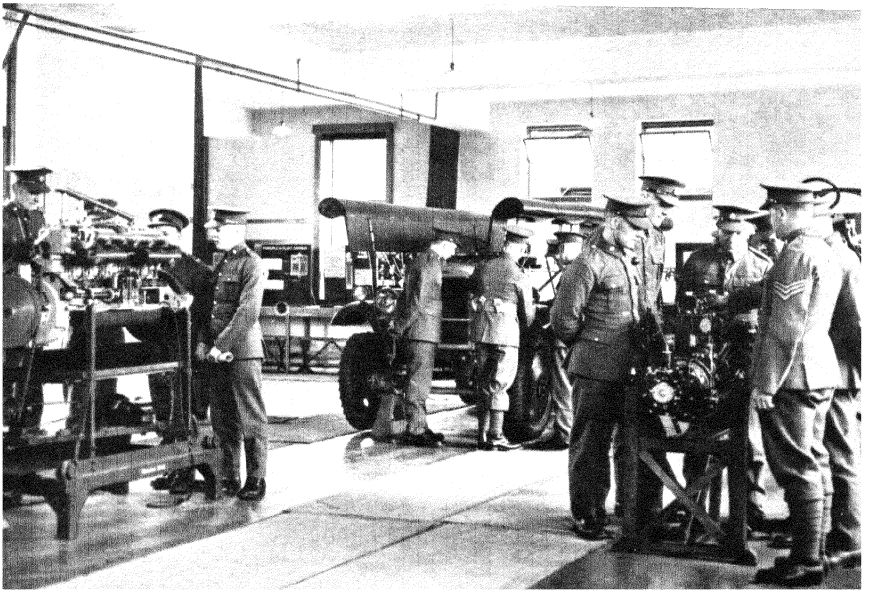
SECTION 3—THE ROYAL ARMY ORDNANCE CORPS

The Ordnance Service, under different names, is probably the oldest in the British Army, as the soldiers' universal providers. Most likely the first Keeper of the King's Wardrobe or Armoury came over with the Conqueror, in 1066, taking up those quarters at the Tower of London, rebuilt by William the Norman, which were to belong to the Ordnance Officer for centuries. The Assize of Arms in 1181, which gave a regular scale of weapons and equipment, must be one of the oldest Ordnance Manuals.

In 1299 the head of the department was a Government



ROYAL ARMY ORDNANCE CORPS: MAIN WORKSHOPS, ALDERSHOT



ROYAL ARMY SERVICE CORPS: INSTRUCTION IN REPAIR OF VEHICLES

servant, with the title of Artillerator and charge of all the military implements at the Tower, which included battering-rams, slings and catapults. The holder of the post in 1338 was directed to buy "1000 bows, 4000 bow-strings and 4000 sheaves of arrows", for those were the great days of English archers. It seems as though, even then, there was need to speed-up munition-workers, for the Artillerator was ordered to hire bow and arrow-makers—Bowyers and Fletchers they were called—to have them ready as quickly as possible.

The Artillerator was succeeded by a Master of Works, Engines and other kinds of Ordnance for War in 1414, just in time to provide ammunition for Agincourt. By 1418 times and weapons had changed, and John Louth, with John Bennett, mason, was supplying 7000 stone cannon-balls of various sizes and twenty barrels of gunpowder made from willow charcoal.

The duties of the Master General of the Ordnance were increasing: soon after this he was also head of the two branches, now the Royal Artillery and the Royal Engineers, and responsible for the supply of all kinds of war material and equipment, including the pay of the troops. In the English army which invaded France in 1475 the only soldiers described as "King's Men" were those fitted out by the Master of the Ordnance.

During the Wars of the Roses, with several claimants to the throne and numbers of great fighting nobles leading their followers on both sides, it must have been hard for the ordnance officials to know whom they were serving. The department became very important under the Tudors—when it was described as "Thordynance" according to the eccentric spelling of those days—and still more so when the Civil War brought

Cromwell to the fore as one of our greatest ordnance officers.

He organized this branch with all the rest of the army and, when actual fighting was ended after the final Royalist defeat at Worcester, constantly attended the Parliamentary Ordnance Committees.

To Oliver Cromwell the British soldier owes several important parts of his equipment. He introduced knapsacks—snapsacks, as they were first called—to hold the spare kit of troops, and also tents.

At this time, the department was supplying the Navy as well as the Army with all the equipment, including tarpaulins and wheelbarrows for powder, known as "ammunition". Curiously enough this word is still used in the term "ammunition boots". For 1657 there is the first entry of a few thousand hand grenades, at 1*s.* each with fuses.

With the formation of the standing army in 1660, a Master General of Ordnance was appointed. One of his first duties was to supply twelve set of Colours, painted with different Royal Crests, to the King's Regiment of Foot Guards, and another interesting warrant to the officers of ordnance in the Tower of London is dated 10th February, 1659–60, and signed "George Monk."

This runs: "I desire you to exchange the old muskets and deliver new arms in their stead to my regiment"—but it was more than muskets which were exchanged. For "my regiment" laid down its arms on 14th February as the Parliamentary Lord General's Regiment of Foot and took them up in the restored King Charles's service, to be later known as the Coldstream Guards.

Time and wars made the Ordnance Department more and more important, and increased the numbers of new officials with such resounding names as the "Firemaster" and the "Master Gunner of England". The first mention of what is now Woolwich Arsenal is in 1716, when guns captured by Marlborough had to be recast and it was decided that the Government should have its own "Royal Brass Foundry at His Majesty's Tower Place at Woolwich". Up to this time weapons and ammunition were made by private companies, but in 1716 there was a munitions crisis, just as occurred two centuries later, and it was proved that all the powder mills in the country could not keep Marlborough supplied.

Two famous Masters General of the Ordnance just a century apart were the great Dukes of Marlborough and Wellington. The Iron Duke governed the department energetically from 1818 to 1827 and made many important changes. He was especially stern in dealing with those who took ordnance material for their private use. At this time it was quite usual for officers to use the timber intended for gun-carriages or musket-stocks to make furniture for their own houses. And this was no light matter: walnut wood for muskets had become so scarce during the Napoleonic Wars that avenues and groves of walnut trees were planted at many ordnance depots.

In 1834 the Board of Ordnance took on fresh duties, undertaking to feed as well as equip the army. It also placed contracts for supplying liquor to regimental canteens, which had just come into existence at that time.

The whole organization of supply, transport and equipment broke down at the beginning of the Crimean War, and

the Ordnance Service was involved in that failure. But in 1855 great reforms were set on foot by Captain Gordon, brother of the famous General Gordon, and from that time the Ordnance Service became entirely responsible for providing all kinds of stores for the army in peace and war, at home and abroad.

Along that road the R.A.O.C. has marched ever since, reaching its highest peak of efficiency when in the Great War it was called upon to arm and equip the largest army Britain has ever raised. The First Expeditionary Force of 6 divisions expanded to 63 divisions; formed 20 corps divided among 5 armies; and of the 25,000,000 tons of war material landed in France up to the time of the armistice 70 per cent was ordnance stores.

In 1914 there were 324 18-pounder guns, in 1918, 3215; at the armistice over 5,000,000 tons of ammunition were ready in France. For the operations at Passchendaele alone, in the autumn of 1917, the expenditure amounted to 465,000 tons, valued at £84,000,000.

As against the " few thousand grenades with fuses " of two centuries before, the ordnance supplied Mills bombs by millions, periscopes, wire breakers, wire cutters in tens of thousands, body armour for trench raids, while ten million sandbags were sent to the Front within four days.

Any possibly useful suggestions were tried out. One was that daggers should be issued to the troops for trench raids and the Ordnance Department provided them in thousands. But the British soldier did not take kindly either to these or the nail-studded knobkerries which were another idea.

It is impossible to imagine the amount of work done by the

corps, the originality and resourcefulness with which it was carried through. The salvage operations alone were a great feat, for nothing was wasted. Web equipment and articles collected from the battlefield were cleaned by a special process, water-bottles re-covered, waterproof sheets patched, tents repaired and reused. Even worthless things were utilized; laces were cut from the uppers of old boots and the residue used as fuel; baths were made from petrol tins and spokes of old wheels made table and chair legs.

At the Paris depot, one of many where this process of renewal and renovation went on, there was a profit of £8,000,000. It is said that, without this salvage, all the sheep-farms of Australia and cottonfields of America could not have produced the necessary raw material, neither could every loom in Yorkshire and Lancashire have woven it fast enough into goods for our armies.

There were huge mobile workshops behind the lines: base depots from which the issues for ten months of 1916 included 11,000 prismatic and magnetic compasses, 7000 watches, 40,000 electric torches and 2,250,000 bars of soap.

During the progress of battles, the work of the Ordnance Corps was ceaseless, day and night, often under heavy shell fire. Here are two acts of bravery selected from many for which both staff-sergeants received the Distinguished Service Order medal.

Staff-Sergeant Drew, under a concentrated hostile bombardment so intense that all the personnel of a battery had been withdrawn, remained alone on the spot to attend to certain necessary repairs, with a coolness and disregard of danger beyond praise.

Staff-Sergeant Primrose, also working at repairs, was blown from a gun by a shell. Although severely shaken, he resumed his job and did not leave it until the gun was in action again.

All this was behind the scenes; outwardly, as far as the world saw, the work of repair and supply went on smoothly and silently—as it goes on still.

For with all the newest resources of mechanization at its disposal, the task of the Ordnance Corps remains at bottom the same, to supply and to go on supplying. It is still the British Army's Universal Provider, turning out tanks and dragons, howitzers and machine-guns, as it once did bows and arrows, battering-rams and slings.

And yet the *Ordnance Training Manual*, carrying modesty to the point of fine art, merely states in a few lines that their work is the provision, storage, handling and dispatch of stores, personal and unit equipment, armament, ammunition, mechanical transport, clothing and necessaries.

Just that. But this terse announcement covers all that has been briefly told here and much more. For it would require many volumes even to touch the fringe of the stupendous labours of this ancient Department of the Master General of Ordnance.

SECTION 4—THE ROYAL ARMY PAY CORPS

Although the word soldier means " one who is paid ", the British Army of old often had reason to grumble about non-payment, and " stoppages " out of pay have been a cause of constant discontent until recently.

When the "trained bands" of the Middle Ages received government grants, one portion called "coat-money" was for clothing. But the captain provided the clothes, deducting the cost from the men's pay, and this bad system existed centuries later, when some colonels of regiments still made a profit out of their soldiers' uniform and equipment.

Even in the reign of Henry VI these frauds existed, for that king forbade stoppages except for certain garments.

In 1282 Edward I paid cross-bowmen 4*d.* each daily, but the first record of rates of pay dates from 1346. An Elizabethan soldier was paid 8*d.* a day, but stoppages were 37 per cent! The pay was 8*d.* to 10*d.* under the Commonwealth: this had to cover all expenses and payment was often delayed, but on the whole Cromwellian troops were well treated.

At the Restoration, the regiments of the standing army were too much at the mercy of their colonels: out of 3*s.* weekly which a man should have received, deductions were made for necessaries like washing, hair-dressing, doctoring and a coffin when he died!

Each regiment had a civilian "Colonel's Clerk", like modern paymasters, to keep accounts: later, these became regimental agents, which is the origin of firms like Cox and Co.

In 1702 a Controller of Army Accounts was created, and in 1798 commissioned paymasters appointed to each regiment, but there were few improvements in soldiers' pay and stoppages.

After 1795 things brightened: by 1884 the pay was a daily shilling with one penny beer money, although until the Crimea soldiers paid for their rations.

In 1878 the Army Pay Department was established. Reorganized in 1905, the Army Pay Department and Corps went through the Great War in this form, becoming the Royal Army Pay Corps in 1920 with the motto "*Fide et Fiducia*". This was especially granted by King George V as an honour for "excellent services performed during the Great War".

There is no direct enlistment in the R.A.P.C.: well-educated men may apply to join, after six months in the Regular Army. Officers transfer in the same way and the training usually takes two years.

The corps is rightly proud that its "other ranks" have 100 per cent First Class Army Education Certificates. It can boast, too, of a fine sports record, especially at hockey, tennis and billiards.

SECTION 5—THE ROYAL ARMY VETERINARY CORPS

The Royal Army Veterinary Corps is not much more than a century old. Before that time British army horses were treated, when ill, by farriers or blacksmiths.

During the Civil War there was a farrier to each troop of horse, and when the standing army was formed this branch was reorganized, for from 1687 to 1693 there was a "Martial of ye Horse", a sort of Farrier Supervisor. In spite of this, unfortunate army horses were treated in a very rough and not particularly kindly way.

The troop farrier's one idea seems to have been to bleed the

animals in his charge, though, of course, during the eighteenth century this applied to human beings as well. The instruments which he carried on parade were one for bleeding cattle, two bandages and a bleeding stick. But he must still have been considered a blacksmith first and foremost, for at the funeral of a farrier-major an axe, a pair of pincers, hammer and two horseshoes were placed on his coffin.

The farrier still survives in the Household Cavalry, wearing a black-plumed helmet and carrying an axe.

In 1796 an order was issued that persons trained at the newly started Veterinary College at Camden Town should be attached to every cavalry regiment, appointment being made by the colonel. Later in the same year, Professor Colman, head of the college, was made Principal Veterinary Surgeon to the Cavalry, and it was thanks to him that things improved rapidly. Very soon after, veterinary officers received their commissions from the King instead of the colonel of their regiment, and men of very different standing and education took the place of the old type of farriers.

By 1802 most cavalry regiments had qualified veterinary surgeons, and there were few further changes until the Crimean War, when a big increase in the number of army vets became necessary.

Then in 1881 the Army Veterinary Service came into existence, when all veterinary officers—except those in the Household Cavalry—were absorbed. Since then they have been attached to corps as required.

Although mechanization will, to a great extent, do away with horses and draught beasts in the army, there will still be a

good many remaining, and establishments for animals must continue to exist. Disease must be prevented, there must be prompt care for all sick and injured animals, with arrangements for the collection of wounded and their subsequent treatment. Then, too, there must be a system of control for contagious diseases among beasts owned by civilians during military operations.

These are some of the duties of the officers and other ranks of the Royal Army Veterinary Corps, who are all trained thoroughly in animal management and veterinary nursing, for which there are hospitals for horses and camels as well as convalescent depots.

What is aimed at—beyond the actual well-being of the army animals themselves—is to train those fitted to the job, with the possibility of helping them to obtain well-paid employment among stock owners or horse-breeders in civil life.

SECTION 6—THE CHAPLAINS' DEPARTMENT

Chaplains were part of the British Standing Army from its beginning, first receiving commissions in 1662. A Chaplain-General was appointed in 1796, and his first act was to stop the sale of commissions; this had become usual among chaplains, just as with other officers.

In spite of this there was much slackness in the department; in 1805 the commander-in-chief pointed out that Lord Cathcart's force of 14,000 men embarked with only one chaplain, while Sir David Baird had one for his 4600 men.

Things greatly improved by the time of the Crimean War,

and the work of chaplains attached to the army during 1914–8 was splendid on all fronts, many winning decorations for their devotion to duty.

SECTION 7—THE ARMY EDUCATIONAL CORPS

This corps undertakes many different kinds of army education, from teaching children in garrison schools upwards. The headquarters of the Army School of Education were established at Shorncliffe in 1920.

Officers and N.C.O.s are either transferred here as probationers from other branches of the service or enlisted from civil life. Recruits must have a university degree, a Special Army Education Certificate, which equals matriculation, or the Board of Education Teachers Certificate.

The training for the corps takes generally three or six months, and the students are then qualified instructors, the lowest rank being sergeant instructor.

Both officer and N.C.O. students have practice in teaching the instructional squad—batches of thirty men who have not gained the Army 2nd Class Certificate, and are sent to the school to do so—for ten weeks.

Adult education of the British Army is the most important part of the Educational Corps' work: that men in the ranks are increasingly keen pupils appears from the fact that in 1921 there were only 156 candidates for examination, while in 1937 12,762 men were examined for 1st Class and the Special certificate mentioned above.

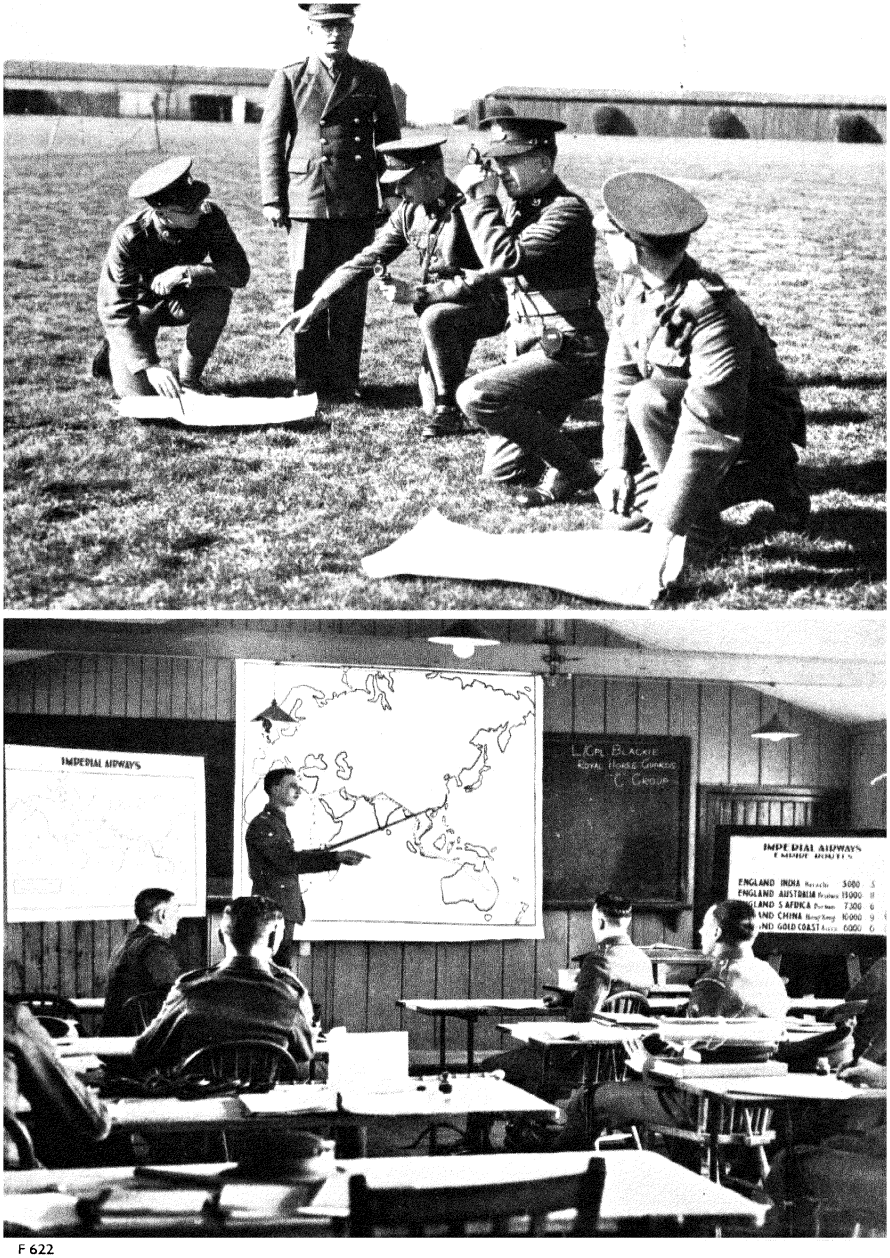
Another of the corps' many and varied tasks is the teaching of English to the personnel of the Indian Army.

Army children's education goes back nearly 150 years to the R.A. Regimental School at Woolwich established in 1797, while the Duke of York's school for soldiers' orphans was founded in 1804.

SECTION 8—THE ARMY DENTAL CORPS

The care of the army's teeth is undertaken by the Dental Corps, consisting, besides officers, of clerk-orderlies and mechanics. The first help the dental officers clerically and in the operating rooms: the mechanics are employed in the dental workshops. These are good openings for well-educated men.

Commissions as dental officers are given to selected professional men, registered under the Dentists or Medical Acts. These candidates are not over twenty-eight years old: they first receive short-service commissions for six years, after which they are either granted permanent commissions or retired with a gratuity of £1000.



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EDUCATION IN THE ARMY: OUTDOOR AND INDOOR

CHAPTER VII

The Education of the Army

SECTION 1—TRAINING SCHOOLS AND COLLEGES

There is no comparison between army education to-day and a century ago. In the Peninsular War, soldiers had no need of watches, being unable to tell the time, and service messages had neither date nor hour of dispatch, things that are now the A.B.C. of military education.

The chief educational establishment, the Staff College, dating from 1739, has lately been reorganized to secure more and younger good staff officers.

The college is now split into Senior and Junior Wings, the former at Minley Manor, Hampshire, the latter remaining at Camberley.

The age limits for candidates for the junior branch will gradually be reduced to under 30. About 120 students attend the one-year course which trains them in scientific warfare and general duties for junior staff appointments.

Some will possibly pass on to the senior wing, while 55 officers are trained annually for higher staff appointments. All attending this course are nominated by the Army Council.

The Imperial Defence College in London, formed in 1927,

principally aims at educating officers of the three services in strategy.

At a New Army Tactical School, captains of not less than 12 years' service, who have not passed the Staff College Junior Wing, must qualify for field rank. This will supersede the Senior Officers' School, where candidates learnt to teach and also to command units.

For training on the technical and mechanical side, there is the Military College of Science at Woolwich. Here officers and other ranks learn all connected with artillery equipment and mechanized vehicles, including physics, chemistry, balistics and metallurgy. Officers qualifying after the advanced two-years course, obtain what equals a university science degree, and have " p.a.c." after their names in the army list.

The college staff are civilian professors, lecturers, serving officers, warrant officers and staff-sergeants. The mechanical branch trains officers and men of the Royal Artillery as instructors, and there is a Training Battalion for boys aged fourteen to fifteen to become craftsmen in the Royal Regiment. Many commissions have been granted to these students.

The Royal Army Ordnance Corps School of Instruction educates officers and men in the duties of this corps, and the training of Ordnance mechanical engineers. Regimental officers wishing to join the R.A.O.C. are transferred here.

Supply, transport and advanced branches of mechanical engineering for selected officers are taught at the Royal Army Service Corps Training Centre, and there is also a R.A.S.C. driving school at Feltham.

The Central School of the Royal Tank Corps, better known

as the Armoured Fighting Vehicles School, trains officers and other ranks to drive and maintain tanks and armoured cars, and not only for the Royal Tank Corps itself. The cavalry and infantry too of the mechanized army need a thorough knowledge of motor vehicles and gain it at this school. For such army horsemen as remain, there is a school at Weedon.

The School of Artillery at Larkhill trains senior officers of all arms in the uses of artillery; also practical gunnery is taught to officers and N.C.O.s of the Royal Artillery. There is also a School of Anti-Aircraft Defence.

The School of Military Engineering at Chatham deals with field works and construction: the Railway Training Centre for Royal Engineers is at Longmoor. Electrical subjects generally are taught at the School of Electric Lighting.

The infantry have their Small Arms School for training in the uses of such weapons as rifles, light machine-guns and anti-aircraft rifles. There is also an anti-gas wing at Porton.

There is no finer establishment of its kind than the Army School of Physical Training at Aldershot. British soldiers have been kept fit by P.T. since 1860, so that nearly 80 years' experience is behind the present methods. The instructors trained here are all-round athletes, specialists in sports and games, and certain of good posts, when they leave the army, at schools or clubs.

One of the most interesting army training centres is the Royal Military School of Music at Kneller Hall. Up to Crimean times army bands were trained in a very casual way, and it is said that the need for better teaching was impressed upon the authorities by a particularly bad performance of the national

anthem at a review held by Queen Victoria in 1854, before the staff of the allied armies.

The Kneller Hall School was established in 1857. Here not only army bandmasters are trained, but promising boys are sent from regimental bands to learn to become proficient performers on their instruments.

On the medical side there are Royal Army Medical Corps training centres, with schools for dispensing and hygiene as well as a dental school.

Last, but not least in importance, is the Army School of Cookery at Aldershot, the staff now increased by a number of first-class chefs. This should result in a scale of feeding second to none, since Army kitchens are remodelled on Ritzish lines.

SECTION 2—THE ARMY EDUCATION OF BOYS

A mechanized army has opened new professions for boys. About 1500 a year are to be enlisted to become ordinary soldiers.

Besides this, 2000 more are needed to train in some twenty essential trades, varying from armourer to wheeler; the development of motor vehicles brings the need for skilled workmen.

There is no premium. Boys receive good pay, with food and clothing, and get from five to eight weeks' holiday yearly, with two free railway warrants. The entrance examination, which is not hard, includes English, with an essay and questions testing command of language, a simple arithmetic paper, some knowledge of algebra and an intelligence test. Only 50 per cent of marks is needed to pass.

Boys may choose four trades, and the training takes from three to five years: the term of enlistment is twelve years, reckoning from their eighteenth birthday. Their general education is continued to let them obtain a First Class Certificate, during which time their technical training goes on.

At the Royal Army Ordnance Corps School at Hilsea, boys undergo instruction as armourers, learning to repair rifles, revolvers, machine-guns, bicycles, with instruction regarding army clothing. Some pupils pass out as examiners, others are sent to the military college of science for short courses in repairing binoculars, telescopes and range-finding instruments.

At the College of Science there is an all-round training-drill, P.T., craftsmanship, besides the technical schooling in elementary and engineering science, mathematics, drawing and practical knowledge of internal-combustion engines and mechanical tractors.

A very highly specialized education is given at the Royal Engineers Depot, Chatham, where boys learn architectural and mechanical draughtsmanship and surveying.

At the Signal Training Centre, Catterick Camp, they are taught to be wireless operators and signallers; in addition a thoroughly good grounding is given in the theory of electricity and magnetism.

The Royal Army Service Corps Training Centre at Aldershot gives a clerical education, with shorthand, typewriting and book-keeping.

The Army Technical School at Chepstow educates boys *only*. Taking 900 pupils, it is really like a technical public school, where training is given for electricians and instrument-

mechanics, as well as for decorators, carpenters, joiners, fitters and coppersmiths.

The whole system of this training as apprentice tradesmen to the modern army is steadily being expanded so that in the near future some 4000 boys will be under instruction. Three new schools are being opened at Jersey, Channel Islands, Fort Darland, Chatham, and at Arborfield, Berkshire.

SECTION 3—THE ARMY EDUCATION OF MEN

Modern army methods aim not only at making men efficient from a military standpoint, thus increasing their chances of promotion, but also, by continuing education on sound lines, to fit them to take up professions and trades after leaving the army.

As far back as 1883, under the old army schoolmasters who replaced schoolmaster-sergeants in 1830, soldiers competed for fourth-class certificates, then thought a good standard. Now, a third-class is necessary for proficiency, a second for promotion to sergeant, and first-class and special certificates are fairly common.

The former, almost equal to school certificates, are accepted as adequate for entry into the police and other similar forces, as well as government posts. The special certificates take the same standing as matriculation, and seeing their great value, both in and out of the army, increased opportunities are given for gaining them.

Vocational training in trades on full army pay is now

available for all soldiers desiring it, during the last 6 months of their service. Instead of the 3000 who passed annually through the Army Vocational Training Centres up to 1937, now some 10,000 men a year can be trained, and the percentage finding employment is very high.

Many trades are thoroughly learnt. The list is far too long to give, but it includes plumbing, poultry-farming and cabinet-making, with all tools and appliances provided.

CHAPTER VIII

How to become an Officer in the Army

SECTION 1—A COMMISSION THROUGH THE CADET COLLEGES

Formerly, when a nobleman or gentleman raised levies for a new regiment by Royal Command, he usually became the first colonel, and was allowed to *sell* commissions to most of the other prospective officers, as a reward for his trouble and expense in getting recruits.

This system continued after the creation of the standing army, being officially recognized by Charles II in 1683. The Crown took part of the money made thus, and for some years Chelsea Hospital received a shilling in the pound from the purchase of commissions. There was a regular tariff of prices in established regiments, and officers bringing in a certain number of recruits often earned full commissions.

William III and George I disliked the purchase system, but in 1701 the *sale* of commissions was re-established. It was urged that as no officers' pensions existed, this money helped on retirement.

Sometimes, however, colonels sold commissions, without sending in the buyers' names; consequently the secretary of state demanded a full list in 1754, which was our first Army List.

All *first* appointments to regiments rested with colonels, a system still existing in the Guards, and it was quite usual for the orphans of deserving officers to be given commissions and gazetted to regiments at birth, receiving the pay due to their rank. Up to 1778, when this practice was abolished by the Duke of York, there were many infant officers in the army and boys actually served as officers when very young. Wolfe was commissioned at thirteen and adjutant at fifteen; Wellington, Colin Campbell, the Napiers and others were twelve to fourteen when they joined their regiments as ensigns.

The purchase of commissions was abolished in 1870–1.

In June, 1801, owing to the need for more officers in the army, George III resigned a portion of crown heathland at Sandhurst, Berkshire, sending a message to the House of Commons that: "An Establishment has been formed under His Majesty's direction for promoting the study of military science".

This was the real beginning of the Royal Military College. Before this there had been a School at Great Marlow, where officers improved their military education, but the aim of the new establishment, promoted by the Duke of York, was to educate sons of deserving officers for commissions in the army.

The sixteen original cadets, in the first building at High Wycombe, wore uniforms something like that of a French railway porter. At the end of the first year there were 42, five being Indian cadets from the Honourable East India Company. By 1803 there were four companies of 100 each, and in this year a branch moved to Woolwich, where the Royal Military Academy had existed since 1764.

As early as 1741, indeed, under George II it was proposed

" to fit up a convenient Room at Woolwich Warren for a School or Academy for Engineers ".

1812 saw the R.M.C. established at Sandhurst. The cadets were very young: up to 1849 when the Duke of Wellington instituted educational qualifications, the general age was thirteen to fifteen. One of the punishments at this time was that a cadet under arrest dined at mess, but was marched out when the pudding came in.

Officers for the British Army are still largely educated at these two famous cadet colleges, the Royal Military Academy, Woolwich, and the Royal Military College, Sandhurst, both for boys eighteen years of age, who mean to make the army their permanent profession.

The Royal Military Academy, known to service men as " the Shop ", educates for the Royal Artillery, Royal Engineers, Royal Corps of Signals and the Royal Tank Corps. At Sandhurst, cadets are trained for the Household regiments, the cavalry, infantry and Royal Tank Corps.

The way by which boys enter the cadet colleges varies. Sons of well-to-do parents will probably be educated at an " approved " school, public or otherwise. Many of these now have an " Army Side ", which specializes in the necessary subjects. Possibly, too, these boys have belonged to the school officers' training corps.

Such candidates for Woolwich or Sandhurst must be in possession of the school certificate A or B or have matriculated or be recommended for nomination by the headmaster of an approved school.

The next step to secure admission is to pass the army en-

trance examination, conducted by the Civil Service Commissioners. This will not be found over-hard by intelligent pupils, and the written examination is remitted for those possessing the Higher School Certificate. The subjects are English, to test understanding and command of language; British History from 1714 to the present day; a modern language; elementary mathematics, including arithmetic, algebra and geometry; general knowledge, with questions on important topics of the day; literature, geography and so on, with a certain amount of elementary science, mainly on physical, chemical, biological and hygienic matters, well within the scope of an intelligent boy. There are other voluntary but not essential subjects.

Out of 650 possible marks, candidates for Sandhurst must obtain 300 and for Woolwich—always the home of army " intelligentsia "—400. Of these, 20 per cent must be for what is called " interview and record ". This is held by a board who judge the candidate by his personality and qualifications for understanding and command of men. This is considered so important that occasionally a boy highly recommended for personal qualities by his headmaster or some other authority is admitted to the colleges, even if his percentage of marks for written examination work is inadequate.

Cadets of both colleges wear uniform and are under military discipline, the best in the classes becoming N.C.O.s.

At the end of the eighteen months course, an examination decides the place of each cadet in the passing-out list. For this he must obtain 60 per cent of the maximum marks.

Certain awards are made at these final examinations of the Royal Military Academy. The highest is the Sword of Honour

for the most deserving cadet. There is also the King's medal for those qualified in military subjects, such as gunnery, engineering and tactics, and about a dozen other prizes. One is the Agar memorial prize for the best qualified cadet to enter the Royal Corps of Signals, and the Rainey Anderson Prize to the cadet recommened for a commission in the Royal Engineers who obtains the highest aggregate of marks in two languages.

The Royal Military College has similar prizes. The King's medal and a sword go to the cadet who passes out first on the list, a special Sword of Honour to the term's most deserving cadet, and, at the end of each autumn term, the Anson Memorial Sword, in place of an ordinary weapon, to the first cadet on the list.

Having graduated through Woolwich or Sandhurst, the cadet is appointed to a regiment and his real life in the British Army begins.

Another method of gaining a commission is through the universities. Earl Haig entered the army in this way, and direct commissions for the Royal Army Service Corps may be obtained by this method. As these candidates are generally older than college cadets, probably about twenty-four, their commissions are antedated, allowing usually eighteen months.

This is done so that candidates leaving school together should take their places in the army with, roughly, the same seniority, whether they enter by a university or a cadet college.

It is also possible for a university candidate to obtain a commission in the Ordnance Mechanical Engineering branch of the Royal Army Ordnance Corps.

Certain privileges are allowed to candidates who belong to an officers' training corps and possess certificate B.

A number of commissions are given to officers on the Supplementary List of the R.A.R.O. of Household Cavalry and Brigade of Guards, the Supplementary Reserve of officers and officers of the Territorial Army who have completed eighteen months commissioned service, and are not less than twenty-one years old. The examination they take is the same as the passing-out examination at the cadet colleges.

August 5th, 1938, was a red-letter day in the history of the British Army, marking the beginning of a whole series of most important reforms for the betterment and democratization of the service.

On this date appeared the largest London Gazette on record, in which more than 2000 officers, over a quarter of the subalterns and captains in the army simultaneously gained a step in rank.

The whole system of promotion was revolutionized and speeded-up; this now comes *automatically* to all efficient officers below the rank of lieutenant-colonel.

A subaltern becomes a captain after 8 years' service, and a captain a major after another 9 years. How far-reaching this is will be realized when it is remembered that under the old system there have been *subalterns* of 18 years' service. Very many officers of 45 years of age had to retire as captains with a maximum pension of £271, 10*s.* per annum. Now, this is impossible; at this age they will automatically have become majors, entitled to retired pay of £407, 10*s.* a year, and retired pay up to colonel is at fixed rates for each rank.

In addition to this, pay in the junior ranks was too low for men to live on it without private means, while fees at the Royal Military Academy and the Royal Military College were so high that many parents could not afford to send their sons into the army.

As a consequence, there was a shortage of suitable candidates for commissions, but the new conditions of service and concession at the cadet colleges have changed all this for the better so completely that the army becomes altogether a much more attractive career.

It is now possible for any qualified candidate to go through Woolwich or Sandhurst without paying anything for education, keep, uniform, equipment or books, wherever it is shown that his parents cannot afford the fees.

This makes it a possibility for *any* boy, whatever his means or station, to enter the army through the cadet colleges and afterwards to live on his pay.

As a further help, 100 scholarships of £20 a year for three years are given annually to subalterns who need such assistance, on their first commissions.

SECTION 2—A COMMISSION FROM THE RANKS

The soldier's life, from its beginnings as a young recruit at the depot, is full of opportunities and surprises.

But it is probably fairly usual that, when training has made that recruit a thoroughly efficient soldier, the ambition to become an officer fills his mind.

It must always have been so, but the first recorded instance

of a commission from the ranks in the history of the British Army is that of Sergeant Littler of the Bedfordshire and Hertfordshire Regiment. In August, 1708, Littler swam across the river at Lille, let down the drawbridge for the attackers, and so assisted to capture the citadel of the fortress. For this brave deed, he was given a commission in the Buffs, was transferred to the 1st Foot Guards in 1726, and became Lieutenant-Colonel of that regiment in 1738.

Later, there was the outstanding case of Trooper William Robertson, who rose from the ranks, commanded the Staff College, was Chief of the Imperial General Staff, and finally gave a living illustration of the saying that every soldier's knapsack holds a field-marshal's baton.

In his day commissions from the ranks were a matter of chance and sometimes of money, although many were promoted for distinguished conduct in the field.

Things have changed: a good proportion of those yearly obtaining commissions come from the ranks, and this proportion will be increased probably within a year or two by the new system of direct commissions from the ranks, first announced on 1st August, 1938, which opens the army as a career to any boy with soldierly instincts and sufficient education.

This will take the place of the present method of passing candidates from the ranks through Woolwich and Sandhurst. Such candidates must have served 8 months as N.C.O.s and hold a 1st Class Certificate of education. The State pays for their training and messing at the Cadet Colleges and they receive outfit allowances when commissioned to Regiments. These

candidates go through precisely the same course as the other cadets and are eligible for all the awards and privileges.

In addition to this, to make up for the deficiency of subaltern officers, a new grade of warrant officer, the platoon Sergeant-Major, has been created. These take over command of platoons previously held by subalterns, which gives experience in the handling of men and helps to teach initiative.

Having been selected for a commission and fulfilled the stipulated conditions, the one-time recruit is recommended to the War Office and gazetted as second-lieutenant to one of the units of His Majesty's Army, entering on a new life, with new friends, codes, customs and surroundings.

Sometimes this is not entirely easy, but the British soldier of the right stuff—and by getting so far our recruit proves himself this—with honesty, goodwill and personality will meet any difficulties in a fitting spirit. His new comrades, the regimental officers, possess the same spirit, with that asset, which he himself shares by experience, of understanding the private soldier.

The whole history of our army shows that the comfort and contentment of the rank and file, any improvements in the conditions which have been bad at times, are mainly due to the regimental officer, and the private soldier depends upon this and the understanding on the part of the same officer, with the efforts it inspires. Bearing this in mind, the newly joined subaltern need not fear that he himself will be misunderstood, or fall short of those ideals which cause British soldiers, as one who knew them well said, to be peacemakers even more than makers of war.

If in doubt or troubled, the young officer has a talisman at hand to give him renewed assurance and confidence to carry on. He has only to look at a certain parchment, endorsed with the seal of England above that Royal signature which proves it the King's commission, to read the large script which runs: "Given at our Court of Saint James's by His Majesty's command—to our Trusty and well-beloved Thomas Atkins, Greeting; We do by these Presents Constitute and Appoint you to be second-lieutenant in our Land Forces."

CHAPTER IX

Life in the Army

SECTION 1—TAKING THE KING'S SHILLING

The name "soldier", from the Latin *solde* or pay, means one paid to fight, and feudal retainers or town-soldiers of the Middle Ages received "conduct money" for expenses when summoned for service.

Under the Tudors this "conduct" or "coat" money became, as "Bounty" or "Levy", a more or less fixed sum of forty shillings.

Besides such bounty money, paid as an inducement to enlist, a custom survived from mediæval days of giving recruits a coin to bind the contract. This, called in former times earnest-money, "God's penny" (in Scotland Arle-penny), invariably passed hands in making any bargain; so by accepting such a coin the soldier pledged himself to the King's service.

This was the origin of the King's or Queen's shilling which for long was the sign of enlistment. State papers for 1703 mention that a recruit for Temple's regiment having received "one shilling as a retainer and accepting the same, was Lawfully Listed".

In 1868 part of the official procedure was that the attesting officer gave recruits a shilling. Nowadays although the expression "Taking the shilling" is still used, the actual practice of giving the coin was discontinued in 1879.

Tudor recruiting was a rough business. One thinks of press-gangs chiefly in connexion with the navy, but in 1585 the same method was used to raise troops for an army abroad. Four thousand men were forcibly "pressed", dressed in red coats, and found themselves bound overseas, part of some expeditionary force to an unknown destination, whether they wanted to or not. On another occasion, in London, the press-gang closed all the church doors during an Easter Sunday morning service and so trapped and took a thousand recruits from the various congregations.

As late as 1694, when the standing army had been in being for over thirty years, it was brought to the notice of Parliament that prospective recruits were not only being forced to take the King's shilling when they were drunk, but that there were many instances of actual kidnapping for the army.

In 1633 Charles I issued a warrant for the levying of 12,000 men in Edinburgh—as recruits for Hepburn's Regiment, later the Royal Scots. The quaint words used, "to cause towcke (beat) drummes, display cullours and doe and perform alle towards the levying of menne", must be one of the earliest mentions of that custom of recruiting "by beat of drum", which became a regular practice in the reign of Charles II.

The regiments raised for the Civil War had been disbanded: only the outbreak of dangerous rioting made Parliament consent to let the King keep a small standing force for protection, and even then the civic authorities were suspicious and disliked the very idea of regular soldiers.

This is why, when it became necessary to find recruits in the city of London for the few surviving regiments—the King's

Regiment of Foot Guards, now the Grenadier Guards, the Holland Regiment (the Buffs), and the Duke of York or Lord Admiral's Regiment, later to become the Royal Marines—the Lord Mayor insisted that his permission must be asked and the King himself had to give way.

So although a Royal Warrant authorized these corps—and occasionally the navy—to raise recruits by beat of drum, with colours flying, drums beating and bayonets fixed, all this display being made in order to attract attention, the recruiting parties had still to obtain permission from the Lord Mayor before they crossed the city boundary.

Here is the origin of the ancient " privilege " enjoyed still by these three regiments, with, in addition, the 6th Battalion of the Royal Fusiliers, the City of London's own regiment, of passing through the city in full array, although not now for recruiting purposes. From time to time, it is reported in the papers that one or other of these regiments has exercised this " right ", but they must still ask the Lord Mayor's permission both beforehand and again in formal words according to ancient established usage when the city marshal meets them at the city bounds to act as escort.

One or two other regiments have claimed the privilege, but the city maintains that it is only really enjoyed by the original four, partly perhaps because the men recruited for them during those first days may have been largely members of London trained bands.

The 3rd Grenadiers owed their privilege to the fact that when the regiment was divided into three battalions in 1696, the 3rd was the only unit formed from the original regiment



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W. A Crockett

READING-ROOM AND SERGEANTS' MESS, DEPOT THE SOMERSET LIGHT INFANTRY, TAUNTON

raised in the city by leave of the Lord Mayor, but now the honour is extended to the whole Brigade of Guards, while since 1881 all battalions of the Royal Fusiliers are given permission on any special occasion.

Gradually recruiting methods became less high-handed and more persuasive, and the posters used to get men, for the Revolutionary and Napoleonic Wars promised just as many attractions in the army as those of our own day, though not such healthy ones, on the whole.

In 1781 there was one placard which tempted men to enlist for service in Jamaica by promising them " plenty of old rum, opportunities for adding to pay, cheap beer, good food, easy hours of work, recreation among delightful landscapes and excellent society, with the homage of the fair sex ".

Only another way, after all, of saying " join the army and see the world ".

For the 69th Regiment, now the 2nd Battalion The Welch Regiment, in 1811, the poster read: " Wanted for this fine regiment, a few dashing, high-spirited young men, whose hearts beat high to tread the path of glory ". In case this should not be enough attraction, the poster goes on to offer hospitality to recruits from the colonel himself. He says he will be at the door of his house with a bottle of wine in one hand and sixteen guineas in the other, and before they join the regiment, he intends to treat them to a supper and a ball!

The 1st King's Dragoon Guards, those famous " Royals " who even under the new mechanization scheme are still to be allowed to keep their horses for the present, were proud of those horses more than a century ago, for a recruiting poster of 1800

says that " the Regiment is supposed to be mounted on the most beautiful fine action black geldings this country has ever produced ".

The Royals must have taken especial pride in one particular horse in 1834. That year, King William IV, accompanied by Queen Adelaide, inspected the regiment, and the King presented them with a cream-coloured horse—probably one of the famous Hanoverian " creams "—in exchange for the only remaining Waterloo charger in the corps, who, by that time, must have been a real veteran, well over twenty years old.

The recruiting posters of to-day are often artistic and attractive, and with enough practical common sense to impress modern boys and young men, at one and the same time. They offer just those things which interest the lad, without forgetting an appeal to the romance and love of adventure, hidden somewhere in every boy in our British Empire.

The Middlesex Regiment, for instance, shows as a centre-piece a reproduction of the famous picture, " Steady the Drums and Fifes!" guarded by a soldier in the uniform of Peninsula days, when at Albuera in 1811 the old 57th of the line won their glorious title of the " Die-hards ". That is an appeal which many Middlesex men would find it hard to resist. Another regiment tells would-be recruits to " join your County Regiment ", and gives interesting pictures of a soldier's life to accentuate the summons. Yet another corps claims—and quite rightly—that it is famous for sport of all kinds, while a fourth specializes in boxing, cricket, football and hockey, and counts on drawing those keen on games.

Side by side with those posters which promise world-

travel, with pictures of foreign countries, are those of an even more up-to-date character. "Can you drive a motor-car?" "Are you mechanically minded?" "Are you interested in wireless?" And so on. What boy of these days but wishes to do and try all these things if he has not already had the chance? And after all, it is nothing but the truth: the "new model" army offers every inducement to the mechanical, to those interested in the very latest developments of such things as internal-combustion engines, radio-telegraphy and telephony.

Quite as well founded on fact are the other arguments presented by recruiting posters. The army *does* offer nowadays good pay and clothing, free board and lodging, plenty of wholesome food, even if it is of the plain variety, sport of all kinds and an exceedingly healthy life. The prospects are good, too. Promotion may be reckoned upon as certain for the intelligent and keen; the chances of a commission from the ranks for ambitious young soldiers are not to be despised.

One of the latest recruiting methods must not be forgotten. It is that which makes every soldier both a walking advertisement and a loud-speaker on behalf of the army. While they are on Christmas furlough, probably back in their home surroundings, each man becomes a recruiter and receives extra leave and four shillings a head for all "new boys" joining, who may be finally approved and accepted. Quantity counts as well as quality. Should one of these temporary recruiting officials manage to rope-in a six-foot candidate suitable for the Guards, he will be awarded an extra bonus on his out-size catch.

It is a soldier who can best tell others what a soldier's life

is like. If he and those who listen to him are sensible fellows they will know that the army, like any other job in the world, has its ups and downs; its discomforts and bothers. But, take it all round, soldiering is a good life and a good job, especially when the newly-joined have got over their first strangeness and settled down in their fresh surroundings, with the feeling that they are a part, if only a small one, of that great jig-saw puzzle of many pieces which makes up the British Army. And a puzzle is not complete if the tiniest of its fragments is missing; the piece must be there, in its place, filling its own particular niche.

SECTION 2

After studying all the posters and literature available and listening to many arguments for and against, the recruit-to-be has made up his mind and decided which branch of the service, or which regiment, he would like to join.

Perhaps at the very beginning the soldier in embryo may find himself confronted by what would once have been a very solid brick wall. But now if a recruit is not quite up to standard there is still hope. He is sent to a sort of Auxiliary Physical Training School where those who are under weight or slightly deficient in chest measurement can be reconditioned. After two months or so at this Physical Development Depot, with special training and feeding, the odds are that the would-be soldier will fulfil all requirements and be more fit than ever in his life before.

Mechanization has brought new categories into this matter

of joining the army. In the past, it was all more simple: a recruit was enlisted for the infantry, cavalry or artillery, but now there are a number of twigs on these branches, so that according to his physique or other qualifications the newly-enlisted may find himself a motor-driver, a mechanic, or in one of various other classes.

On joining the regimental depot the recruit's new life begins, but lasts only—as far as this particular phase is concerned—for twenty-two weeks at the most; cavalry recruits who join the regiment direct undergo eighteen weeks' training—weeks filled with most varied work and interest.

There is physical training, drill, education planned by easy and interesting stages, in the use of the light machine-gun, defence against gas, judging distances, while cavalry recruits receive instruction in map-reading and lectures in mechanization. These lessons are supplemented by more lectures, intended to develop initiative, intelligence and responsibility, helping him to take his training easily. Other talks deal with loyalty, morale and *esprit de corps*, army and regimental history, and a right understanding of the cause the recruit has elected to serve. There is no dullness or monotony about this: education is made the interesting business it ought to be at the depot school.

Then there are recreation rooms, comfortably furnished, providing newspapers, libraries with the latest books, billiards and bagatelle tables for indoor amusement. As for outdoors, nowhere in civil life does sport play such an important part as at a regimental depot.

In some accounts of first days in the army, rather too much

is made of the amount of time spent in " fatigues ", or in the grander language of the War Office " duties of a non-military character ". Even if this was a grievance in the past, it will soon cease to be a cause for the proverbial " grousing " of the British soldier. Civilians—ex-service men as far as possible—are to be paid wages to do the " fatigues " at depots and elsewhere in the place of soldiers. So in the future even recruits will be in the position of the Gilbert and Sullivan king who found things " extremely flat, with nothing whatever to grumble at ".

A novel entertainment which brings the army and its doings into closer touch with the outside world is when an At Home is given at the depot. There is a display of recruits' training, given by different squads, which are usually named after the principal battle-honours of the regiment, such as " Dettingen ", " Badajos ", " Mons ", or " Suvla ". The band plays a selection of music, old uniforms, medals and plate are brought out, with exhibits from that regimental museum which now forms a part of most depots.

Over tea and refreshments, the relations and friends invited as guests to these At Homes learn a little of army matters, all those things which would otherwise be quite incomprehensible to parents and others with only the vaguest idea of the everyday life led by their sons, brothers, nephews and cousins.

Tradition plays a part at the depot: even the newest recruit can feel himself one with his future regiment and its great past, as is seen in such a ceremony as that which takes place daily in Canterbury Cathedral. The depot of the Buffs is close to the great Cathedral Church. In one of its aisles is placed the Roll of Honour of that famous and ancient regiment. Every morning,

the smartest recruit on that day's guard-mounting parade has the honour of marching to the Cathedral, standing at the salute before the book of the Roll and turning in remembrance one page of the many which bear the names of those who died for king and country.

It may be noticed here that there are no depots now for cavalry recruits; they join their regiments direct. Soldiers enlisting in the Royal Regiment of Artillery go for their recruit training to the depot at Woolwich: the Royal Engineers train at Chatham, the Royal Corps of Signals at the Signal Training Centre, Catterick Camp, Yorkshire. Royal Tank Corps go to Bovington Camp, Dorset, the Royal Army Service Corps to Aldershot, the Royal Medical Corps and Army Dental Corps to Crookham.

Depot days are over—and now the recruit, having passed through this nestling stage, begins to feel himself a full-fledged soldier. He is transferred to the regiment, and perhaps the first thrill of the new life comes when he is played into barracks by the regimental march, the rhythm by which so many of his future movements will be ruled.

Those marches are history set to music. Whether it be the "Bonnie English Rose" of the Green Howards, the "Corn riggs are bonnie" of the King's Own Royal Regiment, or "Wha' wadna fecht for Chairlie"—"Chairlie" for the Cheshire Regiment meaning not the Bonnie Prince, but Sir Charles Napier, their one-time commander. Or it may be the stirring urgent music of the "Ça Ira", adopted in defiance, and still played, by the West Yorkshire Regiment during the French Revolution, when their colonel called to his men to "Beat the

rascals to their own damned tune "—and the Yorkshiremen obeyed. Or the "Warwickshire Lad" of the Royal Warwicks, which Garrick wrote in praise of Shakespeare, the greatest Warwickshire "lad of all lads"; or the romantic seventeenth century "Pearl of the Fountain", the march of the Dorsetshire Regiment, who have for their proud motto "*Primus in Indis*".

The list would end only when one reached the title of the last regiment in the army list. There is not a march without its associated traditions, and each beat of the drum will make the young soldier's heart beat in unison as he finds himself becoming more and more part of those traditions, more and more one with the history of his new regiment, which is yet so old.

In these new pastures, he will go through the post-depot training, an elaboration of what he has already learnt; but while before all centred in a squad of perhaps twenty recruits, now it is a whole battalion in which he is interested. School again; more drill, to complete his knowledge of the regiment's customs, together with others still known as the post-depot draft, but soon now he will take his place as a "trained soldier" and share in section, platoon and company work.

The battalion is a network of small instructional schools, companies being in turn struck off all other duties for the annual course of physical training.

There are classes for novices undergoing instruction in signalling; also musketry, mortars, light machine and anti-aircraft rifles—what is known in general as weapon training. Later in the year our young soldier will go through the finals of this course, and probably emerge as a marksman with a badge to wear on his arm.

From section and platoon work, there is a progressive advance through company, battalion, brigade, divisional and army training, possibly to manœuvres on a big scale, at the end of which the soldier returns to barracks to begin winter training.

This, perhaps, means classes under the mechanical transport officer, to learn the technical intricacies of motor vehicles. Terms like carburettors, magnetos, and radiators will soon sound as easy and familiar as "slope arms!" and by the time Christmas leave comes round, he is on his way to being a skilled craftsman.

Gone now are the days when soldiers enlisted for life and were looked upon as the dregs of society, when no barracks existed and, apart from fortress garrisons, the men lived in billets, mostly public-houses of a low type.

Special buildings as soldiers' quarters were scarcely thought of until the nineteenth century. Some of our barracks of to-day were built as far back as the Crimean War, but now large sums are being spent on modernization or new buildings. These are already planned on the most up-to-date lines, well-lighted, central-heated, with hot water laid on, modern sanitary accommodation. There are to be polished floors, better beds and furnishings, including wardrobes in the bedrooms and chairs to replace benches in the sitting-rooms, all set in pleasant grounds with trees, lawns and flowers.

There is nothing irksome in the active days of a healthy life spent in such surroundings, a life in which comradeship plays such a great part, not to mention those four good meals a day which help to build up bodily strength.

After a year, it will be hard to recognize the lad who stood

deliberating in front of the recruiting posters. His profession is one which compares with any a boy might choose. There are not nearly so many of the restrictions nowadays which hampered a soldier's life in the past. With disciplined freedom in the present, there is the opportunity to make a career which provides for the future, giving men in middle life, while they can still work at some other job, a regular pension as a standby.

And talking of those other jobs, schemes are constantly being developed and improved for after-service and vocational training, which prepare soldiers for civilian employment on leaving the army, by courses taken either before or after they have finished their military service. All this makes the soldier's calling each year less and less a " Blind Alley " type of occupation.

SECTION 3—FOREIGN SERVICE

No account of a young soldier's life would be complete without something about service abroad. Malta, Gibraltar, Egypt, Jamaica, China, Malaya, Ceylon, Burma, India—these are some of the possible stations which make a would-be traveller's mouth water. Perhaps India is the most attractive of all: the " *Atcha* Country ", as soldiers call it, which really means the " All-right Country ", the land of mosques and temples, fakirs, elephants and contrasts which in itself has changed so little, except through the mechanization which has brought it within some eighteen days by sea and a matter of hours by air.

In the days of sailing ships, troops took six months to reach India round the Cape. The story runs of the headquarters of a

regiment which was over a year on the voyage and arrived at last to find themselves given up for lost, all promotions having been made from the second half of the regiment which, starting later, had made port six months earlier.

In 1857 the 94th Regiment left Ireland for service in India, getting to Alexandria three months later. There was no Suez Canal then, but the troops were sent overland across the Isthmus as an experiment, first by boat and train to Cairo, then twenty-five miles over the desert to Suez mounted on donkeys, to re-embark on the P. and O. steamer *Oriental*. This was the first time that a British regiment passed through Egypt in a body.

Then after, and before the cutting of the canal, came the days of the five sister troopships, *Crocodile*, *Euphrates*, *Jumna*, *Serapis* and *Malabar*, fine ships in their snow-white paint, manned and officered by the navy.

But the accommodation was bad and the food worse. Men slept between-decks in hammocks, packed like sardines. Bread appeared only perhaps twice a week. Usually terribly hard ship's biscuit was substituted with preserved beef, mutton and potatoes, unrecognizable tea and condensed milk. Worse still was the condensed water, and that in limited quantity, drunk under the eye of a sentry.

This was bettered when the Admiralty took over the feeding on the new chartered transports, but there was still much room for improvement, although bread and butter, jam, fresh meat and potatoes were available.

It is during the last quarter-century that the greatest " trooping " reforms have been made. The latest troopers, *Dunera* and *Dilwara*, were built by the B.I. Steamship Company for cruising

trips, and they have the accommodation in every way of first-class liners.

No question of hammocks between decks now! There is accommodation for some twelve hundred men in state-rooms with three or four berths only. Families have special suites, and there are rest-rooms and smoke-rooms, besides dining-saloons and promenade decks for the rank and file.

As for feeding, one actual day's troop menu, as given on a recent voyage of the transport *Dilwara*, will show how far removed it is from the hard tack, preserved food and condensed water of old trooping days.

For breakfast, porridge, grilled sausages and bacon, bread and butter, marmalade, tea and coffee; at dinner, soup, roast beef, cabbage, baked potatoes, plum pudding and custard were provided; and for tea, bread and butter and jam; with Irish stew, bread and butter, and cocoa for supper. This seems enough even for ship-board appetites, and the bill-of-fare for every day of the week was different although equally good. For families special dishes are provided in addition; for the children, such as mince, cottage pies, and milk puddings, with a substantial meat tea and light supper, substituted considerately for the troop's menu.

The voyage over, there comes all the excitement of a new country, a new adventurous life. Although there are plenty of chances for sport at home in England, India, like other foreign stations, offers more variety, as compensation for a certain amount of monotony due chiefly to the impossibility of doing much during the heat of the day at any rate, when the " hot weather " comes.

There is generally a racecourse, with frequent meetings, at even the smallest station. Then what is known as *pagal gymkhanas* are constantly in demand and a great source of amusement, being made up of *pagal*—or "silly" events, such as egg-and-spoon, wheel-barrow, sack and potato races.

Lively music from regimental bands in the cantonment gardens once or twice a week gives variety and a kind of accompaniment to the soldier's daily routine, interspersed as it is with bugle-calls and with the fifes and drums playing "Retreat" and "Tattoo", those constant signature tunes of the British Army, whether the regiment is stationed in the plains, along the banks of the Indus, on the edge of the tropical jungles, in the shadow of the Himalayan snows, or among the bare rocks and grey-brown mountain ranges of the North-West Frontier.

Apart from the usual football and hockey, boxing and cross-country racing, there is hunting with the "bobbery pack", a mixed but sporting collection of all the soldiers' dogs in barracks, a multitude of every breed, gathered to chase hares and jackals. There is the chance to own a sporting-gun, possess a shooting-pass and go out after grouse, quail, duck and partridge not far from cantonments. The more ambitious would-be big-game hunters may apply for leave to make up a shooting-camp with a few friends and get away to the jungle, possibly to bag a panther or tiger, as well as deer.

These things are good for health and spirits and encourage thrift as well, for one must save to be able to buy a gun and cartridges.

And talking of saving, this is not a difficult matter in India

if there is an object in view. When the hottest weather comes a little cash in hand will give the soldier a furlough of several months at reduced rates to one of the fascinating hill stations, such as Landour, Murree or Dalhousie. Here he is a gentleman of leisure, having a stand-easy in cool, pine-scented air, high above the burning plains. Or he may even manage the trip for nothing, if he is one of those selected, for health reasons, to be stationed in the hills for the summer.

Take it all round, there is no happier phase in soldiering than a term of foreign service if a man can keep moderately temperate, take plenty of exercise, go in for sport and keep in view the bright prospect of saving-up for a longer furlough in England and the chance to tell those at home all about life abroad.

One more advantage has only lately become a settled fact. Soldiers will no longer have to serve an extra twelve months abroad when their time in the army is up, this prolonged term being generally known as " holding ". They will now be allowed to extend their service after coming home, to enable them to look for jobs in their own country before the moment of actually leaving the army comes.

An increased " Colonial " allowance is now given to all ranks at foreign stations where living is particularly expensive.

SECTION 4—RECREATION, GAMES AND SPORT

The present fine system of sports and games in the army is a testimony to that grand organization behind it all, the Army Sport Control Board. This, which is now at its zenith and runs what may be called the largest sports club in the world,

has grown up from small beginnings and under great difficulties. It is rather, as one might imagine, the case of a street-urchin beginning cricket with a battered ball, an improvised bat, and a wall or bundle of coats for wicket, who eventually finds himself playing for England in one of the Test matches.

Just so, soldiers in the past had to accustom themselves to makeshifts, to be satisfied with the barrack square as a sports ground, while a muddy field behind the barracks was an absolute stadium-de-luxe. However, being, as they still are, adaptable and resourceful and genuine sports-lovers, the men managed to secure a certain amount of rather elementary cricket and football, with an incidental better quality which, now and then, depended on the keenness of individual sporting officers.

No encouragement was given to the games-spirit. Punting or kicking a football between parades, practising at the cricket-nets—if such things had existed—or passing a ball on the hockey-ground, these practices, which are now looked upon as all in the day's play, would have been treated fifty years ago as a kind of sacrilege. Any delinquents indulging in such relaxations under the eagle eyes of the N.C.O.s would certainly have been pulled up short, to find themselves booked for fatigues or scrubbing floors.

It was in 1889 that one of the earliest records of organized army sports can be noted. In this year the first final tie took place for the Army Football Association Challenge Cup. There were forty-four entries, and the 2nd Battalion Argyll and Sutherland Highlanders beat the South Staffordshire Regiment by two goals to nil.

This was a beginning, and the good work continued, but playing grounds and fields were still a difficulty. Just before the Great War the Staff at Aldershot, that incubator of army ideas, hit upon the quite brilliant plan of combining actual military training with the making and lay-out of sports grounds. Instead of the usual "standing at ease by numbers" with cold noses and fingers on a colder parade ground, instead of an uninteresting and monotonous route-march or that digging of trenches which no private soldier has ever viewed otherwise than as a *bête noir* of the blackest dye, the troops were co-opted into a sort of profit-sharing scheme. By degrees and almost unconsciously after a series of progressive operations in digging, levelling and turfing, every formation found itself the proud possessor of its own sports ground, something which had sprung up in the night almost by magic. And the first two divisions of the famous Expeditionary Force were, with equally blissful unconsciousness, graduates in the tactical use of the pick and shovel for trenches or otherwise.

Now there are United Service Grounds, Command Grounds, and every unit and formation has its own playing field as a matter of course.

Prior to 1914 there was no Athletic and Cross Country Association, but during a period between the South African and the Great Wars a system of individual training in sport came in which created a spirit of honest emulation, and did away with pot-hunters, who invariably took all the first prizes at the regimental sports. It also had the advantage of training personally almost every man in the army, so that all had in that respect equal chances.

Probably it is not over-praise to assert that the British Expeditionary Force, in addition to all else, was the finest body of athletes in the world. Someone is credited with the time-worn saying that Waterloo was won on the playing-fields of Eton. Be that as it may, regimental sporting spirit and mass training as instilled at Aldershot, the Curragh and other commands contributed much to the making of that army which fought its way through Armageddon.

A British general said truly that leather played one of the chief parts in winning the war, and that few realized what we owe to the boxing-glove and the football; the two greatest factors in restoring and upholding " morale ".

The Imperial Services Boxing Association caters for the three fighting services and the Territorials. The army itself has in addition the Army Boxing Association. This aims at promoting boxing as a sport in the army, and encourages large numbers rather than single individuals.

There is the Army Cricket Association, the Army Fencing Union for the improvement of skill-at-arms, with foil, épée, sabre and bayonet. Then there is the Army Hockey Association and the Army Lawn Tennis Association—open without fee to all, from the senior general to the smallest drummer-boy who may enter for the challenge cup.

To show how the Army Rugby Union has gradually gained in popularity it is enough to say that in the first season, 1906–7, there were only twelve entries for its challenge cup; in 1936 seventy-two units entered.

There is an Army Swimming Union, and ambitious members of it may compete to win the badge of the Amateur Swimming

Union. Water-polo is one of its fixtures, also that useful sport, life-saving.

Another sporting event is the tug-of-war, a knock-out competition, of which the finalists reach that Mecca of army pageantry, horsemanship and skill-at-arms, the Royal Tournament at Olympia.

The modern Pentathlon Association encourages competitors throughout the country to ensure Great Britain's proper representation at each Olympic Festival. With this idea, an annual competition is held at Aldershot, when a challenge cup is given for the best team of three, who must belong to the same regiment, school, sporting club or educational institution. There is a cup, too, for the best individual competitor.

After watching this film sequence of games, sports and competitions unroll, it will not be wondered at that the motto of the Army Physical Training Staff is *mens sans in corpore sano*—" a well-balanced mind in a healthy body ".

It is almost dazzling for a young recruit, coming from civil life surroundings where there was little time, place or money for games, to be welcomed as a member of this vast Sport's Club. He begins in the kindergarten of sport at the depot, and finds during his training there, often quite unexpectedly, that he is possessed of certain unrealized athletic powers. His ambitions are roused, and when he matriculates into the regiment he may soon find himself selected to play for his platoon or company. With the sport-equivalent of a field-marshal's baton in his pack, he sets out to explore more playing-fields of glory, and may end by representing his regiment in the finals of the Army Football Challenge Cup—perhaps help to carry away from the prize

table that silver replica of the famous Warwick Roman Vase.

Or in another line, as a member of the Army Athletic and Cross Country Association, he may make a new record in the 100 yards or mile, perhaps be one of his regimental team for the Challenge Shield, or first man home in the Inter-services Cross Country Championship.

For lighter moments, there are bowls, badminton, billiards. There are blues, badges, blazers: International caps for Rugby and Association Football, an Army Blue for hockey, army colours for boxing.

Mechanization has spread to sport. Motor-cycling competitions now form part of military training, and army teams compete as well, on War Department machines, in certain civilian events and reliability trials.

The winners of motor-cycling events held in commands will be eligible for an Army Championship under rules compiled by the Army Motor-Cycling Control Board.

We may conclude with this definition of an army sportsman as one who:

Plays the game for the game's sake.

Plays for his side and not for himself.

Is a good winner and good loser—modest in victory, generous in defeat.

Accepts all decisions in a proper spirit.

Is chivalrous towards a defeated opponent.

Is unselfish and always ready to help others to become proficient.

SECTION 5—PAY

It has been shown that there is no lack of variety in a soldier's life. After preliminary training, he has an opportunity not given to his civilian friends to see the world, and his prospects improve, not only in army status and pay, but comfort, as he finds himself a member first of the corporals' mess, a sort of club, or later sitting with the regimental sergeant-major and other senior N.C.O.s in the much more elaborate surroundings of the sergeants' mess.

After some time in the service, a soldier over twenty-six years of age may obtain permission to marry and to live in furnished married quarters if these are available, with free issues of fuel and light.

If quarters are not vacant a family allowance is made; 17*s.* a week and upwards according to rank, with additional allowances for children, free medical treatment and other privileges.

The married quarters are equipped and furnished on modern lines, the wife and family travel at government expense on change of station, and a "disturbance allowance" of £5 is given to help with the move.

The soldier's usual holiday is a month each year on full pay, with additional 15*s.* 2*d.* a week for ration allowance. Besides this, there is usually leave at Christmas and Easter, and sometimes a week's leave during strenuous times of summer training. Soldiers travel by rail at reduced rates, and men of good character are allowed to wear civilian clothes.

A soldier is paid at a daily rate for every day of service, Sundays, holidays and wet days included. It should be remembered that besides his pay he receives board, housing, education, food, clothing and equipment, medical and dental attention, schooling, leave allowances, cheap travelling and training for a trade.

Pay on joining all regiments and corps in the army is 2*s.* a day. This is increased by an extra 3*d.* a day at the end of the first and second years, and reaches 3*s.* a day after 3 years' service. Besides this, intelligent soldiers can from the first obtain an extra 3*d.* a day for educational proficiency and the same as military proficiency pay.

This is the pay of an *untrained* soldier: it is more for a tradesman. There is always, too, the chance of promotion. A lance-corporal's pay begins at 3*s.* 3*d.* a day, increasing to 3*s.* 6*d.* Here also, educational and military proficiency can add the extra 3*d.* a day. A sergeant gets 6*s.* a day: 6*s.* 6*d.* after 3 years. In addition after 8 and 13 years' service a soldier may draw long-service and good-conduct pay at the rate of 3*d.* a day—6*d.* in all.

A good many grievances have been put right lately in the army. "Stoppages", for instance, which often caused discontent. Now, *everything* in the way of uniform is provided both for home and overseas, and during the first year of a recruit's service there is an increased allowance for upkeep of kit and other expenses.

By a new scheme men enlisting between 18 and 24 years of age for 12 years can continue for another 9 years, making 21 in all, and will be eligible for a pension of 14*s.* a week for privates,

rising to 30*s.* or more weekly for warrant officers. At 55 there is an additional pension of 2*s.* 11*d.* a week in all cases.

For those between 18 and 30 not wishing to enlist for so long a term there is still the choice of joining for 7 years with the colours and 5 in the reserve.

CHAPTER X

The Pageantry and Ceremonies of the Army

SECTION 1—THE COLOURS AND THEIR MEANING

There is a good reason why joining the army is called " Serving with the Colours "; those colours are still the regiment's focus and symbol, although no longer carried on active service, " to be a rallying-point and a headquarters ", as Wellington once said.

In early days banners or " guidons "—which means a guide —emblazoned with coats-of-arms told their followers the place of great nobles in battle. The Royal Standard, showing the presence of the sovereign, was very large and often mounted upon a cart to make it conspicuous. A banner carried in this way gave its name to the Battle of the Standard.

At Bosworth Richard III killed his rival's standard-bearer with his own hands, but after victory the new king set up this banner on the battlefield, a red dragon on a green-and-white ground.

The Royal Standard raised at Nottingham in 1642 by Charles was a huge affair. One who saw it says: " It had about 20 supporters; on the top of it hangs the blood-red battle-flag, and it bears the King's Arms. Three troops of horse and 600 foot were appointed to wait upon and lodge the Standard."

The name " Colours " for a standard or banner dates from

the fifteenth century, when military leaders, who did not own coats-of-arms, adopted different *coloured* flags to distinguish their companies. In Elizabethan times these companies themselves were called " Colours ", and he who carried the standard was an " Ancient ", later Ensign. It was in these old Free Companies of mercenaries that the colours became symbols of regimental honour: they were thought to be disgraced by any crime committed in the company and not flown again until the offender was punished.

From this came the feeling that the loss of its colours was a regiment's greatest misfortune. At Steenkirk, more than two centuries ago, the colonel of the Royal Scots died to rescue his colour, and this happened countless times in the history of our army down to one of the last occasions when they were carried in action. For in 1879 Lieutenants Melville and Coghill were killed when saving the colours of the South Wales Borderers from the Zulus, in memory of which Queen Victoria gave the wreath of silver immortelles which those colours carry still.

In the first standing army of Charles II regiments carried a colour for each company, as well as the colonel's colour usually bearing his badge. Under William III the number was reduced to three, those of the colonel, lieutenant-colonel and major; finally, in 1743, two only were allowed.

Of these, the colonel's became the King's Colour, which is the " Great Union " flag in all regiments except the Guards, who carry it as the regimental colour. In other units the regimental colour matches the facings and both colours bear the badges and battle-honours of the corps.

Two colours are still the rule in the British Army, with very



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COLOURS OF THE WORCESTERSHIRE REGIMENT

Lord Stair, who commanded at Dettingen, possibly gave his family motto " Firm " to the Regiment for bravery at Lauffeld in 1747

few exceptions. One of these is the Duke of Wellington's West Riding Regiment, the old 33rd or "Hindostan" Regiment of 1803, which carries an *extra* pair of colours presented by the Honourable East India Company. These bear the Elephant and Howdah, with the Indian honours, which are also engraved on the gilt spearheads of the staves.

The Highland Light Infantry carry a third colour, of white and gold, emblazoned with the word "Assaye". This was given after that famous battle, where the regiment found itself among the gallant few of Wellington's Army which defeated the huge Mahratta forces.

In the mess of the Queen's Royal West Surrey Regiment there still hangs a sea-green colour, which was once the official "third" colour of the regiment, carried by the Queen's longer than in any other corps.

The Essex Regiment in their officers' mess preserve a piece of faded blue-and-white embroidered silk, part of their colour when they were the old 44th Regiment. It was carried at Quatre Bras by a young ensign Christie, who flung himself down to cover the colour with his body, when wounded by a French lancer. A corner still showed and the Frenchman bore this off on his lance, only to be overtaken and overcome by a rush of other 44th men, who rescued that scrap still kept so carefully.

The colours of many regiments gained fresh honour at Albuera, one of the fiercest battles of the Peninsular War. Those of the Middlesex Regiment had their silk torn to shreds, their staves pierced by no less than thirty-three bullets.

The Buffs suffered in this battle as badly as the "Die-

hards": two boys of fifteen, Ensigns Walsh and Pryce Thomas, carried their King's and Regimental Colours, and were both killed in defending them. Then another boy-ensign, Latham, snatched up the King's Colour and shouted, waving it: "Rally on me, men!" Badly wounded, he managed to tear the colour from its staff and hide it under his coat, and he lived to receive a special gold medal, for which his brother officers subscribed a hundred guineas.

The 1st Battalion The Cheshire Regiment possess a small replica of their regimental colour, with a fine and adventurous history. It was worked by the officers' wives in 1911, carried in peace time by the Champion Shooting Company, and accompanied the regiment with the Expeditionary Force to France. During the Mons retreat, when capture seemed certain, a drummer hid this unofficial colour in a barn. Later, it was bricked-up in a wall and the secret kept, although a reward of 2000 marks was offered by the Germans, until a company of the Cheshires came to recover their treasured trophy directly after the Armistice.

It seems as though colours, official or unofficial, were a real necessity to British soldiers, for when they do not possess them they will find substitutes.

Thus at Badajos, the Sherwood Foresters—the "Old Stubborns"—headed a storming party and were the first to reach the ramparts. Here they hoisted the scarlet jacket of one of the privates to serve instead of their colour, just to show that the 45th of the line had been there first.

Regiments have sometimes buried their old colours with all the honours of war; they have burned them ceremonially and

preserved the ashes, or treasured tiny blood-stained shreds of them in a crystal casket, unless they could be carried to churches or chapels for safe keeping.

Even now, with the mechanization of the British Army, the respect and reverence paid to the colours is not to be lessened; their meaning will remain.

In cavalry regiments where chargers are already replaced by tanks, the standard, or square flag carried by Dragoon Guards, the swallow-tailed pennon or guidon which distinguishes Dragoons, will appear on parade as impressively as ever, only in a different manner. Hussar or lancer regiments, even before mechanization, carried no colours of either kind.

Orders have been given that, upon all ceremonial occasions, the standard or guidon will be mounted on a light tank, with an escort of two others echeloned in rear on each flank, as fine a sight, in its own way, as any horsed escort.

So true it is that the colours are still, as an old military writer said, "the very Soul of the Regiment, the Crux and Centre of its Life and Honour".

SECTION 2—GUARD-MOUNTING

The Sovereign's Guard has been mounted over the Royal residences in London since the reign of Charles II, when the ceremony took place, as it does still when the King is not at Buckingham Palace, in the Colour Court of St. James's Palace.

Generations of young princes and princesses have watched it there. Two centuries ago, the five-year-old Duke of Cumberland studied it to some purpose, for he proceeded to raise a

" company of young boys of his own age, whom he trained and drilled according to the methods of the regiments of Guards, as seemed satisfactory ". This much pleased his grandfather, the King, who foresaw the future commander-in-chief of the British Army.

From the first, the daily guard-mounting was, and still is, one of the standing sights of London, but in early days it seems to have been more elaborate than our own daily ceremony. About 1739, when the old portion of the present Horse Guards was built and the parade laid out, the guard was mounted there until the reign of William IV. And here, to keep up the tradition, the daily ceremony still takes place during the month of May.

A writer on " English Military Discipline " in 1678 shows few differences in the manner of guard-mounting then and now. He tells how the officers of the guard that mounts file off their soldiers by the side of the court, and the officers of the guard relieved deliver the orders and march off their men " to the Place of Arms, where they thank them "—a nice touch of politeness!

" The Place of Arms " is where the colours are kept, once the ensign's quarters, but by 1678 those of the colonel. To-day the Colour of the Guard is lodged in the officers' room at St. James's.

The notice of a guard-mounting in 1737 says that " at half-past 10 of the clock to-morrow Colonel Pulteney will exercise one of the battalions of Guards by the Wave of the Colour ", which Sir Thomas Venn describes as a series of elaborate flourishes to communicate orders to the troops.

It is still at half-past ten of the clock that the guard is

changed, that ceremony which goes back to days when kings went to war and piquets or sentries were posted round their tents, just as the Guards' sentries are set round the royal palaces. Even now the officer who makes the rounds of those sentries is called the piquet officer.

There are many interesting details which often pass unnoticed by those who see the guard-mounting. Just before it begins a picturesque figure in old-world uniform and shako appears. This is a king's marshal-man, always present at the changing of the guard, both at St. James's and Buckingham Palace, for the marshal-men were once a kind of military police guard to the sovereign.

If the day happen to be the anniversary of a battle in which the Guards distinguished themselves, laurel-wreaths adorn the colours, but it must be a battle in which that particular regiment took part. For instance, the three older regiments bear wreaths on Waterloo Day, or the anniversary of Namur in 1695, which is 4th August, but not the Irish or Welsh Guards. These younger regiments mark in this way only battles fought in the Great War, such as Loos or Festubert.

On royal birthdays, the drum-majors at the guard-mounting wear their splendid state uniform, with velvet caps. The men forming the guard also receive a small present to celebrate the occasion. On the actual day of birth of a royal prince or princess, the captain of the guard used to be promoted major. Edward VII was born at 10.48, while the guard-mounting was actually going on, and the curious question arose as to *which* guard, the old or the new, was entitled to this "birthday honour"

After the " new guard " has marched in and saluted the " old guard " by halting and presenting arms, the commanders of the two guards meet. In former days they probably exchanged the password and countersign for the day. Now all that passes is the guardroom key, handed from one to the other.

During the period of waiting which follows, while the two pairs of officers, those commanding the guards and the two ensigns carrying the colours, pace up and down, the sentries all round the palaces are being changed.

When fresh piquets have been posted, the " old guard " marches off and the " new guard " lodges its colour in the " Place of Arms ".

The uniforms of Guards' regiments, however alike at a casual glance, have distinctive details for those who know what to look for, even when badges or buttons are indistinguishable.

The plume in the bearskin differs with each regiment. The Grenadiers' is white, that of the Coldstream Guards red, while the Scots Guards carry no plume. The Irish Guards have one in the blue-green colour, called St. Patrick's Blue; the plume of the Welsh Guards is leek-coloured, green and white.

These plumes are worn on different sides of the bearskin. This originated when there were only three regiments in the Brigade of Guards, who formed up on parade in the order, Grenadiers, Scots and Coldstreamers, with Grenadiers on the right.

So that the plume should be on the *inner* flank, the Grenadiers wore theirs on the *left* of the bearskin, and the Coldstream on the *right*, the Scots having none. When the Irish Guards were formed, they took parade position between the Scots and Cold-

stream, with plumes on the right. The Welsh Guards, as junior regiment, take the centre, with theirs on the left of the bearskin.

There was one occasion in 1689 when the daily guard-mounting was grim earnest and blood might have been shed. James II was about to abdicate and William of Orange prepared to take up his quarters at St. James's while the King was still at Whitehall.

The King's Guard that day was commanded by Lord Craven, a staunch Jacobite, and when the Dutch Guards, under Count Solms, marched through the park to relieve the sentries, the old Royalist refused to go, and had prepared to resist by force when a direct command from King James made him give way.

The Household Cavalry, too, have their ceremony, for the King's Life Guard has mounted daily at Whitehall since the reign of Charles II. They ride up the Mall in the traditional formation of those days when the King's enemies might lurk at every corner, in groups with sections of advanced guards in front of the main body, which carries the standard.

Both Life and Horse Guards wear a curious little distinction, the scarlet " flash cords " on their pouch belts, a relic of days when the officer on duty carried the key of the king's carriage on such a cord.

Trooping the Colour.

The King's Birthday Parade, that yearly ceremony of Trooping the Colour by the Brigade of Guards, is really a more splendid version of the daily guard-mounting, which in its fullest form includes those rites of sending for the colour,

" trooping " it along the ranks for all to see, and " lodging " it where every soldier knew its whereabouts.

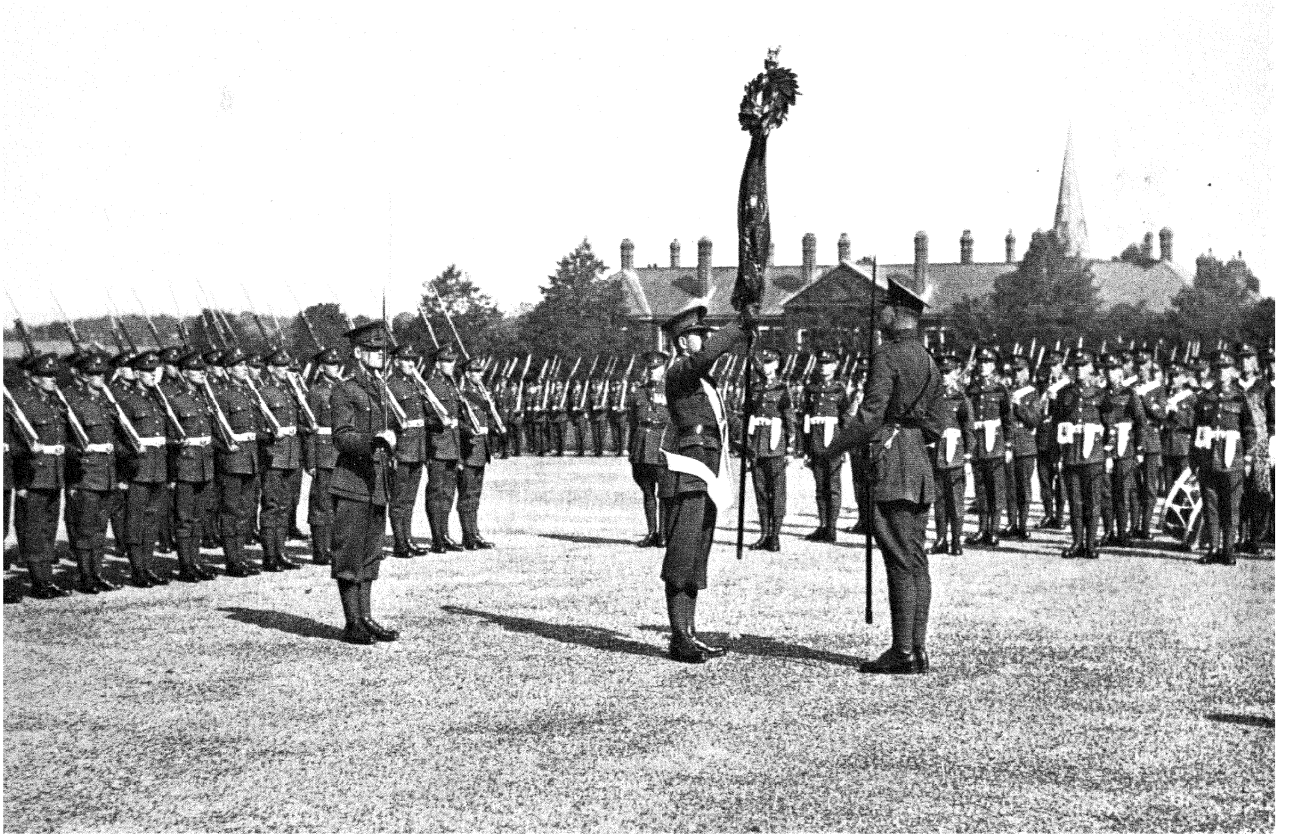
Practical in its beginnings, like all military routine, it is still full of meaning and interest, accompanied by the sound of the drum. For " trooping " is to " salute by beat of drum "; the " assembly " or " troop " beaten for the dawn parade was one of the three daily drum-beats.

The King's Colour, representing the Sovereign and the centre of the whole ceremony, is, as a rule, only touched or carried by a commissioned officer. On this one occasion, to show that the rank and file can be equally trusted to guard the honoured symbol, it is in charge of the regiment represented by warrant officers, non-commissioned officers and men.

At the beginning, the colour is posted in the middle of the Horse Guards Parade, protected only by a sergeant and two sentries, while the eight companies or " guards ", on two sides of the square, are drawn up at first without their officers. These join them just before the ceremony begins.

No. 1 guard on the extreme right is the escort for the colour, for " right of the line " is always the post of honour and this was formerly the allotted place of the grenadier company of a regiment consisting of the tallest, strongest men. This is why, whichever Guards regiment provides the colour and escort, the same music—the " British Grenadiers " and the " Grenadier's March "—always accompanies its movements.

The first procession to arrive is that of the queen in an open carriage, accompanied by other members of the royal family, and a captain's escort of Household Cavalry, consisting of three officers and fifty-eight other ranks, with the regimental standard.



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THE GREEN HOWARDS TROOPING THEIR REGIMENTAL COLOUR ON ALMA DAY

Greeted by a royal salute, they cross the parade and drive through the Horse Guards archway, from a window above which the royal party watch the ceremony.

Shortly afterwards, the king's procession arrives, led by the Household Cavalry band in their gorgeous full-dress uniforms and a sovereign's escort of Household Cavalry, only seen on state occasions. This consists of 7 officers and 109 other ranks riding in 4 divisions, 2 in front and 2 behind the king. A corporal major carries the king's standard of the regiment, with a trumpeter on his right and a corporal-of-horse as " standard-coverer " on the left.

The King, as Colonel-in-Chief, wears the uniform of the regiment whose colour is to be " trooped " and, in the case of the Grenadier Guards or Scots Guards, his charger is caparisoned with the magnificent state saddlery, possessed only by these two regiments. The Grenadier Guards have eight sets, worn by the senior officers on state occasions when the sovereign is present, which were presented by the Duke of Wellington in 1851, probably to replace an older set, as the saddle-cloths bear the initials of Charles II, under whom the regiment was formed.

The Scots Guards have three sets given by the Prince Consort in 1842.

After being received with the royal salute, his majesty inspects the troops on parade and the real ceremony begins. The field officer in Brigade Waiting gives the order: " Troop!" and the massed bands, obeying the command of the king's mouthpiece, pay the first honour to the colour by marching and counter-marching across the parade, first in slow, then in quick time, a fine thing to see and hear.

Still more so is what follows, as a writer described it nearly two centuries ago:

"The battalion being formed up, the colours are sent for, the grenadier drummers being ordered to beat the Drummer's Call. This is a warning to the ensigns detailed to carry the colours."

After fifes were introduced into our army about 1742 they played the "Call" with the drums, but now, although the ceremony has changed very little otherwise, only a single drummer, on the extreme right of the line, beats the ancient call.

Yet in one instance a fifer survives. The Loyal Regiment—who keep Kimberley Day, 15th February, as their special anniversary, being sole possessors of the honour "Defence of Kimberley"—have another unique observance.

Long ago, when the grenadier company of the old 81st acted as colour escort according to custom, they happened to have only a single fife and drum to supply the music. So now, when their King's Colour is brought on parade, behind the usual escort marches *one* drummer and *one* fifer playing the "British Grenadiers".

As the drummer's call gives the signal, the captain of No. 1 guard hands over his command to the lieutenant. This means, probably, that youth must take on responsibility, for now the escort, with the lieutenant and ensign, marches to where the colour is posted.

The regimental-sergeant-major, representing the rank and file, takes the colour from the sergeant who holds it and hands it to the ensign. The National Anthem crashes out, the escort presents arms to the colour, and the regimental-sergeant-major

salutes with his sword, the only occasion on which he draws it in peace-time.

At this moment, another interesting bit of ceremonial takes place. The sergeants on the outer flanks of the escort turn outwards, bringing their rifles to the "port", a defence position, meaning that they are prepared to protect their comrades from attack.

For to present arms, to lower the sword-point in the officer's salute, to raise the hand to the forehead when saluting—in old days soldiers removed their hats or caps, but this was forbidden, because it damaged their headgear—all these movements mean trust and confidence, imply that those making them put themselves in a defenceless position, at the mercy of the person they greet. Even salutes of guns and the firing of a *feu de joie* have the same significance: the weapons are emptied by this action, made harmless and useless.

Now the colour is "trooped" or carried down the lines of guards by its escort, saluted by every soldier as it passes. Afterwards comes the march past, when all the troops pass the king at the saluting-point to their own regimental slow marches, the ensign who carries the colour lowering it just before reaching his majesty and raising it again about ten paces afterwards.

Then time and tune change and the "guards" repass the saluting-point to their respective quick marches.

The final scene comes. The field-officer commanding the parade rides up to the king and says:

"Your guard is ready to march off, sir."

What follows is a fine innovation in the ancient ceremony which was introduced by King George V in 1914. For the

king does not return as he came, leading the brilliant procession of princes, high army officials, staff officers and foreign attachés. Only those of the royal princes who actually belong to the Household Brigade accompany him now, as he rides off the parade and along the Mall to Buckingham Palace at the head of his own guard, to see it " mounted " under his own eyes.

It is such additions as this which have increased the beauty and stateliness of the trooping ceremony down the centuries, taking away none of its ancient splendour by giving it new interest and meaning, making it, what it is, the finest and most impressive military pageant in the world.

SECTION 3—" DAYS " IN THE ARMY

If the King's Colour of one of the Guards Regiments holds the centre of the stage at the royal birthday ceremony, there are a whole series of red-letter days in the army's calendar when regimental colours play a similar leading part.

Almost every corps has its special anniversary, its " Day " of remembrance and pride: quite fittingly, part of the celebration is usually " Trooping the Colour ".

To begin with one of these occasions which is also England's Day, 23rd April, the festival of St. George. It is the " Fighting Fifth ", the " Old and Bold ", the Royal Northumberland Fusiliers who share a patron with the nation and wear a George-and-Dragon badge.

At their yearly trooping ceremony all ranks wear red-and-white roses in their headgear; the drums and colours are

wreathed with roses and the regiment's famous third or " Drummer's Colour " is also trooped. The original of this small green colour was captured two centuries ago at Wilhelmstahl by the drummers of the 5th. Appropriately, the smallest drummer carries it on St. George's Day.

Another regiment which celebrates 23rd April with a trooping ceremony is the King's Own Regiment, wearing Lancastrian red roses on caps, colours and drums.

Roses play a part in several army anniversaries. 1st August is still Minden Day for some of the regiments who fought there, especially the Lancashire Fusiliers or " Minden Boys ".

At reveille the old 20th are roused by the band marching round barracks playing the Minden March, the caps of all display red-and-yellow roses; so do the drums, and the regimental colour bears a rose wreath when it is trooped. At mess that night the silent toast is drunk: " To those who fell at Minden ", and afterwards all newly-joined officers must stand on their chairs and eat a rose.

The Suffolk Regiment, another which fought at Minden, troop the colour and carry yellow roses on their headgear and drums on 1st August, while the King's Own Yorkshire Light Infantry appropriately wear the white county flower. For the K.O.Y.L.I., then 51st of the line, were also at Minden, and in 1813, during the Peninsular War, on the anniversary of the battle they wore laurel and bay in their shakos and marched to the old tune " Lammas Day ", otherwise the Minden March.

The oval Minden wreath, half-bay, half-laurel, is still associated with the K.O.Y.L.I., but they have another regimental anniversary in Badajos Day. Weekly, on band nights, the officers'

mess of the 1st battalion drink the toast, "Dyas and the Stormers", standing and in silence, to keep in memory Lieutenant John Dyas and the men who followed him at Badajos.

Twenty-eighth October is the great day of the Border Regiment, the only unit with the honour Arroyo-dos-Molinos. At this battle, in 1811, the 34th Foot captured a whole battalion of the French 34th of the line, including the drum-major, his staff, the drums and the regimental march. Yearly the 1st Battalion "troops" these captured drums, the principal parts in the ceremony being performed by drummer-boys wearing Peninsular uniforms, led by the smallest carrying the drum-major's staff, to the regimental march of the French 34th, now incorporated in "D'ye ken John Peel", the Border Regiment's own march.

The Green Howards celebrate 20th September, when the 19th won honours at the Alma. The five Russian drums captured there are beaten on parade, wreathed with white Yorkist roses. The 2nd Bn. The Sherwood Foresters also keep Alma Day, when, after many carrying the colours had fallen, Private James Keenan bore the Queen's Colour to victory. To commemorate this gallantry, at the trooping of the regimental colour the King's Colour is held by the senior private at the saluting base, the escort wearing Crimean uniform, with a drummer carrying a drum and trumpet captured at the battle.

Another eastern battle is commemorated by the Cheshire Regiment on Meeanee Day, 17th February, when all ranks wear oak leaves in their caps to celebrate the Indian victory under Sir Charles Napier. The regimental badge is an oak-

sprig, granted traditionally by George II for his rescue at Dettingen by men of the 22nd.

All ranks of the Welch Regiment wear a leek on St. David's Day, and at mess newly-joined subalterns are obliged to eat a raw leek. The famous white goat is led by the goat-major before the band and drums at the ceremonial parade on 1st March, for these successive gifts from the Windsor goat-herd have been regimental mascots since Crimean War days.

The goat-mascot of the Royal Welch Fusiliers—who celebrate St. David's Day in much the same way—dates back more than 200 years. An old military writer describes its gold chain and gilded horns, calling its posesssion " A privelegious honour ".

The Duke of Cornwall's Light Infantry keep Lucknow Day, 17th November, when the colours are displayed, with trophies of the historic siege. One of these is a silver soup tureen, shot through by a bullet; the case which contained it was used as a barricade during the defence of the residency.

The " Glorious First of June " is honoured by " soldiers and sailors " too, for both took part in Howe's Great Victory. The Naval Crown, superscribed " June 1st, 1794 ", is carried as a battle-honour by two regiments, the Queen's and the 29th, The Worcestershire Regiment. The Queen's exchange telegrams on this day with H.M.S. *Excellent*, successor of Howe's flagship *Queen Charlotte*.

Another sea anniversary is kept on Armistice Day by the 2nd Battalion The Dorsetshire Regiment. But their 11th November was in 1857, when the battalion brought the burning troopship *Sarah Sands* to port in Mauritius after her crew deserted.

The General Order telling of this heroic deed was read to

every regiment in the army, by order of the commander-in-chief, and the day is celebrated with many festivities, the toast of the evening being: "To the heroes of the *Sarah Sands.*"

This same battalion of the Dorsetshire Regiment sometimes honour the King's health unusually, with the words: "Gentlemen, a Bumper Toast", which must be drunk at one draught. This dates from 1802 when the 54th saved the Duke of Kent, Queen Victoria's father, during a mutiny at Gibraltar, and were presented, in gratitude, with a magnificent Punch Bowl.

Another toast is drunk by the Royal Inniskilling Dragoon Guards on St. Patrick's day, which they commemorate both as Irishmen and in memory of Captain L. E. G. Oates, the "very gallant gentleman" of Captain Scott's Arctic Expedition, who belonged to the regiment. The then Inniskilling Dragoons do not drink the king's health. They showed this was unnecessary to prove loyalty, William III decreed, by their conduct at the Boyne. This privilege is shared by the Grenadier and Coldstream Guards, the King's Shropshire Light Infantry and others.

A splendid story is remembered by the Wiltshire Regiment on 22nd December. In 1845 the Battle for Ferozeshah was fought on this day. The 62nd led the attack and, nearly all the officers being killed, the sergeants of the regiment took command—and Ferozeshah! So yearly the colours are handed over to the sergeants by the officers and so trooped, the escort being commanded by the regimental-sergeant-major.

Many are the regimental toasts and customs. The Manchester Regiment drink to the King as "Duke of Lancaster"; the West Yorkshire Regiment pass round a Waterloo wine-glass on guest nights, but do not drink from it.

The Scots Guards use no finger-bowls at mess: this dates from Jacobite days, when Scottish well-wishers to the Pretenders would secretly hold their wine-glasses over these bowls to drink to " the King "—over the water.

The Worcestershire Regiment owe their nickname, the " Eversworded ", to a tragic mess-custom. On foreign service, in 1746, the officers were surprised at dinner, unarmed, and afterwards always wore their swords at mess, although the custom has now been relaxed.

This incident happened not long after officers' messes had been established in the army, about 1740, when some lieut.-colonels of regiments took pity on their poorly-paid subalterns, who were obliged to get meals at ale-houses and cookshops and could not afford to keep company with their superior officers.

Soon these messes became regular institutions. Young officers put their shilling a day subsistence money together to get a better meal than they could individually, and all kinds of customs grew up connected with the mess, many of them during the revolutionary and Napoleonic Wars.

One custom belongs to the Oxfordshire and Buckinghamshire Light Infantry. At dinner the mess president says grace before the soup and again after dinner before wine goes round. This regiment do not drink the King's health, neither do they stand up when the National Anthem is played at the end of the band programme at mess.

The sergeants of the 1st Highland Light Infantry patriotically celebrate Burns Night with a real Scottish dinner, including haggis, potatoes and herrings, the latter, in accordance with old custom, being eaten without forks or knives.

Reaching Scotland, " Hogmanay ", the New Year, is the chief " Day " of Highland regiments. The Argyll and Sutherland Highlanders have time-honoured customs connected with " Athole Brose ", a powerful drink made of oatmeal, honey, cream and whisky. All ranks must empty a " quaich " at one draught, the mixture being ceremonially prepared by two junior subalterns.

Very picturesque is the custom of the 1st Battalion The Seaforth Highlanders. Just before midnight on New Year's Eve one of the oldest soldiers in the battalion, dressed as Father Time, with beard, forelock, scythe and hour-glass complete, is mounted on a limber and played out of barracks, escorted by torchbearers, to the tune " Happy we've been a' together ".

As midnight strikes, the youngest drummer-boy, in full uniform, enters barracks, carried shoulder-high on a decorated chair to the tune " A Guid New Year to ane an a' ".

A more dramatic form of this ceremony was followed by some Highland regiments. The " old year " having been piped out of barracks to the strains of " Auld Lang Syne ", as midnight sounded, the " New Year " came to the closed gates, where a sentry challenged: " Who goes there?"

" The New Year," came the answer, to be met with the reply: " Advance, New Year. All's Well!"

SECTION 4—THE CEREMONY OF THE KEYS

There is a nightly London ceremony where colours play no part, but which is no less dignified and impressive.

It takes place in the city's oldest building, the fortress which

William the Conqueror raised on the site of a Roman Camp to defend the Thames. When the time for closing the gates of the Tower of London is near, the Chief Warder of the Yeomen Warders of the Tower, wearing a scarlet cloak over his picturesque uniform and carrying a bunch of keys, goes to the Main Guard and asks for the " Escort for the Keys ". A sergeant and four Guardsmen are detailed for this duty, and the officer salutes the Warder with the Keys.

One soldier carries a lantern, as they tramp along the dark, silent passages. The escort passes under the turrets as Barrier Gate, Middle Tower and lastly Byward Tower are closed and locked in turn, the soldiers presenting arms each time. The party returns towards the Main Guard, until, near the Bloody Tower, they come under observation of the sentry. As they reach the arch leading to the Inner Ward, his challenge rings out and he lowers his bayonet.

" Halt! Who comes there?"

The escort draws up, as the answer is given by the Chief Warder.

" The Keys."

" Whose Keys?" the sentry demands.

" King George's Keys!" comes the reply.

" Advance, King George's Keys, all's well!" the sentry answers, and the escort proceeds to the Main Guard, in front of which they form up. The Guard under the officer having turned out, the officer gives the order: " Guard and Escort, present arms!"

This honour is paid to the King's Keys—just as to the King's Colour at the trooping ceremony—while a single fife and drum

play the National Anthem. Then the Chief Warder steps two paces in front of the escort and, removing his velvet Tudor hat, calls out:

" God preserve King George!"

All present, guard and escort, answer with a loud " Amen ", and King George's Keys are carried to the King's House at the Tower for delivery to the Resident Governor.

None know for how many centuries this nightly ceremony has taken place, certainly as far back as the reign of Edward III, when one John of London had custody of the gates as Tower Yeoman. Perhaps the practice goes yet farther back, as far as the Tower itself with its Keys, which are and always have been the King's Keys.

SECTION 5—THE BATTLE-HONOURS

The battle-honours of regiments are carried in many different ways, not only in the actual names emblazoned on the colours. Yet these are a proud enough distinction, especially when that single word, like the " Nieuport " of the King's Shropshire Light Infantry, represents an honour which no other regiment possesses.

Even a " colour "—in the singular—may be a battle-honour, for the Royal Berkshire Regiment was given " royal-blue " facings, together with the title, in 1885, by Queen Victoria to commemorate the conspicuous bravery of the officers and men at Tofrek in the Soudan.

Several corps, the East Lancashire Regiment and the Lincolnshire Regiment among them, have that distinction, the

Sphinx, for Egypt. But the Gloucestershire Regiment wear it *doubled*, a unique honour which also explains their nickname of " Fore-and-afts ".

At the Battle of Alexandria, in 1801, the men of the then 28th Regiment became surrounded by the enemy. In this crisis they turned back to back, splendidly beating off every attack, and were, as a reward, granted the right to wear a badge behind as well as before on their headgear. In commemorating this occasion, the regiment also stand back-to-back on parade. Curiously enough, the 2nd Battalion, the old 61st, won the same honour in the same way at Chillianwallah.

The Royal Sussex Regiment are rightly proud of the single tall white feather, whose representation ornaments their cap-badge, for it was an honour of war, won under General Wolfe from a famous French Regiment, the Royal Roussillon.

The red rose of Lancaster which the Hampshire Regiment wears as a badge, though taken from the arms of their county town, Winchester, has an extra bit of history attached to it. For this rose is that of Henry V, who granted his own symbol to the ancient town on his way to Southampton and Agincourt.

Another fragment from their county-arms is that horse-shoe worn as part of their badge by the Northamptonshire Regiment, the " Heroes of Talavera ". Their colonel, Donnellan, who fell at this battle, was supposed to be the last man in the British Army to wear the old-fashioned three-cornered cocked hat.

The East Surrey Regiment carry as badge the coat-of-arms of the ancient borough of Guildford, as town-trained bands did of old. Their nickname is the " Young Buffs ", from a complimentary mistake made by George II at Dettingen.

Hailing their bravery with "Well done, the old Buffs", the King, being corrected, cried, "Well done, the Young Buffs".

The famous bearskin caps of the Grenadier Guards are in themselves a battle-honour. In 1728 the "First Regiment of Guards" received their grenadier badge and were distinguished by high painted cloth caps. Then the Grenadier company in 1768 were ordered to wear tall fur caps in place of the mitre-shaped ones, but it was their bravery at Waterloo which won the honour of these "Bearskins" for the whole regiment.

A fine story is connected with the red feathers worn at one time in their headgear by the Duke of Cornwall's Light Infantry, which survives in the red background to their cap-badge. It was when the 2nd battalion was fighting in America in 1777, during the War of Independence, that the "Light Bobs", as they were called, defeated Washington's Horse in an outpost affair. The angry Americans sent a message saying: "The Light Bobs had best look out, for no quarter will be given to them." To this the English regiment answered: "Ready!" and as a distinguishing mark dipped their hitherto white feathers red—so that the enemy might not refuse quarter to *other* regiments by mistake.

For their self-sacrificing bravery at Bois des Buttes, on 27th May, 1918, the 2nd Battalion The Devonshire Regiment won a rather similar honour to these West Country neighbours of theirs. The regiment earned a citation in French Army Orders and the award of the Croix de Guerre. So on the anniversary of the battle and certain other ceremonial occasions, the cockade of rose-pink and green ribbon, the colours of the Croix de Guerre, is worn in the headgear of all ranks in the regiment.

Two other British regiments won the Croix de Guerre in the Great War, the 8th Battalion of the West Yorkshire Regiment and the 1st/4th Battalion of the King's Shropshire Light Infantry.

At the Battle of Almanza in Spain, during the reign of Queen Anne, the Royal Norfolk Regiment gained a special honour when they covered Lord Galway's retreat and lost 324 officers and men out of 467 in doing so. For this gallantry they were granted the badge of Britannia, which the Spaniards in a later war took for an image of the Virgin Mary. In consequence its wearers were known in the British Army as the " Holy Boys ".

A very marked distinction, although not precisely a battle-honour, is the " flash " of the Royal Welch Fusiliers, a bunch of black ribbon worn at the back of the collar by officers and men This " flash " is a relic of the days when all soldiers wore pigtails, and the ends were tied up in a kind of bag, with black ribbons to keep grease and pomatum on the hair from staining the coat.

The Royal Welch Fusiliers were very reluctant to give up their queues when the order went out that the hair of the British Army was to be cut. They kept the pigtails as long as possible and when obliged to give way demanded—and obtained —the right to wear the " flash " as a souvenir.

At one time the 62nd Regiment, the 1st Battalion The Wiltshire Regiment, was distinguished by a " splash " on their buttons. This was permitted as an honour for their gallantry at Carrickfergus, where it is said that the men pulled off and used their coat-buttons as bullets when other ammunition had failed.

A distinction which is worn by several British regiments

has caused endless discussion and argument. This is a " worm " or line of black worn in the lace of the full-dress uniforms by certain units, the East Yorkshire Regiment, the Loyal Regiment, the York and Lancaster Regiment, the East Surrey Regiment, and the Gordon Highlanders among them.

The East Yorkshire Regiment—who put wreaths of white roses on their colours on Quebec Day—have always, with several more corps, held the tradition that the " worm " was a sign of perpetual mourning for General Wolfe.

Other regiments contend that *their* line of black is a mourning symbol for Sir John Moore. It is for the same reasons that some authorities have said that the black scarf of the navy is worn in memory of the death of Nelson, for all three of these great men died at the moment of victory.

But, unfortunately, there is no official proof or record that the black " worm " was ever granted as a mourning sign for any general, and modern authorities are inclined to think that the tradition is unfounded, although firmly believed by the regiments in question.

SECTION 6—ARMY MUSIC

From early days orders in the army have been given through the trumpet. The Roman legionaries used the bronze " Buccina " or " Cornu ", and later the brazen war-trumpets of the Scots startled the English invaders by their hideous blasts in night attacks.

It is probable that drums, which are certainly Eastern in origin, were introduced into Europe by the Crusaders. They

were in full use by English troops during the period from Crécy to Agincourt and onwards. At that time a drummer and trumpeter were in attendance on the Ancient or Ensign, who used them to tell the whereabouts of his charge, the colour, as a rallying-point; they were also the Messengers of the army.

Trumpet-calls and drum-beats are, according to an old military writer, "An audible voice to declare all commandments of the general or captain, to call and summon the soldiers together to perform all manner of duties".

Gradually these beats and calls became the soldier's special language. Some, at least, of the trumpet-calls may have originated in Italy, perhaps a survival from Roman times, and have reached our own army through that of France. In 1591, of the six *Points of War* sounded by drum or trumpet, the sixth, called *Auguet* or the Watch, "commanded all those that are out on duty to their rest, and in the morning commands those at rest come out for duty".

This corresponds in name at any rate to *Le Guet*, an ancient watch-setting call in the French cavalry which is certainly the forerunner of our "LAST POST".

During the sixteenth century the *Lanz-Knechts* or Free Companies of Germany were famous for their drummers. The rolls they played on the march and other of their drum-beats were exactly the same as those still used in our army, which shows their origin pretty plainly.

But one of our best-known drum-beats, which has become part of the British language, travelled to us from the Low Countries. "Tattoo" was the old Dutch "tap-to", the signal for the closing of taverns and drinking-shops, drummed round

the town to send the soldiers of those pre-barrack days to their billets, commanding them " to retire to their chambers and give notice for their repairing to their guards, watches and lodgings ".

Towards the end of the eighteenth century bugles began to supersede drums as the voice of the British Army, a change hastened by the formation of those Light Infantry Regiments, who still bear the bugle or bugle-horn badge. Possibly these calls were copied from those used by the Jäger or " huntsman " regiments of Germany, who in turn borrowed from the signals of the chase and the hunting-horn.

The Oxfordshire and Buckinghamshire Light Infantry and the Rifle Brigade use the word " horn " instead of bugle.

Some say that the great musician Haydn himself, by order of King George II, was responsible for the present calls. It is on record that in 1798 they were revised by Trumpet-major Hyde, and they have changed very little since.

Certain trumpet-calls, especially those in the cavalry, will probably end with complete mechanization. Tanks and armoured cars cannot respond to " Boot and Saddle ", " Trot ", " Gallop " or " Charge ". But most will remain: the soldier will still be wakened by reveille, receive his orders through the day by the accustomed calls, hear " good-night " in the notes of the " LAST POST " and " LIGHTS OUT ".

Regimental bands and regimental marches belong to their separate units, for what may be called personal reasons. There are also certain songs and marches, like the " British Grenadiers ", " The Girl I left behind me " and " Tipperary ", which have become part of the whole army's very life.

There are other songs, too, written and composed in homage to our army at different times: "Soldiers of the Queen", the "Absent-minded Beggar", "Tommy Atkins" — not great poetry or music perhaps, but expressing something of what Britain feels for her army. And the last lines of one of these gives in simple everyday language a message which each of us would like to send to the British private soldier:

"Oh, Tommy, Tommy Atkins!
You're a good 'un, heart and hand,
You're a credit to your calling
And to all your native Land.
May your luck be never-failing,
May your girl be ever true—
God bless you, Tommy Atkins,
Here's your country's love to you."

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