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FINAL REPORT

OF THE

ROYAL COMMISSION

APPOINTED TO INQUIRE INTO THE

RECENT CHANGES

IN THE

RELATIVE VALUES OF THE PRECIOUS METALS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1889.

GOLD AND SILVER COMMISSION.

FINAL REPORT OF THE ROYAL COMMISSION APPOINTED TO INQUIRE INTO THE RECENT CHANGES IN THE RELATIVE VALUES OF THE PRECIOUS METALS.

Presented to both houses of Parliament by command of Her Majesty.

IN THE SENATE OF THE UNITED STATES,
January 4, 1889.

Resolved by the Senate (*the House of Representatives concurring*), That there be printed the usual number and three thousand additional copies of the Final Report of the Royal Commission, appointed to inquire into the recent changes in the relative values of the Precious Metals, with minutes of evidence and appendices, presented to both Houses of Parliament by command of Her Majesty, in octavo form, and bound in cloth, of which one thousand copies shall be for the use of the Senate and two thousand copies for the use of the House of Representatives.

Attest:

ANSON G. MCCOOK,
Secretary.

IN THE HOUSE OF REPRESENTATIVES,
January 8, 1889.

Resolved, That the House concur in the foregoing resolution of the Senate.

Attest:

JNO. B. CLARK,
Clerk.
By T. O. TOWLES,
Chief Clerk.

GOLD AND SILVER COMMISSION.

ROYAL COMMISSIONS.

I.

VICTORIA R.:

Victoria, by the Grace of God of the United Kingdom of Great Britain and Ireland Queen, defender of the faith. To our right trusty and well beloved Councillor Arthur James Balfour, our secretary for Scotland; our right trusty and well-beloved Councillor Joseph Chamberlain; our trusty and well-beloved Charles William Fremantle, esquire, companion of our most honourable order of the bath (commonly called the Honourable Charles William Freemantle); our trusty and well-beloved Sir John Lubbock, baronet; our trusty and well-beloved Sir Thomas Henry Farrer, baronet; our trusty and well-beloved James Richard Bullen Smith, esquire, companion of our most exalted order of the Star of India; our trusty and well-beloved David Miller Barbour, esquire; our trusty and well-beloved John William Birch, esquire; our trusty and well-beloved Lionel Louis Cohen, esquire; our trusty and well-beloved Leonard Henry Courtney, esquire; and our trusty and well-beloved William Henry Houldsworth, esquire, greeting.

Whereas it has been represented unto us that it is expedient that a commission should forthwith issue to inquire into the recent changes in the relative values of the precious metals shown by the decrease in the gold price of silver.

Now know ye, that we, reposing great trust and confidence in your knowledge and ability, do by these presents authorize and appoint you the said Arthur James Balfour, Joseph Chamberlain, Charles William Fremantle (commonly called the Honourable Charles William Fremantle), Sir John Lubbock, Sir Thomas Henry Farrer, James Richard Bullen Smith, David Miller Barbour, John William Birch, Lionel Louis Cohen, Leonard Henry Courtney, and William Henry Houldsworth to be our commissioners for the purpose of said inquiry.

And we do hereby enjoin you, or any five or more of you, to investigate the causes of the said recent changes in the relative values of the precious metals, and especially to inquire whether the said changes are due (1) To the depreciation of silver; or (2) To the appreciation of gold; or (3) To both these causes.

If you should find the said changes to be due to the depreciation of silver, you will then inquire whether such depreciation arises from increase of supply or diminution of demand, or from both, and you will endeavor to ascertain the proportions in which these different causes have operated.

If you should find the changes to be due to the appreciation of gold, you will inquire whether the appreciation arises from the diminution of supply or from increase of demand, or from both, and you will endeavor to ascertain the proportions in which these different causes have operated.

Having regard to these different causes and their respective effects, you will next inquire what has been the bearing of the changes in the value of the precious metals on the following matters of practical business:

I. *India.*—(*a*) Upon the remittances of the Government of India: (1) For payments on old or fixed contracts; (2) For payments on new or current contracts. (*b*) Upon the persons in India who have to make remittances home in gold. (*c*) Upon the producers, merchants, and tax-payers of India. (*d*) Upon merchants and manufacturers at home who trade with India.

II. *The United Kingdom.*—(*a*) Upon the trade of the United Kingdom with other silver-using countries. (*b*) Upon the foreign trade of the United Kingdom generally. (*c*) Upon the internal trade and industry of the United Kingdom.

If you should come to the conclusion that the aforesaid changes in the values of the precious metals are causing permanent or important evils or inconveniencies to any of the interests above referred to, it will be your duty then to inquire whether it is possible to suggest any remedies within the power of the legislature or the Government, by itself or in concert with other powers, which would be effectual in removing or palliating the evils or inconveniencies thus caused without injustice to other interests, and without causing other evils or inconveniencies equally great.

Lastly, if your are of opinion that this is possible, you will state the precise form which such remedies should take, and the manner in which they should be applied.

And for the better effecting the purposes of this our commission, we do by these presents give and grant unto you, or any five or more of you, full power to call before you such persons as you shall judge likely to afford you any information upon the subject of this our commission; and also to call for, have access to, and examine all such books, documents, registers, and records as may afford you the fullest information on the subject; and to inquire of and concerning the premises by all other lawful ways and means whatsoever.

And we do further by these presents authorize and empower you, or any five or more of you, to visit and personally inspect such places in our United Kingdom as you may deem expedient for the more effectual carrying out of the purposes aforesaid.

And we do by these presents will and ordain that this our commission shall continue in full force and virtue, and that you, our said commissioners, or any five or more of you, may from time to time proceed in the execution thereof, and of every matter and thing therein contained, although the same be not continued from time to time by adjournment.

And we do further ordain that you, or any five or more of you, have liberty to report your proceedings under this our commission from time to time, if you shall judge it expedient so to do.

And our further will and pleasure is that you do, with as little delay as possible, report to us, under your hands and seals, or under the hands and seals of any five or more of you, your opinion upon the several matters herein submitted for your consideration.

And for the purpose of aiding you in such matters we hereby appoint our trusty and well-beloved George Herbert Murray, esquire, to be secretary to this our commission.

Given at our court at St. James's, the twentieth day of September, one thousand eight hundred and eighty-six, in the fiftieth year of our reign.

By Her Majesty's command.

HENRY MATTHEWS.

II.

VICTORIA R.

Victoria, by the grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith. To our right trusty and well-beloved Councillor Farrer, Baron Herschell; our right trusty and well-beloved Councillor Joseph Chamberlain; our right trusty and well-beloved Councillor Sir Louis Mallet, Knight, Companion of our most honourable Order of the Bath; our right trusty and well-beloved Councillor Arthur James Balfour; our right trusty and well-beloved Councillor Henry Chaplin; our trusty and well-beloved Charles William Fremantle, esquire (commonly called the Honourable Charles William Fremantle), companion of our most honourable Order of the Bath; our trusty and well-beloved Sir John Lubbock, Baronet; our trusty and well-beloved Sir Thomas Henry Farrer, Baronet; our trusty and well beloved David Miller Barbour, esquire, companion of our most exalted Order of the Star of India; our trusty and well-beloved John William Birch, esquire; our trusty and well-beloved Lionel Louis Cohen, esquire; our trusty and well-beloved Leonard Henry Courtney, esquire; and our trusty and well-beloved William Henry Houldsworth, esquire, greeting:

Whereas we did, by warrant under our royal sign manual, bearing date the twentieth day of September, one thousand eight hundred and eighty-six, authorise and appoint our right trusty and well-beloved Councillor Arthur James Balfour, our then secretary for Scotland, together with the several gentlemen therein mentioned, or any five or more of them, to be our commissioners to inquire into the recent changes in the relative values of the precious metals shown by the decrease in the gold price of silver:

Now know ye, that we have revoked and determined, and do by these presents revoke and determine, the said warrant, and every matter and thing therein contained.

And whereas we have deemed it expedient that a new commission should issue for the purposes specified in such warrant of the twentieth day of September, one thousand eight hundred and eighty-six:

Further know ye, that we, reposing great trust and confidence in your ability and discretion, have appointed, and by these presents nominate, constitute, and appoint you, the said Farrer, Baron Herschell, Joseph Chamberlain, Sir Louis Mallet, Arthur James Balfour, Henry Chaplin, Charles William Fremantle (commonly called the Honourable Charles William Fremantle), Sir John Lubbock, Sir Thomas Henry Farrer, David Miller Barbour, John William Birch, Lionel Louis Cohen, Leonard Henry Courtney, and William Henry Houldsworth, to be our commissioners for the purposes of the said inquiry.

And we do hereby enjoin you, or any five or more of you, to investigate the causes of the said recent changes in the relative values of the pre-

cious metals, and especially to inquire whether the said changes are due—(1) To the depreciation of silver, or (2) to the appreciation of gold, or (3) to both of these causes.

If you should find the said changes to be due to the depreciation of silver, you will then inquire whether such depreciation arises from increase of supply or diminution of demand or from both, and you will endeavour to ascertain the proportions in which these different causes have operated.

If you should find the changes to be due to the appreciation of gold, you will inquire whether the appreciation arises from the diminution of supply or from increase of demand or from both, and you will endeavour to ascertain the proportions in which these different causes have operated.

Having regard to these different causes and their respective effects, you will next inquire what has been the bearing of the changes in the value of the precious metals on the following matters of practical business:

I. *India.*—(*a*) Upon the remittances of the government of India. (1) For payments on old or fixed contracts. (2) For payments on new or current contracts; (*b*) upon the persons in India who have to make remittances home in gold; (*c*) upon the producers, merchants, and taxpayers of India; (*d*) upon merchants and manufacturers at home who trade with India.

II. *The United Kingdom.*—(*a*) Upon the trade of the United Kingdom with other silver-using countries; (*b*) upon the foreign trade of the United Kingdom generally; (*c*) upon the internal trade and industry of the United Kingdom.

If you should come to the conclusion that the aforesaid changes in the values of the precious metals are causing permanent or important evils or inconveniences to any of the interests above referred to, it will be your duty then to inquire whether it is possible to suggest any remedies within the power of the legislature or the Government, by itself, or in concert with other powers, which would be effectual in removing or palliating the evils or inconveniences thus caused, without injustice to other interests, and without causing other evils or inconveniences equally great.

Lastly, if you are of opinion that this is possible, you will state the precise form which such remedies should take and the manner in which they should be applied.

And for the better effecting the purposes of this our commission we do by these presents give and grant unto you, or any five or more of you, full power to call before you such persons as you shall judge likely to afford you any information upon the subject of this our commission; and also to call for, have access to, and examine all such books, documents, registers, and records as may afford you the fullest information on the subject, and to inquire of and concerning the premises by all other lawful ways and means whatsoever.

And we do further by these presents authorise and empower you, or any five or more of you, to visit and personally inspect such places in our United Kingdom as you may deem expedient for the more effectual carrying out of the purposes aforesaid.

And we do by these presents will and ordain that this our commission shall continue in full force and virtue, and that you, our said commissioners, or any five or more of you, may, from time to time, proceed in the execution thereof, and of every matter and thing therein contained, although the same be not continued from time to time by adjournment.

And we further ordain that you, or any five or more of you, have liberty to report your proceedings under this our commission from time to time, if you shall judge it expedient so to do.

And our further will and pleasure is, that you do, with as little delay as possible, report to us, under your hands and seals, or under the hands and seals of any five or more of you, your opinion upon the several matters herein submitted for your consideration.

And for the purpose of aiding you in such matters, we hereby appoint our trusty and well-beloved George Herbert Murray, esquire, to be secretary to this our commission.

Given at our court at St. James's, the sixth day of May, one thousand eight hundred and eighty-seven, in the fiftieth year of our reign.

By Her Majesty's command.

HENRY MATTHEWS.

III.

VICTORIA R.

Victoria, by the grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith. To our trusty and well-beloved Samuel Montagu, esquire, greeting:

Whereas we did, by warrant under our royal sign manual, bearing date the sixth day of May, one thousand eight hundred and eighty-seven, appoint our right trusty and well-beloved Councillor Farrer, Baron Herschell, together with the several gentlemen therein mentioned, or any five or more of them, to be our commissioners to inquire into the recent changes in the relative values of the precious metals shown by the decrease in the gold price of silver.

And whereas one of our commissioners, so appointed, namely, Lionel Louis Cohen, esquire, has since deceased:

Now know ye, that we, reposing great confidence in you, do by these presents appoint you, the said Samuel Montagu, to be one of our commissioners for the purpose aforesaid, in the room of the said Lionel Louis Cohen, deceased, in addition to and together with the other commissioners whom we have already appointed.

Given at our court at St. James's, the twenty sixth day of July, one thousand eight hundred and eighty-seven, in the fifty-first year of our reign.

By her Majesty's command.

HENRY MATTHEWS.

[NOTE.—The Right Hon. Joseph Chamberlain resigned in September, 1887.]

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FINAL REPORT.

PART I.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

May it please Your Majesty, we, the undersigned Commissioners appointed to inquire into the recent changes in the relative values of the precious metals, desire humbly to submit to Your Majesty our final report upon the several matters which we have been directed to investigate.

2. The recent changes above referred to have been of a twofold character:

I. There have been extensive *fluctuations* in the relative values of gold and silver.

II. There has been a considerable *fall* in the gold price of silver.

3. We are directed to inquire whether these changes have been caused by (*a*) the depreciation of silver, or (*b*) the appreciation of gold, or (*c*) a combination of both these causes; and further whether such depreciation or appreciation has been caused by (*a*) an increased supply of, or diminished demand for, silver, (*b*) a diminished supply of, or increased demand for, gold, or (*c*) a combination of two or more of these causes.

4. We are then directed to investigate the bearing of these changes upon the general interests of the United Kingdom and India; and finally, if we are satisfied that such changes have been prejudicial to any of those interests, we are to suggest any remedies likely to remove or modify the evils which may be found to exist, without injustice to other interests, and without causing other evils equally great.

5. From the commencement of our inquiry we have been profoundly impressed with the extreme complexity of the questions submitted for our consideration.

The statistical information relating to the subject is very imperfect, and there is hardly any fact connected with it on which there are not considerable differences of opinion. When we proceed from facts to inferences these differences naturally become more marked.

Even if the facts themselves were admitted, there would still remain an element of doubt caused by the uncertainty as to whether we had taken into consideration all the factors necessary to enable a conclusion to be formed; and in addition to this, the influences which affect prices and the relative value of the precious metals are so subtle and various, that it is difficult, if not impossible, to assign to each of them its due weight.

6. In view therefore of the difficulties which necessarily attach to such an inquiry, we think that the best service which we can render is, in the first instance, to set out at some length the facts to which our attention has been called, with the arguments and opinions expressed on either side, leaving for a later portion of our report the conclusions at which we have ourselves arrived.

We feel that our report will be of greater value if we are able to present in a concentrated form the nature of the problems involved and their bearing on one another, with the opposing arguments, so as to enable those interested to form their own judgment, than if we limited ourselves to a statement of the conclusions to which our own investigations have led us.

We desire to take this opportunity of expressing our acknowledgments to the several witnesses who gave evidence before us, and also to those gentlemen in foreign countries who were good enough to forward written answers to our questions. These answers, which were appended to our second report, will, we think, be found to contain much valuable information on the subject of our inquiry.

7. We have already indicated the nature of the changes to which we understand the terms of Your Majesty's Commission to refer, namely, (*a*) the fluctuations which have taken place in recent years in the relative values of gold and silver, and (*b*) the general tendency of those fluctuations, which has been in the direction of a fall in the gold price of silver.

But before entering upon an examination of the changes which have occurred in recent years, it may be useful to give a brief sketch of the main facts with regard to the relative value and production of the precious metals in periods anterior to those to which our attention is specially directed.

In the history of the production of the precious metals the two principal features are the large discoveries of silver in South America and Mexico which marked the middle of the sixteenth century, and the large discoveries of gold in California and Australia which marked the middle of the nineteenth century. Prior to 1545 the average annual production of gold appears to have been (in weight) about one-tenth of the production of silver. From the date of the discovery of the Potosi mines there was a rapid increase in the production of silver, so that by the beginning of the seventeenth century the relative proportions were about 98 per cent. of silver and 2 per cent. of gold. This proportion gradually altered during the seventeenth and earlier part of the eighteenth century until in 1750 it became 95.5 per cent. of silver to 4.5 per cent. of gold. For the next fifty years the production of gold fell off relatively to silver, and towards the beginning of this century the proportion reverted to about 98 per cent. of silver to 2 per cent. of gold. The output of gold then began to increase, at first slowly, and after 1848 more rapidly, until the proportion in 1850–'55 was 81.5 per cent. of silver to 18.5 per cent. of gold; but owing to the alterations in the supply since that date, the proportion is now about 95.5 per cent. silver to 4.5 per cent. gold.

Notwithstanding these variations in the production, the relative value of the two metals, as represented by the gold price of silver, has, at least during the last two hundred years, been subject to much less fluctuation. At the beginning of the sixteenth century the relative value of silver to gold was as 11 to 1. During that century silver depreciated slowly, and during the first half of the seventeenth century more rapidly, until in 1670 the ratio was about 15 to 1, near which point it remained till shortly after the middle of the eighteenth century. About this time there was a considerable discovery of gold in Brazil, and the ratio became about 14½ to 1. Silver then again became slightly depreciated, and from the beginning of the present century down to 1873 the ratio did not materially vary from 15½ to 1.

It will thus be seen that from the middle of the seventeenth century the relative value of the two metals did not vary much more than 3 per

cent. in either direction until the recent divergence began to manifest itself in 1873.

8. From a table presented by one of our earliest witnesses, Mr. Pixley, it will be observed that from 1833 to 1872 the annual average price of bar silver on the London market was never lower than $59\frac{3}{16}d.$ per ounce nor higher than $62\frac{1}{16}d.$, showing a range of $2\frac{7}{8}d.$ during the forty years in question.

Mr. Pixley has been good enough to furnish us with a continuation of this table down to the end of 1887, from which it appears that in the years from 1873 to 1887, both inclusive, the highest annual average was $59\frac{1}{4}d.$ (in the first year of the period) and the lowest $44\frac{5}{8}d.$ (in the last year), showing a variation of $14\frac{5}{8}d.$

The highest actual quotation between 1833 and 1873 was $62\frac{3}{4}d.$, in July 1859; and the lowest $58\frac{3}{4}d.$ in February and March 1833, showing a variation of $4d.$

In the later period the highest actual quotation was $59\frac{15}{16}d.$ in February, 1873, and the lowest $42d.$ in July and August, 1886, showing a variation of $17\frac{15}{16}d.$

During the current year the price has undergone a further decline, dating from about the end of February. On the 19th of May the quotation was $41\frac{5}{8}d.$, the lowest yet recorded, and for some weeks afterwards it scarcely rose above $42d.$

As will be seen from the dates given the general tendency of the silver market since 1873 has been downwards, there being only three years (1877, 1880, and 1884) in which the average price for the whole year was higher than in the year preceding.

CAUSES OF THE FLUCTUATIONS AND THE FALL IN THE GOLD PRICE OF SILVER.

9. On these facts the question arises whether the wider range of the fluctuations in the later period and the fall in the gold price of silver are due:

I. To some change which has affected silver, or

II. To some change which has affected gold, or

III. To changes which have operated upon both metals.

We will proceed to state the arguments brought forward under each of these heads.

I. CAUSES AFFECTING SILVER.

10. The first point to be noticed is the increased supply of silver from the mines, especially those of the United States.

11. But before entering upon the statistics relating to the production and consumption of the precious metals, we desire to express our acknowledgments to the recent work of Dr. Soetbeer,* which contains so much valuable information on this and many other points connected with monetary questions.

Throughout our report we shall frequently refer on all statistical questions to the figures compiled by Dr. Soetbeer. He explains very fully in all cases the sources of his information and the methods which he has adopted in compiling it; and we have not met with any other figures which appear more deserving of general acceptance.

We have been so much impressed by the value of the work in question, that we have appended a translation of it to this report.

* Materialien zur Erläuterung und Beurteilung der wirtschaftlichen Edelmetallverhältnisse und der Währungsfrage. Berlin, 1886.

We are also indebted for some useful information to the independent inquiries of Sir Hector Hay and Mr. Pixley on certain branches of the subject.

12. The following table reproduces Dr. Soetbeer's estimate of the—

Production of silver since 1851.

Period.	Total production (annual average).		Production in the United States (annual average).	
	Weight.	Value.	Weight.	Value.
	Kilograms.		*Kilograms.*	
1851–'55	886, 115	£8, 019, 350	8, 300	£75, 100
1856–'60	904, 990	8, 235, 450	6, 200	56, 400
1861–'65	1, 101, 150	9, 965, 400	174, 000	1, 574, 700
1866–'70	1, 339, 085	11, 984, 800	301, 000	2, 693, 950
1871–'75	1, 969, 425	17, 232, 450	564, 800	4, 942, 000
1876–'80	2, 456, 252	19, 103, 100	980, 672	7, 647, 000
1881–'85	2, 861, 709	21, 438, 000	1, 137, 478	8, 521, 450

The weight of silver annually raised from the mines may therefore be said to be at the present time considerably more than double what it was twenty years ago; and it has increased nearly 50 per cent. during the last two quinquennial periods.

It should be added that in the above table the value of the silver produced has been estimated according to the actual gold price in the several periods specified.

13. In addition to the supply from the mines, the amount of silver placed on the market was further increased by that portion of the demonetized German silver which was offered for sale. The quantity so sold is stated at 3,552,000 kilograms, and the amount realized was upwards of £28,000,000.

The following figures show the proceeds of the sales in each year from 1873 to 1879, and the average price realized:

Year.	Proceeds of sales.	Average price (in pence) per ounce standard.
1873	£464, 834	59 5/16
1874	3, 056, 783	58 3/4
1875	910, 422	57 1/4
1876	4, 696, 824	52 3/8
1877	11, 521, 211	54 5/16
1878	6, 310, 192	52 9/16
1879	1, 396, 729	50
Total	28, 356, 986	

The effect of this supply must, however, have been of a very temporary character; and little, if any, silver has been sold by the German Government since 1879.

14. Coupled with this increased supply there has also been, it is alleged, a decrease in the demand, arising from the following causes: (*a*) The cessation of the free coinage of silver in Germany, the Latin Union, and Holland, and (*b*) A diminution in the quantity required for transmission to India.

15. The statistics of the coinage throw very little light upon the real extent of the demand for new metal. But we append such statistics as

we have been able to procure of the total coinage of silver in the principal countries of the world since 1851, in the following table:

Period.	Nominal value of silver coinage.		
	Europe and the United States.	British India.	Total.
1851–'55	£22, 879, 000	£22, 409, 000	£45, 288, 000
1856–'60	46, 114, 500	48, 593, 000	94, 707, 500
1861–'65	35, 371, 500	44, 591, 000	79, 962, 500
1866–'70	58, 609, 000	36, 987, 000	95, 596, 000
1871–'75	69, 395, 400	14, 803, 000	84, 198, 400
1876–'80	86, 925, 000	42, 766, 000	129, 691, 000
1881–'85	56, 015, 600	24, 843, 000	80, 858, 600

It will be observed that previous to the period 1881–'85 the coinage greatly exceeded the total production. This is due to the large quantity of silver which is recoined, and which therefore appears more than once in the returns. At many of the Continental mints no record is kept of the origin of the metal coined, and it is therefore impossible to say what proportion of the amount issued by the mints was newly raised from the mines and what proportion was old silver recoined.

16. The diminution in the Indian demand for silver is ascribed primarily to the increase in the amount of the bills drawn by the secretary of state for India upon the government of India.

The following table gives the net import of silver into India (in tens of rupees) and the amounts received by the Home Government for bills drawn upon India (in sterling) for each year since 1851:

Official year.	Net imports of silver into India.	Amounts received by the Home Government for bills drawn on India.	Official year.	Net imports of silver into India.	Amounts received by the Home Government for bills drawn on India.
	Rx	£		*Rx.*	£
1850–'51	2, 117, 225	3, 236, 458	1870–'71	941, 924	8, 443, 509
1851–'52	2, 865, 357	2, 777, 523	1871–'72	6, 520, 316	10, 310, 339
1852–'53	4, 605, 024	3, 317, 122	1872–'73	715, 144	13, 939, 095
1853–'54	2, 305, 744	3, 850, 565	1873–'74	2, 495, 824	13, 285, 678
1854–'55	29, 600	3, 669, 678	1874–'75	4, 642, 202	10, 841, 615
Average	2, 384, 590	3, 370, 269	Average	3, 063, 082	11, 364, 047
1855–'56	8, 194, 375	1, 484, 040	1875–'76	1, 555, 355	12, 389, 613
1856–'57	11, 073, 247	2, 819, 711	1876–'77	7, 198, 872	12, 695, 799
1857–'58	12, 218, 948	628, 499	1877–'78	14, 676, 335	10, 134, 455
1858–'59	7, 728, 342	25, 901	1878–'79	3, 970, 694	13, 948, 565
1859–'60	11, 147, 563	4, 694	1879–'80	7, 869, 742	15, 261, 810
Average	10, 072, 495	992, 569	Average	7, 054, 199	12, 886, 048
1860–'61	5, 328, 009	797	1880–'81	3, 892, 574	15, 239, 677
1861–'62	9, 086, 456	1, 193, 729	1881–'82	5, 379, 050	18, 412, 429
1862–'63	12, 550, 157	6, 641, 576	1882–'83	7, 480, 227	15, 120, 521
1863–'64	12, 796, 719	8, 979, 521	1883–'84	6, 405, 151	17, 599, 805
1864–'65	10, 078, 798	6, 789, 473	1884–'85	7, 245, 631	13, 758, 909
Average	9, 968, 028	4, 721, 019	Average	6, 080, 527	16, 026, 268
1865–'66	18, 068, 673	6, 998, 899			
1866–'67	6, 963, 103	5, 613, 746			
1867–'68	5, 593, 962	4, 137, 285	1885–'86	11, 606, 629	10, 292, 692
1868–'69	8, 601, 022	3, 705, 741	1886–'87	7, 155, 738	12, 136, 279
1869–'70	7, 318, 144	6, 000, 122	1887–'88	9, 218, 751	15, 358, 977
Average	9, 428, 981	5, 487, 159			

These figures, it is contended, show that, whilst the sterling remittances of the Indian government have increased, the exports of silver to India have decreased; and this for the following reasons:

(1) The drawings of the home Government represent an export from India, for a great portion of which no commercial equivalent is received, and which consequently diminishes the purchasing power of the country.

(2) The bills drawn upon India represent a competing remittance with silver; and as, owing to the necessities of the case, the bills must be put on the market at whatever price they may fetch, and can not be held over, except within certain limits, to await the opportunity of a favorable market, the demand for silver as a means of remittance is proportionately reduced and its price depressed.

(3) The bills are not placed on the market in the ordinary course of trade arising from the balance of international indebtedness upon the commercial transactions of the two countries. They may be offered largely for sale at a time when they are not required for purposes of remittance. This has the effect of lowering their price, and experience shows that the price at which they are sold influences the market for silver. If their price falls, the silver market is immediately depressed.

17. The Indian demand for silver has been further affected by other circumstances independent of the mere increase in the drawings of the home Government.

For some years before the commencement of the fall in the value of silver there had been special reasons inducing a flow of that metal to India. This was due mainly to the following causes: (1) The American cotton famine, which stimulated the export of cotton from India; (2) the construction of the Indian railways and other public works, which necessitated the expenditure of a large amount of capital in that country; and (3) the mutiny, which compelled the Government to reduce its drawings on India for the time and even to make remittances in silver. It may also be added that the gold discoveries set free for export to the East large quantities of silver formerly required for purposes of currency in Europe. All these causes tended to promote the export of silver to India and to diminish the amount of remittances to England. The full effect, therefore, even of the comparatively small demands of the home Government, was scarcely felt until about the year 1871–'72; and since that date, as will be seen from the table above given, they have largely increased.

It has also been said that owing to the uncertain value of silver in recent years and the tendency of gold to rise in value, the latter metal has taken the place of silver to some extent in India for purposes of hoarding. The figures showing the increased demands for gold are given in section 37.

18. An argument of a somewhat different character ascribes the fall and fluctuations in the gold price of silver to the removal of an influence which formerly tended to keep its value steady in relation to gold irrespective of the considerations to which we have already alluded.

From 1865 to 1873 the mints of the States forming the Latin Union, namely, France, Belgium, Italy, Switzerland, and Greece, were ready to convert into coin all silver brought to them, such coin being legal tender to any amount in the several States of the Union at a fixed ratio with gold.

In France a similar law had been in force since 1803, and the principle of a legal ratio had been adopted in that country at a much earlier date.

The existence of this bimetallic law was, it is contended, sufficient to

maintain a permanent relation between gold and silver quite independent of the actual quantity of either metal which was brought for coinage or raised from the mines. Any person possessing silver, and knowing that by taking it to the mints of those countries he could obtain in return for it coin which would be there available for the discharge of debts in the proportion of 15½ of silver to 1 of gold, would not part with it for any purpose except at a price approximating to that ratio.

In other words, the ratio established by law between the two metals practically controlled and regulated the market ratio.

19. In support of this view it is pointed out that while the relative value of the production of the two metals was subject to considerable changes in the first seventy years of this century, the extreme variation in their market value scarcely exceeded 3 per cent. in either direction, as shown in section 7; while, if the average value over a series of years is taken, the variation is hardly perceptible.

These facts are brought out more clearly in the following table, compiled from Dr. Soetbeer's estimates of the production of the two metals:

Relative value of production and market price of gold and silver in the under-mentioned periods.

Period.	Value of production (annual average).		Proportion of silver to gold	Average price of bar silver (per ounce).	Ratio of market value (silver to gold).
	Silver	Gold			
				Pence	
1801–'10	£8,002,600	£2,480,000	3 226 to 1	60 7/16	15.61 to 1
1811–'20	4,866,900	1,596,600	3 048 to 1	60 1/16	15.51 to 1
1821–'30	4,075,900	1,983,100	2 055 to 1	59 11/16	15.80 to 1
1831–'40	5,278,600	2,830,300	1.865 to 1	59 5/8	15.75 to 1
1841–'50	6,867,600	7,638,800	.899 to 1	59 5/16	15.83 to 1
1851–'55	8,019,300	27,815,400	288 to 1	61 7/16	15.41 to 1
1856–'60	8,235,400	28,144,900	.292 to 1	61 3/8	15.30 to 1
1861–'65	9,965,400	25,816,300	386 to 1	61 1/2	15.40 to 1
1866–'70	11,984,800	27,206,900	.440 to 1	60 3/8	15.55 to 1

20. In 1873, however, large quantities of the silver which had been withdrawn and sold in consequence of the monetary changes in Germany were brought to the French and Belgian mints. Upwards of £6,000,000 worth of silver in France and upwards of £4,000,000 in Belgium were coined in that year, and serious apprehensions were excited in both countries. The result was the convention of January, 1874, between several States of the Latin Union, which limited the coinage of 5-franc pieces in the Union during the year 1874 to the following amounts, namely: France, 60,000,000 francs; Italy, 40,000,000; Belgium, 12,000,000; and Switzerland, 8,000,000; and this limitation was continued (subject to a slight alteration in the amount) until the coinage of full legal-tender silver was finally suspended in all the States of the Union in November, 1878.*

21. The effect of these measures was, it is said, not only to depress the price of silver by limiting the actual use of that metal, but to destroy the controlling power formerly exercised by the legal ratio; and

* The nominal value of the subsidiary silver coins issued from the mints of the Latin Union in the years 1878 to 1887, inclusive, was £3,610,328; but the greater part of this value represents recoinage. The millesimal fineness of these coins is 835, that of the 5-franc pieces being 900, and the former are legal tender only for sums not exceeding 50 francs.

as this change, in itself one of great importance, occurred simultaneously with a great development of silver mining in America, and as the supply of silver relatively to gold has increased, while the demand for it relatively to gold has diminished, the natural result of a fall in the gold price of silver has ensued.

The full effect of the change is shown in the following continuation of the table given above.

Period.	Value of production (annual average).		Proportion of silver to gold.	Average price of bar silver (per ounce).	Ratio of market value (silver to gold).
	Silver.	Gold.			
				Pence.	
1871–'75	£17,232,450	£24,260,300	.710 to 1	59 1/16	15.97 to 1
1876–'80	19,103,100	24,052,200	.794 to 1	52 1/16	17.81 to 1
1881–'85	21,438,000	20,804,900	1.030 to 1	50 3/8	18.63 to 1

It will be observed that in the latter table an increase of 45 per cent. in the ratio of production was met by a diminution of 16 per cent. in the market value; whilst in the former table the diminution of 86 per cent. in the ratio of production between 1801–'10 and 1866–'70 coincides with a rise in the market value which is scacely perceptible.

22. It is contended, on the other hand, that the fall in the gold price of silver has not been due to any causes solely or chiefly affecting silver.

It is pointed out that the increased supply from the mines is not sufficient to account for a fall of 25 or 30 per cent. in the value of silver as compared with gold, when it is remembered that the annual supply of the precious metals is not consumed within a given limit of time, as is the case with most other commodities, but is added to a stock representing many times the annual production.

The value of the silver produced in the world from the end of the fifteenth century to the present time is estimated by Dr. Soetbeer at upwards of £1,951,000,000. If an allowance be made of one-fourth for loss and wear the annual supply, even at the present rate, represents an addition of less than 1½ per cent. to the existing stock.

23. In reply to this it is urged that, owing to the legislative changes described in section 20, the market has, since 1873, become much more sensitive to variations of supply, and that in such circumstances an addition of 1 per cent. to the existing stock might produce a result altogether out of proportion to its intrinsic importance.

24. With regard to the alleged decrease in the demand, it is urged that the actual employment of silver even for purposes of coinage has not diminished since the period when the fall in its value commenced.

Any falling off in the quantity required for use in Europe has been more than counterbalanced by the comparatively new demand created in the United States.

Down to the year 1873 there had been free coinage in that country for both gold and silver, and both metals were legal tender at a ratio of 16 to 1. But during the civil war, and for some years afterwards, the amount of silver coined was very small; the average value of the coinage in the ten years ending June 30, 1874, did not amount to $2,000,000 a year.

By the United States coinage act of 1873 the free coinage of silver was suspended and gold was made the sole legal tender for sums exceeding $5,

The law of February 28, 1878 (generally known as the Bland act, or more correctly the Allison act), directed the monthly coinage of not less than $2,000,000 or more than $4,000,000, and made them full legal tender for any amount in the absence of special stipulation to the contrary.

The total coinage under that act in the ten years during which it has been in operation is upwards of $300,000,000, the whole of which practically represents a new demand.

It also appears from a table put in by Mr. Giffen that China, which formerly exported silver, has since 1875 become an importing country.

As regards the alleged falling off in the Indian demand, it is pointed out that the diminution in recent years only becomes apparent if it is contrasted with the years 1856–'70, a period which is admitted to have been one of abnormal demand in India.

In the twenty years preceding 1856 the average net imports of silver into India scarcely exceeded Rx. 1,750,000 a year; in the fifteen years 1871–'85, the average was Rx. 5,400,000; while in the years 1885–'86 to 1887–'88 the average rose to Rx. 9,327,000.

The figures given in section 16 show that in the period between 1856 and 1870 the net imports of silver into India slightly exceeded the total quantity produced in the world, and the Indian demand must consequently have been largely met from the currencies of the bimetallic countries.

The failure of the supply from this source since 1873 is, it is said, sufficient to balance a material increase of production from the mines.

25. The allegations concerning the influence of the Indian council bills upon the silver market are also disputed. It is said that while the Indian council bills may have an immediate and temporary effect in preventing silver from going to India and in thus checking the demand for it, yet that in the end it is the value of silver which must determine that of the bills; that if there is a sufficient demand silver will flow to India, whatever the amount of the bills; that they can only check the export of silver to India in the same way and to the same extent in and to which they check the export of other goods; and that as the imports of goods into India have largely increased, notwithstanding the increased drawings of the Government, the imports of silver can not have been seriously checked by those drawings.

26. While, therefore, it is not denied by those who take the above view with regard to the demand that, but for the monetary changes in the Latin Union and Germany, the demand for silver might have been considerably greater than at present, it is contended that on the whole there is no evidence of any such diminution in the use of silver as would be sufficient to account for a fall of from 25 to 30 per cent. in its value when compared with the years preceding those changes.

27. It is also argued—

(*a*) That if the fall in the value of silver was due to some cause affecting that metal alone, and that consequently it had fallen not only against gold but against commodities, there would have been an increased export of silver to countries where it is legal tender to an unlimited extent, resulting in a general rise of prices and wages in those countries.

There is, however, no evidence of any such phenomen having taken place. On the contrary, as will be seen from the figures given in sections 15 and 16, neither the imports of silver into India nor the coinage of that metal have shown any tendency to increase in such a manner as would support this theory.

(*b*) That the demand for a metal which is used as the standard is necessarily unlimited as to quantity in the country in which it is so used;

that the strength of that demand is shown by the quantities of commodities for which a given weight of the metal will exchange; and that as silver will at the present time buy as much produce in India as before, it follows that the allegation of a falling off in the Indian demand for silver can not be maintained.

(*c*) That silver has not flowed to India in greater quantity because there is no great surplus of silver in the market which could be thus disposed of.

The additional amount of silver thrown on the market outside the United States in recent years is shown by the following figures, compiled from Dr. Soetbeer's tables:

Years.	Average annual production of silver outside United States.	Net export from United States (annual average).	Total (annual average).
	Kilos.	*Kilos.*	*Kilos.*
1866–'70	1,038,085	329,888	1,367,973
1871–'75	1,404,625	519,000	1,923,625
1876–'80	1,469,580	221,444	1,691,024
1881–'85	1,724,231	248,111	1,972,342
1876–'85	1,596,906	234,777	1,831,683
1871–'85	1,532,812	329,518	1,862,330

Thus it appears that the average yearly amount of new silver to be absorbed between 1876 and 1885 was actually less than the average of 1871–'75, and that the excess amount to be absorbed in the period 1871–'85, compared with the average of 1866–'70, was only 494,357 kilos. yearly, or less than four and a half millions sterling at the old ratio of 1 to 15½.

(*d*) That whatever influence the increased drawings of the Indian council and the absence of any special demands such as those referred to in section 17 may have exercised on the value of silver, an additional demand must have been created in recent years by the development of the country, the increase of population, the construction of railways, the opening of the Suez Canal, the lowering of the cost of transport, and other similar causes.

28. According to another view, the flow of silver to India which might have been expected from the fall in its value in Europe has been counteracted or prevented by the heavy fall in the gold prices of many commodities exported from Europe to India, which has resulted in increased exports of those commodities in lieu of silver, the prices of such commodities having fallen more than the price of silver.

The following table, in illustration of this argument, shows (1) the total imports into India of merchandise and treasure; * (2), the imports of merchandise only (excluding gold); and (3) the net imports of silver:

Period.	Total imports, including the precious metals (annual average).	Imports of merchandise only (annual average).	Imports of silver (annual average).
	Rx.	*Rx.*	*Rx.*
1866–'70	47,067,000	32,652,200	9,429,200
1871–'75	39,078,700	33,698,700	3,065,500
1876–'80	47,020,900	39,352,600	7,054,200
1881–'85	63,855,100	53,061,600	6,080,500

* The net imports of treasure have been taken.

29. In reply to this argument, it is urged that no diminution in the cost of producing commodities exported from Europe to India could affect the demand for silver in India so long as that metal would buy as much produce in India as before.

30. The fact of the steadiness in the relation between the two metals during the maintenance of the bimetallic system in France is explained as being accidental and not necessarily attributable to the working of that system. At the time when the large discoveries of gold might have been expected to destroy the efficacy of the legal ratio, France happened to be in possession of a considerable stock of silver, for which, owing to exceptional circumstances, she was able to find a market elsewhere; and when, in its turn, the production of silver increased, there happened to be a large stock of gold in the country.

The causes of the steadiness in the relative value of gold and silver, and the extent to which this steadiness was due to the maintenance of the bimetallic standard in France, will be fully dealt with in another portion of our report, and we need not, therefore, at this point state the argument at greater length.

II.—CAUSES AFFECTING GOLD.

31. The view which ascribes the divergence in the value of the two metals to causes primarily affecting silver alone was that which received the largest amount of support when the fall in its value as compared with gold was first brought to the notice of the public.

As soon, however, as the corrections suggested by experience came to be applied to theory, it was suggested that this explanation of the phenomenon was scarcely consistent with some of the known facts of the situation; and it was then urged, even by those who did not admit the effects ascribed to the dissolution of the bimetallic ratio in the Latin Union, or accept the theory of a fall in the value of silver owing to an excessive supply of that metal as compared with the demand, that an explanation should be sought in the hypothesis that the change which had taken place was due to circumstances which had affected gold and not silver.

32. This theory, that gold is scarcer both absolutely and relatively to the work which it has to perform, and that consequently it bears a higher relative value to both commodities and silver (so far as the latter is to be considered as a commodity) than it did formerly, is supported by its advocates both on *a priori* grounds and by appeal to facts.

33. It is pointed out in the first place that there has been a diminished supply from the mines.

The following table gives Dr. Soetbeer's estimate of the total production of gold since 1851:

Period.	Total production (annual average).	
	Weight.	Value.
	Kilograms.	
1851–1855	199,388	£27,815,400
1856–1860	201,750	28,144,900
1861–1865	185,057	25,816,300
1866–1870	195,026	27,206,900
1871–1875	173,904	24,260,300
1876–1880	172,414	24,052,200
1881–1885	149,137	20,804,900

These figures, though they do not of course pretend to absolute accuracy, are in substantial agreement with those compiled by other authorities. In the evidence given by Sir Hector Hay and Mr. Pixley will be found the results of independent inquiries instituted by them. The actual quantities given by the different authorities for each period do not always coincide; but the result, so far as it establishes a proportionate diminution of supply, is practically the same in all cases.

34. Concurrently with this diminished supply it is contended that there has been an increased demand for gold on the part of the United States, Germany, Italy, Holland, and the three Scandinavian kingdoms.

35. Of the above-mentioned countries the demand for the United States is undoubtedly the most important.

Its extent will be best understood from the following figures:

The consumption of gold in the United States.

Period.	Annual average value of—			Actual consumption.
	Home production.	Net exports.	Net imports.	
1866–1870	£10, 602, 000	£8, 069, 000	.....	£2, 533, 000
1871–1875	8, 300, 200	8, 594, 000	.....	293, 800
1876–1880	8, 916, 840	.....	£2, 468, 000	11, 384, 840
1881–1885	6, 708, 080	.....	4, 425, 000	11, 133, 080

From these figures it appears that during the ten years, 1866–'75, the United States absorbed a total value of £11,196,000, and during the ten years 1876–'85, a total value of £112,589,600.

The United States first began to draw gold from Europe in 1878, and since that date the imports of gold have exceeded the exports in every year except one.

This demand was originally created by the anticipated resumption of specie payments on January 1, 1879; and its maintenance is due both to the very rapid growth of the trade and population of the country in recent years, and to the increasing demand for gold for industrial and currency purposes. A large amount is also accumulating in the Treasury, owing to the growing surplus of revenue over expenditure, and the protective system of the country which, it is said, leads to an export of gold thither in lieu of commodities.

This large accumulation of gold in the Treasury is a distinctive feature in the United States. In other countries the store of gold constitutes the reserve of the principal banks, and is the foundation on which the commerce of those countries is based. In the United States, however, the amount held by the Treasury, except so far as it is represented by notes or gold certificates, is practically hoarded and withdrawn from commercial use altogether.

36. The extent of this demand for the United States in its effect upon the supply available for other countries is further illustrated by the following table:

Available supply of gold in countries outside the United States.

Period.	Annual average value of the—			
	Production outside the United States.	Net exports from the United States.	Net imports to the United States.	Total.
1866–1870	£16, 604, 900	£8, 069, 000	.....	£24, 673, 900
1871–1875	15, 960, 100	8, 594, 000	.....	24, 554, 100
1876–1880	15, 135, 360	.....	£2, 468, 000	12, 667, 360
1881–1885	14, 096, 820	.....	4, 425, 000	9, 671, 820

37. There was also a slight increase between 1880 and 1885 in the Indian demand for gold which, however, has not been maintained since that date.

Net imports of gold into India.

Period.	Annual average value.
	Rx.
1866–1870	4, 985, 528
1871–1875	2, 330, 080
1876–1880	614, 388
1881–1885	4, 712, 800
1886–1888	2, 643, 057

If then we deduct from the total production the quantities absorbed by India and the United States we arrive at the following results:

Period.	Total production of the world.	Absorbed by India and the United States.	Surplus.
1876–'75	£257, 336, 000	£47, 771, 000	£209, 565, 000
1876–'85	224, 285, 000	139, 229, 000	85, 056, 000

38. The demand in Germany has arisen from the substitution of a gold for a silver standard simultaneously with the withdrawal of a considerable quantity of notes of small denominations, necessitating a corresponding addition to the metallic circulation.

The gold coinage was first authorized by a law of December, 1871, but the single gold standard was not actually introduced until July, 1873, by a law which also prohibited the issue by the Imperial Bank of Germany of notes of a less value than 100 marks.

The amount of gold actually coined by Germany since 1871 is upwards of £98,000,000; and of this sum about £80,000,000 is estimated to represent the new demand.

The greater portion of this coinage (upwards of £50,000,000) was executed in the years 1872 and 1873; and the bulk of the metal required was drawn either directly or indirectly from France. The following figures will afford some indication of the movement of gold towards Germany during those years:

Value of gold bullion and specie exported to Germany in the under-mentioned years.

Year.	Great Britain.	France.	Belgium.	Total.
1871	£8,488,000	£4,585,000	£1,766,000	£14,849,000
1872	8,152,000	353,000	414,000	8,919,000
1873	7,263,000	7,040,000	*41,323,000	55,626,000
Total	23,903,000	11,978,000	43,513,000	79,394,000

*Entered in the returns as "in transit from France."

These figures are taken from the trade returns of the three countries above mentioned, the German returns themselves being obviously incomplete; but it must be observed that in nearly all countries the returns of the import and export of the precious metals are more liable to error than is the case with other commodities; and we do not therefore think that these figures afford much indication of the real facts of the case.

39. Another demand was created by the action of Italy in 1881–'83, with the view of resuming specie payments. For this purpose a loan was raised of £16,000,000, about £12,000,000 of which was drawn from countries outside Italy; but the gold coinage actually executed in Italy since 1881 does not appear to have exceeded £6,500,000.

In the Netherlands a bimetallic system of currency had been in force until 1847, when a single silver standard was introduced. The coinage of silver was, however, temporarily suspended for short periods between 1872 and 1875. By a law of 6th June, 1875, the adoption of a gold coinage was authorized, and the coinage of silver was permanently suspended; the silver, however, still remaining legal tender at its nominal value. The gold coinage since 1875 has amounted to about £6,000,000.

By a convention originally made in 1872, but not finally ratified by all the parties until 1876, the three Scandinavian kingdoms, Norway, Sweden, and Denmark, adopted a common system of currency based on the single gold standard; that previously in use having been silver. The amount of gold coined in the three countries since 1872 is about £7,000,000.

40. It should, however, be remembered that all the demands for the several European countries above mentioned must not be considered as having had a cumulative effect, some of the gold required having been only temporarily withdrawn from other countries to which it afterwards returned in the ordinary course of trade.

In this respect the European countries stand on a different footing from the United States and India, which have on balance absorbed gold almost continuously throughout the last ten years.

41. In addition to the above demands, which relate chiefly to the use of gold for monetary purposes, allegations are made that the amount required for industrial purposes has increased; but very little evidence has been adduced in support of this view. Any statistics on the subject must necessarily be of a very uncertain character, as there are no means of ascertaining either the quantities actually used for such purposes or the extent to which the supply is obtained from new metal or from metal previously used, or the extent to which metal previously used is melted down and recoined.

Dr. Soetbeer's estimate of the total quantity of gold annually required for industrial purposes at the present time (after deducting the

old material used) is 90,000 kilograms, equivalent to about £12,250,000 But this estimate is considered by some authorities as too high

Sir Hector Hay's estimate of the amount used in this country is about £2,300,000, of which about £1,750,000 is from new material.

The only country in which any systematic attempt appears to have been made to estimate the quantities used over a series of years is the United States.

The inquiries of the Director of the Mint in that country have resulted in the following figures:

Value of gold used for industrial purposes in the United States in the under-mentioned years.

Year.	Total consumption.	From coin and other old materials.	From bars.
1880	£1,799,000	£651,000	£1,148,000
1881	2,101,000	816,000	1,285,000
1883	3,012,000	1,525,000	1,487,000
1885	2,323,000	1,024,000	1,299,000

None of the estimates, however, throw much light on the increase or decrease of the use of gold in recent years.

42. It is further stated that the unsettled relation which has subsisted between the two metals since 1873, as well as other causes, have produced a tendency on the part of both individuals and governments to accumulate or hoard gold rather than silver.

The facts on this point which relate to India have been noticed above in section 37. It is also known that the German Government has a sum of about £6,000,000 in gold stored in the fortress of Spandau, which is practically withdrawn from the stock available for commercial or industrial purposes.*

Further evidence pointing in the same direction may be found in Dr. Soetbeer's estimate of the value of the gold contained in the national treasuries and the principal banks of the world, which gives the following figures:

1877	£144,500,000	1882	£203,500,000
1878	142,500,000	1883	230,000,000
1879	175,000,000	1884	234,000,000
1880	189,500,000	1885	252,000,000
1881	195,000,000		

It is also said that the State banks on the Continent generally facilitate the importation of gold, but place difficulties in the way of its exportation. For example, it has been remarked that the Imperial Bank of Germany has at times attracted gold by making advances for short periods on exceptional terms on condition that gold is imported for the purpose of repaying such advances. On the other hand pressure is brought to bear on merchants and bankers to prevent the exportation of gold from that country.

The Bank of France, while objecting to part with gold except in small quantities for internal purposes, charges a premium on bar gold when required for export.

* It should, however, be noted that "Reichskassenscheine" or treasury notes have been issued by the Government to the extent of about 140,000,000 marks, which may be considered as to some extent secured by the reserve above mentioned.

43. The above are all the arguments which we think it necessary to notice in support of the alleged appreciation of gold as deduced from the facts relating to the supply of and the demand for that metal.

44. On the other hand it is contended—

(*a*) That, while the supply of gold from the mines has undoubtedly fallen off, the effect of such a diminution has been inappreciable, owing (as was pointed out with regard to silver in section 22) to the magnitude of the stock already in existence.

Dr. Soetbeer's estimate of the production of gold since the end of the 15th century is £1,553,415,000; and an annual supply of £20,000,000 would consequently be about 1¼ per cent. on that stock, while the actual diminution in the supply which has taken place during the last fifteen years would only amount to one-fourth per cent. per annum.

(*b*) That the insignificance of this diminution is demonstrated by the fact that, for all purposes for which it is required, gold is as plentiful as ever. In support of this view the figures given in section 42 are quoted. And it is pointed out that the allegation noticed in section 41 with regard to the increased use of gold for industrial purposes would, if true, tend to show that the demand for gold for monetary purposes was adequately met.

(*c*) That the rate of discount has been both lower and less subject to fluctuation than in previous periods.

The rate of discount, it is said, is conclusive evidence as to the extent of the supply of gold for monetary purposes, for it is the price paid for the temporary command of that metal, or at any rate for the command of something which depends upon and varies directly with the supply of the metal, and must consequently be an accurate indication of the relation subsisting between the demand for and the supply of gold at the time when it is fixed.

In further illustration of this view, it is pointed out that any diminution of the bank reserves below their normal limit is almost invariably followed by a rise in the rate of discount, which in its turn tends to replenish the reserves; while any material increase in the reserves is followed by a lowering of the rate, and that these results are produced with such uniformity as to establish a casual connection between movements in the available supply of gold and in the rate of discount.

The average rate of discount at the banks of England, France, and Germany, with the number of changes of the rate, in quinquennial periods from 1861 to 1885, is as follows:

Period.	Bank of England		Bank of France.		Bank of Germany.	
	Average rate per cent.	Total number of changes.	Average rate per cent.	Total number of changes.	Average rate per cent.	Total number of changes.
1861–1865	4.90	59	4.83	36	4.47	12
1866–1870	3.62	36	3.07	12	4.67	16
1871–1875	3.75	73	4.86	8	4.50	17
1876–1880	2.87	29	2.65	7	4.17	27
1881–1885	3.43	32	3.34	6	4.23	12

From these figures it is inferred that less difficulty has been found in recent years in maintaining and replenishing the stock of gold in the reserves of the principal banks; and it is only through the state of these reserves that the supply of gold for monetary purposes produces any effect upon the transactions of commerce.

(*d*) That even admitting the increased demand for gold in some countries, and the decrease in the annual supply from the mines, the total mass available for commercial purposes (which as stated in (*a*) is the more important consideration) has not diminished but increased.

All that can have been effected by the increased demand is a different distribution of the stock of gold from that which formerly obtained; and the proportion in which the stock is distributed among the different countries of the world is immaterial.

Each country will, so far as its financial position allows, secure such a share of the stock as is required by, and is appropriate to, its individual necessities.

However great that share may be in one country, and however little in another, the general level of prices over the whole area and in the long run will be uniform.

(*e*) That from a variety of causes, some of which have only recently begun to operate, and others of which have operated with greater effect since 1873 than before, the quantity of gold required for the commercial transactions of the world has diminished, and what is actually required is enabled to do its work more rapidly and more economically. It can not, therefore, be said that, for practical purposes, the available supply of gold has been diminished.

Among the causes which are said to have contributed to this increased economy in the use of gold may be mentioned the great increase in the number of branch banks in this country, the larger use of checks, postal orders and other instruments of credit, the creation of telegraphic transfers, and the extension of banking accommodation and of the clearing system on the Continent.

(*f*) That the effect of the new demands referred to in sections 34 to 39 upon the available stock of gold has been much exaggerated. The real demand has been less than the apparent demand owing to the consumption being, in some cases, counted twice over. Gold having been coined in one country is exported to another and appears in the returns of both.

Further, it is stated that a considerable proportion of the gold required for the fresh demands has been taken from hoards (especially in France) and other sources where it was practically withdrawn from use.

45. On the other side it is rejoined—

(*a*) That neither the apparent abundance of gold, nor its increased use for other than monetary purposes, can of themselves indicate that gold has not appreciated, since the prices of commodities must always accommodate themselves to the supply of gold. It is of the essence of a monetary standard that it should absorb all the metal of the standard which is not required for other purposes. The demand for the metal of the standard is therefore necessarily unlimited; the strength of that demand, or the value of the metal, for the time being, is represented by the general level of prices. Whatever quantity of the metal is required at that value for non-monetary purposes is absorbed, and the balance is taken into the currency. Any fluctuation in the demand for the metal will be exhibited in the increase or decrease of its purchasing power; and as the purchasing power of gold has increased in recent years, it can not be said that the demand for gold for currency purposes is satisfied.

The increased use of gold for non-monetary purposes does not prove that gold has not appreciated, inasmuch as its use for those purposes is affected by increase of population, of wealth, and especially of sav-

ings, as well as by fashion, and its increase in value relatively to silver may lead to its being hoarded in increasing quantities.

(*b*) That the supply of gold in such institutions as banks and national treasuries is no test of its scarceness.

The reserves in banks are affected by many other considerations besides those depending upon the supply of the metal. An increase in the reserves may simply represent an increased tendency to hoard, with the effect of increasing the demand for, and consequently the value of gold; or it may be due to an increase in the amount of business, or to a change in the mode of doing business.

It is impossible to assume that the banks in question hold more gold than is considered desirable, and as they show a decided tendency to accumulate gold and an unwillingness to part with it, the fact that their reserves have increased can not be urged as an argument in favor of the alleged abundance of gold. Much of the accumulation shown in the figures above given may also be explained by the increasing tendency to replace a metallic by a paper circulation. A larger amount of specie is therefore found in bank reserves and a smaller amount in the hands of the public.

The following table, for example, of the average note circulation of the Bank of France, and the average amount of bullion held against it, shows an increase since 1860–'64 of upwards of £81,000,000 in the former item and upwards of £80,000,000 in the latter.

Period.	Note circulation.	Bullion.	Period.	Note circulation.	Bullion.
1860–'64	£30, 920, 000	£14, 460, 000	1885	£115, 700, 000	£86, 050, 000
1880–'84	109, 110, 000	78, 490, 000	1886	112, 650, 000	94, 900, 000

(*c*) The connection above stated between the rate of discount and the supply of gold is disputed. The rate of discount, it is said, depends upon many causes which are quite independent of the supply of gold. Fluctuations in the amount of gold in the bank reserves may produce a temporary effect upon it; but its permanent level, or its average level during a series of years, will be settled by other considerations. Those who hold this view contend that the rate of discount represents not the price paid for the use of gold, but the price paid for the use of floating capital; and as one effect of a scarcity of gold is, through falling prices, to check enterprise and speculation, the demand for capital would naturally be diminished, and the rate of discount would fall with it. The rate of discount, in fact, depends largely upont he briskness or slackness of business.

So far, therefore, from a low or uniform rate of discount proving the existence of an adequate supply of gold, it is not only consistent with, but the necessary concomitant of, a scarcity of that metal.

Experience further shows that during periods when both the production and the stock of gold were large, the rate of discount was frequently very high.

(*d*) That the chief demand for gold in recent years has come from the United States, and the effects of a reduced supply of gold, relatively to the wants of the community, would ordinarily be experienced in the first instance in that country.

If such want of gold caused prices to fall in the United States, or kept them lower than they would otherwise have been, the influence on prices would be transmitted to all other countries with which the United States had commercial intercourse, through the operations of the international trade.

(*e*) That there is no foundation for the assertion that an increased demand for gold merely causes a different distribution of the metal, and has no effect upon its value. If a change in the distribution of gold among the different countries of the world is immaterial, it is impossible to explain why so much trouble is taken to prevent gold from flowing from one country to another. A proper distribution of the precious metals, so far from being immaterial, is essential to the efficient performance of their functions; and gold, if it is hoarded or accumulated beyond the point necessary for the transaction of current business and the maintenance of credit (as would now appear to be the case in many countries), is practically withdrawn from use.

(*f*) That the effect of the methods for economizing gold referred to in the preceding paragraph, so far as they relate to a period since 1873, has been much exaggerated.

Mr. Bagehot stated, in 1873, that the period from 1844 had "been almost marvelous in its banking development," and there is no evidence of any remarkable progress since that time. The arguments drawn from the extension of the use of postal notes, and from the increase in the number of small checks, fail to indicate the amount of the economy of gold effected in this away, and no attempt is made to show how far such economy of gold, if any, is balanced by such causes as the increased demand for gold due to increase of population, or by the growing tendency to pay cash instead of running up bills.

There has no doubt been a large increase in the number of postal-notes issued yearly, but the economy of gold effected by this means depends not on the aggregate amount of such notes issued in a year, but on the average number outstanding at one time. The number outstanding at one time represents about £270,000; of this, about £70,000 represents sums so small that they could never have been paid in gold. The balance, £200,000, represents the maximum possible economy of gold, but the real economy is evidently much less, as postal-notes have, to a large extent, merely taken the place of postal money-orders, and probably other means of remittance.

(*g*) That the inconclusive nature of the evidence respecting the alleged economy in the use of gold, founded upon the development of credit and the extension of banking accommodation, is shown by the fact that the country which has absorbed most gold in recent years is the United States of America, though there is no country in which so great a development of credit and banking has taken place.

(*h*) That there is no evidence as to the amount of gold which was drawn from hoards in order to satisfy the new demands; that it is unlikely that the habit of hoarding was finally abandoned in 1873; and that the amount then withdrawn has probably since been replaced.

46. Those who maintain the view that gold has become scarce in proportion to the work which it has to perform further adduce a class of arguments drawn, not from the facts relating to the supply of and demand for the metal, but from the quantity of other commodities for which it will exchange.

The prices of commodities are, it is said, the value of those commodities expressed in terms of gold; they represent the relation for the time being between gold on the one hand and commodities on the other; and that relation will be determined from time to time by the quantity of commodities offered on the market in exchange for gold, and the quantity of gold offered in exchange for commodities. A fall of gold prices is therefore synonymous with a scarcity of gold.

Starting from these premises, it is urged that there has been a general

fall of prices measured in gold, while prices in countries where a silver standard prevails have not risen, and have in some cases even fallen.

47. The principal evidence adduced in support of this view is that derived from the system of index numbers.

This method of comparing the general level of prices in different periods is obtained in the following manner:

Certain articles are selected for the purpose of comparison; the price of each at a given date is represented by a standard number, say 100; the variations in price in each subsequent year are noted, and a proportionate addition to or subtraction from the standard number is made.

By adding together the numbers so obtained a general view of the rise or fall of prices is obtained.

48. Several tables of prices constructed on this principle have been compiled in recent years. The best known are:

(1) The table annually published by the Economist newspaper, which gives the wholesale prices of twenty-two of the principal articles on the London market, the basis of comparison being the average prices for those articles in the five years 1845–'50.

(2) A table prepared by Mr. A. Sauerbeck, which deals with the London prices of forty-five wholesale commodities, the period taken as the basis of comparison being the ten years 1867–'77, and his record of prices extending as far back as 1837.

(3) Tables prepared by Mr. Inglis Palgrave for the Royal Commission on the Depression of trade, taking the period 1865–'69 as the basis of comparison. These tables deal not only with prices in England, but in France and India; and in framing them regard has been had to the relative importance of the several articles included in the list.

(4) Dr. Soetbeer's tables, which take the period 1847–'50 as the basis of comparison and deal with the prices of one hundred articles on the Hamburg market, and with fourteen of the principal articles exported from the United Kingdom.

(5) Tables prepared by Mr. Giffen from the Trade Returns of the United Kingdom, going back to 1840 in the case of exports and to 1854 in the case of imports.

49. The following statement shows in a concise form the results arrived at by these several methods:

Period.	For explanation of columns 1 to 7, see note at foot of table.							Period	For explanation of columns 1 to 7, see note at foot of table.						
	1.	2.	3.	4.	5.	6.	7.		1.	2.	3.	4.	5.	6.	7.
1851	104	100	.....	.....	75	....	.....	1870	122	123	91	90	96	.....	.....
1852		102	.....	.....	78	....	.....	1871	118	127	90	93	100	.....	.....
1853	111	114	.....	.....	95	.....	.....	1872	129	136	97	100	109	.....	.....
1854	.....	121	.....	.....	102	100	100	1873	134	138	102	104	111	132	107
1855	.....	124	.....	.....	101	97	105	1874	131	136	100	103	102	.....	.....
1856	.....	123	.....	.....	101	.....	.....	1875	126	130	95	97	96	114	101
1857	136	130	.....	.....	105	103	110	1876	123	128	93	99	95	105	96
1858	118	114	.....	.....	91	.....	....	1877	124	128	94	100	94	101	99
1859	115	116	.....	.....	94	102	99	1878	115	121	87	95	87	....	92
1860	122	121	.....	.....	99	.....	.....	1879	100	117	76	82	83	92	88
1861	123	118	.....	.....	98	.....	.....	1880	115	122	87	89	88	.....	93
1862	130	123	.....	.....	101	.....	.....	1881	108	121	81	93	85	92	92
1863	158	125	.....	.....	103	.....	.....	1882	111	122	83	87	84	.....	.....
1864	172	129	.....	.....	105	.....	.....	1883	107	122	79	88	82	92	89
1865	162	123	.....	108	101	137	118	1884	100	114	75	80	76	90	84
1866	161	126	.....	111	102	.....	.....	1885	95	109	70	76	72	87	79
1867	137	124	.....	99	100	.....	.....	1886	92	104	69	73	69	82	74
1868	122	122	.....	93	99	119	108	1887	94	103	70	73	68	.....	.....
1869	121	123	.....	89	98	.....	.....	1888	101	.....	75	.....	.....	.....	.....

Explanation of numbers in above table:
(1) Economist. Twenty-two wholesale commodities in England. 100 = average of 1845–'50.
(2) Dr. Soetbeer. One hundred Hamburg articles and 14 articles of British export. 100 = average of 1847–'50.
(3) Economist. (Similar to 1, but re-arranged on basis of 100 = average of 1865–'69.
(4) Mr. Palgrave (Similar to 1, but assigning to each article its relative importance.) 100 = average of 1865–'69.
(5) Mr. Sauerbeck. Forty-five English prices. 100 = average of 1867–'77.
(6) Mr. Giffen. Prices of British exports. 100 = prices of 1854.
(7) Mr. Giffen. Prices of British imports. 100 = prices of 1854.

We also annex a diagram showing a comparison of the results arrived at in columns 1, 2, 4, and 5.

50. To the above may be added the following re-arrangement of Mr. Sauerbeck's figures, showing the average prices for each period of ten years since 1837, by which method the general tendency of the movement is more readily seen, and the effect of temporary fluctuations is eliminated.

Average index numbers of prices for ten years.

Year.	Average price.	Year.	Average price.	Year.	Average price.	Year.	Average price.
1837–'46	93	1848–'57	89	1859–'68	100	1869–'78	99
1838–'47	93	1849–'58	90	1860–'69	101	1870–'79	97
1839–'48	91	1850–'59	92	1861–'70	100	1871–'80	96
1840–'49	88	1851–'60	94	1862–'71	100	1872–'81	95
1841–'50	86	1852–'61	96	1863–'72	101	1873–'82	93
1842–'51	83	1853–'62	99	1864–'73	102	1874–'83	90
1843–'52	82	1854–'63	100	1865–'74	102	1875–'84	87
1844–'53	83	1855–'64	100	1866–'75	101	1876–'85	85
1845–'54	85	1856–'65	100	1867–'76	101	1877–'86	82
1846–'55	86	1857–'66	100	1868–'77	100	1878–'87	79
1847–'56	88	1858–'67	99				

51. The general result to be derived from a comparison of these investigations shows, it is contended, a rise in prices from the date of the Australian and American gold discoveries to the year 1873, and an almost continuous fall since the latter date, which has reduced prices to a lower point than at any previous period in this century.

52. It is at the same time pointed out that no such change in the level of prices is observable in countries using a silver standard. The statistics on this point are necessarily imperfect, relating as they do to prices in India only.

As regards that country we have been furnished with the result of investigations made by Mr. O'Conor, assistant secretary to the government of India in the department of finance and commerce, into the prices of the staple food-grains in different parts of India, and of the principal articles of export.

It is, however, very difficult to draw any useful or reliable conclusions from these figures. The conditions of the country, the habits of the people, the isolation of markets owing to want of communication, the constant variations owing to the influence of the seasons, and many other causes, make it impossible to treat the records of Indian prices as of equal value with those referred to in the preceding sections of this report. It may, however, be safely said that there is no evidence of a rise in prices in India; and there is a general agreement among the witnesses whom we have examined on the point, that the purchasing power of the rupee in that country has not fallen.

53. It is contended that these results, namely, the general if not uniform fall in gold prices, and the absence of any corresponding rise in silver prices, support the view that the changes observed are due to a relative scarcity of gold as compared with all other commodities, including silver.

54. Another method of determining the difference from time to time in the purchasing power of the standard of value is described in Professor Nicholson's evidence. The investigations which he has conducted by this method lead him to doubt whether the decrease in the value of gold, which is usually attributed to the period following the great gold

discoveries, was as great as is usually supposed; but he finds that in the period from 1875 to 1885 there is evidence of a rise in the value of gold [illegible]y similar in character, though differing slightly in degree, from that indicated by the system of index numbers.

We are unable to express any opinion upon the value of the corroborative evidence which these investigations are said to supply.

55. Attention is also called to the stationary character of the revenue produced by the income tax since the year 1873.

The produce of each penny of the tax imposed, together with the gross amount of property assessed per head of population, in the undermentioned years was as follows:

Year ended April 1—	Produce of each penny of income tax.	Gross amount of property and profits assessed per head of population.	Year ended April 1—	Produce of each penny of income tax.	Gross amount of property and profits assessed per head of population.
		£ s.			£ s.
1860	£1,119,470	11 6	1875	£1,945,260	17 6
1861	1,123,453	11 6	1876*	1,978,084	17 7
1862	1,162,027	12 1	1877	1,904,770	17 2
1863	1,193,783	12 2	1878	1,909,005	17 3
1864	1,218,863	12 5	1879	1,879,073	17 1
Average, 1860–'64		12 0	Average, 1875–'79		17 4
1865	1,312,725	13 4	1880	1,846,664	16 9
1866	1,380,362	13 9	1881	1,866,636	17 0
1867	1,415,709	14 1	1882	1,915,683	17 2
1868	1,428,215	14 3	1883	1,962,871	17 4
1869	1,435,887	14 3	1884	2,016,785	17 6
Average, 1865–'69		14 0	Average, 1880–'84		17 2
1870	1,476,297	14 4	1885	2,002,222	17 5
1871	1,502,030	14 9	1886	1,980,395	17 3
1872	1,654,276	15 3	1887	1,970,000 Estimated.	17 1
1873	1,741,088	16 1			
1874	1,854,644	17 1			
Average, 1870–'74		15 5			

*Previous to the year 1876–'77 incomes under £100 were exempted, and on incomes between £100 and £300 an abatement of £80 was allowed.

From the year 1876–'77, inclusive, the limit of total exemption was raised to £150, and on incomes between that amount and £400 an abatement of £120 was allowed.

The result of these two measures is estimated to produce a loss of between £50,000 and £60,000 per penny.

As production has been rapidly increasing during the whole of this period, it is argued that taxable income per head of population should have increased in a somewhat similar proportion.

56. The rate of interest on permanent investments is also declining, for reasons, it is urged, similar to those which have been described above as affecting the rate of discount. When gold is scarce and commercial activity is checked by the resulting fall of prices, the demand for permanent investments increases, and the price of such securities rises. Owing either to the actual or the apprehended scarcity of gold there is a tendency to invest in securities bearing a fixed interest payable in gold, which raises their price and reduces the net return obtainable from them.

57. Further evidence is adduced from the fall in the price paid for many kinds of labor.

It is stated that there has been a large and general fall in the rate of wages paid to agricultural laborers, and a somewhat less severe fall in

wages paid for the lower class of skilled labor in the manufacturing districts; that even where the rate of wages has been fairly maintained employment has become both scarcer and more irregular, and that strikes against the reduction of wages have become more frequent, showing increased friction in the labor market; that after making due allowance for the imperfect character of the statistical evidence with regard to wages, and for special causes which have affected the rate of wages in particular trades, there is sufficient evidence to support the conclusion that a general fall of wages is in progress, that it has probably not yet reached its limit, and that no influences are visible which are likely to prevent or reverse the fall.

58. Much controversy has taken place both with regard to the fact above alleged of a general fall in prices and with regard to the cause to which it is ascribed.

Before dealing with these questions, however, we must notice a preliminary objection which traverses the assumption that there is any necessary relation between the general level of prices and the scarcity or abundance of gold.

Because the prices of commodities are expressed in terms of gold, it has been assumed that a transaction of sale or purchase is in substance what it purports to be in form, namely, an exchange of commodities against gold, and this assumption, it is said, necessarily underlies all the arguments with regard to the supply of gold which are drawn from considerations affecting the prices of commodities.

But it is pointed out—

(1) That in any one area the nominal value of the transactions is always enormously greater than the quantity of gold available, and that it would therefore be impossible for all the transactions pending at any one moment to be actually carried out in the terms in which they are expressed.

(2) That, as a matter of fact, gold actually passes in only an infinitesimal number of transactions.

(3) That in all other transactions the consideration which passes from the purchaser to the seller is really not gold, but a promise to pay gold.

(4) That the prices of commodities will consequently be regulated, not by the quantity of gold, but by the quantity of such promises, which will be received in the discharge of debt as equivalent to gold.

(5) That the quantity of such promises to pay, or in other words the volume of credit, has, no doubt, some connection with the quantity of gold, but that the relations between the two are very complex and obscure, vary in different countries and different states of society, and can not be reduced to any definite rule.

(6) That the connection between the supply of gold and the prices of commodities is consequently not direct, but indirect, acting through the medium of credit, and that a rise or fall in the general level of prices may therefore prove nothing as regards the supply of gold, since it may be due to a diminution or expansion of the volume of credit without any corresponding alteration in the amount of gold.

59. To these arguments it is replied—

(1) That a distinction must be drawn between that portion of the supply of gold which is actually circulating as coin and is used in the smaller transactions of commerce, and that portion of the supply which is held in reserve by banks and similar institutions as a basis for the credit which they create.

(2) That between gold in the latter form and the quantity of credit there is a direct arithmetical relation, which may vary in different coun-

tries and in different states of society, but which in any one country or any one state of society will be tolerably uniform.

(3) That whatever proportion the volume of credit may bear to the quantity of gold on which it is based, the value of the former must in the long run conform to the value of the latter.

(4) That the supply of gold also operates directly upon the prices of commodities by its effect upon the rate of discount.

(5) That in face of the fact of an alteration of 30 per cent. in the relative value of gold and silver in recent years, and a corresponding relative alteration in the gold and silver prices of the commodities interchanged between the gold-using and the silver-using countries, it is impossible to deny that the standard of value is intimately connected with prices.

We shall discuss the several arguments here raised at a later period; for the present it will be sufficient to state them in this concise form.

60. Returning now to the conclusions drawn from the system of index numbers, it is contended—

(*a*) That to prove a general rise or fall of prices it is necessary to include in the investigation a much wider field than is covered by the tables of index numbers.

They are confined almost entirely to the wholesale prices of raw materials, and do not take into account the prices of finished manufactures or of retail trade.

Moreover, they make no reference to such important items as land, houses, and other descriptions of property either in this or other countries, salaries and wages, or the price of services generally. Such tables, it is said, to be complete, should include everything which is bought or sold with money.

The number of articles selected, which is only twenty-two in the tables of the Economist and Mr. Palgrave, has been extended to forty-five by Mr. Sauerbeck, and to one hundred and fourteen by Dr. Soetbeer; but it is argued that even the latter number is far too small to afford a satisfactory basis for any general conclusions.

(*b*) That while the selection of the several articles does not appear to be based on any definite principle, the addition of one item or the omission of another will produce widely divergent results.

(*c*) That though the general features of the course of prices in all the tables bear some similarity to each other, there is sufficient variation in detail to throw grave doubts on the accuracy of the conclusions which it is sought to draw from them.

(*d*) That general conclusions drawn from averages are always liable to be fallacious, because the same average result will be produced by a number of instances near the mean as by one instance at either extreme, while the conclusions to be drawn from these results would differ materially.

(*e*) That when, as in the present case, there may be at work a general cause, such as the scarcity of gold, affecting all prices, and a number of specific causes, such as increased or diminished facilities of production, affecting different articles differently, any conclusion drawn from averages concerning the operation of the general cause must be fallacious, unless it be assumed that the different specific causes are opposite in their effects, and balance one another. This is obviously not the case here. The different specific causes affecting each article are all, or almost all, causes which operate in the direction of lowering prices.

(*f*) That the tables of index numbers fail in not giving due weight to the relative importance of the different articles included in the calcula-

tion. A fall of 20 per cent. in one article produces as great a difference in the final result as a fall of 20 per cent. in another; but the importance of the fall in each case must necessarily depend upon the importance of the article, relatively to others, in the general consumption.

(*g*) That the qualities and descriptions of articles vary so much from year to year and period to period as to make it very doubtful whether the price quoted represents a similar article of similar quality throughout the whole period.

61. The above criticisms are directed chiefly against the method adopted in the tables of index numbers.

The conclusions drawn from those numbers are also disputed on the following grounds:

It is asserted—

(*a*) That there is no evidence of any general fall of prices such as would be necessary to support the conclusion that the fall is due to an alteration in the value of gold. Any such cause would operate with tolerably uniform effect over the whole range of prices; whereas, in point of fact, while some prices have fallen, others have risen, and others have remained stationary.

For example, the one hundred articles included in Dr. Soetbeer's tables are divided into seven classes: (1) Agricultural produce; (2) animal food; (3) fruits, oil, and wine; (4) colonial produce; (5) mineral produce; (6) textile materials; (7) miscellaneous.

If the average index numbers for each of these classes in 1881–'85 are compared with the corresponding numbers for the period 1851–'55, when the gold production was at its highest, it will be found that there is a rise in classes 2, 3, and 4, a fall in classes 5, 6, and 7, while the 1st class has remained almost stationary. Or, again, if 1881–'85 is compared with the period 1866–'70 which immediately preceded the commencement of the alleged scarcity of gold, a similar result is obtained; classes 2 and 3 rose, classes 1, 5, 6, and 7 fell, and class 4 remained almost stationary.

(*b*) That apart from any influence affecting gold, sufficient explanations on independent grounds can be given of the movements in the price of each article in question, whether those movements have been in one direction or another; and that in the case of those articles which have remained stationary in price, or which have risen, it is incumbent upon those who maintain that there has been a general fall to show why those articles have proved exceptions to the rule.

(*c*) That in addition to the circumstances affecting each article separately, several causes have been in operation which might have been expected to produce a fall in price without reference to the standard of value itself: (1) the increased severity of competition, which has become much more intense since the date to which the commencement of the fall of prices is ascribed; (2) the immense increase in the quantity of commodities produced, coinciding with (and in part resulting from) a diminution in the cost of production; (3) increased facilities of, and reduction of charges for, transport and communication, which operate in the same direction as a diminution in the cost of production; (4) the increase in the productive power of the world, due to the absence of any great European wars such as in the 20 years preceding 1873 periodically occasioned the destruction of a large amount of capital, together with the remarkable development of America since her recovery from the effects of the civil war; (5) the increased efficiency of capital, owing to the improved organization of credit; (6) the fall in the value

of silver, which has a tendency to lower the gold price of commodities produced in or exported to countries using a silver standard, and also, through these commodities, the prices of others not directly affected by the value of silver. Silver-using countries are content to take for their produce the same silver price as before the fall, which means a lower gold price. They can not, therefore, give more silver for European produce than they did before. Consequently the gold prices of both classes of produce fall, and with them all other gold prices. This argument, which is also used by some of those who maintain the view that gold has itself become scarcer, will be noticed at greater length in another portion of our report. It is adduced in this context as an independent explanation of the fall of prices.

(*d*) That the fall of prices shown by the index numbers has attracted attention chiefly because it occurred after a period of exceptionally high prices. The year 1873 was the culminating point of the upward movement in prices which had been in progress for some years previously; and that date happened also to coincide with the great changes in the monetary policy of Germany and the Latin Union. It is not unnatural, therefore, that the subsequent fall in prices should be ascribed to the effects of those changes; but it is pointed out that the circumstances of the years immediately preceding 1873 were very peculiar, and likely to have been productive of economic disturbance, apart from any question of the supply or consumption of gold. Large accumulations of capital, owing to the depression of trade in 1865–'69, abundant harvests, and a continental war creating a great demand for manufactured goods, all contributed to produce a period of general excitement and speculation. It is therefore urged that the abnormal circumstances of the years 1871–'73 make that period an unsound basis for comparison.

(*e*) That periods of inflation, such as that of 1871–73, are naturally followed by corresponding periods of depression; and that the excessive duration of the depression in the present instance is due to the exceptional rapidity and intensity of the previous inflation.

(*f*) That fluctuations of equal range have taken place in prices in previous periods when the abundance or scarcity of gold was not in question.

(*g*) That the fall, so far as it is proved, has taken place in wholesale trade, in the transactions of which little or no gold is used, and not in retail trade, where the direct effect of a scarcity in the circulating medium might have been expected to make itself felt.

62. In reply to these criticisms it is suggested—

(*a*) That the results obtainable from systems of index numbers. if, like all other averages, they are not absolutely accurate in every detail, are sufficient to indicate the tendency of the course of prices.

(*b*) That the range of articles covered by the several tables is sufficiently extended for all practical purposes, including as it does in the case of Dr. Soetbeer's investigations, no less than 114 articles, and in Mr. Sauerbeck's all those articles the value of which in the United Kingdom, whether produced at home or imported, exceeded £1,000,000.

(*c*) That the relative importance of the different articles has been allowed for in Mr. Palgrave's and Mr. Sauerbeck's tables, and that the corrections thus introduced, though important, do not invalidate the conclusions formed from a comparison of all the tables.

(*d*) That the totally distinct method of measuring the purchasing power of gold employed by Professor Nicholson gives very nearly the same results as the index numbers.

(*e*) That the index numbers of recent years are conclusive as regards

the fact of an increase in the purchasing power of gold in the case of, at least, a very large number of important commodities.

The fact of there being some variation in detail in the different tables does not throw any doubt on the general conclusion to which all the tables point; absolute agreement could only be expected if the price of each article from time to time depended solely on the appreciation or depreciation of the standard, or if all other influences which tend to alter price acted always with the same force and in the same direction in the case of every commodity.

(*f*) That the assumption that the fall in the average level of the prices of these commodities can be completely explained by the cheaper production of one, or of a considerable number, of them is unwarranted, because (1) it does not necessarily follow that the lowering of the cost of production of even a large number of articles would have the effect of lowering the average level of prices, as the saving so effected would create a demand for and so raise the prices of other articles; (2) a diminution in the cost of transport may tend to lower the price of such articles as are bulky in relation to their value in the country to which they are exported, but would tend to raise the price in the place of origin, and could only have a very remote effect upon the general level of prices; (3) it is not proved that there has been a greater proportionate increase in the quantity of commodities since 1873 than in any previous period of equal duration.

(*g*) That the universality of the fall, at least in recent years, is a strong argument in support of the view that it is due to the general cause above indicated.

Of the forty-five principal articles with which Mr. Sauerbeck deals, not one showed a rise in price in either 1885 or 1886 as compared with the average of 1867–77, though the figures for 1887 may possibly show a different result in one or two instances. When Professor Jevons examined the course of prices after the gold discoveries the number of instances which were opposed to the conclusion he then formed was seven out of thirty-six.

(*h*) That it is not necessary to prove a fall in all gold prices in order to show that there has been an appreciation of gold. If gold has not appreciated because all gold prices have not fallen, it may equally well be argued that as all silver prices have not risen, silver has not depreciated, and that consequently the two metals retain the relation which they had before 1873.

(*k*) That the question is not simply whether gold has appreciated or not, but whether the alteration in the relative value of gold and silver is due to the appreciation of gold or depreciation of silver, and that those who hold that there has been no appreciation of gold, and that the change in the relative value of the precious metals is entirely due to depreciation of silver, should be prepared to point out in the silver-using countries a general rise in the silver prices of commodities (over and above what is due to the ordinary laws of demand and supply) bearing some proportion to the extent to which silver is said to have depreciated, and to explain, on grounds peculiar to each article, why so many articles in silver-using countries have not risen in price or have even fallen.

(*l*) That even if it be assumed that retail prices have not fallen as much as wholesale prices, and that gold is more used in retail than in wholesale dealings, it does not follow that a scarcity of gold would not affect wholesale prices sooner than retail prices, and that whatever the cause

may be which is lowering prices, it always affects wholesale sooner and more largely than retail prices.

(*m*) That no doubt the qualities and descriptions of articles may vary from period to period, but that those who prepared the index numbers have tried as far as possible to insure that the price taken should always be for an article of the same quality, that there would be a tendency for errors arising from variations of this character to cancel each other in the general average, and that, as on the whole the quality of articles tends to improve, this cause probably leads to the fall in prices being understated rather than overstated.

(*n*) That the figures given in section 35 show that there has been a largely increased demand for gold in the United States, while that is the only article of which the production in the United States has actually fallen off, and that if there had been an increase in the supply of gold sufficient to meet that new demand and the new demand for Germany and the Scandinavian Kingdoms, prices in other countries would probably be very different from what they now are.

(*o*) That there is ordinarily some correspondence in intensity and duration between periods of inflation and depression, which appears to be absent in the present case.

III.—CAUSES AFFECTING BOTH METALS.

63. We have now stated the principal arguments which refer the divergence in the values of gold and silver to causes affecting one or other of those two metals.

It remains to point out those which ascribe the change in question to a combination of causes affecting both metals.

They may be divided into two classes: (1) Those which ascribe the change to the operation of the ordinary laws regulating the supply of and the demand for the two metals. (2) Those which lay stress on the operation on the bimetallic system in the Latin Union down to 1874, and which ascribe the change which has since taken place to the destruction of the relation theretofore subsisting between the two metals.

64. The former class of arguments has been sufficiently explained in the earlier portion of our report, and at this point we need not do more than point out the cumulative effect of combining the arguments in sections 12–17, which relate to the supply of and the demand for silver, with those in sections 31–42, which deal with the supply of and the demand for gold.

The facts set out with regard to the increased supply of and diminished demand for silver, coupled with the decreased supply of and increased demand for gold are, it is contended, sufficient to account for the facts of the present situation.

65. On the other hand it is urged that changes quite as great in the relative supply and consumption of the precious metals have taken place in former periods without producing any of the results now observed; and that a wholly new element has been brought into prominence since 1873 in the destruction of the connecting link between the gold and the silver standard.

Up to that date, it is alleged, there were always one or more countries in which the two metals were linked together as the standard of value, and in which payments could be made at the option of the payer in either metal at a fixed ratio. The independent use of gold and silver as standards of value is consequently an entirely new experiment.

The effect of the existence of this link was, as pointed out in section

18, that the market ratio was controlled and regulated by the legal ratio; and the relative value of the two metals remained steady, notwithstanding variations in the relative production more marked than those which have taken place since 1873. So long as the two metals were by law legal tender to any amount at a fixed ratio the price of silver measured in gold could not and did not vary materially from that ratio.

From the moment however that the free coinage of silver was suspended this action of the bimetallic system ceased to have its effect, and the relative value of the two metals was left to be settled by the independent action of supply and demand.

Those who maintain this view therefore ascribe the divergence in the relative value of the two metals primarily to the repeal of the legislation which up to 1873 confined the divergence within the very narrow limits shown in section 8.

66. It is further urged that the conditions of the supply and demand of the precious metals since 1873 do not support the theory that the change in their relative value is due solely to depreciation of silver.

There has been in recent years a great absorption of both gold and silver by the United States, and the figures given in section 36 show that the supply of new gold to countries outside the United States has fallen off in recent years by £15,000,000 sterling as compared with the annual supply in 1866–'70; while the figures in section 27 (*c*) show that the supply of silver to the same countries has only increased by £4,500,000 yearly, if silver be valued at the old ratio of 1 to 15½, and by considerably less if silver be valued at its market price, and that the supply of silver to these countries is very little greater than in 1871–'75. As regards the question of the demand for silver in those countries it is pointed out that wherever silver was demonetized gold was substituted, and that so far the increased demand for the one metal equaled the reduced demand for the other.

67. It is further pointed out that silver is still the standard of the greater portion of the human race, but that there has been no such increase in the supply of silver to silver-standard countries as would be sufficient to raise prices by the extent to which gold and silver have altered in relative value; that no marked tendency to an unusual rise in wages in the silver-standard countries can be discovered, nor any such change in silver prices in comparison with cost of production as to justify the belief that they have risen from causes primarily affecting the standard; that the theory that gold prices have fallen, say, 28 per cent. from cheaper production of commodities, or from 100 to 72, and that the increased supply of silver has counteracted this tendency in the case of silver prices can not be maintained, as it involves the assumption that there has been such a supply of silver as to raise silver prices from 72 to 100, or by nearly 40 per cent., and that neither the statistics of the supply and of demand for silver, nor of prices and wages in silver-using countries, afford any support for so extreme an hypothesis.

EFFECTS OF THE DIVERGENCE IN THE RELATIVE VALUE OF THE TWO METALS.

68. We have now enumerated the principal allegations which have been made with regard to the causes of the changes in the relative value of the precious metals.

We are next directed to inquire into the bearing of these changes upon certain matters of practical business affecting the interests of India and the United Kingdom respectively.

As we have already pointed out in section 2, these changes have been of a twofold character; there have been fluctuations in the relative value of the two metals, and there has been a fall in the gold price of silver; and as the effects of these two kinds of change are in some respects distinct it will be convenient to consider them separately.

I. EFFECTS OF FLUCTUATIONS.

69. The main importance of the fluctuations consists in their effect upon the exchanges between countries using a gold and countries using a silver standard. A transaction between two countries in which the same metal is actually in use as standard is of course arranged without difficulty in terms of that standard, the value of which can only vary between the two countries by an amount not exceeding the expense involved in transporting the metal from one country to the other and coining it there.

But in the case of a transaction between two countries having different standards, the matter becomes more complicated.

There is no common measure of value; the metal composing the standard in one country is little more than merchandise in the other; and many of the advantages of money as a means of facilitating trade are thus curtailed.

70. This inconvenience is reduced to a minimum or disappears altogether if the value of the two metals is comparatively stable; but it is urged that if to the difference in standard is added the uncertainty of variations in the relative value of the two metals, a serious impediment to trade is established. Every transaction is subject to the risk of an alteration in the value of the metal in which payment is to be taken or made. The trader must either run this risk himself or take steps to insure himself against it; and either alternative involves a certain burden at some time or other.

Trade, it is said, is thus rendered not only less profitable, but more speculative, and more irregular; it is diverted from its natural channels; and its volume is influenced by the rise or fall in the value of the precious metals.

71. So far as the actual risk arising from fluctuations is concerned, it is said that the mechanism supplied by the exchange banks enables the merchant in general to insure himself against actual loss.

Before he makes his bargain in produce, or simultaneously with it, he can, as a rule, arrange with a bank to buy or sell the necessary remittance.

This accommodation must, however, be paid for, and constitutes to that extent a real burden upon, and hindrance to, trade.

It is said, moreover, to fall with greater severity upon small traders, who are less able to protect themselves from risk, and who are more hampered by the loss when it does occur than those whose transactions are more extensive. Competition is thus limited, and the trade tends more and more to become the monopoly of the large capitalists.

It is stated also that there have been times when, owing to great uncertainty, this accommodation has either been withdrawn altogether by the banks refusing to enter into future contracts on any terms, or so restricted as, in either case, to bring business to a stand-still for the moment.

72. The trade with China and Japan is said to be even more prejudicially affected by exchange difficulties than that with India. The natural flow of trade between Europe and India is such as to render the

above method of avoiding risk more readily available in the case of that trade than in the case of trade with other silver-using countries. The large amount of the Indian council bills, and the advantage of having this alternative mode of remittance, also enable the merchant to secure better terms. But the exchange with other countries in the East is subject to somewhat greater fluctuations by reason of the less uniform currents of trade; while, owing to the less severe competition among themselves, the dealers in exchange are able to exact higher rates; the difficulties of obtaining accommodation and the rate paid for it are consequently increased. The same remark applies to the silver-using countries in South America.

Again, breaches of contract by any of the parties to a transaction which would, under other circumstances, involve little or no inconvenience to those concerned, become of real importance when the loss or inconvenience is aggravated by exchange difficulties. When the exchange is subject to fluctuation from day to day, the failure of a few hours in carrying out a bargain may, by enabling a purchaser to repudiate a contract or claim compensation for non-fulfillment, convert an anticipated gain into a loss, and a new element of speculation and uncertainty is thus introduced which is unknown in trade between countries using the same standard. Against losses of this class no method of insurance is practicable.

73. On the other hand, it is contended that the evils above described have been much exaggerated, and that the real burden on trade caused by the difficulties in question is insignificant.

It is pointed out that in all transactions, whether between countries having the same or different standards, the rate of exchange is one of the elements which the merchant must necessarily take into consideration; that similar difficulties arise in trade with countries having an inconvertible paper currency, where the fluctuations must generally be as great as, or greater than, in the case of silver; that though the difficulties in the case of trade with silver-using countries may be greater in degree than those involved in trade with gold-using countries, they are the same in kind; and that the insurance provided by banking arrangements practically reduces the inconvenience to a minimum.

74. To the argument that, however much the risk may be diminished by such arrangements, it must still be borne by somebody, and must consequently be paid for by somebody, it is replied that, taking the whole mass of transactions between any two countries there is no real risk to be guarded against, the losses on some transactions being balanced by the gain on others.

If a particular fluctuation in the exchange involves a loss on an export transaction from this country to the east, it must simultaneously give rise to a corresponding gain on an export transaction in the opposite direction. To the merchant engaged in both the export and import trade any loss will therefore be balanced by a gain; while as regards others, it is the business of dealers in exchange to balance these losses and gains, and their charges for their services will, by competition among themselves, be reduced to the lowest possible rate, the burden of which will practically be inappreciable.

Another method of avoiding any loss which might arise from uncertainty of exchange is to make simultaneous bargains in respect of all the elements necessary to complete a transaction. This can now be readily done by means of the telegraph. A merchant buys produce in India and sells it in Europe almost at the same moment, fixing at the same time the rate of exchange and the charge for freight. The whole

transaction is therefore based on a rate of exchange as fixed as if there were no difference of standard to be considered.

75. Besides hampering or preventing trade between gold-using and silver-using countries, the uncertainties of exchange have, it is said, tended to encourage the trade between silver-using countries themselves, to the exclusion of gold-using countries. In a transaction between countries using the same metal as standard, the element of uncertainty arising from the use of two metals, with the consequent fluctuations in their relative value, is eliminated. Trade between two such countries can be carried on with less risk and less inconvenience than between two countries using different standards, as in the latter case the uncertainty enters into every transaction, and adds to the expense of the machinery by which trade is carried on.

The tendency of silver-using countries under existing conditions will consequently be to trade with other silver-using countries.

76. In support of this view attention is called to the increase in the number of cotton mills in India, and in the export from that country of cotton yarn and piece goods, which are sent almost exclusively to silver-using countries.

The following table shows the number of cotton mills, spindles, and looms in India, together with the quantity of the cotton yarns and piece goods exported since 1876–'77:

Year.	Mills.	Spindles.	Looms.	Cotton yarn.	Cotton piece goods.
				Pounds.	*Yards.*
1876–'77	47	1,100,112	9,139	7,027,000	15,544,000
1877–'78	53	1,289,706	10,533	15,600,000	17,545,000
1878–'79	58	1,436,464	12,983	21,332,000	22,517,000
1879–'80	58	1,470,830	13,307	25,862,000	25,890,000
1880–'81	58	1,471,730	13,283	26,901,000	30,424,000
1881–'82	62	1,550,944	14,386	30,786,000	29,911,000
1882–'83	62	1,654,108	15,116	45,378,000	41,583,000
1883–'84	74	1,895,284	16,251	49,876,000	55,613,000
1884–'85	81	2,037,055	16,455	65,807,000	47,968,000
1885–'86	86	2,110,847	16,455	78,241,000	51,577,000
1886–'87	94	2,261,561	17,455	91,804,000	53,405,000
Increase per cent. between 1876–'77 and 1886–'87	100	105	91	1,058	243

77. On the other hand, it is pointed out that the exports of similar goods from the United Kingdom to silver-using countries in the east have not increased in anything like the same proportion; and it is suggested that some portion of the trade has been diverted from the United Kingdom to India.

The following table shows the exports of cotton yarn and piece goods from the United Kingdom to China, Hong-Kong, and Japan from 1877 to 1887:

Quantities of cotton yarn and piece goods exported from the United Kingdom to China, Hong-Kong, and Japan.

Year.	Cotton yarn.	Cotton piece goods.	Year.	Cotton yarn.	Cotton piece goods.
	Pounds.	*Yards.*		*Pounds.*	*Yards.*
1877	33,086,000	394,489,000	1883	33,499,000	415,956,000
1878	36,467,000	382,330,000	1884	38,856,000	439,937,000
1879	38,951,000	523,921,000	1885	33,061,000	569,339,000
1880	46,426,000	509,099,000	1886	29,924,000	490,451,000
1881	47,479,000	587,177,000	1887	35,354,000	618,146,000
1882	34,370,000	554,948,000			

78. In reply to these arguments it is contended that the growth of the Indian export trade in cotton yarns and goods is due to causes wholly independent of exchange difficulties, and was anticipated before those difficulties had existed in their present form.

The natural advantages of the country for the manufacture of certain kinds of cotton goods must, it is urged, have resulted sooner or later in a considerable development of her trade in this article.

When trading with neighboring countries in the east, the Indian manufacturer has advantages, as compared with his European competitors, in the cost of transport of the raw material, the cost of labor, and the cost of transporting the finished article to market.

As an illustration of the advantages which accrue to an industry established in close proximity to the place where its raw material is produced and where the finished product is sold, the following figures are quoted showing the recent growth of the cotton industry in the Southern States of the American Union:

Year.	Southern States.		India.	
	Spindles.	Looms.	Spindles.	Looms.
1879–'80	559,320	12,329	1,461,590	13,502
1886–'87	1,213,346	27,963	2,421,290	18,536
Increase per cent	117	127	65.6	37 3

In the following table the consumption of raw cotton in the Southern States, the Northern States, and in India is contrasted:

Cotton delivered to mills.

	1880–'81.	1886–'87.	Increase.
	Bales.	*Bales.*	*Per cent.*
The Southern States	265,000	398,000	94
India	379,000	726,000	91
The Northern States	1,710,000	1,727,000	1

79. The view above given of the relative advantages of England and India is, however, disputed; and estimates have been laid before us which tend to show that the Indian manufacturer, if unassisted by exchange considerations, would be unable to compete with the English manufacturer successfully in any market.

The technical character of the questions involved in these calculations makes it very difficult to pronounce an opinion on the subject; but we understand that a committee of the Manchester Chamber of Commerce has been carefully considering the question, and that their conclusions, which on such a point will have a special value, will shortly be made public.

80. It is further pointed out that the alleged growth in the Indian trade with silver-using countries is true only with regard to the two items of cotton yarn and goods.

If the total trade of India with gold-using and silver-using countries respectively is examined, there does not appear to be any confirmation of the view that trade with European countries is subject to any special disadvantage.

The following table shows the value of Indian exports of merchandise (1) to gold-using countries and (2) to silver-using countries since 1872–'73:

Years.	Exports to gold-using countries.	Exports to silver-using countries.	Years.	Exports to gold-using countries.	Exports to silver-using countries.
	Millions Rx.	*Millions Rx.*		*Millions Rx.*	*Millions Rx.*
1872–'73	35, 456, 000	19, 780, 000	1880–'81	47, 980, 000	26, 551, 000
1873–'74	35, 786, 000	19, 175, 000	1881–'82	56, 395, 000	25, 597, 000
1874–'75	36, 314, 000	19, 998, 000	1882–'83	58, 191, 000	25, 210, 000
1875–'76	37, 983, 000	20, 062, 000	1883–'84	63, 274, 000	24, 847, 000
1876–'77	39, 186, 000	21, 775, 000	1884–'85	58, 339, 000	24, 862, 000
1877–'78	42, 363, 000	22, 823, 000	1885–'86	58, 539, 000	25, 289, 000
1878–'79	36, 082, 000	24, 811, 000	1886–'87	60, 698, 000	27, 731, 000
1879–'80	40, 972, 000	26, 201, 000			

Comparing the average of the first and last quinquennial period in each case, it will be found that the exports to gold-using countries increased by 62 per cent. and those to silver-using countries by 27 per cent.

81. Nor again does the trade between the United Kingdom and India appear to have been much affected in this way.

Our trade with India has increased both absolutely and relatively to that with other countries, as will be seen from the following figures placed before the commission by Mr. Waterfield:

Trade between India and United Kingdom.

Years.	Imports into India.	Exports from India.	Percentage of trade with India to the whole trade of the United Kingdom.	Years.	Imports into India.	Exports from India.	Percentage of trade with India to the whole trade of the United Kingdom.
1874–'75	100	100	8.5	1881–'82	127	125	9.2
1875–'76	96	101	8.5	1882–'83	135	127	9.8
1876–'77	110	105	8.5	1883–'84	145	132	9.9
1877–'78	132	110	8.9	1884–'85	147	121	9.7
1878–'79	93	101	8.5	1885–'86	146	124	9.8
1879–'80	108	99	7.8	1886–'87	154	125	10.5
1880–'81	132	111	8.9				

82. It is further pointed out that if the trade of the United Kingdom with the principal silver-using countries since 1873 is compared with the total trade with all countries, the increase will be found to be proportionately greater in the former case than in the latter, as will be seen from the following table:

Years.	Total trade of the United Kingdom.	Trade with principal silver-using countries.*
1873	£682, 000, 000	£93, 000, 000
1874	668, 000, 000	94, 000, 000
1875	656, 000, 000	98, 000, 000
1876	632, 000, 000	94, 000, 000
1877	647, 000, 000	102, 000, 000
Average	657, 000, 000	96, 000, 000

*India, China, Japan, Ceylon, Straits Settlements, Mauritius, Mexico, Central America.

Years.	Total trade of the United Kingdom.	Trade with principal silver-using countries.*
1878	£614,000,000	£90,000,000
1879	612,000,000	85,000,000
1880	698,000,000	104,000,000
1881	694,000,000	104,000,000
1882	720,000,000	109,000,000
Average	667,000,000	98,000,000
Compared with previous period	+1.52 per cent.	+2.1 per cent.
1883	732,000,000	110,000,000
1884	686,000,000	104,000,000
1885	642,000,000	99,000,000
1886	619,000,000	98,000,000
1887	643,000,000	99,000,000
Average	664,000,000	102,000,000
Compared with previous period	−0.45 per cent.	+4.08 per cent.

*India, China, Japan, Ceylon, Straits Settlements, Mauritius, Mexico, Central America.

83. On the other hand, it is contended that the growth of trade between India and the gold-using countries has been stimulated by causes which have not affected in an equal degree the trade between India and the silver-using countries, such as the opening of the Suez Canal; and that the proportion of the total trade of England which is carried on with India might be expected to increase more rapidly than the trade with other countries which impose heavy import or export duties.

It is further pointed out that if, from the total Indian exports to silver-using countries, we exclude opium, which is subject to special conditions, it will be seen that the exports from India to silver-using countries have increased as rapidly as the exports to gold-using countries.

Exports from India to silver-using countries (opium excluded).

Official year.	Rx.	Official year.	Rx.	Official year.	Rx.
1872–'73	8,362,000	1877–'78	10,451,000	1882–'83	13,729,000
1873–'74	7,844,000	1878–'79	11,818,000	1883–'84	13,553,000
1874–'75	8,064,000	1879–'80	11,877,000	1884–'85	13,979,000
1875–'76	8,922,000	1880–'81	12,956,000	1885–'86	14,554,000
1876–'77	9,325,000	1881–'82	13,075,000	1886–'87	16,653,000

84. It is also stated that the uncertainties caused by fluctuations in exchange tend to discourage the investment of capital in silver-using countries, and that the latter consequently suffer through the want of proper development. Such countries are in themselves usually poor; and the capital required for their development must generally be attracted from gold-using countries; but the capitalists in the latter countries are deterred from investing in securities, the interest on which is payable in silver, owing to the uncertainty as to the return which they will receive.

The flow of capital is therefore diverted from its natural channels, and its most profitable employment; and the development of the regions where it is urgently required is impeded.

85. On the other hand, it is pointed out that the increasing competition of the Indian cotton mills, to which reference was made in section 76, would appear to show that capital was forthcoming when any good opening presented itself; that the uncertainties of exchange affect only the capital which bears a fixed rate of interest payable in silver; and

that some compensation is afforded by the increased stimulus given to industrial enterprise and the consequent demand for capital in the silver-using countries themselves, owing to the fall in exchange.

It has also been stated in evidence that the English banks keep as small an amount of their capital as possible in India, and thereby diminish their power of giving accommodation.

86. There is further an increasing tendency in the case of silver-using countries to do business on a cash basis, owing to the inconvenience of having transactions open for long periods. This curtails credit and diminishes the trade of the countries concerned.

II. EFFECTS OF THE FALL IN THE GOLD PRICE OF SILVER.

87. Turning next to the effects of the fall in the gold price of silver we find that one of the effects most prominently put forward is the general fall of gold prices alluded to in section 46.

This fall of gold prices is connected by two distinct lines of argument with the divergence in the relative value of the precious metals, and the monetary changes to which that divergence is attributed.

It is said that—

(*a*) The fall in the gold price of silver has had a direct effect in lowering other gold prices.

(*b*) The greater demand for gold and the increased work thrown upon it in the monetary systems of the world have caused a general contraction of the currency in gold-using countries, which has increased its purchasing power, or, in other words, caused a fall of prices.

Greater importance is attached by some to the operation of the former cause than of the latter.

The arguments urged in relation to it have already been alluded to in section 61 (*c*); but it will be desirable to state them rather more fully at this point.

88. The ratio between the level of gold prices and the level of silver prices must, it is said, ultimately conform to the ratio between the value of gold and the value of silver, if any change in the ratio has occurred owing to causes affecting primarily one or both metals. In other words, gold and silver prices will vary about as much as the value of gold and silver.

If there is any change in the relative value of gold and silver, which is not itself merely a consequence of a prior disturbance in the general levels of gold and silver prices, that change will show itself sooner or later in the gold and silver prices of commodities respectively.

In the present instance there has been a fall in the gold price of silver, due to one or more of the causes set forth in the earlier part of this report; the necessary adjustment in the levels of gold and silver prices will therefore follow, and will be effected either by increased exports of goods from silver-using countries to gold-using countries, causing a fall of gold prices, or by increased exports of silver to silver-using countries, causing a rise of silver prices.

It is also pointed out that to produce the fall of gold prices here indicated, it is not necessary that the goods should be actually exported from the silver-using countries. A depressing effect of the same kind would be caused by the mere knowledge of the fact that a large supply of goods would come upon the market if any symptom of a rise in the gold price manifested itself.

89. One theory which was generally accepted, when attention was first directed to the divergence in the value of the two currencies, was

that the adjustment would be carried out by the exportation of silver to the East until its value in the West and prices in the East were so affected as to make this operation no longer profitable.

It is now suggested that instead of a rise in silver prices, or a recovery in the gold price of silver, the fall in the value of silver has produced a corresponding fall in gold prices, the level of prices in the East remaining unaltered.

Silver prices are, it is said, less subject to alteration, through causes affecting the currency, than gold prices. The immense volume of silver in eastern countries, the conservative habits of the people, the absence of banking facilities and other commercial conveniences, all contribute to this result.

The adjustment, therefore, takes the line of least resistance and results in a fall of gold prices in western markets in conformity with the alteration in the gold price of silver.

In India the cost of labor, the land revenue, and other similar charges have remained the same. The Indian producer therefore, so long as he can get the same silver price for his produce as before, remains in as favorable a position, and he is forced by competition to accept the same silver price as before the gold price of silver fell; but the same quantity of silver can, after the fall, be obtained for a less quantity of gold. The maintenance of the silver price is therefore equivalent to a lowering of the gold price. Consequently a fall is established in the gold price of all commodities exported from silver-using countries to gold-using countries.

On the other hand, as the Indian producer only obtains the same silver price as before, or a lower gold price, he can not give more silver for European produce than before. The European producer must therefore, in order to find a market for his produce, accept the same silver price or a lower gold price. Hence arises a fall in the price of all the produce exported from gold-using to silver-using countries; and the altered relation of silver to gold thus affects directly the gold prices of all articles comprised in the trade between those countries.

90. It also affects indirectly the gold prices of articles exchanged between, or consumed in, the gold-using countries themselves. So far as these articles are the same, or serve the same purpose, as those which are directly affected, their prices are necessarily forced down by competition; the remainder, or a considerable proportion of them, are affected by the diminution in the cost of production generally, arising from the fall in the prices of the other articles, many of which are staple commodities or necessaries of life having a direct bearing upon the cost of production.

91. It is also argued generally that the relative prices of commodities must be adjusted so as to maintain (other things remaining the same) the same relative values, and thus that an established fall, through varying causes, of the prices of any important groups of commodities will be transmitted through other groups by industrial competition. A fall, for example, in the price of agricultural produce will (methods of production, etc., remaining the same) give a less money income to landlords, farmers, laborers, and all depending on land, and they will not be able to pay so much for other things, whilst at the same time labor and capital will tend to flow into other industries so long as prices in those industries remain relatively high, and thus in both ways those prices will tend to fall.

It would have been impossible for a fall in proportion to the gold price of silver to have been established in the case of all the great

staples of trade between gold and silver-using countries without indirectly affecting other commodities.

92. In reply to these arguments it is contended—

(*a*) That the level of prices in gold-using countries can only be affected by changes in the relation between the volume of the currency in those countries and the work which it has to do; and not by a change in the value of the metal forming the standard of value elsewhere.

(*b*) That a sufficient explanation of the fall of gold prices can be deduced from causes affecting directly the volume of the currency in gold-using countries, and the nature and extent of the business transactions in which it is used.

(*c*) That the assumption of greater stability in Indian than in European prices is unwarranted. Such statistics as are available show that there has been as much variation in Indian prices as in European prices, and that the fluctuations in the prices of the same article at the same places in different years, or at different places in the same years, are far greater than any which can be observed in Europe.

It is therefore urged that there is no foundation in such statistics for the theory that gold prices tend to accommodate themselves to silver prices more than silver prices accommodate themselves to gold prices.

(*d*) That the gold price of silver is constrained to move in accordance with the ratio between the level of gold prices and the level of silver prices, and that an increased supply of silver in gold-using countries would result in a flow of silver to silver-using countries until the equilibrium had been restored.

(*e*) That, again, there has been no decrease in the export of goods from gold-using to silver-using countries such as would be caused, other things being equal, by such a divergence, but rather the reverse.

(*f*) That the volume of the currency and the methods of using it remaining unchanged, a fall in the prices of goods that enter into Oriental trade would be more likely to raise than to lower the prices of goods that are not connected with it, because it would leave more money free to do business in them. For instance, during the period in which wheat was the chief element in the expenditure of the working classes, it was notorious that a fall in the price of bread led to an increased money demand for other commodities and a rise in their price.

(*g*) That so far as statistics of trade go, they are inconsistent with the arguments which trace the fall in gold prices to the fall in the gold price of silver and to the effect of silver prices on gold prices. The immediate effect of any such change would be to reduce the gold prices of articles exported to silver-using countries, and consequently the exports to those countries, and to stimulate the exports to gold-using countries. But no such effect can be traced in the trade returns. On the contrary, the exports from the United Kingdom to silver-using countries have increased more rapidly than the exports to other countries.

93. The allegation of a general fall of gold prices has already been referred to in section 46, where it was adduced as corroborative evidence in support of the view that gold had become scarcer; but it is necessary to recur to the subject at this point in order to examine the bearing which the general fall of prices, assuming it to be proved, may have had upon the several interests which we are directed to consider.

It must, however, be observed that this question only enters within the scope of our inquiry if, and so far as, the fall of prices is due to causes directly connected with the precious metals.

In considering, therefore, the effects of a fall in the general level of prices, we shall, for the purpose of the present argument, assume the

soundness of the reasons connecting it with circumstances affecting the precious metals and their relation to one another, which were adduced in the earlier portion of our report.

94. Those who lay stress on the evil effects arising from a fall of prices urge—

(*a*) That an appreciating standard of value can not properly perform its most important functions.

The metal which serves as the standard has to act as (1) a medium of exchange; (2) a measure of value; (3) a means of storing value; and (4) a standard for deferred payments or contracts extending over a long period.

In the two first of these cases variations are of less importance. The ordinary transactions of commerce are seldom open for more than a few months at a time; allowance can therefore be easily made for a change in the value of the currency in which these transactions are expressed, and such a change can seldom be sufficiently marked or sufficiently sudden to cause any substantial loss or gain to either party. The second use of the standard is important mainly on account of its connection with statistical and other similar inquiries. But in the third, and to a still greater extent in the fourth, case the inconvenience of such changes in the standard of value is especially great, and material inconvenience and hardship is caused by any alteration.

(*b*) That in respect of these two cases an appreciating standard causes more inconvenience and hardship than a depreciating standard, because it imposes a greater burden upon the debtor class; and it is asserted that borrowers are those on whose enterprise the industrial interests of the country principally depend.

(*c*) That an appreciation of the standard creates uncertainty as to the profit to be made from commercial transactions, checks enterprise, and therefore impairs the productive capacity of the world.

The depression caused by falling prices is due partly to material and partly to sentimental causes.

Falling prices will, if other things remain the same, involve a reduction of profits and a consequent indisposition to continue producing; but this reduction is to a certain extent only apparent. In so far as the profits, though smaller, have the same purchasing power as before, the person who receives them is, no doubt, in the same relative position as before; but he is more impressed with the decrease in their nominal amount than with the maintenance of their purchasing power. The depressing effect thus produced by falling prices tends to curtail business and discourage enterprise. Further, so far as his production is carried on with borrowed capital, for which he has to pay a fixed rate of interest, or is subject to any permanent charge from which he can not at once free himself, he sustains a real loss, because his outgoings remain nominally the same, but are really more onerous, while his returns are diminished, owing to the fall in the selling price of his produce.

Moreover, it is found that wages, which must necessarily form a large proportion of the total cost of production, fall less rapidly than prices.

For all these reasons the necessary adjustment in the cost of production, which, to maintain real profits at their normal rate, should be going on *pari passu* with the fall of prices, is always deferred, and is frequently deferred to a point at which production ceases to be remunerative.

95. In reply to these arguments it is said—

(*a*) That, if the question lies between rising and falling prices, the latter are the lesser evil, since they tend to a more equal distribution of

wealth and benefit the consumer as such, and more particularly the wage-earning classes, whose real wages, on the hypothesis above mentioned, are increased.

(*b*) That when prices are falling trade is carried on with greater circumspection and maintained in closer correspondence with the real wants of the community than in times of great inflation and excitement. In illustration of this it is pointed out that the great commercial crises and disturbances of trade rarely occur in times of so-called depression, but are usually the result of the great stimulus to production and speculation caused by a general rise in prices.

(*c*) That times of falling prices are usually more fertile in inventions and other means of diminishing the cost of production or economizing the use of capital; and that the stimulus to improvement so created results in a material benefit to the community, thus affording compensation for any diminution in production caused by loss of profits.

(*d*) That the transfer of value from one class of the community to another can not be a national loss; and that, as regards the country at large, a clear gain can be shown, owing to the large investments of British capital made in foreign countries at a time when prices were high. With every fall of prices the real return on this capital increases and the country gains.

(*e*) That a fall in profits is to some extent compensated by a fall in the rate of interest on borrowed capital required for production, and that this compensation extends to all except the few producers who are unable to take immediate advantage of this element in their favor.

96. To the foregoing arguments the following rejoinder is made:

(*a*) That as regards labor, the apparent advantage of higher real wages is (1) only temporary, as it will disappear whenever the final adjustment is made, and will be converted into a loss whenever the movement of prices turns in the opposite direction; (2) more than neutralized by the uncertainty and irregularity of employment, which is inseparable from depression of trade, and which frequently results in an actual and serious loss of real wages.

(*b*) That a fall in prices benefits the capitalists who have lent money for fixed periods at a fixed rate of interest, and in such cases a smaller share of the product of labor is left to be divided between the producer and the wage earning classes. It is difficult to suppose that the latter can for any length of time receive larger real wages out of the smaller share of the gross product of labor which is divisible between themselves and the producer.

(*c*) That the methods of economizing labor which, as stated above, are more readily devised in times of depression, can not but produce temporary inconvenience and hardship among the laboring classes, owing to the difficulty which they find in accommodating themselves to the altered conditions of industry.

(*d*) That if times of falling prices are more fertile in inventions and other means of diminishing the cost of production, this can only arise from the hardship caused by the fall in prices compelling producers to put forth greater exertions, and does not differ in nature from what would be produced by the imposition of any additional burden, such as increased taxation, on the same class.

(*e*) That the friction in the labor market produced by constant attempts to lower wages in correspondence with a fall in prices engenders much discontent and social disturbance.

(*f*) That the laboring classes are rarely able to obtain the full benefit of a fall in prices, such as would compensate them for the disad-

vantages mentioned above, much of it being intercepted by other classes before it reaches them.

(*g*) That if a check to production from a fall in prices be admitted, the actual wealth of the world must necessarily be diminished, and that no redistribution of what remains can alter this fact.

(*h*) That an active trade with a high rate of interest, even if accompanied by occasional crises, is preferable to the depression which results from falling prices.

(*k*) That a loss caused by the transfer of value from one class of the community to another may be a national loss, and that the alleged gain to the country at large from investments of capital in foreign countries at a time when prices were high has been greatly exaggerated. It has sometimes been assumed that this gain is realized on all the payments made by foreign nations to this country which are not made directly in exchange for commodities; but this is not the case. For example, there is no such gain on the payments to this country on account of freights earned by British ships, nor on account of investments of capital abroad in industrial enterprises; payments on account of such investments may even be reduced by the fall in prices affecting profits. The only gain is in connection with loans made in gold at fixed rates of interest, and the total gain from this class of investments should be reduced by the loss on similar investments made in silver or other currency which has depreciated in comparison with gold. A large portion of this gain is made at the expense of British colonies and dependencies such as India, and does not accrue to the country at large, but to a very limited class.

97. In section 88 we have dealt with one effect of the fall in the gold value of silver upon the international trade between gold and silver using countries, and with the process by which the adjustment between the levels of prices in those countries respectively is carried out.

It would appear to be admitted by almost all witnesses that when the adjustment has been completely carried out, the conditions of international trade will be precisely the same as before the divergence between the values of the two currencies occurred.

When the exchange between the two countries has reached a stable point, and the level of prices in each has accommodated itself to the altered state of things, no further disturbance of prices will occur so long as the equilibrium of the exchange is preserved.

98. In the mean while, however, trade, it is said by some, may be diverted to a considerable extent from its natural channels; and the process of adjustment above described may extend over a long period, and must necessarily continue until the par of exchange between the two currencies becomes comparatively stable.

In the present instance, the instability has continued for upwards of fourteen years, and there is no sign of the permanent restoration of equilibrium.

The complete adjustment of prices to the altered value of the currency has therefore been continually deferred, and this has, it is said, resulted in a stimulus to exportation from silver using countries and a corresponding check to exportation from gold-using countries.

99. Reasons have already been given in support of the view, that as it is easier for prices to fall than to rise, the necessary adjustment would more propably be carried out by a fall of gold prices than a rise of silver prices.

If prices in silver-using countries have not risen, the cost of production and all other charges remain the same, and the producer can make

the same rate of profit if he can get the same selling price in silver as before. The fact that the silver selling price is equivalent to a lower gold price does not affect him.

The producer in the gold-using country, on the other hand, who exports produce to the silver-using country, receives the same amount of silver as before, but reduced in value when converted into gold. Unless, therefore, the cost of producing the commodity is reduced to the same extent as the gold value of the silver which he takes in exchange, he will sustain a real loss.

But it is urged that the cost of production does not accommodate itself readily, much less simultaneously, to the fall in the selling price. Fixed charges of all kinds and the wages of labor will fall but slowly; and until the adjustment is complete the loss will continue.

In the present case it is pointed out that the process of adjustment has been going on since the fall in the value of silver first manifested itself, but that as the fall has been in the main continuous, and shows no symptom of having reached its limit, the process can not have been completed, and the loss is therefore for the time being irremediable.

The advantage thus gained by the producer in the silver-using country extends, it is said, not only to those who produce articles exported to gold-using countries, but to those who produce articles for the home market in competition with producers in gold-using countries; and similarly the disadvantage attaching to production in gold-using countries extends not only to those engaged in the export trade to silver-using countries, but to the producers of all commodities which compete with the produce of silver-using countries.

The illustration most commonly brought forward in support of these arguments is the export of wheat from India, which it is said competes successfully with that grown in England or imported from America and other countries.

As silver prices remain stable, the apparent cost of producing wheat in India is not greater than before the fall in silver. No larger number of rupees are paid for rent, taxes, wages, or carriage; no smaller number of rupees are received by the producer in return; and that return will enable him to satisfy all his wants to the same extent as before.

If, when the gold price of wheat is 40*s.* a quarter, the rupee is worth 2*s.* in gold, the Indian producer will receive 20 rupees for a quarter of wheat. If the gold price of wheat then falls 25 per cent. to 30*s.* a quarter, and the gold value of the rupee falls 25 per cent. to 1*s.* 6*d.*, the Indian producer will still receive 20 rupees for a quarter of wheat, and will pay the same amount as before in rent and wages.

The producer in the gold-using country, on the other hand, will receive 10*s.* less on each quarter of wheat, owing to its price having fallen from 40*s.* to 30*s.*; but the cost of production has not fallen to the same extent, though rent and wages have fallen slightly; taxation and many other compulsory charges have not fallen at all, and their burden is therefore heavier.

Where the producer both owns and cultivates the land himself, and where consequently neither rent nor wages enter into the calculation, the disadvantage to the English producer is said to be even more apparent.

The cost of production in either case remains practically the same; but the difference in the return is very great.

The Indian producer will still receive, as has been shown, 20 rupees

for his quarter of wheat; and these rupees will buy as much as they bought before, because prices in India have remained stationary.

The English producer receives only 30*s.* instead £2, and it can not be contended that the purchasing power of 30*s.* is equal to that of the £2 which he formerly received, except on the hypothesis that the prices of all commodities here have fallen in the same proportion, which is not alleged.

No adjustment in regard to rent or wages can in this case restore the balance, because neither rent nor wages are paid; and the difference between the purchasing power of the 30*s.* which he receives at present, and the £2 which he formerly received, is the precise measure of the loss which the English grower suffers as compared with his Indian competitor.

If, therefore, the English and the Indian producers were, before the fall in prices, competing on equal terms, the result of the fall will be to leave the Indian producer where he was, and to reduce the profits of the English producer.

100. These circumstances, it is said, account, to a large extent, for the increased export of wheat from India, which appears to have synchronized with the fall in the value of silver, for the serious decline in the price of wheat and the corresponding depression in agriculture in this country.

India already exports a quantity which is quite sufficient to materially influence the market price, and the effects of depression are shown, it is urged, in (*a*) the diminished profits of landlord and farmer; (*b*) the extent of land which has already been thrown out of cultivation, and the consequent reduction in the annual produce of material wealth in the country; and (*c*) the injury sustained by the agricultural laborer, owing, in some cases, to the total loss of his employment, and in others to a considerable reduction in wages.

The following table gives the value and quantity of wheat exported from India during the last ten years, with the average rate of exchange:

Years ended March 31.	Quantity.	Value.	Average rate of exchange.	Years ended March 31.	Quantity.	Value.	Average rate of exchange.
	Cwts.	*Rx.*	*s. d.*		*Cwts.*	*Rx.*	*s. d.*
1877	5,587,000	1,958,000	1 8 5	1883	14,194,000	6,089,000	1 7.52
1878	6,373,000	2,874,000	1 8.79	1884	21,001,000	8,896,000	1 7 53
1879	1,057,000	520,000	1 7.79	1885	15,851,000	6,316,000	1 7.31
1880	2,202,000	1,124,000	1 7.96	1886	21,069,000	8,005,000	1 6.25
1881	7,444,000	3,278,000	1 7.95	1887	22,264,000	8,626,000	1 5.44
1882	19,901,000	8,870,000	1 7.89	1888	13,538,000	5,562,000	1 4.89

101. Another illustration may, it is said, be found in the growth of the Indian cotton trade, both for home consumption and for export to the silver-using countries of the East. The stimulus to the Indian and the disadvantage to the English manufacturer are of the same nature as has been indicated above with regard to wheat. If the selling price in India of Manchester goods has undergone no alteration, the Indian manufacturer is in precisely the same position both as to cost of production and profits as before; but, as in the case of the Manchester manufacturer the gold price of goods has fallen, and he has not been able to effect a similar diminution in the cost of production, he is in a worse position.

The figures showing the growth of the Indian cotton trade are given in section 76, and need not therefore be reproduced here.

102. On the other hand it is contended—

(*a*) That international trade is in substance only barter, an exchange of commodities for commodities, and that the conditions of such a trade can not be affected, except to a very slight extent, by alterations in the value of the metals in which transactions are expressed. If those metals fall in value, more of them will be required in exchange for a given quantity of commodities; if they rise in value, less will be required. But the real value of the commodities, relatively to other commodities, will remain the same, or will be governed by independent consideration.

(*b*) That consequently the levels of prices in two countries having currencies of different values must adjust themselves to the relative value of the two metals, and that, at any rate, no appreciable difference can be permanently maintained.

(*c*) That until a relatively uniform level is reached in the two countries, there may be a certain advantage in trade in one direction or another, but that this is much less than is commonly supposed, and that its effects very soon disappear.

(*d*) That if the disturbance of the trade between England and India had been of the kind suggested, it would have resulted in a falling off of exports of goods to the latter country, and an increased export of silver in their place. But there is no evidence of either of these movements having taken place.

(*e*) That the arguments used above with regard to the effect of a change in the value of two metallic currencies are equally applicable to the case of a metallic currency and an inconvertible paper currency, in which the changes are frequently greater; and that consequently, if the reasoning be sound, the export trade of a country would be benefited by excessive issues of such paper.

(*f*) That any permanent bounty arising from a fall in exchange is impossible. As soon as prices have adjusted themselves to the altered condition of the currencies, any gain which might appear to be made in one direction will be balanced by a loss in another.

(*g*) That though the fall of gold prices does increase the burden of fixed charges on the English capitalist producer, and makes it difficult for him to secure the same rate of profit, yet this effect is independent of his having to meet the competition of producers in silver-using countries, and would exist equally if England had no foreign trade.

(*h*) That after taking account of the slight advantage obtained by the Indian producer owing to (i) the fall in exchange having been almost continuous, and (ii) the fact that the same nominal taxation does not in his case impose any heavier burden, and of the more serious disadvantage to which the English producer is put by his inability to reduce the cost of production in the same proportion as the selling price of his produce, the increase in the export of wheat from India can be sufficiently accounted for by the diminution in the cost of sea and land transport, the large area of production which has been made available by the extension of railways, and recent improvements in the methods of adapting the wheat for the English market.

The growth of the Indian cotton trade has been already dealt with in section 78.

(*k*) That if, as alleged, the Indian producer, while still receiving 20 rupees for his wheat, can purchase as much of other commodities as before, the price of such of those commodities as are capable of export to this country must have fallen in nearly the same proportion as the gold price of silver.

(*l*) That the English producer, or wage-earner, is only injured by the

fall in the price of his produce so far as other commodities have not fallen to the same extent, and that so far as this general fall has taken place he is in the same position as the Indian producer.

(*m*) That if the fall in the gold value of silver is due to a cause affecting gold, then it is to that cause and not to the divergence between gold and silver that the fall in gold prices is due.

But if the fall in the gold value of silver is due to causes affecting silver, then the effect of the fall must have been to keep up silver prices. Consequently if no such fall had taken place, the value of silver in silver using countries would have been greater, and silver prices would have been lower than they are; and the gold prices of articles of trade with silver-using countries would have been affected by silver prices just as much as they have been, with the difference that the change would have been exhibited in a fall of silver prices instead of in a fall in exchange.

(*n*) That the statistics of the export of wheat from India and the export of cotton goods from England do not support the theory that the volume of either trade is materially affected by the fall in the gold price of silver.

The export of cotton goods to India has steadily increased during the period in which the exchange has been falling; nor does it appear to have met with any check in the years when the fall in exchange was most marked.

The increased export of wheat from India during the same period may appear to give some support to the theory; but the variations from year to year are so great, and correspond so little with the course of the exchange, that other causes must have operated to a much greater extent; and the variations obviously arise largely from favorable or unfavorable seasons.

(*o*) That Indian wheat forms but a very small proportion of the total supply in the gold-using markets of the world, and is not sufficient in quantity to control the price in those markets.

III.—*Effect upon India.*

103. We now pass from considerations which are of general application to the commercial relation of all countries having different standards to the special case of India. The exceptional position of that country causes it to be affected in a special manner which we propose to treat separately.

While the metal forming its standard of value is silver, its political and, for the most part, its commercial relations are with a country having a gold standard.

Whilst its taxes are collected in silver, a substantial portion of its outgoings, including the payments which have to be made in this country, are necessarily disbursed in gold.

104. Of the above circumstances, the most important is the fact that the government of India has every year to convert a large portion of its receipts from silver into gold in order to meet its liabilities in England.

In practice this operation is effected by selling in London for gold bills payable in India in rupees. As these gold payments are, for the most part, fixed in amount, any fall in the value of silver necessarily compels the government to sell a larger quantity of bills, or, in other words, to pay a larger quantity of silver. It is this which constitutes its chief difficulty, for (*a*) it is always uncertain what additional number of rupees will be required in any one year, and all calculations of rev-

enue and expenditure are therefore open to serious modifications between the date when they are made and the date when they are realized; (*b*) it is extremely difficult, on political grounds, to increase the existing taxation; and (*c*) the increased amount of silver now required to discharge its gold liabilities imposes a burden upon the Indian taxpayer in respect of a considerable proportion of those payments.

105. The bulk of the gold payments which the government of India is under obligation to make fall under one or other of the following heads: (1) interest on debt, (2) interest on the stock of the guarantied railway companies, (3) expenses on account of the British forces maintained in India, (4) pensions and non-effective allowances payable in England, (5) the cost of the home administration, and (6) stores purchased in England for use or consumption in India. In order to show the effect of the fall in exchange upon the total amount of these remittances Mr. Waterfield has divided them into two classes according to the distribution laid down in our order of reference, namely (*a*) payments under old or fixed contracts, and (*b*) payments under new or current contracts.

106. As regards old or fixed contracts the actual sterling (net) payments in 1874–'75, the last year in which the average rate of exchange was above 1*s.* 10*d.*, were £11,704,953, and the number of rupees required to discharge this liability was 12,67,88,727. In 1885–'86 the actual sterling (net) payments were £11,321,979, and the number of rupees required was 14,88,58,141. At the rate of exchange current in 1874–'75, the same amount in gold could have been provided by an expenditure of 12,26,40,330 rupees, and the additional number of rupees required owing to the fall in exchange was consequently 2,62,17,811.

Under new or current contracts the sterling (net) payments in 1874–'75 were £3,339,968, equivalent at the then rate of exchange to 3,61,78,726 rupees. Owing to large payments received from railway companies in 1885–'86, the expenditure under this head in the latter year was less than the receipts by a sum of £311,996. Apart from these receipts the actual payments were £4,331,074, which would have required 5,69,43,722 rupees; at the rate of exchange of 1874–'75, the same payment would have been liquidated for 4,69,14,443 rupees, showing an increased charge owing to the fall in exchange of 1,00,29,279 rupees.

Owing, however, to the receipts above mentioned the actual sterling payments under the two heads together were only £11,009,983, and the number of rupees required was 14,47,56,107.

To provide the same amount of gold in 1874–'75 would have required 11,92,60,770 rupees, showing a difference due to the fall in the exchange of 2,54,95,347 rupees.

The effect on the finances of the government of India will perhaps be seen more clearly by considering that a fall in the value of the rupee from 1*s.* 6*d.* to 1*s.* 5*d.* would in the year 1886–'87 have made it necessary for the government of India to find an additional sum of at least 11,000,000 of rupees. A fall from 1*s.* 5*d.* to 1*s.* 4*d.* would have had a greater effect, and a fall from 1*s.* 7*d.* to 1*s.* 6*d.*, a somewhat less effect.

107. It is, however, pointed out—

(*a*) That the real burden of the increased charge shown to have been imposed on the Indian exchequer by the fall in exchange is limited to that portion of it which represents payments contracted to be made before the fall in exchange commenced, or when the fall was not so great as it has since become.

(*b*) That consequently no loss can properly be said to arise from the bulk of the payments which fall under the head of "new or current

contracts." If a larger number of rupees is required to represent a given quantity of gold, that quantity of gold will purchase a larger quantity of commodities than before. In the case of many commodities required by the government of India the gold price has fallen even more than the gold price of silver; and in such cases the same number of rupees will purchase a larger quantity of commodities than before.

(*c*) That even in the matter of payments under "old or fixed contracts," the position of India is no worse than that of any other country which has contracted a permanent gold debt. The fall of gold prices, if due to a scarcity of gold, has increased the burden of all contracts to pay a fixed quantity of gold; and it is immaterial whether the gold has to be purchased by a larger quantity of commodities or a larger quantity of silver.

(*d*) That in the case of India there can be little doubt that this debt, the burden of which is complained of, has been incurred for useful purposes, and has increased the productive capacity and the wealth of the country, thus making it as well able to bear the burden of taxation as it was before the fall in the value of silver took place.

108. The difficulties of the government of India consist, however, not only in the additional number of rupees which it is compelled to find from year to year in order to discharge its gold liabilities, but in the uncertainty caused by the fluctuations in the rate of exchange, which makes it impossible to forecast with any accuracy its future expenditure.

The following table shows the rate of exchange estimated in the budget, the rate actually realized, and the additional expenditure caused, or the saving effected by the divergence, since 1874–'75:

Year.	Rate of exchange estimated in the budget.	Rate actually realized.	Difference.		Year	Rate of exchange estimated in the budget	Rate actually realized.	Difference.	
			Excess.	Saving				Excess.	Saving.
	s. d.	*s. d.*	*Rupees.*	*Rupees.*		*s. d*	*s. d*	*Rupees.*	*Rupees.*
1874–'75	1 10.375	1 10.156	15, 91, 764	.....	1881–'82	1 8	1 7.895	10, 17, 482	.....
1875–'76	1 9.875	1 9 626	19, 57, 917	.....	1882–'83	1 8	1 7 525	37, 46, 890	.....
1876–'77	1 8 5	1 8.508	.....	76, 736	1883–'84	1 7 5	1 7.536	.....	3, 62, 902
1877–'78	1 9 23	1 8.791	38, 43, 050	.....	1884–'85	1 7.5	1 7 308	18, 97, 307	.....
1878–'79	1 8.4	1 7.794	56, 87, 129	.....	1885–'86	1 7	1 6.254	56, 82, 638	.....
1879–'80	1 7	1 7.961	.....	84, 40, 737	1886–'87	1 6	1 5.441	65, 17, 721	.....
1880–'81	1 8	1 7.956	4, 24, 722	.....	1887–'88	1 5⅝	1 4.898	71, 90, 097	.....

It will be observed that during the above period the actual rate exceeded the estimated rate in only three years, and that on the whole the effect of the fluctuations was to cause a considerable increase in expenditure over what had been anticipated when the financial arrangements of the year were made.

109. Reference has been made in a previous paragraph to the difficulty of attracting capital to silver-using countries, owing to the reluctance of capitalists to invest in securities, the return on which they are unable to calculate with certainty.

This consideration applies with special force to the case of the government of India, with whom it necessarily lies to take the initiative in any scheme of public works for the better development of the country.

The form of investment which native capital has adopted from time immemorial is hoarding, and though there may be some tendency to invest in the securities offered by the government, it has made but slow progress, and since the divergence between the value of gold and silver

first manifested itself the inducement to hoard the more valuable metal has rather increased.

In former times, when the relative value of the two metals was more stable, the government were able to raise loans, both capital and interest being payable in silver; and the terms on which they were raised were about the same in Calcutta and London. The price of 4 per cent. rupee paper in 1873 varied between 101¾ and 105½ in Calcutta, while the price of the 4 per cent. sterling stock in London was from 101 to 106. But in 1887 the former security was from 95¼ to 99⅞, while the 3½ per cent. sterling stock in London varied between 100¼ and 104, or but very little below the 4 per cent. stock fourteen years before.

110. Of the three sources of embarrassment to the government which we have indicated above, perhaps the most serious is the uncertainty which must necessarily attend all the calculations on which their financial arrangements for the future are based.

Apart from any question of exchange, both the revenue and expenditure in India are from various causes, it is said, more subject to fluctuations and uncertainty than is the case with European states generally.

But in addition to these contingencies an unexpected fall in the value of silver may involve a loss of revenue which could not have been foreseen when the financial arrangements of the year were made, and this difficulty would be aggravated in the case of arrangements extending over many years. The extent of the inconvenience thus caused may be inferred from the figures given in section 108.

Even if the precise limits of the fluctuations could be foretold with greater accuracy, neither revenue nor expenditure could be made to accommodate itself to variations of such magnitude. For it would be difficult to impose and remit taxation from year to year without causing great discontent among a population who are unaccustomed to changes in their fiscal arrangements, and to whom it would be difficult to explain the circumstances which had rendered the changes necessary.

111. Grave objections are also entertained to progressive increases of taxation to meet either unexpected fluctuations or a continued fall in exchange. A large portion of the revenue generally is inelastic and not easily increased. The land revenue, from which source is derived nearly one-half of the net receipts of the government, has been fixed on a silver basis, in some cases in perpetuity and in others for long terms of years.

The salt tax has been increased since the commencement of our inquiry, and we are told that it would be difficult to raise much additional revenue from this source. The opium receipts are of a very precarious nature, and have shown a tendency to fall off in recent years; and it is stated that it would be difficult to find any available branch of the Indian revenue which could be relied upon to bring any large addition to the exchequer.

112. Another interest to which our attention has been directed is that of the European employés of the government of India. They receive salaries paid in silver, and calculated with some regard to the cost of living in India, and to the necessity imposed upon them of remitting home a certain proportion of their incomes. So far as their incomes are spent in India or are devoted to the purchase of commodities, the gold price of which has fallen as much as that of silver, they do not sustain any loss. But on a large proportion of their remittances to Europe they derive no benefit from the fall of gold prices, as the fall has affected wholesale more than retail prices, and has not affected at all many of the prices in which they are interested.

In reply to this it is pointed out that the loss sustained by the servants of the government in connection with their remittances is a matter for discussion and settlement between themselves and their employers. If the salaries of the Indian officials do not represent as much real remuneration as before, the government will ultimately be compelled, by the same forces which settle the market value of all other commodities, to increase their salaries.

113. The above allegations relate to matters affecting only the government of India as a government and its employés. The country in its commercial intercourse with other countries is subject to the same disadvantages and disturbing influences which affect the international trade of silver-using countries generally with gold-using countries, and which have been described above.

On the other hand it is urged—

(*a*) That with the exception of the European employés of the government no class in India can be shown to have suffered by the fall in exchange; that, on the contrary, those interested in exports would appear to have gained some advantage by the stimulus given to their several industries, and those interested in imports have secured the benefit of the fall of gold prices which has taken place in Europe.

(*b*) That consequently the people of India are as well, if not better, able to bear the increased burden of taxation rendered necessary by the fall in the value of their currency.

(*c*) That if and so far as silver has fallen, silver prices are higher than they would have been without that fall, and in that case the fall in silver, if it has added to the sum which the Indian government have to raise by taxation in order to pay their gold debt, has lightened the burden which, but for that fall, would have rested on the Indian taxpayers.

REMEDIES PROPOSED FOR EVILS ABOVE DESCRIBED.

114. We have now enumerated the principal allegations which have been made with regard to the evils or inconveniences resulting from the disturbance in the relations between the two precious metals.

115. Reserving until a later portion of our report the expression of our own opinion as to the magnitude and importance of these evils, we will next proceed to state the remedies which have been proposed to meet them, and we shall for our present purpose assume that they have been proved to be of a sufficiently serious nature to require a remedy.

A reference to the preceding paragraphs of our report will show that the element of disturbance on which the principal stress is laid in connection with all the evils which have been alleged is the want of fixity in the relation between the two precious metals.

The remedy which has been put before us most prominently and as most likely to remedy the evils complained of to the fullest extent possible is that known as bimetallism.

BIMETALLISM.

116. A bimetallic system of currency, to be completely effective, must, in the view of those who advocate it, include two essential features: (*a*) An open mint ready to coin any quantity of either gold or silver which may be brought to it. (*b*) The right on the part of a debtor to discharge his liabilities, at his option, in either of the two metals at a ratio fixed by law.

It is urged that, though such a system might under certain conditions be established in one or more countries independently, the maximum amount of advantage would not be derived from it, unless it were adopted by international agreement between the principal commercial countries of the world.

117. We propose to consider the subject under the following heads:

I. The effects which would be produced by such an arrangement if carried out.

II. The possibility of carrying it out as proposed.

III. The consequences which will result if no steps are taken to restore stability in the relative value of the two metals.

I.

118. It is asserted that if a sufficient number of the principal commercial nations of the world were to agree upon an arrangement such as that described above, a stable relation of value between the two metals would be secured, or that at any rate the variations in that relation would be confined within very narrow limits.

If the possessor of any quantity of silver could, by taking it to the mints, have it converted into coin available as legal tender at a fixed ratio with gold, he would never part with it except at a gold price closely approximating to the value represented by that ratio. The variations in the gold price of silver would therefore be scarcely appreciable.

119. On the other hand, it is contended that inasmuch as the supply of each metal, the demand for non-monetary purposes, and the cost of production, vary from time to time, and the relative value of the two metals must depend in the main upon the action and reaction of these factors, no conventional arrangement such as that suggested could prevent their operation. Experience proves that if two metals or two kinds of money are available for the discharge of debt, the metal which is relatively cheaper will be preferred, and the metal which is relatively dearer will disappear from circulation.

If, for example, in a particular country the relative value at which gold and silver exchanged in the open market was as 20 to 1, and the legal ratio were fixed at 15½ to 1, no gold would be taken to the mints. Those who possessed gold would sell it for silver at the market rate and bring the silver to the mints for coinage; all the gold in the form of coin would be melted down for use in other ways, and the currency of the country would consist of silver alone.

If the same legal ratio were fixed in several important commercial countries, the effect would be the same, though less in degree; and the effect could only cease if all the commercial countries of the world adopted complete bimetallism.

120. To this it is replied that, on the assumption of an international agreement between the principal commercial countries, the effects of a bimetallic system so established would be universal, and there could not be any appreciable difference between the relative value of the metals in the open market and their legal ratio. On this hypothesis the demand for gold for purposes of currency from the other countries of the world could not be considerable; and consequently the only purpose for which the gold could be required in considerable quantities would be for industrial use or for hoarding; and the demand for these purposes when compared with the annual production and the existing stock of the metal would not be sufficient to cause it to disappear from circulation.

121. It is further urged that the proportion between the existing stocks of the two metals and the probable conditions of their future production are such as to render it extremely unlikely that gold would ever cease to circulate, or that any serious disturbance of the equilibrium would occur at any ratio which is likely to be adopted.

122. It is admitted that no international arrangement would be likely to include all the countries of the world; but it is pointed out that on the assumption that the principal commercial countries were parties to it, the countries outside the Union could only withdraw gold from those inside it by sending commodities in exchange for it, and that the international trade with such countries would not be of sufficient importance to make it reasonable to expect that any substantial impression could be produced in this way on the stock of gold existing within the bimetallic area.

123. In support of the view that a fixed ratio can be effectively maintained over a long period, attention is called to the steadiness in the relative value of the two metals which was maintained from the beginning of this century down to the date when the coinage of silver was suspended by the Latin Union in 1874. Since 1874, on the other hand, the price of silver has on the whole fallen considerably, and has also been subject to constant variations.

In sections 19 and 21 figures are given showing the relative value of the gold and silver produced over a considerable number of years prior to 1874, together with the relative value of the two metals in the market; and similar information for the period since that date. These figures, it is urged, show that the existence of the legal ratio in France during the first seventy years of the century was sufficient to maintain the market ratio in conformity with it, notwithstanding very large variations in the quantities of the two metals raised from the mines; but that when the operation of the legal ratio ceased to have its effect, a change in the relative market value of the two metals speedily manifested itself.

124. On the other hand, it is contended that the stability which was maintained during the first seventy years of the century was due to accidental causes, which enabled the bimetallic system to be maintained; and that the final result would not have been materially different had no bimetallic law been in existence.

It is said that—

(*a*) Down to the time of the great gold discoveries the conditions of the supply of, and demand for, the two metals were such as would of themselves tend to keep their relative value nearly uniform.

Had silver been produced in increasing quantities in the earlier part of the century the ratio would have been powerless to prevent its falling in value, as there was no gold in the country which could have given place to the increased supplies of silver; and the operation of the ratio can only be effective in maintaining the relative value of the two metals when there is, within the bimetallic area, a sufficient stock of both. Down to the year 1846, therefore, the ratio was maintained by causes independent of the bimetallic law.

(*b*) At the time when the increased supplies of gold began to be placed on the market the French currency had ceased to be bimetallic, and practically was composed of silver only. The large influx of gold altered the relative values of the two metals; gold became overvalued in the ratio and silver undervalued. The latter metal was consequently withdrawn from France for export to the east and other places, and the deficiency in the French currency was supplied by the overvalued

gold. To this extent the bimetallic system prevented a serious fall in the value of gold which could not otherwise have been avoided. But it is pointed out that this result was mainly due to the fact that the French currency was not, at the time when the disturbance in the ratio was threatened, on a bimetallic but on a monometallic basis. France, instead of having a stock of both metals circulating at the legal ratio, had a large stock of the undervalued metal only, and the overvalued metal was poured in to take its place. If she had had a large stock of the latter already in the country the operation of the bimetallic system could not have taken place. Conversely, when the supply of silver began to increase, her currency was almost exclusively composed of gold, which she was able to dispose of in order to meet the demands of Germany and other countries, replacing it again with the cheaper metal, which at this time was silver.

Thus, her monetary system, instead of being bimetallic, happened, whenever the compensating action of the ratio was called into play, to consist almost entirely of the metal which was the cheapest for the time being.

In support of this view the following figures are quoted:

Coinage of gold and silver in France between the years 1816 *and* 1880.

Years.	Gold	Silver.	Years	Gold.	Silver.
1816–'20	£9, 758, 000	£4, 970, 000	1851–'55	£63, 346, 000	£7, 159, 000
1821–'25	2, 329, 000	17, 632, 000	1856–'60	108, 027, 000	3, 333, 000
1826–'30	1, 470, 000	25, 160, 000	1861–'65	38, 337, 000	875, 000
1831–'35	4, 131, 000	32, 881, 000	1866–'70	47, 733, 000	17, 010, 000
1836–'40	2, 949, 000	15, 241, 000	1871–'75	12, 376, 000	13, 704, 000
1841–'45	797, 000	15, 166, 000	1876 '80	25, 819, 000	2, 838, 000
1846–'50	6, 472, 000	21, 556, 000			

It will be observed that from 1816 to 1820 the coinage of gold exceeded that of silver, that from 1821 to 1850 the coinage of silver exceeded that of gold, and that since the latter date gold has again been the metal chiefly brought to the mints.

(*c*) The stability of the ratio was only nominal, as one of the two metals was, in actual practice, generally at a premium.

From 1820 to 1847 there was constantly a premium on gold, which was nearly always as much as 1 per cent., and occasionally rose to as much as 2 per cent. Any increase in the supply of silver would of course have increased this premium.

125. To this it is replied that the premium never exceeded very small proportions and only applied to a limited number of transactions in which gold was required for special purposes, such as export; that for the ordinary transactions of the country there was always a sufficient supply of either material; that as matter of fact both gold and silver were brought to the French mint and coined * in every year except in 1871 and 1872, when no gold was coined; that throughout the period in question, gold and silver coins were accepted for all practical purposes at the ratio fixed by the law; and that the efficacy of the bimetallic ratio is proved by the fact that an immense increase in the supplies of gold produced no sensible disturbance in the relative value of the two metals.

126. It is also pointed out that at the present moment in the United

* In the year 1860 no 5-franc pieces were coined, but silver coins of other denominations were issued to the value of £321,000.

States upwards of £55,000,000 of silver dollars or silver certificates are circulating side by side with gold and are accepted in payment of all debts as equivalent to gold, though the intrinsic value of the silver dollar is not more than 70 per cent. of the value of a gold dollar.

Similarly in Holland, where the standard is gold and the coinage of silver is suspended, a currency of about £30,000,000 is maintained at a gold value, concurrently with a gold circulation.

These two cases, it is said, are proofs of the possibility of maintaining a legal ratio between the two metals as coin, permanently differing from the market ratio, without the dearer metal being driven out of circulation, or commanding a premium.

127. On the other hand, it is contended that the illustration is in both cases rendered inapplicable by the limitation of the coinage of silver. In the United States no more than $48,000,000 can be coined in the year, and as matter of fact the coinage has not amounted to more than $30,000,000 annually during the last ten years; while in Holland there has been no silver coined since 1875.

The silver coins circulating in both countries are, therefore, for practical purposes, only tokens. If they could be coined to an unlimited extent they could not fail to drive out the gold, which would be taken by foreign countries.

It is also said that the condition of the currency in the United States is only possible because the course of trade has induced a flow of gold to that country, and that if the flow of gold were in the other direction that metal would soon be at a premium.

128. In reply to this it is pointed out that, on the hypothesis of an international agreement for bimetallism, the silver would be equally available for export, and that in such a case no reason would exist for a drain of gold rather than a drain of silver.

129. It is argued that as the production of silver has increased of late years, and the production of gold diminished, notwithstanding the increased value of the latter relatively to the former, the process is likely to continue, and that therefore it would become increasingly difficult to maintain a fixed ratio, even if the existing market ratio were adopted, as the effect would be to stimulate the production of silver, and to discourage the production of gold.

The result would be in a short time to drive gold out of circulation, and to leave silver as the only metal available for currency throughout the world; while if a ratio of 15½ or 16 to 1 were adopted, the stimulus to an increased production of silver would be far greater and the maintenance of the ratio more difficult, thus accelerating the period when silver alone would be found in circulation.

130. In reply to this it is said—

(*a*) That there are no grounds for supposing that in any period, however remote, the relative value of the two metals in the market, as compared with the legal ratio, could be so different as to drive out of circulation the whole of the gold now existing as coin or used for monetary purposes. Such a hypothesis would involve the absorption for other purposes of the existing stock, roughly estimated at £900,000,000, and the annual production of about £20,000,000. On the other hand, those who consider that gold might, under these circumstances, cease to be used for circulation, do not contemplate that it would be demonetized, and it might therefore still be held by Governments and by banks as a reserve.

(*b*) That if such a hypothesis were admissible, it would follow that if the metals continue to be used as standards of value separately,

very great divergence in the relative value must occur; that such divergence would involve greater evils than the disappearance of one of the metals from the currency under a bimetallic system; and that the disappearance of one of the metals from the currency of the world under a bimetallic system would not of itself be productive of any serious evils.

(*c*) That the economic laws which regulate the production of other commodities do not appear to operate to the same extent in the case of the precious metals. Their production is of a specially speculative character, and is frequently commenced or continued with very doubtful prospects of a profitable return. The quantity of either metal produced appears to depend much more largely on the accident of the discovery of new sources of supply; and it is to be observed that the supply of gold has fallen off throughout the last few years when its purchasing power was rapidly increasing, while the supply of silver has continued to increase, notwithstanding the fall in its value relatively to gold.

131. It is stated by the opponents of bimetallism that the question is argued as if the only demands for gold and silver were demands for the purpose of currency, and that this is very far from being the case. Statistics are confessedly imperfect, but, so far as they go, it appears that the demands on the precious metals for purposes of ornament, of industry, or of hoarding already absorb something like half of the annual production, and are increasing constantly. Over these demands, it is said, mint legislation can exercise no influence. If they stood alone, no one, it is urged, would think it possible to restrict their natural operation by any artificial tie between the two metals; and as matters really stand, any effect which such an artificial tie might have would, it is said, be liable to be defeated by the demands for other purposes.

132. To this it is replied—

(*a*) That industrial demands for gold and silver existed during the period anterior to 1873, during which period there was no material disturbance in the relative value of gold and silver.

(*b*) That an increased demand for one metal for non-monetary purposes of any kind would simply produce the same effect upon the ratio as a diminution in the supply of that metal from the mines, or an increased supply of the other.

(*c*) That currency demands still preponderate over other demands, and are likely to do so.

(*d*) That so far as experience goes, the increased demand of late years for purposes other than currency has been for gold rather than silver, the effect of which the adoption of bimetallism under present circumstances would tend to counteract.

133. It is also urged by the opponents of bimetallism that it attaches too much importance to the law of legal tender, and too little to the habits and feelings of mankind; that the adoption of gold as the single standard of value and as the chief material of currency is not the result of arbitrary legislation; but that it has originated in natural convenience, in voluntary preference, and in habit, and that it has consequently been sanctioned by legislation. It is further urged that under such circumstances it is quite possible that men of business may, notwithstanding a law making silver as well as gold legal tender, require contracts to be made in gold exclusively, and thus give gold a practical value very different from the legal ratio. The mode in which, according to Lord Liverpool, our own gold standard was introduced;

the history of the adoption of gold by the United States, Germany, France, and Italy; the example of California and of gold contracts often made with paper-using countries, all points in this direction. Legislation, it is said, which is contrary to the general current of human dealings is not likely to be successful.

134. To this it is replied by bimetallists that men's dealings tend to conform to their interests; that under a legal system of bimetallism it would not be to the interest of either debtors or creditors to insist upon paying or receiving one metal rather the other, except under special circumstances not likely to be of frequent occurrence; that the instances of supposed natural preference for gold have been misstated or misapprehended; that Lord Liverpool was not a contemporary witness of the change from silver to gold to which he refers, and that his account of the causes which led to that change was contradicted by Ricardo, in 1816; and that a great mistake has been made by modern legislators, who have forced gold upon the people to the exclusion of silver, where under earlier and more wholesome systems both metals would have been equally available.

135. We have so far dealt with the views held as to the effect which would be produced on the relative value of the two metals themselves by the establishment of a bimetallic system of currency.

It remains to consider whether and how far such a system, if carried out, would remedy all or any of the evils which are said to be caused by the existing relations between the two metals.

For this purpose it must be assumed that one effect of a bimetallic system would be, as claimed by its supporters, to preserve a fixed ratio between gold and silver, if not permanently, at least for a long period of time, or to confine the variations in their relative value within such narrow limits as practically to make them of no consequence.

136. It may be convenient here to repeat that the evils which are said to result from the existing relations between the precious metals are of a twofold character.

There are inconvenient fluctuations in their relative value, and there has been a considerable fall in the gold price of silver.

It is contended that all the evils now caused by *fluctuations* in the relative value of gold and silver would be removed.

The par of exchange between gold-using and silver-using countries would again become stable, as it was prior to 1873, and the inconveniences which are inseparable from trade carried on between two countries having different metallic standards would be reduced to a minimum.

Trade would, it is said, return to its natural channels, and cease to be subject to the abnormal influences which now affect it prejudicially.

137. In the second place, it is urged that the maintenance of a fixed ratio would tend to prevent any further general fall in prices. To whatever extent the fall of gold prices is due to the displacement of silver by gold, or to the diminished production of the latter metal relatively to the demands upon it, it would be counteracted by the re instatement of silver in those countries where its use as a standard metal has been abandoned. Prices would consequently tend to rise, or at any rate cease to fall.

If the ratio adopted were higher than the existing market ratio, then, in so far as the causes above mentioned have operated on prices, the effect of the change would be proportionately greater. The rise would be more certain and more considerable.

138. If, and in so far as, the gold prices of commodities produced in or exported to silver-using countries have been reduced by the fall in the gold price of silver, as maintained in the argument developed in section 88, the establishment of a fixed ratio between the two metals would prevent further changes from the same cause if the existing market ratio were adopted; but the existing situation and the fall already produced would not necessarily be affected. If the ratio adopted were that in force prior to 1873, the prices of these commodities would tend to rise to the extent to which they have been depressed by the cause above referred to; and the evils which have flowed from such fall in prices, and which are described in section 94, would be removed.

139. But it does not follow, even on the hypothesis that the gold prices of commodities have been reduced by the fall in the gold price of silver, that they would regain their former level, as they would always be subject to influences of the same nature originating in countries with a depreciated paper currency.

The suggestion is that the fall in the gold price of silver has, through the more advantageous position of the producer in silver-using countries, caused a fall in the price of the commodities which he produces, and that a similar process would take place in the case of any country with a paper currency depreciating in relation to gold, and thus the competition of producers in these countries might prevent the gold price of commodities rising, notwithstanding a rise in the gold price of silver.

For example, the production and export of Russian wheat has, it is said, been greatly stimulated by the same cause which has operated upon the production and export of Indian wheat, namely, the depreciation relatively to gold of the currency of the country, which, in the case of Russia, is inconvertible paper, now about 35 per cent. below its nominal value.

If the gold price of Indian wheat is affected by the fall in the gold price of silver, the gold price of Russian wheat must, it is said, follow the fall of the paper rouble; and no fixity in the relation between silver and gold would affect the prices which depend upon an inconvertible paper currency.

If the paper rouble continued to fall it would tend to lower the metallic price of the Russian wheat exported, and consequently the price of all other wheat.

So, again, if the gold price of the goods exported from Lancashire to India has been lowered by the fall in the value of silver, owing to the Indian purchaser being able to give only the same silver price (or a lower gold price) for them, then if the gold price of Indian produce did not advance *pari passu* with the advance effected by the establishment of a fixed ratio, neither would the gold price of the commodities exported to India so advance.

140. If, and in so far as, an appreciation of the gold standard has arisen from the disuse of silver, the evils arising from the disturbance of contracts extending over a period commencing prior to the changes which we have been considering would be counteracted by the restoration of silver at the old ratio to its former position as a standard metal; but, on the other hand, all contracts made for a term of years since the appreciation commenced would be disturbed to the same extent.

141. The advantages which would flow from a standard possessing the maximum amount of stability would, it is said, be secured by having the two metals linked together at a fixed ratio. Any variation in the value of either metal, instead of operating as at present on that metal alone, would, on the hypothesis of a bimetallic currency, operate

upon the whole mass. The effect of the variations would therefore be much less intense.

It is improbable that the variations in the supply of either gold or silver would be simultaneously in the same direction. An increase in one might often be accompanied by a decrease in the other; and the volume of the currency would thus be maintained in equilibrium.

142. It is also suggested that a bimetallic system would facilitate the resumption of specie payments by countries such as Russia, Austria, and Chili, whose currency largely consists of incontrovertible paper based on silver.

143. In preceding paragraphs we have stated the extent to which, in the view of its supporters, the proposed remedy would counteract or modify the evils of the existing systems.

Those, on the other hand, who are in favor of maintaining the *status quo* in this country contend that the proposed remedy would itself cause other evils which are demonstrably equal to, or greater than, those which have been proved to exist.

Their objections divide themselves into two classes, (i) those relating to the adoption of the bimetallic system in principle, (ii) those which are directed against one or other of the several ratios recommended for adoption.

144. Under the first head it is asserted—

(*a*) That the United Kingdom, and more particularly London, is, and has been for many years, the financial center of the world. Transactions having no other relation with the actual commerce of the country are settled by means of agencies in London, which thus derives great pecuniary benefit from this position.

This supremacy arising, it is maintained, in a great measure from the knowledge that a debt payable in London will be discharged in a definite quantity of a certain metal which can always be readily obtained there by those entitled to it, would be endangered by the adoption of bimetallism with the uncertainty necessarily accompanying any system which allows to a debtor a choice of alternatives for the discharge of his liabilities.

On the other hand, it is denied that this supremacy would be endangered by the adoption of bimetallism, inasmuch as a sufficient explanation of England's position is to be found in the confidence imparted by her insular position, her comparative immunity from wars and other political troubles, the magnitude of her commerce, and the reputation of her merchants and bankers.

It is also said that, so long as a debt payable in London could be discharged in metal freely coined into money throughout the world, England's position as a financial center could not be injuriously affected.

(*b*) That the actual uncertainty caused in the present by an important monetary change would be enhanced by the apprehension of further changes in the future; and that there are scarcely any material advantages which would compensate for the evils arising from the want of confidence which would thus be engendered.

To this it is replied that with the exercise of proper care and a conviction on the part of the public that the change was well considered and final, no apprehension need be excited; and that in any case the disturbance so caused would be of a temporary character.

(*c*) That injustice would necessarily be done to creditors if a debtor were allowed to select one of two metals in which to discharge his debts. He would naturally choose the metal which happened for the moment to be depreciated, and would therefore gain an advantage which could

not be contemplated or allowed for at the time when the liability was incurred. England, also, as a creditor country, would suffer specially by the change, and other countries would benefit at her expense.

To this it is replied that a bimetallic system, if adopted internationally, as proposed, would preclude the possibility of either metal becoming depreciated relatively to the other, except within such very narrow limits as to be practically unimportant.

(*d*) That silver, owing to its greater bulk and weight in relation to its value, has disadvantages as compared with gold, both as a medium of exchange and as a means of storing value.

To this it is replied that, under the existing systems of the principal commercial countries, but a small proportion of payments is made in either gold or silver; and that under a bimetallic arrangement transactions would be carried on, as at present, by means of checks, bank notes, and other substitutes for coin. Gold and silver would probably continue to pass current much as they do now, and if there should happen to be a large excess of silver coined as compared with gold, notes of smaller denominations might be issued to meet the difficulty.

In many countries all debts can at the present moment be discharged in silver or gold at the option of the debtor; but no practical inconvenience arises from this fact.

The opponents of a bimetallic system rejoin that, on the hypothesis of a serious depreciation in the value of one metal, the other might be driven out of circulation altogether and cease to be available for the purposes for which it is now required and used; and they point out that in the countries where the debtor may now pay his debts in either gold or silver, a complete system of bimetallism does not exist, as the mints are not freely open to both metals.

145. Finally, it is alleged that the arguments on the subject of bimetallism being founded on various hypothetical premises which in the present state of our knowledge are unverified and incapable of verification, the conclusions and practical results must also be extremely uncertain; and that this uncertainty is in itself a sufficient reason for not making a fundamental change in things so delicate and so important as currency and the standard of value.

To this it is replied that, though the conditions at the present time may not be precisely the same, sufficient experience has been acquired by an investigation of the working of bimetallism prior to 1873 to justify a conclusion as to the effect which would now be produced by the adoption of such a system.

It is also said that as changes of some sort appear to be inevitable, it is desirable that they should be made deliberately, and that the different nations interested should act in concert.

146. Passing next to the objections which are connected with the particular ratio that might be adopted, it is contended that if the ratio actually existing in the market between the values of the two metals were adopted, or some ratio approximating thereto, most of the evils which are alleged to have been caused by the fall in the value of silver would be perpetuated, and that in the case of India such a measure might create a serious obstacle to the prosperity of the country, owing to the increased burden of its gold debt being made permanent.

On the other hand, it is urged that, so far as the general interests of India are concerned, the advantages to be gained from stability and the increased certainty which would attend the financial arrangements of the Government would amply compensate for any evils arising from the cause above indicated.

147. It is further argued that even if the adoption of the existing ratio did not produce any permanent effect upon prices, it might, by inducing the belief that it was likely to result in an expansion of the currency, cause a temporary rise; and that if it stimulated the production of silver, unless at the same time it discouraged the production of gold, it would tend to raise prices permanently, and so act injuriously upon the interests of creditors and consumers.

To this it is replied that the settlement of the relations between gold and silver used as standards of value is of such importance as to justify some sacrifice being incurred, if necessary, for that purpose. If silver, when freely coined into money throughout the world, will so depreciate as to produce injurious consequences, it will depreciate still more if used only in a limited number of countries, and the probable attempts of these countries to change from the silver to the gold standard would aggravate the mischief and give rise to evils of still greater magnitude.

148. If the ratio of 15½ to 1 were adopted, which is that in force in the Latin Union, or that of 16 to 1, which is the ratio in the United States, it is apprehended that there would be a flow of silver from the countries which now hold stocks of that metal, and that the mints of the other countries forming the Bimetallic Union would be flooded with it, while the countries possessing silver would benefit at their expense.

It is however denied that there are any considerable stocks of silver which would be available for this purpose, those already in existence being used and required for purposes of currency in the countries in which they now are.

149. It is urged that if, in consequence of deficiency in the supply of gold, or of new demands upon the existing supply caused by the legislation of other nations, gold has appreciated and the prices of goods have fallen, England as a country to which large gold debts are due must be deriving advantage from the change, since she must receive from other countries in payment of interest on her gold debts a larger quantity of goods, or money which will buy more goods, than she would otherwise have received, and that if under these circumstances a change were introduced which tended to cause the depreciation of gold or the raising of gold prices, a serious injury would be done to the general interests of the country.

The rejoinder to this argument will be found in section 96 (*k*).

150. Any advantage now gained by some classes in the country owing to the fall of prices would also, it is said, be neutralized. Prices would rise, and since, as has been already pointed out, wages do not respond immediately to movements in the level of prices, the wage-earning classes would suffer. The process of adjustment, which has been going on since the fall in prices commenced, would begin in the opposite direction, and all the friction produced by it would be repeated.

To this it is replied that wages respond more readily to upward than to downward movements in the level of prices, and that, until a real stability of the standard is attained, the process of adjustment and the consequent friction among the different interests concerned must be going on in one direction or another, and that the advantages of a stable standard would amply compensate the country for either the temporary friction necessary for the final adjustment, or the permanent loss of the profit which is said to arise from the debts due to it by foreign nations.

151. The extent to which the adoption of a ratio making silver more valuable as compared with gold than at present would affect prices, is a question which depends upon the view taken of the effect of the volume

of the currency upon prices, and the argument set forth in sections 58 and 59.

But it is said that, even if those who entertain the view that monetary changes have been the most potent factor in producing the fall of prices in recent years be mistaken, the fact that such a belief is entertained by a large number of persons would be likely to foster speculation, and thus produce, if only temporarily, a rise of prices which might attain a high level.

152. If, and so far as a rise of prices resulted from the restoration of silver to its former relation with gold, debtors would benefit at the expense of creditors, and, on the assumption that the rise of wages would be slower than the rise of prices, the wage-earning classes would suffer most; but it is suggested as probable that there would not be a long interval between the rise of prices and an upward movement in wages.

It is urged that it would be unjust to make a deliberate change in the conditions of all existing contracts by a direct act of the legislature, and so give an advantage to one class in the country at the expense of another.

153. To this it is replied—

(*a*) That those who have gained by the changes in the value of the precious metals have gained by accident, and not from causes due to their own foresight or calculations.

(*b*) That the injury caused by the change would be of a temporary character only, while the change would itself produce permanent benefits of much greater extent.

(*c*) That the right of the State to make alterations in its currency laws can not be disputed, and that all contracts must be assumed to have been made subject to this risk.

(*d*) That if the change is necessary in order to place the currency of the country on a satisfactory basis, the State is justified in making it, even though incidentally it may have an injurious effect upon the interests of some individuals or classes, and that such disadvantages are of less moment to the community at large than the adoption of a standard of value possessing the maximum of stability.

154. To revert to the former ratio would also, it is said, have a specially prejudicial effect in the case of India.

If the effect of bimetallism at that ratio should be to appreciate silver and cause silver prices to fall, or if the gold price of Indian produce did not rise to the same extent as the gold value of silver was raised, the Indian producer would for the same amount of produce receive less silver, whilst he would, subject to the reduction of taxation which would be caused by the advantage gained by the Government as regards its gold payments, have to pay the same amount of rent and taxes as he now pays. In this way a burden would be thrown on the Indian producer.

He would also be deprived of the advantage which the continued fall in exchange is alleged to give him in competing with other countries.

It is also said that, if it be true that the gold price of the commodities produced in India has fallen in response to the fall in the gold price of silver, it does not follow that the reverse process can be counted on. Where there is an increasing production of any commodity and competition for its sale, the process of reducing price is more easy than that of raising it. It is possible, too, that in competing for the sale of produce with Russia, or any other country whose currency depreciates, the Indian producer might, in order to secure a sale, be compelled to take the same gold price as at present. This would be equivalent to a lower

silver price, and might, it is alleged, produce serious results to the trade of the country.

155. On the other hand, it is urged that it is very improbable that the gold price would not rise if the volume of currency in the gold-using countries was increased by the restoration of silver to its former relation with regard to gold; and that in so far as prices fell in India, consumers and the wage-earners (so far as they are paid in money) could obtain those advantages which are said to have accrued to the corresponding classes in England from the fall in gold prices.

II.

156. We will pass next to the questions which have been raised as to the practicability of (*a*) inaugurating and (*b*) maintaining such an agreement as that which is proposed between the chief commercial nations of the world.

It is said on the one hand that France and the United States would be unwilling to agree to an arrangement based on the ratio at present subsisting between the market value of the two metals, on account of the large amount of silver which is held by those countries, and which has been coined at the rate of $15\frac{1}{2}$ to 1 in the case of France and of 16 to 1 in the case of the United States.

If a ratio greatly differing from this were adopted, the standard silver coins of those countries must either become admittedly token coins or pass current at a large reduction from their nominal value.

157. On the other hand, it is urged that the interest of these countries in securing a stable ratio between the two metals for the future is so great that they would probably agree to such an arrangement rather than be left in their present position, with the possibility of a still further fall in the gold price of silver.

It is argued also that the inconvenience in the case of the United States, or of France, if the ratio, say of 20 to 1, were fixed would not be serious. There is no reason why the silver existing in the form of coins at the ratio of $15\frac{1}{2}$ or 16 to 1 should not continue to circulate and be received concurrently with a new coinage at the altered ratio, and why people should not continue to receive them as readily as they do now. It may be said that there would be a danger of the manufacture of imitations of the existing coins. But this danger is as great at present, when the gold price of silver differs so much from the legal ratio; and as regards the silver certificates which circulate to so large an extent in the United States, representing silver at the ratio of 16 to 1, if 25 per cent. of the existing quantity were converted into a fiduciary issue, which might be done without difficulty or public inconvenience, the position of the United States Government would be unaltered.

158. As an alternative arrangement, the adoption of the former ratio of $15\frac{1}{2}$ or 16 to 1 is suggested; and it is contended that if such a ratio were adopted by England, the United States, the Latin Union, and Germany, all the other commercial countries of the world would join the union; and that whether they joined or not, the effect of such an arrangement would be to maintain that ratio.

159. The position of India in view of any such combination would, however, it is said, be very difficult. On the one hand the amount of her gold liabilities makes a stable relation between the two metals a matter of the first importance to her; and on the other, any serious rise in the value of silver would, it is said, produce the evils already pointed out.

160. As regards the maintenance of the bimetallic arrangement, if once established, it is asserted that it would be to the interest of all the contracting parties to adhere to it, and that there would be no inducement to any power to secede. The seceding power would, it is urged, cause more inconvenience to its own subjects than to any one else, and no sufficient motive for secession can be suggested.

161. On the other hand, it is pointed out that the action of a nation is not always regulated by a wise regard for its own interests alone. Its policy is sometimes mistaken, and sometimes actuated by other motives than self-interest.

The adoption of a gold standard by Germany is cited as an instance of a currency change made without any advantage commensurate with its cost.

To this it is replied that the currency change made by Germany took place at a time when the effects of such a change were unknown and unforeseen, and that with the experience gained since 1873 no similar change need be apprehended in the future, if an understanding between the chief commercial nations were arrived at.

162. One probable cause for any failure of the bimetallic arrangement would, it is said, be found in the necessity for the suspension of cash payments and the issue of a large amount of inconvertible paper in any one of the contracting countries.

This measure, however, it is said, would not affect the stability of the legal ratio in other countries. The only result of the establishment of an inconvertible paper currency in a bimetallic country would be that its specie, whether gold or silver, or both, might flow to other countries and increase the circulation of the rest of the world. The principle of the bimetallic system would remain intact, though it might cease to be practically operative in that country.

If a bimetallic arrangement were in force, the effect of such a step would, as regards the flow of the precious metals from the country suspending cash payments, be precisely the same on other countries as at present, whilst its distribution might be so altered as to cause less disturbance.

163. In reply, it is contended that though the suspension of cash payments in any one country might not defeat the operation of the bimetallic arrangement in other countries, it would materially restrict the benefits supposed to flow from that system, both by limiting the area within which it would operate, and by pouring into other countries the stock of metal, whether gold or silver, previously held by the country suspending cash payments.

164. It is further urged that there is a growing tendency among all commercial nations in favor of the use of gold rather than silver for currency purposes, and that the fear of holding too much of the less popular metal in their reserves would induce governments and bankers to seek to get rid of it and increase their store of gold. A struggle for the possession of gold might thus be brought about which would prove a severe strain upon the bimetallic arrangement.

This motive, again, would be intensified by a sense of the precarious nature of the arrangement, by apprehensions that other nations would depart from it, and by a desire on the part of each nation to protect itself, as far as possible, from the mischievous consequences which would result from such departure, if it were left with a large stock of the less esteemed metal.

Further, if it should prove that, for any of the reasons mentioned above, any of the nations should not adhere to the arrangement, the

position of England, if she adhered to it, would be seriously compromised. The whole arrangement depends upon leaving free scope to commercial motives; and in this respect England is less likely to interfere than foreign governments with the free commercial distribution of the precious metals.

165. In reply it is asserted that the sentiment in favor of a gold standard is based merely on the convenience of that metal as a circulating medium for certain purposes; that the tendency of the more advanced nations is towards the use of paper or other substitutes for coin; that so long as the different nations maintained the unlimited coinage and full legal tender of silver, the hoarding of gold would be found unprofitable and perhaps impossible; and that if the legal ratio fixed approximated to the market ratio, and the arrangement were for an indefinite and not a fixed period, there would be much less ground for any of these apprehensions.

III.

166. In addition to the arguments stated above, the advocates of bimetallism urge in support of their proposals that far greater difficulties will arise if the hope of establishing a stable ratio between silver and gold is finally abandoned.

It is asserted—

(*a*) That even if the countries of the world were divided permanently into gold-using and silver-using nations there would be continual fluctuations in the relative value of the two standards, with the evils which necessarily flow from such a state of things, and that as this state of things never prevailed in the past before 1873, it is probable that it might give rise to unsatisfactory results, beyond those of which we have experience.

(*b*) That it is impossible to devise any satisfactory principle on which the permanent division of the countries of the world into gold-using and silver-using nations could be based, and that, if such a principle could be devised, it would not be found possible to apply it in practice.

(*c*) That no settlement of the relations between gold and silver money of a satisfactory nature and affording a prospect of permanence is probable or possible without the acceptance of the principle of the unlimited coinage and full legal tender of both gold and silver at a fixed ratio.

(*d*) That in the absence of such a settlement every nation using either gold or silver as its standard will remain liable to disturbances of its standard of value from time to time, which might have very serious consequences.

(*e*) That the existing situation presents no elements of finality and no reasonable ground for anticipating any definitive solution of the difficulties with which it is now surrounded. On the contrary, a further fall in the gold price of silver, to even half the extent of that which has taken place since 1873, would dangerously affect the financial position of the Government of India; would still further disorganize our commercial relations with that and other silver-using countries, and would materially aggravate the depression which has affected so many branches of trade and industry.

FURTHER REMEDIES.

167. The system of currency which we have dealt with in sections 116–166 is that which is usually known under the name of bimetallism.

We have examined it at length, partly on account of the weight of authority by which it is supported, and partly because, if the serious nature of the evils described in sections 69–113 be admitted, no other proposal which has been submitted to us appears to apply so complete and practical a remedy.

Two schemes have indeed been suggested for attaining the end in view.

According to one proposal, the standard coin would be composed of both metals in certain specified proportions. This could be effected either by fusing the two metals and forming an amalgam coin or by the insertion of a small disk of gold in the center of a silver coin.

The practical difficulties in the way of both the manufacture and the use of such a coin appeared to us so great that we did not subject either form of the proposal to a minute examination.

168. A plan presenting fewer difficulties has been submitted to us by Professor Marshall. His suggestion is that the currency should consist of paper issued against deposits of the two metals in certain defined proportions. Any person bringing to the issue department the required quantity of gold and silver bars would receive the equivalent in currency.

The principal advantage claimed for this plan is that the currency would be really bimetallic, that is to say, it would necessarily always consist of the two metals in the prescribed proportions, and not of that one alone which happened to be for the moment most easily procured.

Its effect upon the production of the two metals would, it is said, also be beneficial, as it would encourage the production of the metal which was being produced at the greatest cost, instead of the reverse, which would be the case under what is ordinarily known as bimetallism.

On the other hand, if the supply of one metal was materially reduced, a contraction of the currency would not be avoided; and to insure the effective operation of the scheme it would be necessary that all the important silver-using countries, and especially India, should be included in the arrangement.

To this proposal, also, we have not thought it necessary to give a prolonged consideration. Any scheme which involves so great an alteration in our system of currency would be so opposed to the traditions and prejudices of the people of this country that we think some considerable period of time must elapse before it will have gained that amount of support among the public which will entitle it to be considered as a practicable proposal.

169. A third suggestion is that the system now in force in the Latin Union, the United States, and Holland, namely, the maintenance of both metals as legal tender to any amount with free coinage for gold alone, and a large, though limited coinage of silver, should be extended to all countries.

From the experience of those countries it is urged that a considerable amount of silver can be kept in circulation side by side with gold at a rate greatly exceeding its market value; and it is contended that if their practice were generally carried out a great additional demand for silver would be created, and its use would be so extended as to keep its value relatively to gold at a more uniform level.

170. We may here refer to certain proposals of a somewhat similar character which arose out of the proceedings of the international conference on the monetary question held at Paris, 1881.

It was then suggested that the fall in the value of silver might be alleviated if the Bank of England would undertake to make use of the

power which it possesses under the provisions of 7 and 8 Vict., cap. 32, of holding one-fifth of its bullion reserve in silver, such an undertaking being coupled with a pledge that the Governments of the United States and of the countries forming the Latin Union would re-open their mints to the free coinage of silver.

The directors of the bank, having been consulted on this proposal, pointed out in reply that they were compelled by law to pay all their notes in gold, and that they could not therefore take any step which was likely to infringe this principle; but that if the mints of other countries returned to such rules as would insure the certainty of conversion of gold into silver and silver into gold, they saw no reason why they should not exercise the discretion intrusted to them of holding a portion of their reserve in silver, without interfering with the obligation imposed on them by law of receiving gold in exchange for notes and paying notes in gold on demand.

171. In the early part of 1882 a further suggestion was made by the Italian Government that, failing a bimetallic arrangement, an international agreement might be arrived at on some such basis as the following:

The states of the Latin Union to undertake for a fixed period, say five years, to coin silver annually to the amount of at least half a franc per head of population;
The United States of America to coin at least 3,000,000 silver dollars a month during the same period;
The Government of India to maintain the unrestricted coinage of silver;
The Government of the United Kingdom to raise the legal-tender limit of silver from 40*s.* to £20; to coin a minimum amount of £500,000 in silver annually; and the Bank of England to hold one-fifth of its reserve in silver;
The Government of Germany to undertake not to sell any silver for five years, and to substitute silver coins for the gold five-mark pieces and some of the smaller denominations of notes.

No definite answer appears to have been given to these proposals, and up to the present date they have not been acted upon.

172. A further suggestion for promoting the more extended use of silver, as well as economizing gold, is that the half-sovereigns circulating in this country should be called in and notes to the value of 10*s.* and 20*s.* each should be issued against silver in place of them.

173. Complaints are also made that the use of silver for industrial purposes is much restricted, owing to the duty of 1*s.* 6*d.* per ounce which is levied on silver plate manufactured in this country or imported from abroad.

The duty is said to bear with special severity upon those branches of Indian industry which are engaged in the manufacture of silver plate or ornaments.

Not only does the duty (which now amounts to upwards of 40 per cent. on the value of the raw material) restrict the demand for manufactured silver, but, owing to the Hall-mark regulations, only silver of the authorized standard can be introduced into this country for purposes of trade, the importation of lower grades being prohibited except for private use; and the rupee standard in India is slightly below the standard required by the Hall-mark regulations in this country, its millesimal finenesss being 916 as against 925.

The repeal of the duty has been repeatedly urged by the Government of India in the interests of those engaged in the industry in that country; and the amount of revenue which is now raised from it (between £50,000 and £60,000 per annum) is so small that it could be surrendered without creating any serious disturbance of the financial equilibrium.

The main difficulty which is understood to stand in the way of the repeal of the duty is the question of the drawback to be granted on the plate now in the manufacturers' hands which has already paid the duty; but the concession of the drawback might be limited to a moderate period, say three years, and this difficulty ought not to be an insuperable obstacle in the way of a desirable reform.

174. One common object of all the proposals above described is to meet the difficulties and inconveniences of the existing situation by promoting the more extended use of silver.

Suggestions have also been made for avoiding the existing pressure upon the stock of gold in the world by still further economizing its use.

The most practical proposal from this point of view is that for the introduction of a fiduciary issue of £1 notes in this country.

Such a measure would, it is said, set free a sum estimated at from £8,000,000 to £20,000,000, which would be available to meet the large demand for gold in America and elsewhere.

Any result, however, which could be produced by the release of this amount of gold would be very transitory in its effects, even if it be assumed that it would have any influence upon the level of prices or the commercial interests of the world.

Considering the many serious questions with regard to our financial policy, and other matters not immediately connected with our inquiry, which would be raised by such a measure, and the very slight effect it might have upon the relative value of the precious metals, we have not thought it necessary to give a prolonged consideration to the proposal or to pronounce a decided opinion upon it.

175. It has further been suggested that the difficulties of the government of India, so far as they arise from the difference between the standard of value in that country and the United Kingdom, might be removed or modified by the adoption of a gold standard in India, while retaining the existing silver currency. The first step towards such a measure would be to raise by artificial means the gold value of the rupee to any point which might be decided on, either by stopping the free coinage of silver in India or by imposing such a seigniorage as would raise the cost of a silver rupee to its gold value; while at the same time British or Indian gold coin would be made legal tender for all payments to the government concurrently with the rupee at the fixed rate.

176. A proposal of this character was submitted by the government of India to the home Government in 1878, and was referred for consideration to a departmental committee, who reported that they could not recommend the proposal for adoption.

The principal objections which are urged against it are—

(*a*) That by enacting a gold standard without a gold currency it would be practically equivalent to the establishment of an inconvertible token currency.

This difficulty, it is said, would only be of importance if gold was required for export; and the flow of the standard metals is at present, and is likely to remain, in the direction of India. For internal use the existing rupee currency would be sufficient.

(*b*) That the closing of the only mint now open to the free coinage of silver might have so serious an effect upon the market value of the metal that it would be impossible to maintain the rate of exchange fixed upon.

(*c*) That it would not meet the real difficulty of the present situation in India, which is that, owing to the fall in all gold prices, a larger amount of produce has to be exported in payment of gold debts; and

that consequently any apparent gain to the government of India would be balanced by a corresponding loss to the people of that country.

(*d*) The danger of illicit coinage, which would be greatly increased if the exchange value of the rupee were raised much above its intrinsic value.

To this it is replied that the danger, such as it is, already exists not only in England, but on the Continent, but it is not believed that any serious amount of illicit coinage takes place.

177. Another proposal of a similar character is to make gold legal tender in India at a rate to be fixed by the Government from time to time. Such a measure would, it is urged, bring into use for currency purposes the large hoards of gold which are known to exist in the country; and the ratio, which would at first be fixed according to the market value of the two metals, would gradually tend to approximate to that which subsisted before the recent divergence.

CONCLUSIONS AS TO THE CAUSES OF THE DIVERGENCE IN THE RELATIVE VALUE OF THE PRECIOUS METALS.

178. We will now proceed to state the conclusions to which we have been led by a consideration of the several arguments set forth in the previous pages.

179. We have pointed out that the phenomena with which we had to deal were (*a*) extensive fluctuations, and (*b*) a considerable fall in the gold price of silver, which have manifested themselves since 1873.

For forty years preceding that date there was a difference of only $2\frac{7}{8}d.$ between the highest and lowest annual average price of bar silver in London. Between 1873 and 1887 the difference was $14\frac{5}{8}d.$

Not only have the variations in price covered this greatly extended range during the later period as compared with the former, but the fluctuations from time to time in the course of a month, or even of a few days, have been much greater.

180. The first point which naturally invites attention as an explanation of the fall in the gold price of silver in recent years is the large increase in the production of silver, coincident with some diminution in the production of gold.

The annual average production of the former metal, according to Dr. Soetbeer's estimate, has increased from 1,339,085 kilograms, valued at £11,984,800, in the five years 1866–'70 to 1,969,425 kilograms, valued at £17,232,450, in the five years 1871–'75, and to 2,861,709 kilograms, valued at £21,438,000, in the five years 1881–'85; thus showing an increase between the first and last periods mentioned of upwards of 100 per cent. in quantity and nearly 80 per cent. in value.

On the other hand, according to the same authority, the annual production of gold, which averaged 195,026 kilograms, equivalent to £27,206,900, from 1866 to 1870, fell off to 173,904 kilograms, or £24,260,300, from 1871 to1875, and to 149,137 kilograms, or £20,804,900, between 1881 and 1885, a diminution of nearly 25 per cent.

181. In addition to changes in the relative production of the two metals during the last fifteen years, there appears to be ground for the allegation that there has been during that period both increased use of gold and diminished use of silver for currency, resulting from changes which were made in the currency systems of various countries immediately before or during that period.

182. The amount of gold actually coined in Germany since 1871 has been upwards of £98,000,000, of which about £80,000,000 is said to rep-

resent the new demand. But a considerable proportion of this new demand appears to have been satisfied prior to or in 1872 and 1873, as the German coinage in those two years amounted to £50,000,000; and there seems reason to believe that some portion of this gold was taken from hoards of that metal in France which were not previously in circulation.

It is also to be observed that while in the years 1866–'70 the United States retained on an average £2,533,000 a year out of their own home production, in the period from 1871 to 1875 they exported nearly £1,500,000 in excess of the quantity produced in the country in those years.

The force of the United States demand did not begin to make itself felt until the middle of the year 1877; but since that date the use of gold in that country has increased very largely, the value of the metal absorbed during the ten years 1876–'85, having been £112,589,600, as against £11,196,000 in the ten years immediately preceding.

There has also been a certain demand, though of a less important character, owing to the requirements of Italy, Holland, and the three Scandinavian countries.

On the whole there can be very little doubt that there has been a considerable increase in recent years in the use of gold for purposes of currency.

183. Turning next to silver, it is very difficult to estimate the extent to which the use of this metal has diminished in Europe and America owing to currency changes.

No doubt the adoption of a gold standard in Germany diminished the demand for silver in that country; but on the other hand there has been a very large coinage of silver in the United States during the last ten years, amounting to upwards of $300,000,000, while in the ten years preceeding 1873 the currency in that country was paper and but very little silver was coined.

When all the facts are taken into account it seems doubtful whether there has been on the whole any great diminution in the use of silver for currency purposes.

184. The silver placed on the market by Germany since 1873 is another element which must be taken into account. The amount actually sold and thus added to the supply available for the use of the world was not very large, but the mere fact of the sale and demonetization even of the amount in question would probably tend to discredit silver, and produce an effect upon the market disproportionate to the amount which was actually sold, if the latter were regarded merely as an addition to the supply. The sales of the German silver, however, practically ceased in 1878 or 1879, and this influence has therefore probably ceased to operate directly since that date, though apprehensions of further supplies being thrown upon the market may have exercised a depressing effect.

185. It can not be doubted that in the circumstances to which we have called attention, as marking the period since 1873, we see causes at work which would tend to render silver less valuable as compared with gold, and so to diminish its gold price. But it is very difficult to measure the force of this tendency, especially when we regard not merely the changes in the relative production and use of the two metals, but the ratio which the increased production of silver on the one hand, or the diminished production of gold on the other, bears to the existing stock of those metals respectively.

186. It must be borne in mind that in the case of other commodities the effect of changes in the supply and demand is both more marked and more immediate. These commodities are generally produced for the

purpose of consumption at an early date or within a comparatively short period. The supply at any time available for the market, or capable of being placed on it at short notice, is therefore a very important element in the process by which its value is fixed.

The precious metals, on the other hand, are but to a slight extent consumed, and the available supply consists of the accumulations of previous years.

It follows, therefore, that in their case a diminution or an increase in the new supply is of less importance than in the case of consumable articles, and that an increase or diminution in demand has also a smaller effect. The important consideration with regard to them at any one moment is rather the relation between the total stock then in existence and the then existing demands upon it.

187. When we examine the marked contrast which the period prior to 1873 presents to later periods, and the extensive changes in the relative production of the two metals which took place during the earlier period, it seems impossible to conclude that the circumstances connected with the supply sufficiently account for the altered conditions in the relative value of silver and gold since that date.

In the forty years between 1833 and 1873, which include the period of the great gold discoveries, and the consequent increase in the available supply of that metal, but little change in the gold price of silver can be observed.

In the ten years from 1831 to 1840 the proportion which the value of the silver produced bore to that of the gold was as 1.86 to 1. In the five years from 1851 to 1855 the proportion had fallen to .288 to 1. Yet the market value of silver only varied between 15.75 to 1 in the former period and 15.41 to 1 in the latter.

On the other hand, if we compare the five years 1871 to 1875 with the five years 1876 to 1880 we find that the proportion borne by the production of silver to that of gold was .710 to 1 in the first period and .794 to 1 in the latter. But this change, almost insignificant when compared with those to which we have called attention above, coincided with a fall in the market value from 15.97 to 1 to 17.81 to 1.

188. Examining the figures a little more closely, and taking the statistics of production for each year which were laid before the select committee of the House of Commons on the depreciation of silver by Sir Hector Hay in 1876, we find that from 1861 to 1872 the annual production of gold had been diminishing from £22,760,000 to £19,910,000, while that of silver had increased from £8,540,000 to £13,050,000, and that this important change took place without any great variation in the gold price of silver. The average price of bar silver in the former year was $60\frac{3}{16}d.$ and in the latter $60\frac{5}{16}d.$

It is true that since 1872 the changes in the demand for the two metals have taken place which we have dwelt upon above; but an increase or diminution of demand would not be likely by itself to have a greater effect upon the relative value of the two metals than an increase or diminution of supply to the same extent.

189. Looking, then, to the vast changes which occurred prior to 1873 in the relative production of the two metals without any corresponding disturbance in their market value, it appears to us difficult to resist the conclusion that some influence was then at work tending to steady the price of silver and to keep the ratio which it bore to gold approximately stable.

190. There is another fact, to which we have already drawn attention, pointing decidedly in the same direction. Prior to 1873 the fluctuations in the price of silver were gradual in their character, and ranged within very narrow limits.

Thus in the year 1872 the margin between the highest and lowest quotations in each month was as under:

	Pence.		Pence.
January ..... per ounce..	$\frac{1}{2}$	July ..... per ounce..	$\frac{1}{8}$
February ..... do....	$\frac{3}{8}$	August ..... do....	$\frac{1}{4}$
March ..... do....	$\frac{1}{8}$	September ..... do....	$\frac{1}{8}$
April ..... do....	$\frac{5}{8}$	October ..... do....	$\frac{1}{4}$
May ..... do....	$\frac{7}{16}$	November ..... do....	$\frac{1}{8}$
June ..... do....	$\frac{1}{8}$	December ..... do....	$\frac{1}{8}$

While in the year 1886 the corresponding figures are as follows:

	Pence.		Pence.
January ..... per ounce..	$\frac{9}{16}$	July ..... per ounce..	$2\frac{9}{16}$
February ..... do....	$\frac{7}{16}$	August ..... do....	$\frac{1}{8}$
March ..... do....	$\frac{9}{16}$	September ..... do....	$2\frac{3}{8}$
April ..... do....	$\frac{1}{16}$	October ..... do....	$1\frac{3}{8}$
May ..... do....	$1\frac{1}{4}$	November ..... do....	$1\frac{1}{2}$
June ..... do....	$\frac{1}{16}$	December ..... do....	$1\frac{3}{8}$

It will be observed that the maximum variation in the former year was $\frac{5}{8}d.$ and the average not quite $\frac{5}{16}d.$, while in the latter year the maximum was $2\frac{9}{16}d.$ and the average nearly $1\frac{1}{8}d.$ It has not been, and indeed hardly could be, suggested that this difference can be accounted for by changes in the relative production or actual use of the two metals.

191. The explanation commonly offered of these constant variations in the silver market is that the rise or depression of the price of silver depends upon the briskness or slackness of the demand for the purpose of remittance to silver-using countries, and that the price is largely affected by the amount of the bills sold from time to time by the secretary of state for india in council.

But these causes were, as far as can be seen, operating prior to 1873 as well as subsequent to that date, and yet the silver market did not display the sensitiveness to these influences from day to day and month to month which it now does.

192. These considerations seem to suggest the existence of some steadying influence in former periods, which has now been removed, and which has left the silver market subject to the free influence of causes, the full effect of which was previously kept in check.

The question therefore forces itself upon us: Is there any other circumstance calculated to affect the relation of silver to gold which distinguishes the later period from the earlier?

Now undoubtedly the date which forms the dividing line between an epoch of approximate fixity in the relative value of gold and silver and one of marked instability is the year when the bimetallic system which had previously been in force in the Latin Union ceased to be in full operation; and we are irresistibly led to the conclusion that the operation of that system, established as it was in countries the population and commerce of which were considerable, exerted a material influence upon the relative value of the two metals.

So long as that system was in force we think that, notwithstanding the changes in the production and use of the precious metals, it kept the market price of silver approximately steady at the ratio fixed by law between them, namely, $15\frac{1}{2}$ to 1.

When once the conclusion is arrived at that this was the case, the circumstances on which we have dwelt as characterizing the period since 1873 appear amply sufficient to account for the fall in the price of silver, tending as they all do in that direction; and the fact that on any particular day the supply of silver and of council bills may be large while the need for remittances is small, and *vice versa*, would explain the constant fluctuations in the price of silver which have manifested themselves in recent years.

193. Nor does it appear to us *a priori* unreasonable to suppose that the existence in the Latin Union of a bimetallic system with a ratio of 15½ to 1 fixed between the two metals should have been capable of keeping the market price of silver steady at approximately that ratio.

The view that it could only affect the market price to the extent to which there was a demand for it for currency purposes in the Latin Union, or to which it was actually taken to the mints of those countries is, we think, fallacious.

The fact that the owner of silver could, in the last resort, take it to those mints and have it converted into coin, which would purchase commodities at the ratio of 15½ of silver to one of gold, would, in our opinion, be likely to affect the price of silver in the market generally, whoever the purchaser and for whatever country it was destined. It would enable the seller to stand out for a price approximating to the legal ratio, and would tend to keep the market steady at about that point.

194. It has been urged that during the earlier of the two periods, which we have been contrasting, the conditions which existed from time to time were favorable to the maintenance of the legal ratio; that the great influx of gold towards the middle of this century found France with a large stock of silver, and that this silver, owing to exceptional circumstances, had a ready outlet to India.

But we do not think this affords an adequate solution of the problem without taking into account the existence of the bimetallic system. It may be true that the circumstances referred to were conditions which helped to make the bimetallic system operative. But, as we have observed before, circumstances and conditions of a like nature have been more or less operative both before and since 1873, and yet the effect on the relative value of the two metals has been very different.

195. It is said that the altered circumstances since 1873 would have rendered it impossible to maintain silver at the former ratio, even if the Latin Union had not abandoned the free mintage of silver, and that sooner or later the bimetallic system must have broken down and its steadying influence have ceased.

To estimate the force of causes without adequate experience of their effects in the past is a matter of extreme difficulty. But even if it were true that the Latin Union would not have been able down to the present time to preserve silver from falling below the legal ratio, this does not prove that the views which we have propounded as to the causes of the former stability of the gold price of silver and of its present unstable condition are incorrect.

Whether silver would ultimately have fallen to its present price, and whether the Latin Union could now, by reversing its action and re-opening its mints, restore silver to its former gold value, and re-establish the former condition of stability, are questions very material to another part of the case, but the determination of which is not essential to the particular point with which we are now dealing.

196. It is also said that such effect as the bimetallic system has had in keeping the relative value of gold and silver steady was due to the accidental circumstance that, at the time of the gold discoveries, France was saturated with the appreciating metal silver; and that if the discoveries had been of silver and not of gold, France, having no gold to part with, could not have kept down the silver price of gold or have kept up the gold price of silver. To this our answer is that we are for the moment concerned with what has actually happened, and that for our present purpose we need not consider what might have happened had the circumstances been different.

197. It has been suggested that the fall in the price of silver is to be

accounted for exclusively by the appreciation of gold in relation to all commodities, arising from increased demand for that metal, or, as it is put by some advocates of the view, owing to a contraction of the currency, which has caused all prices to fall.

We shall have to discuss hereafter the questions of the suggested appreciation of gold and contraction of the currency; but dealing with them now only as an explanation of the fall and fluctuations in the gold price of silver, we have no hesitation in saying that, in our opinion, they can not be regarded as of themselves adequate to account for the phenomena we have witnessed.

If gold be now appreciated, in relation to commodities generally, owing to diminished production, it is equally clear that it was depreciated in relation to commodities at the time of the large gold discoveries of thirty or forty years ago; and yet the gold price of silver did not then rise with that of many other commodities. Why, then, even assuming the appreciation of gold in relation to commodities generally, should the reverse process take place now, unless some condition existed then which is absent now?

If the active maintenance of the legal ratio in the Latin Union had the effect which we are disposed to attribute to it, the difference between the two epochs would, even on the assumption with which we are now dealing, be accounted for.

198. To sum up our conclusions on this part of the case, we are of opinion that the true explanation of the phenomena which we are directed to investigate is to be found in a combination of causes, and can not be attributed to any one cause alone. The action of the Latin Union in 1873 broke the link between silver and gold, which had kept the price of the former, as measured by the latter, constant at about the legal ratio; and when this link was broken the silver market was open to the influence of all the factors which go to affect the price of a commodity. These factors happen since 1873 to have operated in the direction of a fall in the gold price of that metal, and the frequent fluctuations in its value are accounted for by the fact that the market has become fully sensitive to the other influences to which we have called attention above.

199. Down to this point we have been able to maintain an agreement among ourselves as to the terms of our report; but in considering our conclusions on the question to what extent the fall in the gold price of silver has taken the form of an appreciation of gold or a depreciation of silver, as well as on the remaining questions submitted to us, such a divergence of opinion manifested itself that we have found ourselves under the necessity of stating our opinions in the separate documents which follow.

Before, however, we pass from our statement of the conclusions upon which we are agreed, we desire to express the sense which we all entertain of the high value of the services rendered to the commission by the secretary, Mr. G. H. Murray. His zeal and ability have greatly assisted us in our labors.

All which we humbly submit for Your Majesty's gracious consideration.

HERSCHELL.
LOUIS MALLET.
ARTHUR JAMES BALFOUR.
HENRY CHAPLIN.
C. W. FREMANTLE.
JOHN LUBBOCK.
T. H. FARRER.
W. H. HOULDSWORTH.
D. BARBOUR.
J. W. BIRCH.
LEONARD H. COURTNEY.
SAMUEL MONTAGU.

GEO. H. MURRAY, *Secretary.*

OCTOBER, 1888.

PART II.

1. The question whether the change in the relative value of gold and silver is due rather to appreciation of gold or depreciation of silver is so much involved in the consideration of the fall of prices, which is said to be connected with that changed relation and with the circumstances which have led to it, that in order to avoid repetition we have thought it convenient to defer the discussion of this question to a later part of the report. Our conclusions with regard to it will be found below in sections 47 and 71.

CONCLUSIONS AS TO THE EVILS SAID TO HAVE RESULTED FROM THE CHANGES IN THE RELATIVE VALUE OF THE PRECIOUS METALS.

2. We will now proceed to consider the evils which are said to have resulted from the recent changes in the relative value of the two metals.

We have already drawn attention to the fact that the phenomena observable have been that constant fluctuations in the value of gold and silver have taken the place of approximate fixity, and that there has been on the whole a considerable fall in the gold price of silver.

3. It is alleged that both the fluctuations and the fall have been followed by serious and embarrassing consequences.

In dealing with this part of the case we shall, as far as possible, treat separately the evils which are traced to the fluctuating character of the relation between the two metals and those which are alleged to have their origin in the fall in the gold price of silver, or in circumstances which have affected or are affecting the two metals and their relation to one another. It is not easy, and indeed not always possible, to preserve this distinction, as the consequences alleged to flow from these causes touch at so many points and are so closely connected.

I. EVILS RESULTING FROM FLUCTUATIONS.

4. We will consider, first, the effects of the change from a fixed to a fluctuating relation between the two precious metals; for we are here on less debatable ground, and the views presented to us differ rather in their estimate of the extent and importance of the effects produced, than as to the existence of the effects.

5. The most obvious of these is the inconvenience which arises in the exchange between gold-using and silver-using countries.

This is no doubt reduced to a minimum by the action of exchange banks and telegraphic transfers. Where the currents of trade in opposite directions between the two countries are more or less constant and uniform, the risk to the exchange banks in undertaking these transactions is but small, however frequent the fluctuations. They are therefore able and willing to undertake them without any very burdensome cost to the trader.

Where, however, the counter-currents of trade are less constant, as is said to be the case between this country and China, the burden imposed on commerce is no doubt at times somewhat greater.

6. It must be borne in mind that the fluctuations in exchange, even in a single day, have of late years often been considerable, and inasmuch as it is not always possible to close the transaction on both sides and make the settlement of the exchange simultaneously, some risk to the merchant is at times inevitable,

Beside this, it is said that the exchange difficulty tends to limit trade, and to restrict it to those cases in which a contract of sale and purchase can be made in the two countries at the same time.

It has been stated that in the trade between Chili and England there has been a tendency, owing to exchange difficulties, to diminish trading upon credit, and to substitute cash transactions, and that this has the effect of contracting the commerce between the countries within narrower limits than would otherwise be the case.

Chili has a depreciated paper currency, but the fact is used as an illustration of the commercial disadvantages arising generally from fluctuations in exchange between gold-using countries and those possessing a currency which is depreciating in relation to that metal.

7. It must also be remembered that there are certain risks which arise from, or are aggravated by, the fluctuations of exchange, and against which a merchant can not practically protect himself by any of the expedients to which we have referred.

Obstacles, for example, sometimes arise to prevent a contract being carried out at the appointed time; and there are cases in which this would be of comparatively little moment if the exchange were stable, but in which the merchant may be subjected to a serious loss if, with a heavy fall of exchange in the meantime, the purchaser is enabled to refuse to receive the goods.

8. Some witnesses representing the trade of Lancashire have deposed that when a heavy fall in the exchange takes place the trade in cotton goods is sometimes brought for a short time almost to a stand-still.

Statistics do not appear to afford evidence in support of the view that trade between this country and India has been diminished from this cause.

The exports to India have increased at a greater rate than those to gold-using countries. This statement is, however, open to the criticism that this expansion of trade is partly due to obvious causes, such as the development of railways and the removal of import duties in India, and the operation of protective tariffs in certain foreign countries, and that it would have been greater still if the exchange had remained steady.

It must further be admitted that there has not been a similar expansion of the exports from this country to China.

It must be borne in mind, however, that this is to some extent accounted for by the growing competition of Indian exports of cotton goods to China, and of Indian with Chinese tea in the English markets, which would both tend to diminish the export of goods from this country to China. And it must be noted that there has been of late a large increase in our exports of cotton goods to that country.

9. However much opinions may differ as to the extent of the evil arising from the increased difficulty which a fluctuating exchange interposes, we do not think its reality is open to question.

We are not ourselves disposed to regard it as having hitherto limited or burdened to any very serious extent the commerce between this country and those having a silver standard. Nevertheless, everything which hampers complete freedom of commercial intercourse between two countries, or which imposes on it any additional burden, is undoubtedly an evil to be avoided or removed if possible.

10. If, therefore, a remedy could be devised to accomplish this end, without involving the risk of other disadvantages, there can not be two opinions that it would be worth while to apply such a remedy.

Whether it is serious enough, taken by itself, to render it advisable

to apply any remedy from which some risk is inseparable must depend on the nature of the particular remedy, and our estimate of the severity of the risks it would entail, as compared with the gravity of the existing evil. Our views upon this point will appear when we come to discuss the expediency of adopting the remedies which have been suggested.

11. Two other evils of a general character are also attributed to fluctuations in the gold value of silver, though, as regards one of these, the prejudicial effects are said to have affected gold-using countries more particularly.

It is alleged that an unstable exchange between gold and silver has tended to foster trade between countries having the same standard to the prejudice of those having a different standard.

12. It can not be denied that the trade between two countries having the same standard (or, what is practically the same thing, having different standards maintaining a stable relation to each other) is free from an obstacle, and to some extent a burden, to which trade is subject between countries having different standards, varying in their relation to one another; and it may reasonably be assumed that whenever international trade is simpler in its operations and less burdened, it will have a tendency on that account to make better progress, and this to the detriment, it may be, of countries less favorably circumstanced.

It is alleged that practical proof of this is afforded by the growth of the trade in cotton yarns between India on the one hand and China and Japan on the other in recent years as compared with our trade in that commodity with the latter countries.

This result is, however, attributed, even by those who attach weight to the argument, more to the fact that the fluctuations have on the whole been downward in their direction than to the mere fluctuations themselves.

We will therefore defer the consideration of this point until a later period, merely observing that though the difficulty of an unstable exchange may have a tendency to foster trade between countries having the same standard, as against trade in the same commodities between countries whose standards have not a fixed relation, we do not think, all other things being equal, that its effect in this direction is likely to be very considerable.

It must be noted that alterations in the supply of one or other of the precious metals which, when no bimetallic link exists between them, cause or intensify fluctuations of exchange between gold and silver using countries, might, if the relations between the metals were fixed, operate, though by a process slower and less severe, upon prices, and thus affect contracts or engagements to be performed or fulfilled at a future time.

13. The second evil upon which stress has been laid is that a fluctuating exchange is alleged to discourage investment by gold-using countries in silver-using countries, from which both sustain injury, the gold-using country losing an outlet for its surplus capital, and the silver-using country being deprived of that development which the employment there of such capital would produce.

There are many, it is said, who are unwilling to invest money except when it yields a fixed or approximately fixed return, and, owing to the apprehensions of fluctuations in the relative value of gold and silver, this class of persons do not invest in India or China.

This again is closely connected, by those who urge the point, with the circumstance that the fall in the gold value of silver aggravates the evil, and renders the person having capital to employ less willing to in-

vest it there. It is said, too, that the Government of India are unwilling for the same reason to undertake public works to the extent to which they otherwise would.

We think there is truth in the view thus presented, though it is very difficult to gauge the extent to which a real influence is exerted in hindering investment in silver-using countries; especially having regard to the fact that English capital has been invested in the Indian mills whose competition is complained of, and that a large amount of English capital has been and is being invested in South America.

14. In addition to the evils of a general character to which we have drawn attention, there is one specially affecting the Government of India which deserves the most careful attention.

We allude to the effect upon the Indian finances of the obligation of the Government of that country to pay every year the interest on their gold debt, as well as to meet other fixed gold charges, while all their taxes are imposed and received in silver.

15. It is obvious that a fluctuating exchange must in consequence be the cause of serious embarrassment to the financial policy of the Indian Government. The estimates of receipts and expenditure may be prepared with the utmost care and accuracy, and yet an estimated surplus may become a deficit by a sudden fall in the exchange.

So long as these fluctuations continue it is impossible to count in any year upon a financial equilibrium; and the peculiar circumstances of our position in India render it specially difficult to make constant changes in the taxation imposed upon the people. The difficulty is of course intensified when the ultimate or general tendency of the exchange is continuously downwards, and the revenue can only be made to balance the expenditure by increased taxation, which it is very difficult to devise.

Even if the assumption be well founded that the change is due to a fall in the value of silver, and that, the taxes in India being payable in rupees, a fall in the value of silver is in fact a diminution of taxation, and is therefore a relief to the people of India, it nevertheless constitutes a difficulty for the Government itself.

16. Putting aside the difficulty which has already arisen from a fall in the past, there can be no doubt that the uncertainty created by the want of a fixed ratio, the apprehension of a further fall, and the impossibility of determining to what point that fall may reach, do make the task of the Government of India a very difficult one, and constitute a real and very serious evil.

We have been very much impressed by the views which have been urged upon us by the Government of India. We understand that they regard the re-establishment of a fixity of ratio between gold and silver as of even greater moment than the restoration of silver to its former value as compared with gold.

We fully share their view as to the great importance of the subject, and the great advantage that would result to the Indian Government, with whose safe administration of the affairs of that great Empire the interests of this country are so intimately connected, if a stable ratio between gold and silver could again be relied upon.

II. EVILS CONNECTED WITH THE CHANGED RELATION OF SILVER TO GOLD.

17. We have next to consider the evils attributed to or connected with the altered relation of silver and gold, other than those which result from fluctuations in exchange between gold and silver using countries.

These evils are, first, the effects upon the commerce of the country, and the relation of debtor and creditor, alleged to be due to the fall in the price of commodities; and secondly, the special difficulties which have arisen in connection with the finances of India, owing to the fall in the gold price of silver.

18. Two explanations have been offered of the connection between the fall in the price of commodities and the altered relation of gold and silver.

One is that which attributes the fall in the price of commodities directly to the fall in the gold price of silver; the other is that which connects the fall with the appreciation of gold, which, it is suggested, has arisen in recent years from the diminished production of that metal, and its increased use owing to the currency changes which have occurred during that period, as well as to an increase of demand for it caused by, and indirectly due to, the results of those changes.

19. We will deal first with the latter point.

There can be no question that the gold price of many, and probably of most, commodities has fallen during the last fifteen years. In relation to these commodities it may, no doubt without inaccuracy, be said that gold has appreciated. That is another mode of expressing the fact that their price is lower. It may, however, also without inaccuracy, be said that in relation to gold these commodities have depreciated. Which is the more accurate expression in any particular case will depend upon whether the altered relation of the commodity to gold has arisen from some change which has affected gold, such as a diminished supply, or some increase of demand owing to its use for purposes for which it was not formerly employed, or whether this altered relation is connected with a change affecting the commodity, such as increased supply or diminished demand. It may, however, have arisen partly from one and partly from the other, so that the true explanation of the fall in price may be that there has been both appreciation of gold and depreciation of the commodity.

20. It is only in so far as the fall in price is due to circumstances affecting the standard of value that it comes within the scope of our inquiry. A fall in the price of commodities which results from an increase in their supply or a diminution in the cost of their production or transit does not appear to us to be of itself an evil, and if it were so it is one foreign to the subject which is referred to us for consideration and report.

21. There are indeed some who think that in an ideally perfect system of currency, whatever may have been the cause of an alteration in the relation of the standard to commodities, the standard ought to adjust itself to this variation, so that prices should remain constant.

They point out that otherwise contracts to pay money at a future date are affected to the prejudice either of the creditor or the debtor by the change in the purchasing power of the standard; that the obligation, which ought to remain constant, varies in reality with its greater or less purchasing power.

It may be questioned whether the strict idea would not require that the constancy of obligation aimed at should be to render the same labor rather than to transfer the same commodities, so that the sacrifice of toil in repaying an obligation should be the same as that which was involved in its creation; but apart from this abstract criticism of an abstract theory there are practical difficulties opposing it.

The view presented would not be without its force if all commodities and services changed in their relation to the standard simultaneously

and *pari passu*, but this never has been, and practically never can be, the case, where the change arises from circumstances operating upon the different commodities themselves.

Even if it were practicable to adjust the standard in correspondence with an increase in the supply of any class of commodities or services, the result would be to alter its relation to things not comprised within that class the supply of which either had not been increased, or not to the same extent, and thus to bring about the very evil which it was sought to remedy.

In our opinion, therefore, we must dismiss this theory from consideration, and devote our attention exclusively to the question how far the fall in the price of commodities is due to currency changes.

22. Reliance is placed, by those who contend that the lower prices which now prevail are due to the appreciation of gold, upon the index numbers which have been prepared by different authorities to indicate the general course of prices.

We have already drawn attention in sections 60 and 61 to the reasons which enforce caution in the use of this method of generalization; but we may in addition draw attention to the fact that, taking Dr. Soetbeer's table, the index numbers for the years between 1874 and 1883 were, with the exception of that of 1879, in each case as high as, or higher than, those of the years 1858 to 1861, inclusive, and that the number for each of the years 1880, 1882, and 1883 differed by less than 1 per cent. from those of the years 1865, 1868, 1869, and 1870.

If, however, we turn from these general index numbers and examine the index numbers of the several commodities which have been taken into account in arriving at the general index number for the year, it can not be doubted that a fall has taken place, especially in the most recent years, in the majority of the commodities in common use, and that in some cases the fall has been very heavy.

23. The index numbers, as has been observed, take no account of the price of labor or services, or of the rent of houses or lands.

The facts with regard to wages, even in this country, are very difficult to ascertain.

The report of the royal commission on the depression of trade (1886), in referring to the last twenty years, states (paragraph 83) that while during that period wages have risen, profits have fallen, and (paragraph 81) that "there is no feature in the situation which the commissioners have been called to examine so satisfactory as the immense improvement which has taken place in the condition of the working classes during the last twenty years."

These conclusions, formed after a long and patient inquiry, though they deal with real rather than nominal wages, and relate to a period dating back to 1866, are scarcely consistent with the conclusion that the money wages of the laboring classes in general have been seriously diminished by the monetary changes which took place in and subsequently to 1873.

Since the date of the report in question there has in this country no doubt been further depression, especially in the employment of agricultural labor, and this depression has tended to depress other branches of the labor market.

But although nominal wages have undoubtedly fallen in certain departments of industry, we have no evidence to show that they are generally lower than they were fifteen years ago; and the reports of the labor correspondent of the board of trade show that during the past twelve months there has been a steady improvement in the skilled

labor market, both as regards the rate of wages and the numbers employed.

We have no statistics of retail prices, but there can be little doubt that though they have fallen considerably, the fall has not been so great as in the case of wholesale prices. This again points to the fact that wages have not fallen to anything like the same extent as the wholesale price of commodities, for the wages of labor are an important, if not the most important, element in determining the difference between wholesale and retail prices.

There does not appear to be any evidence that the salaries of clerks and others, outside what may be termed the wage-earning classes proper, have decreased, and although some house rents have fallen, it seems questionable whether, except as regards the more expensive class of houses which are inhabited by the wealthy, there has been any general diminution of house rent.

24. At the outset of our investigation we were confronted by the fact that the fall in prices has been neither universal nor uniform. It will be seen that it did not commence as regards all commodities, even approximately at the same time, nor has it proceeded at the same rate or to the same extent.

A fall of prices arising from the appreciation of gold alone must, other things remaining the same, ultimately be both universal and uniform.

But it has been pointed out by some economists, and notably by Professor Cairnes, that alterations of price due to a change in the standard (he was speaking of the depreciation of gold after the great gold discoveries) do not and are not to be expected to affect all commodities at the same time. In the case of the depreciation of gold arising from the gold discoveries, a most potent factor in the raising of prices was found to be the rise in wages which was brought about, with its consequent effect upon the prices of commodities in the production of which labor was one of the elements. Reasons were also suggested why the rise of price was not uniform in the case of all commodities. It was pointed out that the price of animal would be affected at an earlier date than that of vegetable products, inasmuch as the latter could be increased in quantity to meet an increased demand with greater rapidity than the former.

In the case of the suggested appreciation of gold, which we are now considering, the fall in the price of commodities has certainly not come about from a fall in the cost of labor, and the various products have not been affected in the same order.

We have had no sufficient explanation offered of the phenomena which have manifested themselves, assuming them to be entirely due to appreciation of the standard. It has not been shown why its effect upon the various commodities has been so different in point of time and of extent; and a careful survey of the varying prices of commodities at once suggests that, even if there has been an appreciation of the standard, some other causes must have been at work affecting particular commodities, so as to depreciate them in relation to gold.

We have in section 61 of the foregoing report drawn attention to the fact that if the period from 1881 to 1885 is compared with the period 1866 to 1870, which shortly preceded the occurrences alleged to have resulted in the appreciation of gold, the classes which include animal food and fruits, oil, and wine, rose in price, while colonial produce remained stationary, a fall being exhibited in agricultural and mineral produce and textile materials. Again turning to Mr. Sauerbeck's classi-

fication of his index numbers we find that while, with the exception of the years 1877 and 1878, the fall in the price of vegetable food products was continuous from 1873 to 1885, and in the latter year was very rapid, the price of animal food was, with the exception of 1879, as high or higher in every year between 1872 and 1883 than in 1872, and the fall has only manifested itself since the latter date, and that not to an extent at all comparable to the fall in the price of vegetable food.

There has recently been a rise in the price of many important commodities, and also in freights, which certainly receives no adequate explanation from any change in the supply of or demand for gold. It can not be contended that there has been of late anything to cause a substantial depreciation of that metal.

25. We do not think that the causes, other than those relating to the standard, which have been operating to produce a fall of price are far to seek. When we examine the case of individual commodities we see factors at work which fully account for a fall in their price, even if the standard had remained, so far as it was itself concerned, stable.

Take for example the case of wheat. The increase in the supply during recent years in many parts of the world, but especially on the American continent and in India, has been enormous.

This has been due in a great measure to the fact that vast territories, consisting in some cases of virgin soil, have been opened up by the construction of railways, and become the means of creating supplies largely in excess of the needs of those engaged in their production.

In addition to this the cost of transit from these countries to other parts of the world has very much diminished. The development of railways to which we have alluded has proceeded with striking rapidity during the last fifteen years,* especially in America and India, and in the latter case the opening of the Suez Canal has exercised a great influence in the same direction.

The diminished cost of transport is also partly due to increased competition for the carrying of goods. Ship-building has at times proceeded at a greater rate than the increase of the commodities to be carried. Not only so, but the same quantity of wheat can now be carried, owing to improvements in machinery, with less expenditure of fuel and the employment of considerably less labor.

All these things contribute to enable the markets of the world to be stocked at much less cost, and the wheat thus to be sold at a lower price.

26. What has been said with regard to wheat may also be said in varying degrees with reference to many other commodities. The total output of coal and mineral ores, for example, has exhibited a remarkable increase, and in the case of metals, invention has conduced enormously to economy in the cost of production. It is true that the ouput of coal in this country has in the last two or three years been arrested or diminished; but this may be attributable to increased economy in the use of coal for industrial purposes, and to the restrictions placed by many foreign countries upon the importation of coal and iron (which largely affects coal); and these causes have tended to aggravate the decline in prices.

It has been said, and it may be with truth, that the development of machinery was as great in the fifteen or twenty years which preceded

*Down to the end of 1873 about 70,250 miles of railway had been constructed in the United States. From a table in the Economist of January 21, 1888, it appears that during the last fourteen years ending 1887, no less than 80,300 miles have been added. In India there were about 5,400 miles of railway in March, 1873, while on the 31st of March, 1887, there were no less than 13,390, and on the 31st of March, 1888, 14,383 miles.

1874 as in the subsequent years, and that steam transport had been also largely developed in the earlier period. But not only has the actual extension of railways and the cheapening of land and sea freight been greater in the subsequent years, but the effect of railways which had been previously made has been more felt.

As above noticed, large new districts of great natural fertility and rich in minerals have been opened up, and consequently civilized countries have been furnished with an unprecedented quantity of raw vegetable and mineral products.

The rise in the price of raw products during the period preceding 1875 exceeded the average rise of the prices of all commodities, while the fall in the prices of raw products since 1875 has been above the average fall. Comparing, therefore, the earlier with the later period, the lower cost of manufacture was in the earlier period counteracted by the higher cost of raw materials, while in the later period not only was this not the case, but the cost of the raw materials has decreased simultaneously with the diminished cost of manufacture.

27. It may be well here to point out that the fall in wages which has occurred, as we have stated, in certain industries in this country is, in some cases at least, largely accounted for by the fall in the price of the product of labor.

Take for example agricultural wages. There can be no doubt that, even if other circumstances were equal, the wheat-growers of this country compete at a great disadvantage with those whose conditions of soil and climate are better, and when the price of wheat falls and their margin of profit is diminished, or even disappears, they resort necessarily to an economy in their expenditure upon labor, and inasmuch as some land goes out of wheat cultivation altogether, and the labor market becomes overstocked, there is the less difficulty in their forcing wages down.

It may be noted, too, that this again would react upon prices, especially upon the prices of some kinds of food and textile fabrics used for clothing. The diminution of wages means a diminution in the purchasing power of the wage-earning classes, and therefore operates in this direction.

28. Other causes which have contributed to the fall of prices are referred to in section 61 (*c*). To these we may add the increasing tendency in late years to do business in a more direct manner than formerly, and to dispense with the services of middle-men and intermediate agencies of all kinds, thus effecting great economies in the cost of distribution.

Another cause, too, which has tended to lower certain prices in the open markets, from which the index numbers of prices are taken, has been the increase in protective tariffs. Those tariffs, by enabling manufacturers to demand high prices at home, have in so doing enabled them to throw their productions at an unnaturally low price upon foreign markets. In the case of bounties, *e. g.*, those on sugar, the operation of protection upon prices has been more direct, and even in protected countries, while the first effect of protection has been to raise prices, the ultimate effect has been in many cases to produce a glut and make it difficult for the protected industries to get rid of their stocks.

29. It is asserted by some that if the circumstances affecting each commodity the price of which has fallen were separately considered, the fall which has taken place would be amply accounted for.

We do not think it necessary to pursue the examination into the case of each commodity the price of which has been depressed in recent

years. It will be sufficient for the moment to say that it can hardly be disputed that causes altogether apart from the currency have unquestionably been at work, tending to diminish prices.

We may refer to the extraordinary development of the productive and industrial resources of the United States which has taken place since the conclusion of the civil war. The cessation of that struggle set free the energies of the people, and enabled them to devote themselves without impediment to increasing the productive and industrial resources of their country.

We may add, too, that, as compared with previous periods, there has been a remarkable freedom from the absorption of the people of the continent of Europe in operations of war. Their energies have thus been turned instead to industrial and commercial pursuits, which has led to an increase in their power of production.

30. It is argued that a fall in the price of one article arising from the increased or cheapened production of that article would be followed by a rise in the price of other articles, since those who save money in one direction have more to spend on other commodities.

But we do not think this would necessarily be the case to any considerable extent. When a commodity becomes cheaper it may fall within the reach of some who were unable to procure it at all before, and to a far greater extent there is likely to be an increased consumption on the part of those who were obliged to be content before with a smaller quantity. Many, therefore, may spend on the article, cheaper though it be, as much as they did before, and have no more to spare for other commodities. Cheaper bread and tea and clothing, for example, have certainly led, on the part of the masses of the people, to increased consumption. If it be said that there are some whose needs were before fully supplied, their number would not be great in proportion to the whole population, and in their case the money set free would probably either result in accumulation or in an increased expenditure upon luxuries. And there seems reason to believe that of late years such accumulations, as well as expenditure upon luxuries, have increased.

But besides this there can be no doubt that a fall in the price of one article often induces a fall in the price of another for which it may be substituted. Prices thus react on one another. And a simultaneous fall in the price of many important articles of consumption tends to check speculation and thus to cause a further and more general fall.

31. We ought also to notice that the years immediately preceding 1873 were a time of great speculative activity. The prices of some commodities, *e. g.*, coal and iron, rose rapidly to an abnormal height. And the large loans to foreign states during the period in question, though much of the money subscribed may have been intercepted by speculators, led to a considerable demand for materials for the construction of railways and other industrial undertakings. As soon as further loans were checked by doubts as to the security offered by the borrowing states, these demands naturally diminished or ceased.

Experience, too, shows that a period of excessive speculation is always followed by a period of exceptional depression. The observation, however, is a fair one that in the present case the depression has lasted longer and been more severe than was to be anticipated from the experience of former occasions when depression has been the outcome of overspeculation.

32. We may observe in passing that it may fairly be asked of those who deduce, from the evidence afforded by variations of price, the conclusion that the standard has appreciated, how they explain the fact

that in the case of some articles there has been no fall of price at all. The onus would appear to be on them to show how it has come about that the price of these articles has, on their hypothesis, so greatly risen. We do not think any complete answer has been given to this inquiry.

33. Those who maintain the view that there has been an appreciation of gold do not, however, limit themselves to the evidence afforded by the fall of prices with which we have been dealing. They assert that, owing to the diminished production of gold and its extensive use in countries formerly having a silver currency, there must have been an appreciation of that metal.

But it must be remembered that, if these circumstances have been working in the direction of appreciation, there have been other influences operating in a contrary direction also at work.

We allude to the economies of gold which must have resulted from the development of the banking system which has taken place in France and from the institution of a great clearing-house system in Germany, as well as from the extension in our own country of branch banks, and the great increase in the use of checks in place of gold, especially for small amounts. The employment of postal orders has to some small extent operated in the same direction, and in a more important degree the use of telegraphic transfers. Economy of gold, too, has resulted through the use of the telegraph rendering the accumulation and transport at times unnecessary where, but for this, it must have taken place.

In connection with this we may also mention the great diminution in the time necessary for the transport of gold from one part of the world to another, which enables the same amount of metal to do much more work. We believe, too, that there has been an increased use of securities for the purpose of discharging international indebtedness, thus contributing to the settlement of accounts without the necessity for the transmission of bullion.

It is difficult, and indeed impossible, to estimate the relative forces of these tendencies which have thus been acting in opposite directions; but they must both be borne in mind in considering the question whether there has been an appreciation of gold.

34. Those who assert that the economies of gold have not balanced the additional demands upon it point also to the rise in prices which took place during and after the period of the great gold discoveries, and contend that the conditions being reversed the reverse process has now taken place.

We have, however, already drawn attention to the consideration, sometimes lost sight of, that there has been no diminution in the supply of the gold which exists for the use of the world. The stock of gold has not diminished, and indeed still increases, though the annual addition to the stock has somewhat diminished of late years.

This fact is of vital importance. Suppose, for instance, that the production of gold and of wheat were, in any given year, increased in the same ratio, say that they were both doubled. The result would be that the stock of wheat would be doubled or more, while that of gold, on the other hand, would only be fractionally greater. If, then, the wheat and the gold were compared with some third article, say iron, of which the demand and supply had remained the same, it is evident that while the ratio of iron to gold would have undergone little change, that of iron to wheat would have greatly altered.

35. It is to be observed, further, that the fall of prices before the gold discoveries was not so great as might have been expected if the volume of the standard metal had as direct an effect upon prices as has been

suggested. The period of peace from 1820 to 1850 was marked by a great increase of population and a vast development of trade, and, consequently, of the use of money, while the annual increment to the stock of gold was so small that one would have anticipated a far greater depression of prices than was actually manifested.

A similar observation may be made with regard to the movement of prices upwards which followed the great gold discoveries. When the circumstances which accompanied the latter are borne in mind, they amply account for a rise in prices, apart from the mere increase in the volume of the metal of which the currency consisted. The gold was discovered in distant and undeveloped countries, and obtained often in large amounts with little expenditure of labor. The men in those countries thus found themselves easily possessed of a commodity immediately exchangeable against all other commodities, and so creating an additional demand for the latter. They were willing to give much of the metal to supply their wants, and the price of labor and of commodities, many of which could only be obtained from a distance, rose very high. Multitudes, too, were attracted to the spot in the hope of acquiring wealth. Many industries were stimulated, speculation was rife, and all the elements which, other circumstances remaining the same, go to produce higher prices were at work.

36. We have now to consider the mode in which it is suggested that the appreciation has taken place, and here we enter upon an inquiry of extreme difficulty, namely, what is the nexus between prices and the metal which forms the standard of value. It can not be questioned that an increase in the quantity of that metal which, as we have pointed out, is directly exchangeable against all commodities, increases the volume of purchasing power which is in the market seeking commodities, and so tends to raise prices.

We may observe also that a rise in the price of certain commodities may react upon other prices. Those who receive more for the commodities which they possess can afford to give more for those which others have to dispose of.

37. If no one would part with his property except in exchange for the standard metal, there can be no doubt that the effect of a material increase or diminution in its production would be in direct relation with such increase or diminution. In that case the proposition of the economists that prices are determined by the ratio which commodities bear to the money (using that term in its most limited sense) seeking commodities would be strictly accurate. But with an elaborate system of banking and credit, such as exists more or less in all civilized countries, the problem becomes much more complex. It is not money only that men will take in exchange for their goods; indeed the transactions which take place in this country in a single day probably exceed in amount the stock of money that exists in the country, and they are often settled with the employment of a very small amount of coin.

We have, of course, been using the term money as applicable only to coined metal, or metal which is available for immediate coinage.

38. It is admitted by all economists that the existence of the banking system has resulted in great economy in the use of money. The transfer, by means of checks, of the right to the possession of gold has, to a vast extent, taken the place of the transfer of gold itself, and it can not be doubted that every day the payments which are made by means of checks exceed greatly the amount of gold which exists available to meet the checks if every holder were to insist upon receiving the gold which he is entitled to claim.

The purchasing power of the people consists, it appears to us, not only of the actual gold which they possess, or of that which their bankers are possessed of and can immediately command, but, to use a popular expression, of the money which they have at their disposal at their bankers, which greatly exceeds the amount of gold which either they or their bankers could at any given time at once command. Indeed this is an understatement of the case, for the credit which customers can obtain from their bankers may have as potent an influence upon prices as their cash balances.

So long as those who possess commodities are as ready to take checks for them as they would be to take gold, the balance which a man has, or can have at his bankers influences prices to the same extent as if he were possessed of that amount of gold.

Gold has come now to be much more a measure of the comparative value of commodities than an actual medium of exchange, although it still remains the basis of all transactions, and of course enough gold must be held by bankers to prevent the apprehension that it could not be obtained if required.

39. It may be that it was from losing sight of this fact that the anticipations of eminent economists, who predicted a much greater rise in prices as the result of the gold discoveries than was actually experienced, were not realized.

It is indeed said that although an extended system of credit effects an economy in the use of gold, the volume of credit bears an exact ratio to the volume of the metal on which it is based, so that if the amount held by bankers for their customers were now say ten times the amount of gold in their tills, or in the banking reserves, the addition of £1,000,000 of gold would at once add £10,000,000 to the amount of banking credit.

We can not see that there is any evidence that this is true in point of fact, nor do we see that it would necessarily be the case. The cash balances held by bankers for their customers have greatly risen in recent years, while there seems reason to believe that the amount of gold held against them, even if it has increased, has not done so in the same proportion.

40. It is of course impossible to diminish beyond a certain point the amount of gold which bankers must hold or have at command, but so long as enough exists to sustain credit it is difficult to see how it could produce any substantial effect upon prices at any rate, whether more or less were held.

This, of course, must be guarded by the qualification that an increase or diminution in the amount of gold exercises a direct influence upon the rate of discount, and a rise or fall in that rate tends immediately to affect the price of stock exchange and other securities, but we are disposed to think that it exercises a less direct and sensible effect on the price of commercial products.

41. How then does an expansion or contraction of the metallic currency affect prices?

The volume of the currency is certainly not one of the elements which parties consciously take into account in ordinary commercial transactions when fixing the price of sale and purchase.

Where then does it come into contact with and exert its influence upon prices? This is a question of extreme complexity and difficulty, and though various suggestions have been made, there is no common agreement upon the answer to be given to it.

42. One explanation propounded is that a diminution or increase in the supply of the standard metal affects prices directly in those less-

developed countries where the transactions of commerce consist in the actual exchange of commodities for the metal itself, and that the prices in those countries re-act on prices elsewhere.

Without disputing that this may be the case, we do not see any evidence of these conditions existing to an extent sufficient to produce any very sensible effect upon general prices.

43. Another explanation suggested is that when appreciation of gold is anticipated, the possessors of it are unwilling to invest in commodities, owing to the expectation that its appreciation will depress prices, and consequently employ their money instead in the purchase of securities bearing a gold interest which the appreciation of the standard will render increasingly valuable. This, it is said, tends of itself to depress the price of commodities.

It may be that these effects would be produced if the fact that the standard was likely to appreciate were so generally seen and realized as to induce the suggested action on a large scale. But we do not think there has been any general recognition of the fact that appreciation was probable or in progress, or that this has been consciously the basis of action to any material extent.

44. The most obvious mode in which the appreciation of gold operates upon prices is as pointed out in section 40, through the rate of discount. Any increase in the supply of gold to this country, unless used for industrial purposes, would flow ultimately to the Bank of England, and thus tend to lower the rate of discount, whilst a diminished supply would have the contrary tendency. And no doubt prices might be affected by these changes.

When, however, we compare the rate of discount during the period we are considering with that prevailing in former periods, we do not see any evidence that the depression of prices, which has distinguished recent years, was initiated by a high rate of discount arising from a scarcity of gold.

It has indeed been pointed out that the rate of discount from 1871 to 1874, which covered the period of the German demand for gold, was somewhat high, and it is suggested that we see in this both evidence of the appreciation of the metal and the first impulse towards lower prices.

But it is to be observed, in the first place, that the rate of discount during those years had its parallel, or was even higher, in previous epochs when it can not be suggested that appreciation of the metal was the cause, and when no lasting depression of prices resulted. We may cite as examples the years 1855 to 1858, and 1863 to 1866. Secondly, the features which characterized the years from 1871 to 1874 were quite sufficient to account for a high rate of discount. It was a period of feverish speculation, when high prices were inducing men to embark largely in new enterprises. Added to this, the financial operations resulting from the Franco-German war and the payment of the war indemnity to Germany produced also, no doubt, an exceptional and very sensible effect upon the discount market.

45. But, in addition to these considerations, we must remark that those who maintain the theory that the low prices which have prevailed have resulted from the appreciation of gold, trace that appreciation as much or more to the United States demand than to the German.

It is certain that there was a greater diminution in the annual supply of that metal during the years of the United States demand than during the time when the German supply was procured; yet we fail to see any evidence of the appreciation of gold in the records of the rate of dis-

count between 1878 and the present time. The rate has been both lower and less subject to fluctuations than before.

We fully admit that where the accumulations of capital are great, and speculative enterprise small, as is not unlikely to be the case with falling prices and a diminished margin of profits, however caused, a low rate of discount may be accounted for consistently with the fact that there has been some appreciation of the standard. But if there had been a serious scarcity of gold, which had caused prices to fall, we should have expected to see some marked indication of it in the state of the discount market sufficient to account, at all events, for the initial depression.

46. In summing up our observations on this head, we would observe that it is one upon which it seems scarcely possible to arrive at any certain conclusion. The causes which contribute to affect prices are so subtle, and the information which we possess so imperfect, that we can do no more than hazard a statement as approximately accurate.

47. We do not think that there is any conclusive evidence of a substantial appreciation of gold to be derived, either from a review of the variations in prices or of the circumstances relating to the production and use of that metal; at the same time we are far from denying that there may have been and probably has been some appreciation, though we think it absolutely impossible to determine its extent.

When we look at the character and times of the fall in the prices of commodities which has exhibited itself, and the variations which we have pointed out above in section 22, we think the sounder view is that the greater part of the fall has resulted from causes touching the commodities rather than from an appreciation of the standard.

48. In the above remarks we have dealt with the fall of the gold price of commodities generally, and have come to the conclusion that the greater part of the fall has resulted from causes touching the commodities, rather than from causes specially affecting gold; but here we are met with the question whether this is true of silver as well as of other commodities.

We have already referred to the striking fact that, whilst gold prices have undoubtedly fallen, silver prices in silver-using countries have not, so far as we can learn from the imperfect statistics of those prices, risen to the same extent. It appears, at any rate, to be true, that the adjustment of prices between gold and silver using countries has taken the direction of a fall in gold prices rather than a rise in silver prices. These facts would seem *prima facie* to indicate that, whilst gold, as compared with commodities, has risen in value, silver has, comparatively, retained its position; and they have been relied on as pointing to the conclusion that, as between gold and silver, it is gold which has appreciated, rather than silver which has depreciated.

49. But this conclusion is by no means certain or necessary. It is quite possible, consistently with the observed facts, that both silver and commodities may have fallen in value together, as compared with gold; and that the result of this concurrent fall may have been to prevent a fall in silver prices, which would have taken place if it had not been for the concurrent fall in the gold value of silver. If this is what has really happened, silver prices in silver-using countries, if not higher, or even if lower than they formerly were, must now be higher than they would have been but for the fall in the gold price of silver.

Having these two alternatives to choose from, viz, an appreciation of gold on the one hand, and a depreciation of commodities, coupled with a depreciation of silver, on the other, it becomes important to consider

with some care what are the special causes which have tended to lower the value of silver, and what effect they have had.

50. The first and most obvious of these is the increase in the annual supply which has occurred during the period of the fall in the gold price of silver, and, concurrently with this increase, the diminution in its use, owing to the currency legislation of Germany, the Latin Union, and other European countries.

It is remarked, and no doubt plausibly, that if these elements alone be regarded, the reverse phenomena in the case of gold afford as much ground for the assertion that it is by the appreciation of that metal that the changed relation of the two has been brought about, as for the allegation that it has arisen from the depreciation of silver.

51. We shall have occasion hereafter to dwell upon certain other circumstances which must be taken into consideration in estimating whether the causes at work have been sufficient to account for a depreciation of silver so great as that represented by the fall in its gold price.

But it appears to us most important to bear in mind, at the outset, a marked distinction between the position of the two metals so soon as the rupture of the bimetallic tie was complete.

Silver, as we have pointed out, loosened from its artificial tie to gold, became in the West as well as in the United States a mere commodity and freely subject to all the influences, which in the case of other commodities affect their market price.

It may have felt the impulse of causes previously in operation which the existence of the bimetallic link had held in check; and, independently of a diminution of its use in the countries forming the Latin Union, the circumstance that it had in those countries become a mere commodity and could no longer be converted at the will of the possessor into coin, would be calculated to depress its value.

But apart from this, the very fact that apprehension as to the future value of silver had induced the action of the Latin Union, the fear of further depreciation, the stock of metal thrown on the market by Germany, and the anticipation of further sales by that country—all these, with other circumstances that might be named, would be manifest as elements affecting the price to be given for silver, and would be likely to lead to its depression. And there would not necessarily be any calculable relation between these causes of depression and the extent to which the price of the metal fell.

For it appears certain, not only that what may be termed sentimental considerations play a large part in determining market prices, but that causes which can logically be shown to be inadequate, or at least can not be proved to be adequate, may, nevertheless, be the true explanation of a fall in the price of a commodity. A depressed market, in the absence of some new stimulus, generally tends to further depression.

Every element, then, calculated to lower the price of silver, would produce a direct and immediate effect, and one in excess, it may be, of what would reasonably be anticipated from a consideration of alterations in its supply and monetary use alone.

52. With gold, on the other hand, the case is entirely different. To it the mints of all the important civilized countries of the world are open, and these and the great banking establishments are the markets to which it finds its way. It can not be said to have a market in the same sense as silver.

It is argued, and we admit with truth, that gold is a commodity at Calcutta just as silver is in London. But while London is the great silver market of the world, and the price in that market fixes the gen-

eral price of the metal, no one can pretend that the same is true of Calcutta in relation to gold. The latter metal has no central market where it is disposed of by sale, and where the daily quotations of price influence men's minds as to its value and their judgment as to its prospects.

On the assumption, then, that appreciation of gold has been going on owing to altered conditions in the supply and use of that metal, these causes would operate more slowly and less directly than would the like causes operating upon the silver market, when once it has become fully sensitive to them. The progress of appreciation would not invite attention at the time, and would be seen only in its ultimate effect upon prices. And, in the case of gold, the effects would be accurately measured by the strength of the causes at work, free from, or at all events scarcely affected by, the sentimental considerations to which we have alluded.

Even assuming the alterations in the supply and use of the two metals to be of equal potency, we should not be surprised to find that owing to the difference in circumstances on which we have been insisting, a greater depreciation of silver than appreciation of gold was manifested.

53. There is another consideration of equal or even greater importance to be borne in mind.

We have already in section 33 dwelt upon the fact that the circumstances tending to the appreciation of gold have been counteracted or kept in check by other influences operating in the contrary direction.

But in the case of silver there have been no such counter influences at work. Economies in the use of metallic money which have tended to diminish the appreciation of gold, so far as they have had any influence at all in the case of silver, must have tended to intensify and increase its depreciation.

54. But the changes in the supply and use of silver need to be considered in connection with the special circumstances under which they have taken place, to some of the most important of which we have yet to allude.

It is in Europe and in America that these changes have occurred; it is the European and American market for silver which would in the first place be affected by them; and it is through that market that their effect must reach the great silver-using countries of the East.

55. It is therefore desirable to consider in the first place the effect of these changes on the silver market in America and Europe, and afterwards to consider the relation of this market to the silver markets of the East.

We have no estimate of the quantity of silver in Europe and America used in the arts. But it is the monetary supplies of the precious metals with which we are more immediately concerned, and of these we have estimates which, though rough, are sufficient for our purpose. Dr. Soetbeer's estimate of the monetary supply of the precious metals in those countries at the end of the year 1885, is as follows, viz:

Gold	£668,200,000
Silver	392,150,000

The subsidiary silver being estimated in these figures at the value assigned to it by law, *i. e.*, at a value considerably above its value as silver bullion.

Most, if not all, of this gold constitutes a part of the aggregate stock of gold upon which supply and demand operate, and which has to be taken into consideration when we desire to learn the effect of the diminished annual supply of gold or of the increased demand for it.

56. But this is not the case with the silver. The subsidiary silver coinage, to which an artificial gold value is given by legislation, constitutes much the larger part of the silver money of Europe and America; and this portion of the above amount forms no part of the stock in the open market, the value of which is affected by demand and supply. The above stock of monetary silver was distributed as follows, according to Dr. Soetbeer's estimate:

Great Britain	£21,600,000
British Colonies (without India)	3,300,000
Netaerlands	13,450,000
Latin Union	160,000,000
Germany	44,600,000
Scandinavian countries	2,100,000
United States	64,000,000
Total	309,650,000
Russia	14,000,000
Austro-Hungary	18,500,000
Other countries in Europe and America	50,000,000
Total	82,500,000

Out of these amounts all or nearly all of the stock of Great Britain and her colonies, Holland, the Latin Union, Germany, Scandinavia, and the United States consist of subsidiary silver maintained at an artificial gold value, and these subsidiary coinages with an artificial value must therefore be deducted from the total monetary stock of silver in Europe and America before we arrive at the amount of such stock which can be affected by an increase in the annual supply of silver. The remainder, as will be seen, amounts to considerably less than £100,000,000 in value.

It is this portion alone, so far as money is concerned, which has to be taken into consideration when we desire to learn the effect of the increased annual supply, or of the diminution, if any, in the demand.

57. An increase in the supply of silver of the value of £10,000,000* a year, such as has taken place during the last fifteen years, though comparatively unimportant when considered as an addition to the whole stock of silver in the world, or to the whole stock of silver money in the world, or even to the whole stock of silver money in Europe and America, becomes very important when considered as an addition to a stock considerably under £100,000,000.

Even this is an overstatement of the stock of silver subject to these influences. In many of the countries in which it is to be found, the existence of a forced paper currency and the absence of free minting operate so as to prevent its having an ordinary market value.

58. In considering, therefore, the effect of an addition to the annual supply we must look to the proportion which it bears to the stock of unmanufactured silver and of coins circulating at their full value, rather than at its relation to the total existing stock of the metal.

Even if it should be thought that, in order to arrive at the amount of silver which is affected by the increased supply, we ought to take into consideration the silver used in the arts as well as the monetary stock of silver, the small proportionate amount of the monetary stock still remains a most important factor; and it must be remembered that the value of manufactured silver has been enhanced by the cost of manufacture to an extent largely exceeding its bullion value—a fact which diminishes the probability of its coming into the market as bullion.

*See figures in Part I, section 12.

It is also a material consideration that while there is evidence of the increased demand for gold for use in the arts in Europe and America, there is, according to Dr. Soetbeer, no such evidence in the case of silver.

59. So far, therefore, as Europe and America are concerned, the stocks of silver upon which an increased supply or a diminished demand, can operate are proportionately small, and the increase of annual supply is proportionately large; whilst as regards demand, the actual use of silver in Europe and America, whether for monetary or for other purposes, has either decreased, or if it has increased, has increased very little. For the reasons to which we have referred in section 51 a comparatively small addition to the supply may produce an effect upon the market quite out of proportion to the extent of the addition.

If, then, we consider Europe and America alone, there appear to be ample causes to account for a large fall in the gold value of silver, arising from causes affecting silver.

But it is of course to the East, and to the relation of the East to the West, that we must turn for a more complete answer to our question. It is Asia, and India in particular, which always has been, and is, the great absorbent and user of silver; and it is in the trade with Asiatic countries that the divergence between gold and silver is most apparent, and its effects most strongly felt.

It is obvious, therefore, that the East in general, and India in particular, whose mints are freely opened to silver, ought to be the principal factors in absorbing any increase of supply, and in preventing any considerable lowering of the gold price of silver; and this is in fact what economists expected when silver first began to fall.

If we can find any cause or causes which have interfered with the operation of the Eastern demand, which have checked the flow of silver from the over-supplied market of the West to the East, or which have lowered the value of the Indian silver currency when measured in gold, we shall have done much to show that the fall in the gold price of silver is, like the fall in the gold price of other commodities, due in the main to causes affecting silver.

60. One of the difficulties of the question has always been to know why a larger demand for silver in the East has not followed on its fall and cheapened cost in the West.

When silver first began to fall, it was said that the East, whose mints and markets stood open to silver, would take the surplus silver, as it did at the time of the gold discoveries, and that the gold price of silver would be thus kept at or near its former level.

When it was found that this did not happen, the changes in the relative values of the two metals were attributed by many to the appreciation of gold. For this, it was said, would account for a fall in the gold price both of silver and of commodities, but would not necessarily cause any flow of silver from the West to the East; and it was consequently alleged by those who held this view that this appreciation of gold was the cause both of the lower gold price of commodities and of the lower gold price of silver.

But it is obvious, on consideration, that the same effect would be produced on the flow of silver to the East by a fall in the gold price of commodities and of silver, whether that fall was due on the one hand to the appreciation of gold, or on the other to causes which affected commodities and to similar causes which simultaneously affected silver.

Let it be assumed that goods have fallen in gold price from causes affecting goods, and that silver has fallen in gold price in Europe from

causes affecting silver. It is obvious that as regards articles imported into Europe from the East, the English importing merchant would make no new profit by exporting the cheapened silver and importing Eastern goods, if for the goods he imports he were to receive a gold price as much lowered as the gold price of silver had been lowered. And as regards articles of export to the East, there would be no greater profit in buying and exporting the cheapened silver than in buying and exporting other English articles, such as cotton goods and iron, which have fallen in gold price as much as or more than silver.

In examining the relation of commodities to gold, we have come to the conclusion that the greater part of the fall in the gold price of commodities in general, and among them of the great articles of trade with the East, is due to causes touching the commodities rather than to an appreciation of gold.

If, then, we are right in this conclusion, the fall in the gold price of commodities arising from these causes is itself the reason why the silver in Europe, though cheapened for its gold price from causes affecting silver, has not been exported to the East, and why such export has not maintained or restored the former gold value of silver.

The calculations which were founded on a notion that a fall in the value of silver in the West must send silver to the East, and redress the divergence between gold and silver, have proved erroneous, not because silver has not fallen, but because other things have fallen as much as or more than silver. It was assumed that other things would be equal, and they have not been equal.

61. The above reasons go far to explain why the increased supply of silver in the West has not been drained off to the great reservoirs of the East.

But another cause which has probably prevented India from taking silver, and which has depressed the silver currency of India in terms of the gold currency of England, is, we think, to be found in the increased indebtedness of India to England on current account, in other words, on the balance of liquidation between the two countries, the operation of which on the gold value of the rupee is no longer checked by any bimetallic tie between the two currencies.

62. We have all of us come to the conclusion that the dissolution of the tie between silver and gold created by the bimetallic system of France and the Latin Union distinguishes the period subsequent to 1873 from former times, and has left other causes of demand for, and supply of, gold and silver free to act.

So long as the ratio between gold and silver remained approximately stable, the two metals might practically be considered one; and the relations of exchange between a country with a gold standard, such as England, and a country with a silver standard, such as India, did not differ in any essential particular from the relations of exchange between two countries with a gold standard, such as England and the United States, or England and Australia. A *quasi* par of exchange was established between the sovereign and the rupee, which, though not absolute, as in the case of coins of the same metal, fluctuated within narrow limits.

The peculiarity in the case of England and India is, that, independently of the fluctuating balance of trade or indebtedness arising out of current commercial or financial transactions, there is a constant flow of the precious metals, and especially of silver, from America, as the country of production, and from England, as the great market for the precious metals, to India and the East.

The result of this peculiarity is that alterations in the transport of the precious metals, which, between two countries having equal access to them, would be reciprocal and alternate, show themselves in the case of India in a greater or a less flow of silver to India, and only in a very extreme case in the entire stoppage or reversal of the flow.

63. In the ordinary case of two countries having the same currency, the exchange is regulated by the current state of liquidation between the two countries.

If England owes more than usual to the United States on account of bad harvests at home and an excessive import of corn, or if England has to make unusual remittances to Australia on account of large loans and advances for railways or other purposes, the effect is at once seen in the exchange, which alters in favor of the United States or of Australia. Bills drawn in London on New York or on Sydney are at a premium. Bills drawn at those places on London are at a discount. But this premium or discount can never exceed the cost of sending gold from London to those places. If there is a normal flow of gold from those places to England it will be checked, and may be stopped or reversed. The same thing would happen in the opposite direction, if these exports from the United States or Australia fell off, and if the payment of interest on money advanced by England caused the balance of liquidation to turn the other way. But in either case, it is the cost of remitting gold which limits the alteration in exchange.

64. Now, on the assumption that we are right in our view of the operation of the bimetallic tie, the relations of England and India in regard to exchange were, during the operation of that tie, substantially the same as those of England and the United States, or of England and Australia.

Gold and silver were, for purposes of exchange, one metal; the varying balance of liquidation between the two countries would have the same effect on the exchange as it has in the case of countries having the same currencies; and its effect would be limited in the same manner, viz, by the cost of transmitting bullion, which in this case was silver, and which always, or almost always, as we have seen, traveled in the same direction, viz, from England to India.

If India became more indebted to England upon current transactions, *i. e.*, if she had larger remittances than usual to make to England, the effect would be seen in an alteration of the exchange in favor of England. The rupee would fall and the sovereign would rise. But as the two metals were tied together, this rise or fall would, as in the case of England and the United States, or of England and Australia, be limited by the cost of transporting bullion. If the Indian exchange had fallen beyond a certain point it would have paid the Indian merchant better to export silver to England than to pay the premium. As a matter of fact the flow was always from England to India, and therefore the effect of an extreme fall in exchange was to check or stop the flow, not to reverse it. But it was the cost of transport which formed the limit of the fall of exchange. The ounce of silver being always capable of employment at a certain gold value in France, it would always be more advantageous to send silver to France or to keep it there, than to pay an excessive premium on exchange.

65. But when the bimetallic tie was dissolved this state of things was altered.

If the current indebtedness of India increased, if there were more remittances to be made by India to England than by England to India, the exchange would alter as before in favor of England, but there would

be no such limit as before to the fall in the gold value of the Indian currency.

The exchange might alter with the balance of liquidation until an increase in Indian exports, or other alterations in the conditions of trade, had satisfied the liability, and every increase in the balance against India would show itself by a fall in the gold value of the rupee.

66. It is not possible to state a complete account between any two countries so as to show, with certainty and accuracy, the balance of liquidation. All that can be done is to give certain known items, and in the case of India these known items are so important, when compared with the unknown, as to justify some confidence in the result.

The following would be the principal items in a complete account:

Liability of India:

1. Imports of merchandise.
2. Imports of gold and silver.
3. Freights on exports, minus expenses incurred in India.
4. Private remittances of money and securities from India.
5. Balance of remittances on Government account.

Means of payment:

6. Exports of merchandise.
7. Exports of gold and silver.
8. Private remittances of money and securities to India.

Of these items, those numbered 3, 4, and 8 can not be procured at all; but they are probably unimportant, as compared with the others, and there is no reason for thinking that they would materially alter the balance.

As regards the other items, it is to be remembered that in taking those numbered 1, 2, 5, and 6 from the Indian statistics, we include exports to and imports from silver-using countries, as well as to and from England and other gold-using countries. But considering the comparative magnitude of the trade of India with England, and the importance of the item numbered 5 (viz, council bills), these considerations will probably not affect the general results indicated by the figures in the following table:

Statement showing approximately the balance of trade between India and foreign countries.

Items.	1870–'71.	1871–'72.	1872–'73.	1873–'74	1874–'75	1875–'76.
	Rx.	*Rx.*	*Rx.*	*Rx.*	*Rx*	*Rx.*
Exports of—						
Merchandise	55,356,000	63,209,000	55,251,000	54,996,000	56,359,000	58,091,000
Gold	501,000	8,000	79,000	266,000	215,000	291,000
Silver	1,720,000	1,468,000	1,219,000	1,648,000	1,410,000	1,909,000
Total	57,557,000	64,685,000	56,549,000	56,910,000	57,984,000	60,291,000
Imports of—						
Merchandise	34,469,000	32,092,000	31,875,000	33,820,000	36,222,000	38,892,000
Gold	2,783,000	3,573,000	2,622,000	1,648,000	2,089,000	1,836,000
Silver	2,662,000	8,000,000	1,934,000	4,144,000	6,052,000	3,464,000
Total	39,914,000	43,665,000	36,431,000	39,612,000	44,363,000	44,192,000
Net exports of merchandise	20,867,000	31,117,000	23,376,000	21,176,000	20,137,000	19,199,000
Net imports of gold	2,282,000	3,565,000	2,543,000	1,382,000	1,874,000	1,545,000
Net imports of silver	942,000	6,532,000	715,000	2,496,000	4,642,000	1,555,000
Excess of exports	17,643,000	21,020,000	20,118,000	17,298,000	13,621,000	16,099,000
Rupee paper enfaced for payment of interest in England	—4,366,000	—165,000	—256,000	767,000	361,000	—1,737,000
	13,277,000	20,855,000	19,862,000	18,065,000	13,982,000	14,362,000

Statement showing approximately the balance of trade, etc.—Continued.

Items.	1870–'71.	1871–'72.	1872–'73.	1873 '74.	1874–'75	1875–'76.
REMITTANCES BY THE GOVERNMENT:						
Payments in India for bills and transfers drawn to defray home charges	*Rx* 9, 708, 000	*Rx.* 9, 956, 000	*Rx.* 15, 058, 000	*Rx.* 14, 264, 000	*Rx.* 11, 999, 000	*Rx* 14, 504, 000
Bills drawn on India for interest on enfaced rupee paper	820, 000	679, 000	610, 000	602, 000	610, 000	659, 000
	10, 528, 000	10, 635, 000	15, 668, 000	14, 866, 000	12, 609, 000	15, 163, 000
Excess of surplus exports over remittances by Government	2, 749, 000	10, 220, 000	4, 194, 000	3, 199, 000	1, 373, 000	
Excess of remittances by Government over surplus exports						801, 000
Average rate of exchange	*s. d.* 1 10 49	*s. d.* 1 11. 12	*s. d* 1 10 75	*s. d* 1 10 35	*s. d* 1 10. 15	*s. d* 1 9. 62

Items.	1876–'77	1877–'78.	1878–'79.	1879–'80.	1880–'81	1881–'82.
Exports of—						
Merchandise	*Rx.* 61, 014, 000	*Rx* 65, 222, 000	*Rx.* 60, 937, 000	*Rx4* 67, 212, 000	*Rx.* 74, 581, 000	*Rx.* 81, 968, 000
Gold	1, 237, 000	1, 111, 000	2, 359, 000	300, 000	17, 000	13, 000
Silver	2, 793, 000	1, 100, 000	1, 623, 000	1, 735, 000	1, 423, 000	1, 087, 000
Total	65, 044, 000	67, 433, 000	64, 919, 000	69, 247, 000	76, 021, 000	83, 068, 000
Imports of—						
Merchandise	37, 441, 000	41, 464, 000	37, 800, 000	41, 166, 000	53, 117, 000	49, 113, 000
Gold	1, 444, 000	1, 579, 000	1, 463, 000	2, 050, 000	3, 672, 000	4, 857, 000
Silver	9, 992, 000	15, 776, 000	5, 594, 000	9, 605, 000	5, 316, 000	6, 466, 000
Total	48, 877, 000	58, 819, 000	44, 857, 000	52, 821, 000	62, 105, 000	60, 436, 000
Net exports of merchandise	23, 573, 000	23, 758, 000	23, 137, 000	26, 046, 000	21, 464, 000	32, 855, 000
Net imports of gold	207, 000	468, 000	—896, 000	1, 750, 000	3, 655, 000	4, 844, 000
Net imports of silver	7, 199, 000	14, 676, 000	3, 971, 000	7, 870, 000	3, 893, 000	5, 379, 000
Excess of exports	16, 167, 000	8, 614, 000	20, 062, 000	16, 426, 000	13, 916, 000	22, 632, 000
Rupee paper enfaced for payment of interest in England	1, 443, 000	1, 348 000	3, 598, 000	2, 834, 000	702, 000	1, 886, 000
	17, 610, 000	9, 962, 000	23, 660, 000	19, 260, 000	14, 618, 000	24, 518, 000
REMITTANCES BY THE GOVERNMENT:						
Payments in India for bills and transfers drawn to defray home charges	14, 494, 000	10, 323, 000	17, 465, 000	17, 992, 000	18, 206, 000	22, 128, 000
Bills drawn on India for interest on enfaced rupee paper	592, 000	617, 000	808, 000	727, 000	799, 000	839, 000
	15, 086, 000	10, 940, 000	18, 273, 000	18, 719, 000	19, 005, 000	22, 967, 000
Excess of surplus exports over remittances by Government	2, 524, 000		5, 387, 000	541, 000		1, 551, 000
Excess of remittances by Government over surplus exports		978, 000			4, 387, 000	
Average rate of exchange	*s. d.* 1 8 5	*s. d.* 1 8. 79	*s. d.* 1 7. 79	*s. d.* 1 7. 96	*s. d.* 1 7. 95	*s. d.* 1 7 89

Statement showing approximately the state of trade, etc.—Continued.

Items.	1882–'83.	1883–'84.	1884–'85.	1885–'86.	1886–'87.	1887–'88.
Exports of—	*Rx.*	*Rx.*	*Rx*	*Rx*	*Rx.*	*Rx.*
Merchandise	83, 485, 000	88, 176, 000	83, 255, 000	83, 881, 000	88, 470, 000	90, 544, 000
Gold	164, 000	7, 000	106, 000	329, 000	657, 000	243, 000
Silver	878, 000	1, 003, 000	1, 865, 000	780 000	1, 064, 000	1 361, 000
Total	84, 527, 000	89, 186, 000	85, 226, 000	84, 990, 000	90, 191, 000	92, 148, 000
Imports of—						
Merchandise	52, 096, 000	55, 279, 000	55, 703, 000	55, 656, 000	61, 777, 000	65, 005, 000
Gold	5, 095, 000	5, 469, 000	4, 778, 000	3, 092, 000	2, 834, 000	3, 232, 000
Silver	8, 358, 000	7, 409, 000	9. 110, 000	12, 386, 000	8, 220, 000	10, 580, 000
Total	65, 549, 000	68, 157, 000	69, 591, 000	71, 134, 000	72, 831, 000	78, 817, 000
Net exports of merchandise	31, 389, 000	32, 897, 000	27, 552, 000	28, 225, 000	26, 693, 000	25, 539, 000
Net imports of gold	4, 931, 000	5, 462, 000	4, 672, 000	2, 763, 000	2, 177, 000	2, 989, 000
Net imports of silver	7, 480, 000	6, 406, 000	7 245, 000	11, 606, 000	7, 156, 000	9, 219, 000
Excess of exports	18, 978, 000	21, 029, 000	15, 635, 000	13, 856, 000	17, 360, 000	13, 331, 000
Rupee paper enfaced for payment of interest in England	2, 048, 000	—110, 000	—270, 000	- 1, 100, 000	- 500, 000	1, 744, 000
	21, 026, 000	20, 919, 000	15, 365, 000	12, 756, 000	16, 860, 000	15, 075, 000
REMITTANCES BY THE GOVERNMENT						
Payments in India for bills and transfers drawn to defray home charges	18, 896, 000	22, 858, 000	16, 029, 000	14, 403, 000	16, 738, 000	20, 818, 000
Bills drawn on India for interest on enfaced rupee paper	901, 000	868, 000	871, 000	830, 000	796, 000	806, 000
	19, 797, 000	23, 726, 000	16, 900, 000	15, 233, 000	17, 534, 000	21, 624, 000
Excess of surplus exports over remittances by Government	1, 229, 000	.....	.....	.....	.....	.....
Excess of remittances by Government over surplus exports	.....	2, 807, 000	1, 535, 000	2, 477, 000	674, 000	6, 549, 000
Average rate of exchange	*s. d.* 1 7 52	*s. d.* 1 7. 53	*s. d* 1 7. 31	*s. d.* 1 6. 25	*s. d* 1 5. 44	*s d* 1 4. 89

67. These figures show that, so far as we can judge from the items comprised in them, the balance of liquidation has, since 1870, been constantly, though not regularly, against India; and if the above reasoning is correct, they give a reason why the silver currency of India has become depreciated in terms of English currency, or, in other words, why the rupee has fallen in gold value. They thus furnish an additional reason why the demand of India for silver has not been such as to counteract its fall in gold value in Europe, and why the flow of silver to the East has been checked.

It must not be supposed that India stands alone in respect of the change which we have pointed out in the growing balance of liquidation; but we refer to it here as bearing upon the demand for silver for the purpose of remittance to that country.

68. If our view is correct, it illustrates the real effect of the Indian council bills, which undoubtedly compete with silver as a mode of remittance, and thus have an immediate effect on the silver market. These bills indicate an increased demand for remittances from India to England, and tend to make the demand for such remittances exceed the demand for remittances from England to India. This excess is con-

sequently shown in a fall in the exchange value of the rupee, not now limited, as heretofore, by the bimetallic tie between gold and silver.

69. It is not to be expected, especially with the imperfect data at our disposal, that the connection between the fall in exchange, the balance of liquidation, and the different items constituting the balance can be traced in detail in the statistics. The various items which help to create the balance of international liquidation are too many and too uncertain to make such a process possible. But there is enough in the above figures to show that the balance against India has been and is on the increase, and that the demands on India have not been completely counteracted by increase in her exports.

70. Nor must it be supposed that the increase in the balance of liquidation, as shown in the exchange value of the rupee, indicates any permanent impoverishment of India. It only shows that for the moment the balance of liquidation is against her. Such a result would, in fact, be produced if the growing wealth of India enabled her to repay the capital of her gold debt with increasing rapidity. The causes which have led to the existence of an adverse balance of liquidation may, indeed, well have been such as to conduce to her essential prosperity, and enable her to discharge the balance with greater ease.

71. The above are reasons for thinking that the greater part of the fall in the gold value of silver has been due to causes affecting silver rather than to causes affecting gold, and this conclusion fortifies, and is fortified by, the conclusion to which we have already come, that the fall in the gold price of commodities is in the greater part due to causes which affect those commodities rather than to causes which affect gold.

72. So far as the fall in prices represents an appreciation of the standard, undoubtedly we are in presence of an evil resulting partly from currency changes and partly from changes in the quantity of the precious metals produced.

It is of the essence of a good standard that it should be as stable as possible, and should not in itself be subject to causes affecting its relation to commodities. We have in the earlier part of the report pointed out the effect of such instability on the relative position of debtor and creditor, and this is specially important in the case of industrial enterprises where the same interest has often to be paid upon borrowed capital, even though, owing to the fall in the price of the industrial product, it represents a greatly increased burden.

73. The arguments which have been adduced as to the effect on trade and enterprise of falling prices are not without their weight. We do not notice at this point the effects alleged to be directly produced upon prices and industry in this country by the changed relations of silver to gold, although they are by some attributed to the appreciation of the latter metal.

There are others who deny or doubt the appreciation of gold, but trace the same effects directly to the altered relation of silver to gold.

It will be more convenient, therefore, to defer the discussion of this part of the case until we have dealt with the allegation that the fall in the gold price of silver has directly affected the prices of commodities produced in or exported to silver-using countries.

74. Before proceeding to do this we must remark that any consequences arising merely from an appreciation of the standard would be but temporary, though not necessarily limited to a short space of time. They would continue, indeed, to operate upon all engagements to pay a fixed sum at a future date, so long as those engagements were cur-

rent. But as soon as all prices had adjusted themselves, as ultimately they must, to the new conditions, the evil would disappear.

75. We pass on to consider the view which has been presented to us that the fall in the gold price of silver has resulted in a corresponding fall in the gold price of commodities produced in India, and of those which are exported to that country from gold-using countries.

A fall in the gold price of silver having taken place, due to the combination of causes pointed out in section 198, it is obvious that a corresponding adjustment in the gold and silver price of commodities was inevitable.

It is impossible that there could be, for more than a short period, a greater difference between the silver price of a commodity used in and exchangeable between silver and gold using countries and the corresponding gold price than would be represented by the cost of transferring the commodity from the silver to the gold using country, or *vice versa*.

Whenever, then, a fall takes place in the gold value of silver, either the gold price of these commodities must fall or the silver price must rise, or the adjustment must be brought about by both these operations combined.

76. If, however, concurrently with the fall in the gold price of silver, there were a fall in the gold price of commodities, then it is possible that, while gold prices fell, silver prices would remain stationary, or that a fall would result in both gold and silver prices, and that the adjustment would be arrived at by a commensurate difference in the amount of the fall; and in the present instance this would seem to have been the case.

77. It is not easy to arrive at an accurate estimate of Indian prices. They have, of course, varied much as regards particular commodities. The price of wheat, for example, has, owing to the failure of crops and other influences, risen greatly at times, and it has, from local causes, varied in different parts of the country. But there seems reason to believe that on the whole the silver prices in India are at the present time a little, though not greatly, lower then they were.

78. In the case of some important commodities, in the production of which India competes with gold-using countries, the fall in the gold price has exceeded the fall in the gold price of silver; but the gold price of other commodities produced in India, which are less subject to the competition of other countries, has not fallen to the same extent as that of silver.

79. If the entire fall in the price of both commodities and of silver had resulted from the appreciation of gold, the problem would be simple enough.

In that case both silver and commodities must ultimately fall to the same extent, but we have already stated our reasons for thinking that the altered relation of gold to commodities and silver has not arisen alone or chiefly from the appreciation of gold.

It follows that in so far as silver prices in India have remained stationary or fallen less than gold prices, other causes affecting the relation of commodities and silver respectively to gold must have been in operation.

80. It is alleged that there is an intimate connection between the fall in the gold price of silver and the corresponding fall in the price of commodities produced in and exported to India, and that the fall in the gold price of commodities has been brought about directly by the fall in the gold price of silver.

More than one witness has stated that such a fall has been followed invariably in experience by a fall in the gold price of wheat, and it has been alleged that the two are connected as cause and effect in the manner we have already indicated in section 75.

81. The growth of wheat has largely increased in India and elsewhere, and thus competition has become keener. Under these circumstances it is said that the Indian producer, whose charges are payable in silver, and who therefore receives the same margin or profit so long as the silver price remains the same, can afford, notwithstanding the fall in the gold price of silver, to sell at the former silver price (which, of course, means a lower gold price), and will not stand out for a higher silver price.

82. We think that, when supplies of wheat are increasing and the competition of producers to dispose of it is keen, this tendency will exist, but it is impossible to determine its force and effect with any accuracy.

It must be remembered that Russia, which largely supplies the wheat market, has a currency which is greatly depreciated, and if the fall in the gold price of silver tends to lower the price of wheat, it is not easy to see why the great depreciation of the paper ruble should not have the same tendency.

83. One witness, who has had great experience in the wheat trade and who favors the view that a fall in the price of silver tends to depress the price of wheat, has himself pointed out that it is only occasionally that the price of Indian wheat can be said to rule the market. This must depend upon the extent of the supplies from other wheat-producing countries, as compared with those coming from India, as well as upon other circumstances. During the past year, for example, it is said that, owing to an abundant crop, Russian wheat has been the principal factor in determining the market price, and it is manifest that, apart from other circumstances, an unusually good harvest in America might have the same effect.

We think, therefore, that it is easy to exaggerate the influence which the fall in the gold price of silver has exerted upon prices, even assuming it to have had any such operation as is suggested.

84. We have already, in sections 25–31, dwelt upon the reasons which satisfied us that other causes have largely conduced to a fall in the price of wheat, as well as of other commodities.

Even then, if the view we are discussing be well founded, we think it would be a mistake to attribute more than a very limited portion of the fall of price to this cause.

85. Even if it be admitted that it has had some operation, we think it by no means follows that a rise in the gold price of silver would reverse that operation to the same extent.

So far as it has acted, it has been a cause working in the same direction as competition and in connection with it, and it does not follow that, when acting in the opposite direction and against the force of competition, it would have an equally extensive effect in the other direction.

We have used the case of wheat as an illustration; but, so far as the same circumstances exist in relation to other commodities, the effect would be the same.

86. We pass on to consider the prejudicial consequences which are alleged to have resulted from the fall in the price of Indian produce, especially of wheat, both by those who attribute this fall to the appreciation of gold and by those who connect it directly with the fall in the

gold price of silver. It is asserted that its effect has been to create a bounty upon the production of wheat in India, and thus to act prejudicially upon other wheat-producing countries.

87. We do not think the term bounty is in any view properly applicable. If the silver price of wheat in India is no higher than it was, its growth can be no more profitable, and there is, therefore, nothing to stimulate increased production.

At the same time, it must be admitted that the Indian producer is for the time in a somewhat more favorable position than his English competitor.

The elements which go to make up the cost of production in India being payable in silver, and not having materially increased, the Indian producer, supposing him to obtain the same silver price, is in substantially the same position as before, even although the gold price of silver has greatly fallen. The gold price of his produce has fallen, but so has the cost of production as measured in gold.

The English wheat-grower, on the other hand, who receives the corresponding gold price—that is, a lower price than before—is in a worse position, except so far as he can reduce the cost of production in the same ratio as the price of the product. That is to say, unless there is a fall in rent, taxes, wages, and the other elements of which the cost of production is made up proportionate to the fall of price, he is at a disadvantage as compared with the Indian producer, and, as it can hardly be contended that this adjustment has as yet completely taken place, there can be no doubt that the English wheat-grower is for the present placed at some disadvantage.

88. In our opinion, it is only to a limited extent that prices can have been affected by, or that the low price of agricultural produce can be due to, the fall in the gold price of silver or the appreciation of gold.

The depressed condition of agriculture is at least largely due to the other causes to which we have in the earlier part of the report called attention, and it must not be forgotten that it is only in one important description of agricultural produce that India competes with this country.

89. We have next to discuss the allegation that the price of commodities produced in this country and exported to silver-using countries, has been affected by the fall in the gold price of silver.

It is said that inasmuch as the Indian producer gets no higher silver price than before, and the ryot is paid the same silver wages, they are not in a position to give more silver than before for the produce which they buy, and therefore can not purchase as much as before, unless the manufacturer is willing to sell at the same silver price—that is to say, a lower gold price—and the result of this must be either a diminished sale of these imported goods or the supply of an inferior article or the sale of the same article at a lower gold price.

Very serious complaints have been made of the consequences which are said to have ensued, especially to the trade and manufactures of Lancashire.

90. We do not deny that fluctuations in the rate of exchange do constitute to a certain extent an impediment to trade; nevertheless it appears that the trade between this country and India has increased largely in volume.

But it is said that as the gold price of silver has continued to fall, so the price of Lancashire goods exported to India and China has fallen in correspondence with it.

Inasmuch as it appears to be the fact, whatever be the true explana-

tion of it, that the Indian producer receives, notwithstanding the fall in the gold price of silver, no more silver for his produce than before and the wage-earner no higher wages, we think that these circumstances, other things remaining the same, would have a tendency to reduce either the quality or the price of the goods exported to silver-using countries, or perhaps both.

The increased volume of trade may be accounted for by an increase in the number of wage-earners and the purchasing power of the country consequent upon its increased prosperity and the growth in its own export trade. The opening up of the country by means of railways and the development of agricultural industry would no doubt enable a larger number of persons to purchase the imported commodities.

91. But we think it would be wrong to attribute the whole or anything like the whole fall in the price of Lancashire goods to such a cause as that above described, even if it has had any substantial operation.

Many other factors have been at work. The cost of the raw material has diminished, and so has the expense of conveying the goods to their destination, and considerable economy has been effected, by improved machinery, in the cost of production. A given number of workers can now turn out a greater product.

All these changes have conduced to enable the manufacturer, without any alteration of his position, to sell to the Indian purchaser at a considerable reduction in price.

92. In addition to this, those who have most loudly complained of the disastrous effect upon Lancashire industries of the fall in the gold price of silver themselves attribute the unfavorable position of these industries in part to other causes, and notably to the enormous development of competition due to the large increase in the number of mills, which they allege has arisen from the working of the limited liability acts.

93. Even if it be admitted that the depression of prices may possibly have been intensified by the changed relation of silver to gold, we think that it is mainly attributable to other causes; and it must be remembered that if the conclusion we have expressed as regards the depreciation of silver be well founded, the fall in the silver price of important Indian products would, but for the fall in the gold price of silver, have been considerably greater than it has been; and if so, the producer has, by reason of that fall, received more silver for his produce than he otherwise would, and has, therefore, been able to give more silver for imported goods than if no such fall had taken place.

94. We have already pointed out that even upon the hypothesis we have been discussing in the preceding sections, it must not be assumed that a rise in the gold price of silver would be followed by an equal rise in the gold price of Indian commodities; and if it were not, the Indian producers would receive less silver for the same amount of produce, and it would not therefore necessarily follow that they would be able to pay a higher gold price for the goods they purchased.

95. So far as the fall in prices can be connected with the currency, it can not be denied that it is attended with great inconveniences.

It must tend to diminish the margin of profit, or even to cause it to disappear altogether, and this necessarily results in an effort on the part of the manufacturer to economize the cost of production by reducing the wages of the operatives.

Even if the manufacturers could succeed in reducing wages sufficiently to maintain their former position, this could only be done after considerable struggles and an amount of friction very undesirable.

It is true that real wages depend not on their nominal amount, but on

their purchasing power, and that the wage-earning class may be in the same position as before, although they receive lower nominal wages.

But this is not immediately obvious, and does not prevent the disturbance of trade and the ill-feeling which result from an effort to reduce wages.

Further, it seems by no means clear that there has been a fall in the price of all that the wage-earner needs, and upon which his wages are expended, equivalent even to the reduction of wages which has, in fact, taken place.

96. Here again, however, we must beware of exaggeration.

There is always a temptation to refer all the phenomena which are observed to a single cause; but, both lower wages and want of employment, which depend on the state of the labor market, must have been affected by other causes besides the special one we are considering. All labor-saving inventions and the displacement of labor from other branches of industry, such as agriculture, must have tended, for a time and until a complete adjustment has taken place, to lower the rate of wages.

97. It is not only in the manner which we have been discussing that the trade of Lancashire is said to have been affected. Complaints are also made, as we have seen, that a part of that trade has been lost owing to the competition of cotton mills in India, and especially at Bombay, which, it is alleged, have been unduly fostered by the advantage offered them through the lower gold price of silver.

We need not repeat the facts relied on, which are to be found in section 76 of our main report, where we have pointed out that the question is of a very technical character, and is still under consideration by experts. Under these circumstances we are not prepared to pronounce any judgment upon it.

98. In concluding the expression of our views upon this part of the case, we would observe that the character and mode of operation of the influence which the currency exerts upon prices are matters of extreme complexity, and have been the subject of extended discussion.

Extremely different views have been maintained and adhered to with equal tenacity by able and painstaking economists. Treatises of considerable length have been written expounding these different views.

We feel that it is quite impossible, without extending this report to an unreasonable and inconvenient length, to exhaust the discussion of the subject. All that we can do is to indicate the conclusions at which we have arrived, alluding briefly to the arguments which have been most prominently put forward.

We are strongly impressed with the conviction that the materials do not exist, and that the time has not arrived for the expression of a confident opinion upon these points. We offer our conclusions as at best but an approximation to the truth, and not as logical deductions resting upon the assured basis of ascertained facts.

99. We may summarize our conclusions upon this part of the case as follows: We think that the fall in the price of commodities may be in part due to an appreciation of gold, but to what extent this has affected prices we think it impossible to determine, with any approach to accuracy.

We think, too, that the fall in the gold price of silver has had a tendency operating in the same direction upon prices; but whether this has been effective to any, and if so to what extent, we think equally incapable of determination.

We believe the fall to be mainly due, at all events, to circumstances

independent of changes in the production of, or demand for, the precious metals, or the altered relation of silver to gold.

As regards the fall in the gold price of silver, we think that, though it may be due in part to the appreciation of gold, it is mainly due to the depreciation of silver.

100. We have hitherto been dealing with the effects which currency changes are alleged to have produced upon the commerce of this country and of India generally.

We now turn to certain special evils which are said to affect the financial position of the Indian government. Here we are on firmer ground. It is not necessary to make any detailed statement of the considerations bearing upon this part of the case, as they are fully set forth in section 103 and the following sections of our main report. We have already made some allusion to them in the discussion of the results which have flowed from the fluctuating relation between gold and silver.

101. There can not be two opinions as to the very serious effect which the continued fall in the gold price of silver has had on the finances of the government of India.

Unless expenditure be diminished every additional fall in the value of the rupee renders additional taxation necessary if a deficit is to be avoided; and even if it be true that India has upon the whole benefited by the fall in the gold price of silver, that the condition of her agricultural industry has improved, and that commercial enterprises have prospered, this does not obviate the difficulties of the government.

Even if, in consequence, additional taxation might in some quarters be well borne, it is not easy, if indeed it be possible, to devise means by which such additional taxation should impose a burden only on those who are able to bear it.

102. We are fully impressed with a sense of the difficulties which surround the Indian government, and of the serious questions to which any proposed additional tax must give rise.

It is not only the embarrassment which has already been caused to the government of India that has to be borne in mind, but the impossibility of foreseeing to what extent those embarrassments may be increased and their difficulty augmented, by a further depression in the value of silver.

We have no hesitation, then, in expressing the conclusion that the changes in the relative value of the precious metals are causing important evils and inconvenience to the government of India, which are well worth the endeavor to remedy them, if a remedy can be devised, which could be adopted without injustice to other interests, and without causing other evils or inconveniences equally great.

It must be remembered, however, that if the view be correct that there has been a substantial fall in the value of silver which has prevented the silver prices of Indian produce being as low as they otherwise would have been, then to that extent the Indian taxpayer has escaped the increase of his burdens which would have resulted, assuming the taxes imposed to have remained the same.

CONCLUSIONS AS TO THE REMEDIES WHICH HAVE BEEN SUGGESTED.

103. We turn now from the consideration of the evils attributed to the altered relation of gold and silver and to currency changes, to inquire whether any remedy can be found which would remove these evils without bringing with it others, as great or greater, in their place.

No measure has been suggested that claims to be anything like so complete and thorough a remedy as the adoption of the system known as bimetallism.

Objection has been taken to the use of this term on the ground that it does not accurately describe the nature of the system. It is unnecessary to discuss the justice of this criticism, as the term has been so generally employed to describe the arrangement which prevailed in the Latin Union prior to 1873, that it would only cause confusion if we were to adopt any other expression.

104. We have described in section 116 of Part I, what are the essential elements of a bimetallic system of currency.

Before proceeding to discuss the merits and demerits of such a system we would observe that we shall do so on the basis that this country would not be prepared to entertain the question of its adoption at all, unless as part of an international arrangement to which the leading commercial nations of the world were parties.

No one has seriously proposed that England should, except as a party to such an arrangement, abandon her present gold standard and substitute a bimetallic one, and although some have maintained the position that if the Latin Union alone were to revert to their former practice it would be effectual to achieve the object in view, the advocates of bimetallism are generally agreed that the true basis to be sought is such an international arrangement as we have indicated.

We should, however, point out that they are not agreed as to the inclusion of India in any such arrangement. Its exclusion would be a singular anomaly. Its inclusion would provoke fresh and grave difficulties.

Nor have we any means of ascertaining what view would be taken by Australia and other of our colonies with reference to the formation of a bimetallic union. As large producers of gold they might naturally take objection to it, and it would be a serious matter to introduce a different system of coinage in the mother country and our larger colonies.

105. We would further observe that if the question is to be entertained at all, it appears to us that it should only be on the basis of a ratio, between silver and gold, approximating to the present market ratio of the two metals.

It would not of course be practicable for obvious reasons to adopt, as the basis of the arrangement, what happened to be the market ratio at the date fixed for its coming into operation. It would probably be thought desirable to take the average ratio for two or three years.

We will state hereafter our reasons for thinking that it would be highly inexpedient to adopt a ratio differing very materially from that ruling in the market, and that to revert to the ratio of 15½ to 1 formerly in force in the Latin Union would be fraught with serious danger, not to speak of injustice.

We shall for the present pursue the inquiry upon the assumption that an international agreement could be arrived at, under which the United Kingdom, Germany, the United States, and the Latin Union should be parties to the adoption of a bimetallic system with a ratio approximating to the market ratio.

106. The first question that arises is, how far would such a scheme remove the evils to which we have drawn attention?

The proved evils we take to be the following: The inconvenience and burden to which the commerce between gold and silver using countries is subject, owing to fluctuations in the relative value of these metals; and, further, the difficulties in which the Indian government is involved,

owing not only to the fluctuations in the relative value of the metals forming the standard in this country and in the Indian Empire, respectively, but also to the fall which has taken place in the gold price of silver, as well as the uncertainty and apprehension due to the impossibility of forecasting the future position of that metal, and the extent to which its gold price may yet fall.

There are other evils complained of—such as the fall of prices attributed to the appreciation of gold, the alleged tendency in the fall of the gold price of silver to depress the prices of commodities produced in and exchangeable between gold and silver using countries, and the further tendency attributed to this fall, to favor unduly the competition of India as against this country, alike in its internal commerce and in that with silver-using countries. These are, no doubt, worthy of grave consideration, as possibly arising from alterations of the currency, and of the relation of the precious metals to one another, but we do not consider them as by any means proved.

107. The first step towards answering the inquiry we have proposed to ourselves is to determine the subsidiary question whether a bimetallic arrangement could create and maintain a stable ratio between silver and gold.

We have already so fully set out the opposing views held on this point that it will be sufficient, without examining them at any length, to state the conclusions at which we have ourselves arrived.

We think that in any conditions fairly to be contemplated in the future, so far as we can forecast them from the experience of the past, a stable ratio might be maintained if the nations we have alluded to were to accept and strictly adhere to bimetallism, at the suggested ratio. We think that if in all these countries gold and silver could be freely coined, and thus become exchangeable against commodities at the fixed ratio, the market value of silver as measured by gold would conform to that ratio, and not vary to any material extent.

We need not enter upon a detailed explanation of our reasons for entertaining this view, since they will be gathered from what we have already stated when discussing the causes of the divergence in the relative value of the two metals, and will be seen to result, in our judgment, as well from *a priori* reasoning as from the experience of the last half century.

108. We do not deny that it is conceivable that these anticipations might be falsified by some altogether unprecedented discovery of one or other of the precious metals, and that the maintenance of a stable ratio might then become difficult. But for practical purposes we think we may put this aside and reasonably act on the assumption that no such grave dislocating cause is likely to arise. We have already drawn attention to the fact that, during the time covered by the great gold discoveries, the production of silver continued undiminished, and that of late years, when gold is said to have been appreciating, the production of silver has increased.

109. We pass on then to the next point, namely, assuming such a stable ratio to be secured, what effect would it have upon the evils with which we have to deal?

Fluctuations of exchange between countries having a different standard, so far as they depend upon the varying relation of silver to gold, would cease, and the perplexities and difficulties which now so severely beset the Indian government would be at an end, subject to this qualification, that so far as the burden on the Indian exchequer is due to the fall

which has taken place in the gold price of silver, that burden would continue permanently.

But it must be remembered that in the view of the Indian government, and upon this point we agree with them, this would involve less danger and evil than the continuance of the present state of uncertainty with the risk of a future fall.

110. As regards the other evils which we have classed as possibly or probably due to monetary changes, rather than as conclusively proved to result from them, the adoption of bimetallism would not be without its effect.

In so far as the fall in prices which has occurred is due to the appreciation of gold, we think its adoption would tend to check and diminish, if not to prevent, further depression of prices from appreciation of the standard.

If in any degree the fall in the price of commodities produced in and exchangeable between gold and silver using countries, respectively, has resulted from the fall in the gold price of silver, this cause would cease to operate, and no further depressing influence could ensue from it when once a stable ratio between the two metals was established.

Finally, if it be true that a fall in the gold price of silver unduly favors Indian manufacturers in their competition for trade at home and with silver-using countries, there would be no extension of this fostering influence.

111. We may point also to an advantage of a different character which might perhaps arise from the adoption of bimetallism.

There seems reason to believe that the production of gold has been diminishing, and it is uncertain whether this diminution has reached its lowest point.

On the other hand, there is some reason to suppose that the use of that metal in the arts is likely in the future to increase. There can be no doubt too that the population and commerce of nations having a gold standard may be expected to increase largely.

Under these circumstances it may be open to argument that the vast superstructure of credit, which rests upon a gold basis, would run the risk of being disturbed if the standard were found to be appreciating. If, on the other hand, credit were founded on a bimetallic instead of a gold standard the base upon which the fabric rests might be enlarged, and the danger to which we have alluded might be diminished.

112. We have yet to consider whether the adoption of the bimetallic system, even if it did effect a cure of all or some of the evils at present experienced, would be itself productive of mischief as great or greater.

We have already pointed out that so far as the finances of India have suffered from the fall in the gold price of silver, the burden due to this cause would then become permanent.

It is also obvious that if, and in so far as the gold price of commodities has fallen owing directly to the fall in the gold price of silver, that fall would, other things remaining the same, be permanent also, and the chance of some rise in these gold prices, due to a rise in the gold price of silver, would be lost.

But if, on other grounds, the adoption of bimetallism were deemed expedient, we should not regard this as a fatal objection, or as counterbalancing the advantages to be obtained from it.

113. There are other reasons against its adoption deserving of far more serious consideration.

It is alleged that the position of England as the financial center of

the world depends greatly upon the fact that she has, and has for a long time enjoyed, a gold standard.

This is no doubt strenuously controverted, and it is asserted by other authorities that the financial position of England is in no way bound up with the circumstance that she is monometallic, and that her standard is a gold one.

We need hardly dwell upon the fact that the financial position which this country occupies is a matter of immense importance; that the risk even of interfering with it, or of taking any course which could reasonably be expected to affect it, is not to be lightly encountered; and even those who do not entertain grave apprehensions of a disturbance of existing financial conditions, if we were to depart from monometallism and accept the bimetallic standard, can not dispute the fact that the existence of such apprehensions is not to be treated as a trivial circumstance or one to be lightly regarded.

The danger may be enhanced by the circumstance that the mere fact of one change having been made would lead to the apprehension that others might follow.

114. It has not been suggested by the advocates of bimetallism that we ought, if that system were adopted, to prohibit contracts requiring performance by the payment specifically of one or other of the precious metals; and in the present state of financial opinion and practice it seems by no means certain that such contracts, if permitted, would not be common.

The result of this might be not only to cause some strain upon the bimetallic ratio, but to send gold to a premium, and to produce considerable financial disturbance.

115. A further danger to be apprehended is that the nations who were parties to the bimetallic arrangement might not continue to adhere to it.

It may be difficult to suggest any motives which should make it their interest to secede; and it may be capable of proof that any country violating the international compact would subject itself and its people to loss and serious inconvenience; but, unhappily, enlightened self-interest is not the only motive of the political action of nations, nor is self-interest always enlightened. A desire to inflict injury may often exercise as potent an influence as self-interest, and the idea that the financial position of one country might be endangered with a resulting advantage to other countries might well afford a sufficient motive for action.

Any such departure from an international compact might indeed set this country free again to act as she chose, but if the result were to compel her to revert to the system she had abandoned, she would undoubtedly find herself in a position worse and fraught with greater evils than if she had maintained her existing standard.

At present the action of this country is unfettered and not dependent upon the course taken by any other power. This condition of freedom would cease as soon as she became a party to an international agreement.

Dangers arising from this cause would be aggravated if it were found necessary, as we think it would be, to embody in an international agreement detailed stipulations with regard to the coinage, currency, or internal financial arrangements of the several countries joining in it.

116. Another serious consideration is that the governments, as well as the banks and financial institutions of particular countries, might, notwithstanding the existence of a bimetallic system, seek to accumulate

gold. It may truly be described as at present the more esteemed metal of the two. There has certainly been a tendency of late years to substitute it for silver as the standard, and to use it to an increased extent for currency purposes throughout the commercial world. With the single exception of the Bland act in the United States, all recent changes in currency legislation have been in the direction of using gold rather than silver for currency purposes. This fact shows, at any rate, a sentiment in favor of gold which may not be without its influence; and indeed, beyond the mere sentiment, the superior convenience of that metal for monetary purposes may tell in the same direction.

117. In addition to this, the apprehension that the bimetallic arrangement could not be relied on as permanent, and the fear of secession from it, might operate strongly to induce bankers and financiers to hold as large a stock as possible of gold rather than silver. This might cause a struggle for the possession of gold with consequent financial disturbance, and with the result that nations who are accustomed to the use of gold for the actual purposes of currency, and who have enjoyed its superior advantages for that purpose, owing to its bulk being less in proportion to its value, might not be able easily to acquire or retain all that its people needed for these purposes.

118. In this connection the experience of France is, we think, very instructive. The table given in section 124 of the main report shows the coinage in that country from 1816 to 1880.

It will be observed that from 1830 to 1845 the coinage of gold was almost replaced by that of silver, and from 1846 to 1865 that of silver again, to a great extent, by that of gold. The continuance for a few years longer of the conditions which prevailed up to 1845 would apparently have resulted practically in the entire cessation of gold coinage in France. Even as things were, the result led to the existence of an agio on gold coins; and it seems probable that the most extended international agreement would lead from time to time, in some of the countries included in it, to the existence of a premium on either the gold or the silver coins; and it can not be denied that an agio on any part of the coinage would be a serious evil.

119. Apprehensions have been expressed that if a bimetallic system were adopted gold would gradually disappear from circulation. It, however, the arrangement included all the principal commercial nations, we do not think there would be any serious danger of such a result.

Such a danger, if it existed at all, must be remote. It is said, indeed, by some that if it were to happen, and all nations were to be driven to a system of silver monometallism, the result might be regarded without dissatisfaction.

We are not prepared to go this length, but, at the same time, we are fully sensible of the benefits which would accrue from the adoption of a common monetary standard by all the commercial nations of the world, and we are quite alive to the advantage of the adoption by these nations of an uniform bimetallic standard as a step in that direction.

120. We have thus pointed out the advantages and disadvantages to be anticipated as the result of entering into the bimetallic compact suggested.

We have now to weigh the advantages against the disadvantages, and to answer the question whether in our opinion the result of the change would, upon the whole, prove beneficial.

It is comparatively easy to estimate with substantial accuracy the extent and force of evils or inconveniences of which we have had

experience. To weigh with just and accurate balance the possible dangers and evils that might result from a change is a very different matter. They must be largely the subject of conjecture. The opinions of economists and men of experience in financial matters with respect to them have differed, and are likely to differ. Even if not prepared to rate them as high as some have done, we can not question their reality.

The change proposed is tremendous, and we can not but feel that to a great extent it would be a leap in the dark.

The public mind certainly is not prepared for it at present, and the very novelty of the proposal would excite apprehensions which, in themselves, might not be without their danger.

We speak of the novelty of the proposal because, though it has been for some years publicly advocated with great ability and earnestness, it has not found anything like general acceptance, and those accustomed to the existing system have often been disposed to put it aside as a chimerical proposal, unworthy of serious consideration.

Under all these circumstances, whilst fully impressed with the difficulties of the present situation, and more especially with those which affect the government of India, we are not prepared to recommend that this country should proceed to negotiate with other nations a treaty embodying a bimetallic arrangement. We feel that the matter needs much more discussion and consideration in the financial world, and by practical men, than it has yet received, and that we are not in a position to advise with any confidence that the change could be made safely, or without the risk of creating evils exceeding those which we at present experience.

121. We have hitherto discussed the subject on the assumption of a bimetallic ratio approximating to the present market value of the metals.

We have now to state our objections to the proposal that this country should agree to a bimetallic arrangement with the old ratio of 15½ to 1, which differs so widely from the present market ratio.

It is said indeed by some of the advocates of bimetallism that this is the only ratio at which an international agreement could be secured. We do not think it falls within the scope of the reference to us to express any opinion upon the point; nor have we the materials for forming one.

But though we appreciate the difficulties there might be in inducing some nations to concur in any other ratio, it does not appear to us clear that when all the circumstances were considered, and future possibilities taken into account, they would necessarily reject a bimetallic ratio much more nearly approximating the present market ratio, if there were no hope of securing the result they desired.

122. Reverting to our objections to the ratio of 15½ to 1, we would observe that doubts may be entertained whether it would be possible to restore and maintain permanently a ratio so much at divergence with that which at present exists in the market.

Even if it be admitted that, supposing the Latin Union had continued acting as they did before 1873, silver would never have fallen to its present gold price, it does not necessarily follow that the divergence having arisen, and men's minds having been affected by it, a recurrence to the free coinage of silver, even within a more extended area, would necessarily restore the former conditions.

We do not, however, dwell upon this point, and will assume for the sake of argument that a stable ratio of 15½ to 1 could be maintained.

123. We will treat of the effect of a bimetallic system at such a ratio, first, upon the interests of this country, and next of India.

If the effect of the currency changes made by other nations within

the last twenty years, coupled with the changes in the production of the precious metals, have produced an appreciation of gold resulting in a fall of prices, the result of adopting bimetallism at the suggested ratio would be to cause a rise in the price of these commodities, and thus, by an act of the state, to alter the relation of debtor and creditor, and of those who have entered into commercial contracts.

This rise might be sharp and serious, and lead, as such rises not unfrequently do, to serious commercial confusion and disaster. It might also diminish the purchasing power of wages without, for a time at any rate, increasing their nominal amount.

124. Such a measure would be manifestly unjust. It may be said that it would only be reversing the process which has been going on; but those whose position has been altered by the fall of prices are not the same persons as those whose position would be affected by the rise; and it is one thing to have to submit to conditions which are the result of causes entirely outside the action of the state, and another to be called upon to endure loss resulting from its interposition.

125. We do not dispute that all monetary relations and liabilities are entered into and incurred subject to such alterations of the currency of the country as the public advantage may demand, and that to any inconvenience, resulting from a change dictated by those motives, the subjects of every country must be liable.

But so far as this change is advocated, as it is by many, on the very ground that it is calculated to raise prices, we should object strongly to state interference with the currency with any such object, and should think such artificial raising of prices an evil, even if the change were made for other reasons.

If currency changes need to be made for the public weal, inasmuch as they must involve inconvenience or loss to some, it appears to us that justice requires that the change should in nowise transcend the necessities of the case, and that the loss or inconvenience should be rendered as small as possible.

126. Even those who are not disposed to attribute the fall in the price of commodities which has marked recent years entirely, or to any great degree, to monetary changes must admit that such an alteration as that proposed would be likely for a time, if not permanently, to cause a serious disturbance of prices. The very fact that many people anticipate a great rise of prices from such a change would of itself tend, for a time, to bring about that result.

127. Another consideration, which we think deserving of great weight, is this: if such a ratio were adopted, all the dangers to which we have drawn attention, as possibly connected with the adoption of a bimetallic system, even at the existing market ratio, would be much increased. The risk of a struggle for gold, of endeavors to accumulate that metal, of a temptation to break away from the agreement, and of the other causes of financial disturbance upon which we have dwelt, would be greatly intensified.

128. It must be remembered, too, that this country is largely a creditor country of debts payable in gold, and any change which entailed a rise in the price of commodities generally, that is to say, a diminution of the purchasing power of gold, would be to our disadvantage.

129. The interests of our Australian and other gold-producing colonies, at which we have already glanced, must also be considered. Their deposits of gold are one of their principal sources of wealth, and any measure which tended to check gold-mining or to depreciate that metal

would, in all probability, injuriously affect the prosperity of the colonies, and re-act upon the trade of the mother country with them.

130. Turning next for a moment to the special dangers to India, which might result from adopting this ratio, we would remark that although the government of India would undoubtedly be a gainer, in so far as the burden of its gold debt would be diminished, yet there would be at least a serious risk of substantial mischief to the people of India.

If there be any truth in the theory that the fall in the gold price of silver has depressed gold prices, the silver price remaining stationary, we have pointed out our reasons for believing that it by no means follows that a rise in the gold price of silver would create an equal rise in the gold price of commodities. And if the gold price of commodities produced in India did not rise to the same extent as the price of silver, the Indian producer would receive a lower silver price for his commodities, while he would remain liable to the same taxes and charges as before. This would be the case also, if the view we have indicated be correct that the fall in the gold price of silver is due mainly to the depreciation of silver.

Any change having the effect of lowering silver prices, while taxes and charges remained unaltered, might occasion serious discontent, and if it were seen to be a consequence of political action, it might create political dangers as grave as any that are likely to result from a continuation of the present conditions.

Further, if it be true that cotton manufactures in India have been fostered and stimulated by the fall in silver, it would be a serious matter, and certainly likely to engender great discontent, if by an act of the State the manufacturing industry thus created were seriously hampered, if not destroyed.

131. We have already intimated our doubts whether the advantages to Indian producers or the disadvantages to English producers, alleged to arise from recent currency changes, have been proved; and our still greater doubts whether, if they do exist, they would be removed by taking measures to return to the *status quo*. But on the assumption that they would be so removed, we desire to express our opinion that, so far as the measure in question has this object in view, it would be questionable, in point of justice and policy, for this country to take from India by legislation any benefits the latter may have derived from changes in the value of precious metals, which are in nowise due to such legislation.

132. Although we have not felt ourselves able to recommend that this country should enter into negotiations with the view of establishing a bimetallic system of currency, we have indicated that we are fully sensible of the considerations which have been urged by the government of India; and we think that every proposal which seems calculated to diminish these difficulties, and to ease the existing situation, is deserving of very careful consideration, and that an earnest endeavor should be made to adopt any which should appear to promise substantial advantages without the risk of greater evils.

133. We have already given our reasons for thinking that some of the proposals presented to us, such as those discussed in sections 167 and 168 of Part I, are impracticable, and it is not necessary to dwell further upon them.

The proposition to establish a gold standard in India is deserving of more serious consideration, but it can not be disputed that there are formidable difficulties in the way of its adoption.

We think, however, that in the consideration of this or any other proposal of Indian legislation for removing the difficulties of that gov-

ernment, the interests of India should alone be consulted. While we can not recommend that the mother country should run any serious risk in altering its system of currency in order to assist the dependency, we think that the government of the latter should be allowed a free hand to deal with the problem as it considers best in its own interest.

134. Before passing on to other proposals there is one which we recommend for adoption without hesitation.

We refer to the abolition of the duty on silver plate, to which we have drawn attention in section 173. We do not suggest that it is likely to have any very extensive result, but, so far as it operated, it would be beneficial and a step in the right direction.

135. We pass now to other proposals of a practical character.

In our opinion it might be worth while to meet the great commercial nations on any proposal which would lead to a more extended use of silver, and so tend to prevent the apprehended further fall in the value of that metal, and to keep its relation to gold more stable.

Such negotiations would probably be in the direction of an agreement that each nation should annually coin a certain amount of silver. It would not be essential to such a scheme that the amount fixed should be the same in every country, but the question might, no doubt, be raised in the negotiations for such an agreement that, in those countries where silver is not now legal tender to an unlimited amount, it should be made so to a greater extent than at present. Any such proposal would have to be considered in relation to the extent of the suggested increase and the amount of silver agreed to be coined.

136. The real difficulty of the present situation lies in the position of the Government of India on the one hand and of the foreign nations whose currency consists in a large part of silver on the other.

The nations forming the Latin Union are large holders of silver, and are greatly interested in maintaining its value. It is possible, moreover, that India, in order to obviate the difficulties from which she at present suffers, may determine, as she has already proposed, to follow the example of the Latin Union and close her mints, a measure which would still further depreciate the value of silver.

If this course were adopted the States of the Latin Union, as large holders of that metal, might be seriously affected; and it is worthy of consideration whether foreign governments might not be approached with a view to ascertain whether they would open their mints to a greater extent than at present to the coinage of silver, for a given term of years, on an undertaking from India that she would not close her mints during the same period. In order to assist such an arrangement we think that part of the bullion in the issue department of the Bank of England might be held in silver, as permitted by the bank act of 1844.

We are aware that a similar suggestion made in 1881 was not accepted, but the possibility that India may follow the example of the Latin Union in closing her mints may render the countries forming that combination more disposed to entertain the proposal.

137. We think that the best suggestion in relief of the tension of the existing situation is to be found in the issue of small notes based on silver. These might become the substitue for the half-sovereign, and if they came into general use, they would afford a remedy for those difficulties in relation to that coin to which public attention has been prominently called.

Twenty-shilling silver notes might also be issued. If these were put into circulation they would probably pass largely into use, without any

alteration of the law of legal tender; and we are inclined to think the mint or bank might safely be required to issue such notes to some fixed amount, in exchange for silver bullion taken at the average market price; or the Government might issue them upon condition of retaining silver capable of being coined into an equal number of shillings. The market thus opened for silver might check the decline in price of the metal, besides producing an economy in the use of gold.

We are quite aware of the objection which has been taken to the issue of small notes on the gound of the great expense which would be incurred, if the system at present adopted by the Bank of England with reference to its existing bank notes were applied to these smaller issues, and of the danger of forgery if this system were not applied; but when we consider the enormous note circulation for small amounts current in the United States, we can not but think that these apprehensions are excessive, and that the difficulties in the way of issuing such notes can not be insuperable. The facts with regard to the issue of silver certificates in that country to which we have called attention in section 126 of Part I of the report, throw an important light upon the feasibility of the proposal we have been discussing.

138. Though unable to recommend the adoption of what is commonly known as bimetallism, we desire it to be understood that we are quite alive to the imperfections of standards of value, which not only fluctuate, but fluctuate independently of each other; and we do not shut our eyes to the possibility of future arrangements between nations which may reduce these fluctuations.

One uniform standard of value for all commercial countries would no doubt, like uniformity of coinage or of standards of weight and measure, be a great advantage. But we think that any premature and doubtful step might, in addition to its other dangers and inconveniences, prejudice and retard progress to this end.

We think also that many of the evils and dangers which arise from the present condition of the currencies of different nations have been exaggerated, and that some of the expectations of benefit to be derived from the changes which have been proposed would, if such changes were adopted, be doomed to disappointment.

Under these circumstances we have felt that the wiser course is to abstain from recommending any fundamental change in a system of currency under which the commerce of Great Britain has attained its present development.

All which we humbly submit for Your Majesty's gracious consideration.

HERSCHELL.
C. W. FREMANTLE.
JOHN LUBBOCK.
T. H. FARRER.
J. W. BIRCH.
LEONARD H. COURTNEY.

GEO. H. MURRAY, *Secretary.*
OCTOBER, 1888.

In signing this report we must take exception to section 137. No evidence was taken by the commission with reference to a small note issue, and numerous questions and doubts occur to us as to the soundness of such a scheme.

As the report simply makes the suggestion without entering into details, we do not consider it expedient that two members of the com-

mission should set out the grounds of their dissent. We therefore confine ourselves to the simple statement that we do not agree with our colleagues on the above point.

With reference to section 135 we think that, if any change is introduced in the amount for which the silver coinage is made legal tender, the State should undertake to exchange it for gold, if required.

We feel also grave doubt as to section 107 of the foregoing report. In France, as stated in section 124 of the main report, the coinage of gold almost entirely ceased in 1841–'45, and that of silver in 1861–'65. The powerful combination known as the Latin Union, and comprising France, Italy, Belgium, and Switzerland, have not considered it possible to keep their mints open to the coinage of silver, and the ratio has fallen from 15½ to 1 to 22 to 1. We must, moreover, consider the very large use of gold in the arts, estimated in section 41 at upwards of £12,000,000 a year.

No doubt the adhesion of England, Germany, and the United States would be a very important addition of strength, and we do not deny that such a combination might for a considerable time be able to maintain the ratio adopted. Having regard, however, to the great uncertainty as to the probable future production of the mines, the large use of the precious metals in the arts, and to the number of countries which would still remain outside the combination, we doubt whether any given ratio could be permanently maintained.

This doubt seems to be supported by the view expressed in section 118 of the foregoing report.

In considering the expediency of any international agreement, it must also be borne in mind that our banking arrangements and currency requirements are very different from those of other countries.

JOHN LUBBOCK.
J. W. BIRCH.

I wish to add for the sake, not of dissent, but of distinctness, that I do not believe that the change in the relations between gold and silver currencies has lowered English prices.

T. H. FARRER.

PART III.

1. We concur generally in that portion of the foregoing report which is devoted to a statement of the facts relating to the subject of our inquiry, and of the various arguments which have been advanced in connection with them.

2. We also concur in the opinion expressed in sections 192 to 198 of Part I of the report, that the primary cause of the recent changes in the relative value of the precious metals is to be found in the abandonment, by the countries forming the Latin Union, of the free coinage of both metals into legal-tender money at a fixed ratio.

3. But in considering the extent of the evils or inconveniences which have resulted from this step, and the possibilities of removing them, as well as those which may be expected to arise in the future if no remedy is applied, the divergence of opinion between our colleagues and ourselves becomes so marked that we have felt it necessary to draw up a separate statement of the conclusions to which we have been led.

EVILS ARISING FROM THE CHANGED RELATIONS OF THE PRECIOUS METALS.

4. To the enumeration of these evils which is contained in sections 4 to 16 of Part II of the report we have little to add.

They are: (*a*) The evils arising from fluctuations in the relative value of the two metals, which (1) hamper the course of trade between gold and silver using countries; (2) stimulate abnormally the trade between silver-using countries to the prejudice of gold-using countries; (3) discourage the investment of capital in, and consequently retard the development of, silver-using countries. (*b*) The evils arising from the progressive and continuous fall in the gold price of silver, which, by its effects upon the exchange between gold and silver using countries, places the producers and merchants in the former country at a disadvantage as compared with those in the latter. (*c*) The evils, arising from a fall in the gold prices of commodities, so far as such fall is due to monetary causes. (*d*) The special evils which affect India.

5. From the report of our colleagues we gather that in their view the existence of some of these evils may be considered as satisfactorily proved, but that as regards others, while admitting the serious character of the allegations which have been made, they do not by any means consider them to be proved, and they are consequently not prepared to express any decided opinion upon them.

We can not therefore refrain from recording our conviction that the gravity of the evils above set forth has been much underestimated in the foregoing report, and that they do constitute such an impediment to the material prosperity both of this country and of India as urgently calls for a remedy.

EVILS ARISING FROM FLUCTUATIONS IN THE RELATIVE VALUE OF THE PRECIOUS METALS.

6. Taking first the evils resulting from fluctuations in the exchange between gold and silver using countries, we agree in the views expressed by our colleagues in section 9:

> Everything which hampers complete freedom of commercial intercourse between two countries, or which imposes on it any additional burden, is undoubtedly an evil to be avoided or removed if possible. If, therefore, a remedy could be devised to accomplish this end without involving the risk of other disadvantages, there can not be two opinions that it would be worth while to apply such a remedy.

We shall, at a later period, indicate a remedy which, in our opinion, fulfills the above condition.

EVILS AFFECTING INDIA.

7. We also concur in the view taken by our colleagues of the gravity of the evils which affect the government of India, and which they sum up in the following words (section 102):

> We have no hesitation, then, in expressing the conclusion that the changes in the value of the precious metals are causing important evils and inconvenience to the government of India, which are well worth the endeavor to remedy them, if a remedy can be devised which could be adopted without injustice to other interests and without causing other evils or inconveniences equally great.

8. It is, however, under the two remaining heads that the principal divergence between our colleagues and ourselves arises.

In our view a large proportion of the evil effects which are produced by changes in the relative value of gold and silver results from their

action upon the international trade between gold and silver using countries.

EVILS ARISING FROM FALL IN THE EXCHANGE BETWEEN GOLD AND SILVER USING COUNTRIES.

9. Any change in the relative value of the two metals must be accompanied by a corresponding change in the prices of commodities measured by them.

In the present case there has been a fall in the gold price of silver, and this has been accompanied by a general fall of gold prices in this country, where gold is the standard.

In India, on the other hand, where, in the opinion of nearly all the witnesses whom we have examined, the purchasing power of the rupee continues unimpaired, the prices of commodities measured in silver remain practically the same.

We have no evidence to show that silver has undergone any material change in relation to commodities, although it has fallen largely in relation to gold; in other words, the same number of rupees will no longer exchange for the same amount of gold as formerly, but, so far as we can judge, they will purchase as much of any commodity or commodities in India as they did before.

It is easy to perceive the effect which this fact must have on all transactions and remittances passing between the two countries, as well as on the interests of the producers and exporters of commodities in both.

It is commonly alleged that it gives to the Indian exporter of commodities to England an advantage over his competitor in England, which is said to be equal in effect to a bounty on his exports; while it places the English exporter of commodities to India at a disadvantage, which is said to be equal to the loss that he would suffer by the imposition of a corresponding duty on his exports.

We believe that, subject to the qualifications which we afterwards express, there is much force in both of these contentions.

The most familiar, and perhaps the simplest, illustration of our meaning may be found in the effect of the exchange on the export of wheat from India and on the relative position of the growers of that commodity in either country.

If, when the gold price of wheat is 40*s.* a quarter, the rupee, measured in gold, is worth 2*s.*, the producer of wheat in India will receive 20 rupees for a quarter of wheat.

If the gold price of wheat then falls 25 per cent., to 30*s.* a quarter, and the gold price of the rupee falls 25 per cent., to 1*s.* 6*d.*, the Indian producer will still receive 20 rupees for his quarter, and they will purchase as much as they did before, because prices in India have remained practically the same.

The position of the English grower, on the other hand, is materially changed.

He will only receive 30*s.* instead of £2, and unless all other prices have fallen in the same proportion he must be a loser, and the precise measure of his loss will be the difference between the purchasing power of 30*s.* at the present time and the purchasing power of £2 at the former period.

If, then, the English and the Indian producer were competing upon equal terms before the fall in the exchange occurred, the result will be to largely reduce the profits of the former and to leave the latter exactly where he was before. He is able to take the lower price of 30*s.* a quarter

for his produce, instead of 40*s.*, without loss to himself, and the market price of wheat in England is thus unduly depressed.

A similar result ensues in the case of articles which are sent from England to silver-using countries, as, for instance, in the case of cotton goods exported from Lancashire to India, where the effect of the fall in exchange is equally injurious to the English manufacturer.

For example, cotton goods are sent to India, for which, in order to make a profit, the English exporter must receive a certain sum, say, £10,000.

With the rupee worth 2*s.*, £10,000 is realized by the payment of Rs. 100,000.

With the rupee at 1*s.* 6*d.*, Rs. 133,333 are required to realize that sum.

Will the Indian importer give this greatly-increased price for precisely the same article as he bought before?

Obviously not, because prices in India, as we have seen, remain the same, and the English manufacturer is in consequence obliged either to take the same silver price as formerly, viz, Rs. 100,000, which means a greatly lowered gold price, viz, £7,500, or not to sell at all; and in either case he undergoes a loss which must be traced directly to the fall in the gold price of silver.

The industries which have suffered most from the fall in the exchange are naturally those which are most directly connected with the trade between gold and silver using countries, such, for example, as the cotton and the agricuitural industries of the United Kingdom.

We are not prepared to say, and it is not our view, that the fall in exchange can operate permanently as a bounty on Indian exports or as a protective duty against imports; but it is obvious—

First, that the loss which it occasions to the producer in gold-using countries, whatever that may be, must continue to operate until there has been a general adjustment of the prices of commodities, or, in other words, until all prices and all the incidents of production have on an average fallen in the same proportion;

Secondly, that the measure of that loss is the difference between the purchasing power of the higher price received for commodities before the fall and that of the price received at present; and

Thirdly, that the date of such a general adjustment is uncertain, but will probably be remote, and may be postponed for an indefinite period of time.

EVILS ARISING FROM THE FALL OF GOLD PRICES.

10. We have lastly to consider the evils arising from the fall in the gold prices of commodities.

The fact of a general fall of prices, or in other words, of an increase in the purchasing power of money in countries using a gold standard, can hardly be disputed. On this point we need only refer to the tables of index numbers given in section 49 of Part I of the report.

11. In section 47 of Part II, our colleagues express the view that "the greater part of the fall has resulted from causes touching the commodities rather than from an appreciation of the standard;" and again, in section 99, "we believe the fall to be mainly due, at all events, to circumstances independent of changes in the production of or demand for the precious metals, or the altered relation of silver to gold."

From this view we feel bound to dissent. The importance of the question whether the incapacity of the existing stock of gold to meet the currency requirements of the world arises from the fact that those currency requirements are increasing through the growth of commerce and of

population, or through the monetary policy of particular nations, may easily be exaggerated. In our opinion it is almost impossible to distinguish between these two sets of causes. A great increase in the production of commodities means a great increase in wealth, and would ordinarily be attended with an increased demand for the standard metal. The prices of some commodities would fall because they were produced in increasing quantities; the prices of commodities generally would tend to fall because there was an increased demand for the standard metal, and there are no means of saying how much of the alteration in price in any particular case is due to increased production and how much to increased demand for the standard.

In any case, however, we differ from the view taken by our colleagues, to which we have above referred, for the following reasons:

In the first place, we find no proof that the supply of commodities generally has increased, or that the cost of production has diminished at a greater rate in the years which have elapsed since the rupture of the bimetallic par than was the case in periods of like duration antecedent to that date.

On the contrary, it would seem to be the case that it was immediately after, and no doubt in consequence of, the great discoveries of science, such as the inventions of steam, of electricity, the telegraph, etc., that the most marked advances in production were apparent.

The cost of production was lessened and the facilities were increased at that time by the introduction and the aid of machinery in a greater degree than they have ever been since then, and yet there is no record of any permanent or general fall in prices similar to that which is the subject of investigation now.

Secondly, if gold prices have fallen solely owing to increased supply of commodities, silver prices should have fallen to the same extent, which is not the case. And the possible contention that a similar fall in silver prices has been averted by increased supplies of silver seems to us to be inconsistent with the figures given in sections 27 and 36 of Part I of the report, which show that, as regards countries outside of the United States, while the supply of gold has fallen off by £15,000,000 yearly since 1866–'70, the annual supply of silver has increased by less than £4,500,000.

For these reasons we are unable to attach as much importance as our colleagues to the operation of causes affecting commodities in producing a general fall of prices, which is estimated to average about 30 per cent.; and we think it is incumbent upon those who take that view to explain why prices did not fall in a similar degree at the earlier periods to which we have referred.

We are not insensible to the fact that facilities for production are habitually increasing, and the cost of production is constantly becoming less. But these factors have always been in operation since the world began, and while we recognize their tendency to depress the prices of commodities, they are not, in our opinion, sufficient to account for the abnormal fall in prices which has been apparent since the rupture of the bimetallic par, and only since that time.

Moreover, if industrial progress during the last fifteen years has produced this enormous fall of prices, we ought to anticipate a further fall of equal magnitude as a consequence of industrial progress during the next fifteen years. Is this a conclusion which we can accept? And, if so, can we contemplate it with equanimity?

Even assuming, then, that it is possible to maintain the distinction drawn by our colleagues, we are led to the conclusion that, while some

effect is no doubt due to causes affecting commodities alone, it is to monetary causes that the larger share of the general fall must be ascribed; and a fall of prices from these causes we consider, for reasons given at greater length in section 94 of Part I, to be a serious evil.

In support of this opinion we may refer to the views which were expressed in the final report of the royal commission upon the depression of trade in the following words, to which we think it desirable to recall attention:

> We expressed in our third report the opinion that this fall in prices, so far as it has been caused by an appreciation of the standard of value, was a matter deserving of the most serious independent inquiry, and we do not, therefore, think it necessary to investigate at length the causes which have brought it about; but we desire to give it a leading place in the enumeration of the influences which have tended to produce the present depression.

Under an appreciating standard those who are enjoying acquired wealth benefit, for a time at least, at the expense of those who are acquiring it, and the active and enterprising members of society suffer. In this way we believe that an appreciating standard of value exercises an injurious effect on the rate of increase of the total wealth of the community.

12. There appears to us to be sufficient evidence (to which we shall refer later on when we deal in detail with the several questions contained in our order of reference) to show that the fall of prices and its resulting evils have affected all classes of the population (with the exception of those in the enjoyment of fixed incomes payable in gold), from the manufacturers and producers down to the wage-earners; but, in our opinion, it is the latter class which have the most direct and immediate interest in the adoption of any measure which will re-establish the comparative stability of the standard of value, such as it was before the recent divergence in the relative value of the precious metals.

EFFECTS OF THE CHANGES ON CERTAIN SPECIFIED INTERESTS.

13. Passing next to the effects of the changes which we have described upon the various matters and interests specified in our order of reference, we are directed in the first place to consider their bearing upon the remittances of the government of India.

We have already expressed our concurrence with the view taken by our colleagues of the difficulties arising under this head.

14. As regards "payments under old or fixed contracts," it is manifest that such contracts, if dating from a period antecedent to the fall in the gold prices of silver, become more onerous at each successive stage of the fall, and that the burden of "new or current contracts" will increase in the same manner if the fall proceeds further.

In both cases the uncertainty attaching to the future must be a matter of great embarrassment to the government; but it should be observed that in the case of new or current contracts, such as those for the purchase of commodities, which do not extend over any long period of time, the evil caused by the fall is mitigated, but only in so far as the prices of the commodities in respect of which the contracts are made have fallen as much as or more than the gold price of silver.

15. "Persons in India who have to make remittances home in gold" have suffered in the same manner and to the same extent as the government. Their remittances, when converted into gold, undergo an apparent loss at the present time of 30 per cent.

The loss is no doubt alleviated *pro tanto* by any fall in the gold prices

of the articles or services for the purchase of which the remittance is employed; but we do not think that complete compensation is obtained in this way, and in comparison with persons receiving fixed salaries in this country, every person receiving a similar salary in countries where silver is the standard undoubtedly suffers a loss of about one-third on all sums which he remits home.

Where the remittance is made to cover a fixed charge, or to purchase commodities of which the gold price has not fallen, the loss is heavy.

When the rupee was worth 2*s.*, a fixed charge of £100 could be met by remitting 1,000 rupees. At the present time the amount required would be nearly 1,500 rupees, an increased burden on the remitter of 50 per cent.

16. We are next directed to consider the position of "the producers, merchants, and tax-payers of India."

(*a*) As regards the Indian producer, he gains through the operation of the causes set forth in section 9 of this report; and he will continue to gain until all the incidents of production in gold-using countries shall have accommodated themselves to the new level of prices. On the other hand, both the producer and exporter in India must suffer from the uncertainty of the exchange with gold-using countries, resulting from variations in the relative value of the precious metals.

(*b*) The position of the merchant in India does not seem to have been materially affected. So far as the export trade of the country may have been stimulated by the causes to which we have referred above, he has benefited. So far as the import trade may have been hampered by the operation of similar causes in the converse direction, he has sustained a loss.

But it can not be doubted that, as in the case of the producer, the constant fluctuations in exchange must have introduced an element of risk and uncertainty into trade which has been *pro tanto* prejudicial.

(*c*) As regards the position of the tax-payer in India, it is obvious that the necessity of making increased remittances in discharge of gold debts compels the government to maintain taxation above what it would be if no fall in the value of the rupee had taken place.

The tax-payer, therefore, considered exclusively as such, is a loser. He has to pay a larger number of rupees than he would if, instead of 1*s.* 4*d.*, the rupees were worth 1*s.* 10½*d.* At the present rate of exchange the annual burden to India is represented by a sum of about five crores of rupees. This amount, constituting as it does about one-tenth of the total revenue, properly so-called, of the government of India, might either, if the rupee were at its former value, be remitted, thus relieving the people of India from a heavy amount of taxation, or be expended in the further promotion of public works, education, and other important measures for the improvement of the country.

This large sum has been sometimes represented as a loss to the government, but not to the people of India. The distinction is, in our opinion, untenable. In every country finance is the most important business of government. But in no country is it so important as in India. Yet in India we maintain a system of currency such that, in a time of comparative peace and growing commerce, its administration finds itself involved in as many financial uncertainties and embarrassments as if it were engaged in a costly war.

Again, it is sometimes said that the loss to India is nominal, and not real. But if, as we believe, the divergence in the values of the precious metals is due to an increase in the value of gold, the loss to India is

most real. For she has to pay the same quantity of gold as before, and that quantity is worth more.

We find in consequence that, after repeated efforts to reduce expenditure, the government of India have been at last compelled to resort to fresh taxation of an undesirable kind, in order to restore the financial equilibrium, and that, unless some improvement in this respect shortly takes place, it will become indispensable, in order to avert financial disorder, to adopt further measures, which are, in their opinion, open to grave objection, both on financial and political grounds.

We regret to add that however grave the present financial position of the government of India may be, the future prospect is one which we can not regard without far more serious apprehension.

We are very far from attempting even to form an opinion as to what the future relations of the two precious metals may be if they continue, as at present, without any fixed ratio between them; but it is impossible to shut our eyes to the possibility of a still further relative depreciation of silver or appreciation of gold, and a consequent increase of the difficulties by which the Government is now beset.

17. As regards the merchants and manufacturers at home who trade with India, we have already indicated in general terms the mode in which their interests are affected.

Both English and Indian producers have had to submit to a lower gold price in the English market; but as this lower gold price produces the same number of rupees as the higher gold price did before, the Indian producer has not suffered, while the English producer, from the causes previously mentioned, has undergone a loss.

To whatever extent this may have been the case, we think that the trade between the United Kingdom and India has been affected by the recent monetary disturbance; but, beyond this, we doubt whether any very marked effects have been produced by it, except so far as trade has been checked and restrained from its natural expansion by the uncertainties and insecurity which have doubtless exerted an unfavorable influence.

The large increase in this trade during the period under consideration is often adduced as a proof that no such adverse influence can have been in operation; but we think that this is sufficiently explained by other causes, such as the comparative prosperity of India, the development of her railway system, the abolition of import duties, which has practically made her a free port, the reduction in transport, and the facilities of communication with Europe due to the Suez Canal. We also think that, had it not been for the monetary disturbance, the trade would have assumed still larger dimensions.

18. Our attention is next directed to the effects of these changes upon the interests of the United Kingdom.

As regards trade with silver-using countries other than India, we have only to point out that the views which we have expressed with regard to India are, so far as they concern trade, of general application to all silver-using countries; but we observe that, in marked contrast with our Indian trade, both the import and export trade with other silver-using countries appears to have declined in recent years.

One feature in this general decline of trade deserves special notice on account of its effect upon the manufacturing industry of Lancashire.

A serious check appears to have been given to the growth of the exports of cotton yarn to China and Japan, owing to the rapid increase in the exports from India to those countries. The facts are given in section 76 of Part I of the Report, from which it appears that the ex-

ports from India increased, between 1876–'77 and 1886–'87, from 7,900,000 pounds to 91,800,000 pounds, or about 1,058 per cent.; and the returns for 1887–'88 show a still further increase. The exports from the United Kingdom, on the other hand, to China, Hong-Kong, and Japan, increased steadily between 1877 and 1881 from 33,000,000 pounds to 47,400,000 pounds; but from the latter year they declined to 26,900,000 pounds in 1886, though they rose again slightly in 1887 to 35,350,000 pounds.

The competition of the Indian spinning mills of course makes itself felt in the home markets of that country; and there is some evidence that our trade with the East in coarse yarns has entirely left us.

The natural advantages which India derives from being itself the country where the raw material is produced, and from her close proximity to the markets afforded by the silver-using countries in the East, are thus enhanced by the additional advantages derived from a common standard, free from the fluctuations to which the trade between India and gold-using countries is subject.

The divergence between the value of gold and silver, therefore, in practice constitutes an advantage to the producer in India, not only in so far as he produces for the markets of gold-using countries, but in so far as he competes with the manufacturers of those countries in the neutral markets of silver-using countries.

19. But it is upon the foreign and internal trade of the United Kingdom, and the industrial condition of the country generally, that we think the recent currency changes have produced the most injurious results.

We must not, however, be understood as implying that in our opinion the depression which has affected the trade and industry of the country in recent years is entirely due to these changes. Other causes have no doubt been at work; but we think that monetary causes have also operated to a considerable extent.

20. In our view the magnitude of the evil arising from the existing relations between the precious metals is due to the facts (*a*) that the commerce of the world is now conducted under two distinct standards instead of one as was formerly the case; (*b*) that those two standards have, by being dissociated from each other, lost the important quality of relative stability; and (*c*) that the effect upon the trade and industry of the United Kingdom has been that of an appreciating standard of value, which, for reasons above given, we consider to be a serious evil to the industrial and working classes. In this respect we are unable to draw any distinction between the foreign and the internal trade of the country; the evils of an appreciating standard must obviously apply equally to both.

21. In regard to our foreign trade we would call attention to the falling off in value both absolutely and relatively to population.

This reduction of value would, of course, be immaterial if the cost of production had decreased in the same proportion, and if retail prices had followed the fall in wholesale prices. But this does not appear to have been the case.

22. The evidence of the income tax returns given in section 55 of Part I of the Report points in the same direction. Notwithstanding a large increase both in population and in the production of nearly all commodities, the profits which come under the notice of the tax collector are scarcely larger than they were fifteen years ago, and, what is more important, the rate of increase has materially fallen off.

From 1874 to 1886 the increase in the gross amount of property and

profits assessed to income tax was not quite 15 per cent. In the preceding twelve years, from 1862 to 1874, the increase was 56 per cent.

23. Turning next to the employment of labor, we think that the commission might with advantage have taken more evidence upon this subject, but we desire to call special attention to the evidence of Mr. Fielden, who, besides being personally acquainted with the condition of the laboring classes in the manufacturing districts of Lancashire and Yorkshire, was able to place before us much valuable information with regard to the employment of labor in the country at large.

He has obtained statistics from ten of the largest trades unions in the country with regard to the number of their members out of employment, and the amount of support given to them out of the society funds.

The result is, that while the average number of members in these societies in the years 1871–'75 was 98,640, the average number out of work was 2,150, or 2.18 per cent., and the average cost £44,852 per annum. In the years 1882–'86, the number of members averaged 139,338, the number out of work 10,063, or 7.22 per cent.. and the average cost £162,494 per annum.

24. The general conclusions which we draw from his evidence are, not only that the rate of wages has fallen, but that the amount actually earned, even by those who are nominally at work, has, owing to irregularity of employment, fallen in a still greater degree, and that the number of persons altogether out of employment has distinctly increased of late years.

The important question for the laborer is not what he earns per day or per week, but per year.

25. The reduction in profits and wages to which we have above alluded appears to us to be fully corroborated by the diminution in the purchasing power of the country shown in the statistics of our foreign trade.

In 1873 the total value of the imports into and exports from the United Kingdom was £21 4*s*. 1*d*. per head of population. In 1886 it was £16 17*s*.

If the fall in prices had been caused solely by the reduced cost and increased supply, the money demand of the population should, in our view, have remained the same, and the total value of the trade should have been maintained.

26. We may here notice another important effect of an appreciating standard, which arises from the increased burden of all fixed charges payable in gold, such as the national debt, perpetual debenture, leases for long terms of years, annuities, pensions, and other similar charges, which can not be reduced or terminated. With every rise in the value of gold the weight of this burden upon the industry of the country increases.

The loss to the nation at large under this head must be of a most serious kind, the only class which benefits being the small number of annuitants, estimated at 250,000.

27. We wish to direct attention also to another consequence which has resulted from the rupture of the bimetallic par, and the unsettled relations between the two metals.

We refer to the check which has been given to the free-trade policy, and tendency to reactionary legislation in favor of protection which have been manifested in recent years, and to which, we think, the cause in question has largely contributed.

A period of falling prices is always unfavorable to the removal of commercial restrictions and of protective duties; and in the present case this general depression has been aggravated in the gold-using countries by the advantages in competition which have been enjoyed by silver-using countries, in the manner which we have explained in section 9 of this report. So long as unequal conditions of production and exchange are created and fostered by monetary legislation it will be difficult to prevent attempts to counteract their effects by protective or countervailing tariffs.

On the other hand, the financial embarrassment which has been created in British India must raise the question of a return, for revenue purposes, to the system of import duties which was abolished with such successful results in 1879 and 1881, and which it was thought was finally removed from the path of Indian progress.

The interests of any country which is committed to a free-trade policy are especially and deeply interested in removing, so far as it lies in her power, a cause which operates in making the abandonment of a protective system more and more difficult by other countries, and it appears to us that the adoption of a common international standard of value is an essential condition of the fulfillment of this policy.

28. We think that the above remarks upon the evils affecting both the United Kingdom and India, if taken in connection with the more detailed statement in Part I of the report, will sufficiently indicate our view as to their nature and gravity, and that they are largely due to the currency changes which have taken place in the years immediately preceding and following 1873.

We think that too much stress can not be laid upon the novelty of the experiment which has been attempted as the result of the above changes. That experiment consists in the independent and unregulated use of both gold and silver as standards of value by the different nations of the world.

We are strongly of opinion that both metals must continue to be used as standard money; the results of using them separately and independently since 1873 have been most unsatisfactory, and may be positively disastrous in the future.

It can not be questioned that until 1873 gold and silver were always effectively linked by a legal ratio in one or more countries.

It is equally indisputable that the relative value of the two metals has been subject to greater divergence since 1874 than during the whole of the two hundred years preceding that date, notwithstanding the occurrence of variations in their relative production more intense and more prolonged than those which have been experienced in recent years.

29. In 1873 and 1874 the connecting link disappeared, and for the first time the system of rating the two metals ceased to form a subject of legislation in any country in the world.

The law of supply and demand was for the first time left to operate independently upon the value of each metal; and simultaneously the ratio which had been maintained, with scarcely any perceptible variation, for two hundred years gave place to a marked and rapid divergence in the relative value of gold and silver, which has culminated in a change from 15½ to 1 to 22 to 1.

PROPOSED REMEDY.

30. It appears to us impossible to attribute the concurrence of these two events to a merely fortuitous coincidence. They must, in our

opinion, be regarded as standing to each other in the relation of cause and effect.

We can not, therefore, doubt that if the system which prevailed before 1873 were replaced in its integrity most of the evils which we have above described would be removed; and the remedy which we have to suggest is simply the reversion to a system which existed before the changes above referred to were brought about—a system, namely, under which both metals were freely coined into legal-tender money at a fixed ratio over a sufficiently large area.

The effects of that system, though it was nominally in force only within a limited area, were felt in all commercial counties, whatever their individual systems of currency might be, and the relative value of the two metals in all the markets of the world was practically identical with that fixed by the legislation of the countries forming the Latin Union.

As regards the possibility of maintaining such a system in the future, we need only refer to the conclusion at which our colleagues have arrived in section 107 of Part II, and with which we entirely agree, namely, that—

> In any conditions fairly to be contemplated in the future, so far as we can forecast them from the experience of the past, a stable ratio might be maintained if the nations we have alluded to were to accept and strictly adhere to bimetallism at the suggested ratio. We think that if in all these countries gold and silver could be freely coined, and thus become exchangeable against commodities at the fixed ratio, the market value of silver as measured by gold would conform to that ratio, and not vary to any material extent.

We also agree generally with the views expressed by our colleagues in sections 109 and 110 as to the extent to which such a system, if adopted and maintained, would remedy the evils complained of. And we would call attention to the additional advantages referred to in sections 111 and 119 as likely to accrue from the adoption of an international bimetallic system of currency.

31. It only remains for us, therefore, to give our reasons for thinking that our colleagues have attached undue importance to the several objections which have been urged against the proposed change. These objections are as follows:

(1) That "the change proposed is tremendous," and that its "very novelty would excite apprehensions which in themselves might not be without their danger."

To this we reply that the system of currency which we recommend was in existence in other countries for many years before 1873, and its effects practically extended to all the commercial countries of the world. We are not aware that so long as it was maintained in its integrity any evil results ensued. The only novelty in our proposal is that the United Kingdom should join with the other countries specified below, in section 35, in re-establishing a bimetallic system. We are therefore unable to understand how, in view of the experience of the past, any ground for serious apprehension can exist.

(2) That the position of the United Kingdom, and especially of London, as the commercial or financial center of the world, would be endangered.

This position, it is urged, is due to the fact that the standard of value in this country is a definite quantity of a particular metal, and that persons entering into transactions expressed in pounds sterling consequently know with absolute certainty what it is that they will have to give or receive. This certainty, it is said, would disappear if an option were given to debtors, as is proposed under the bimetallic system, of tendering either one of two metals.

To this we reply—

(*a*) That the commercial and financial pre-eminence of London dates back to a period anterior to the establishment of the single gold standard in this country, and a period when, as a matter of fact, the currency of the country was bimetallic.

(*b*) That if the transactions of other countries are now largely carried out by means of bills drawn upon London, it is because London is, for many reasons, the best market for such bills, and that this fact is not likely to be affected by our joining with other nations in a common system of currency.

(*c*) That the option conceded to debtors under the bimetallic system could rarely have any practical effect, inasmuch as if that system were established and maintained in its integrity there would be no appreciable inducement to select one metal rather than the other.

(3) That if bimetallism resulted in a fall in the value of gold, England as a country entitled to receive large gold payments would lose, and other countries would gain at her expense.

In reply to this objection we need only refer to the arguments stated in section 96 (k) of Part I of the Report, to which we have nothing to add.

(4) That the bimetallic system depends for its successful working upon international support, and that, for adequate or inadequate reasons, other nations would, sooner or later, cease to adhere to it.

To this we reply (*a*) that no sufficient motive can be suggested for the secession of any of the contracting powers; (*b*) that provided the system was maintained over a sufficiently large area the secession of one or more powers would not be of vital importance; (*c*) that in any case the seceding power would cause more injury to its own subjects than to those of other countries; and (*d*) that such an objection applies with equal force to all international agreements.

(5) That the tendency, which is observable among the more civilized nations, to use gold rather than silver, would be likely, notwithstanding the existence of a bimetallic system, to encourage the accumulation of that metal, and the creation of an agio upon it, which would thus disturb the ratio fixed by law between the two metals.

To this we reply that the tendency above mentioned is mainly the result of the apprehensions and uncertainty attending upon the existing relations between the two metals; and that all inducement to accumulate gold would cease with a return to a stable ratio of value between them.

(6) That there might be a tacit refusal of the people of a country to accept both metals as legal tender, and that contracts would be largely made in one of the two metals only.

The question raised in this objection is rather a matter of opinion than of argument, and we can only say that we do not share the apprehensions of those who foresee any serious difficulty arising from such a course.

Even if it be admitted that it would be largely adopted we do not think that, so long as the legal ratio between the two metals continued in force, any real difficulty could occur.

But we may point out that the objection appears to assume what has, of course, never been suggested, that the bimetallic system could be introduced into a country without the consent of those sections of the population who would be most interested in the adoption of such a change. We are satisfied that no such measure as the introduction of the double standard could be passed into law, in this country at least,

without such an amount of popular support as would practically prevent the possibility of the adoption of such a course as is supposed in the objection we are noticing.

(7) That if debts contracted in gold could be paid in silver, the claims of all creditors would unjustly suffer, and that the adoption of a bimetallic system would thus amount to a breach of faith.

This last objection is that which appears to us to call for the most serious consideration, and we are not disposed to underrate its importance.

If it be right that a government should adopt and impose upon its people a legal standard of value, it is clearly its duty to provide, as far as possible, that such standard shall not be wanting in its most essential attribute, viz, that of the greatest attainable stability.

Recent experience has shown that by the monetary policy of Germany, the Latin Union, and the United States, over which this country had no control, the standard of value in the United Kingdom has been gravely impaired and its future stability, as well as that of the silver standard of India, seriously endangered.

In these circumstances it is evident that if the Government, by its direct action in changing the standard, injured the interests of creditors and disturbed existing contracts, it may, by abstaining from action, injure the interests of debtors to an equal or greater extent, and affect future contracts.

It appears to us that if it is wrong in a Government to make any change in its standard of value on the ground that it would disturb the relations of debtors and creditors, it must be equally wrong to abstain from any action which it is in its power to take, by which a disturbance in those relations may be averted.

But it is essential to observe that this objection, whatever force attaches to it, is not directed against the policy of bimetallism as such, but merely against the return to the ratio of 15½ to 1, or some other ratio differing much from the current relative value of gold and silver.

It must also be recollected that it can not be urged by those who have insisted that the fall in prices is due to causes primarily affecting commodities, and not to the appreciation of gold. If the rupture of the bimetallic par has not led to the appreciation of gold and to a fall in prices, there appears to be no sufficient reason for supposing that its renewal would affect the value of gold or cause a rise in prices.

32. For these reasons we do not think that, after giving due weight to the foregoing objections, they are such as ought to be allowed to stand in the way of such a policy as we are prepared to recommend.

Neither metal alone exists in sufficient quantity to serve as a sole standard without causing such a change in the level of prices as to amount to a financial and commercial revolution; but we can not doubt that if a sufficiently wide area of agreement between the leading commercial countries can be secured, this most important result may be effectually attained and a great international reform successfully accomplished.

33. Further, we are strongly impressed with the conviction that whatever evils may be expected to flow from a return to the *status quo ante*, the evils, both present and prospective, of the existing situation are infinitely more serious.

Failing any attempt to re-establish the connecting link between the two metals, it seems probable that the general tendency of the commercial nations of the world will be towards a single gold standard.

Any step in that direction would, of course, aggravate all the evils

of the existing situation, and could not fail to have a most injurious effect upon the progress of the world.

A further fall in the value of silver might at any moment give rise to further evils of great and indefinite magnitude in India, while a further rise in the value of gold might produce the most serious consequences at home.

34. No settlement of the difficulty is, however, in our opinion, possible without international action.

The remedy which we suggest is essentially international in its character, and its details must be settled in concert with the other powers concerned.

It will be sufficient for us to indicate the essential features of the agreement to be arrived at, namely, (1) free coinage of both metals into legal tender money; and (2) the fixing of a ratio at which the coins of either metal shall be available for the payment of all debts at the option of the debtor.

35. The particular ratio to be adopted is not, in our opinion, a necessary preliminary to the opening of negotiations for the establishment of such an agreement, and can, with other matters of detail, be left for further discussion and settlement between the parties interested.

We therefore submit that the chief commercial nations of the world, such as the United States, Germany, and the States forming the Latin Union, should in the first place be consulted as to their readiness to join with the United Kingdom in a conference, at which India and any of the British colonies which may desire to attend should be represented, with a view to arrive, if possible, at a common agreement on the basis above indicated.

36. We have indicated what appears to us to be the only permanent solution of the difficulties arising from the recent changes in the relative value of the precious metals, and the only solution which will protect this and other countries against the risks of the future. At the same time we approve the recommendations of our colleagues in sections 134–137.

We do not attach much importance to their probable direct effects; but their influence at the present time would be beneficial, while their adoption would place no obstacle in the way of a more satisfactory solution at a future date, and might possibly facilitate it.

All which we submit to Your Majesty's gracious consideration.

LOUIS MALLET. D. BARBOUR.
ARTHUR JAMES BALFOUR. W. H. HOULDSWORTH.
HENRY CHAPLIN. SAMUEL MONTAGU.

GEO. H. MURRAY, *Secretary.*

OCTOBER, 1888.

NOTE BY SIR LOUIS MALLET.

1. I have signed the foregoing report (Part III) because I concur generally in its conclusions and recommendations, but as it does not adequately represent the reasons which have led me to their adoption, and still less the reasons which have obliged me to dissent from the main conclusions of Part II, I add the following supplementary observations:

2. The facts as to the recent changes in the relative value of the precious metals have been as fully set forth in the general report as the circumstances of the case appear to require.

3. In considering their nature and causes three alternatives are presented in the order of reference:

There may have been (*a*) a depreciation of silver; (*b*) an appreciation of gold; (*c*) a combination of both causes.

4. I must here observe that it is necessary to distinguish between the terms "appreciation" and "depreciation," as applied to the precious metals in their relation to each other, and in their relation to commodities.

To whatever cause it is to be attributed, the relative value of the two metals to each other had not for many years previous to 1874 been subject to much variation; and in their relation to commodities they have therefore risen and fallen together, with a corresponding but converse fall or rise in the gold and silver prices of commodities.

It has, therefore, been customary, in speaking of the appreciation or depreciation of the precious metals, to consider their relation to commodities, and not to each other.

5. But although any divergence in value between gold and silver must be represented by an equal divergence between gold and silver prices, it is evident that in such a case either metal may appreciate or depreciate in relation to the other, while undergoing no change in relation to commodities.

It becomes necessary, therefore, from this point of view, in order to ascertain the effect of such divergence upon the relation of either metal or of both to commodities, to consider separately the cause or causes of the divergence between the two metals "*inter se*," and the cause or causes of the divergence between gold and silver prices.

6. With respect to the relations of the metals *inter se*, I agree in the conclusion stated in paragraphs 188–195 of Part I of the report, that the primary cause of the recent changes is to be found in the abandonment by the countries forming the Latin Union of the free coinage of both metals into legal-tender money at a fixed ratio.

7. I am unable to believe that the increased supply of silver and the diminished supply of gold during recent years could have caused the divergence in value between gold and silver which has taken place if that system had been maintained.

Changes in the supply of the two metals of much greater magnitude in former times do not appear to have had an important influence in controlling their relative value; and in support of this view I need not do more than refer to the following figures, taken from section 21 of Part I of the report.

Relative value of production and market price of gold and silver in the under-mentioned periods.

Period.	Ratio of value of production (silver to gold).	Ratio of market value (silver to gold).	Period.	Ratio of value of production (silver to gold).	Ratio of market value (silver to gold).
1801–'10	3.227 to 1	15.61 to 1	1861–'65	.386 to 1	15.40 to 1
1811–'20	3.048 to 1	15.51 to 1	1866–'70	.44 to 1	15.55 to 1
1821–'30	2.055 to 1	15.80 to 1	1871–'75	.710 to 1	15.97 to 1
1831–'40	1.865 to 1	15.75 to 1	1876–'80	.794 to 1	17.81 to 1
1841–'50	.899 to 1	15.83 to 1	1881–'85	1.030 to 1	18.63 to 1
1851–'55	.288 to 1	15.41 to 1	1888		22 to 1
1856–'60	.292 to 1	15.30 to 1			

It will be observed that during the first seventy years of the century, although the quantities of the two metals produced varied in relative value from 3.227 to 1 to .44 to 1, their value in the market varied only between 15.41 to 1 and 15.83 to 1; but between 1870 and 1885, with much less marked variations in relative production, the relative value of the two metals in the markets fell from 15.55 to 1 to 18.63 to 1, and at the time we write it is nearly 22 to 1.

In the face of these facts it appears to me impossible to attribute the divergence of value between gold and silver to the comparatively slight change in the conditions of supply, irrespective of the altered conditions of demand.

DEMAND.

8. The demand for gold and silver largely depends upon their use as "money" in its several functions, and for this purpose both metals have hitherto been found, and probably will continue to be found, indispensable, from the diversity of their uses, and also from the insufficiency in quantity of either one, or the other, alone.

The distribution of these two metals between the nations of the world has been determined by various considerations; but as one of the most important of their uses as money has been to serve as a standard measure of value with free mintage, or liable only to a seignorage representing its cost, it is obvious that the selection of one or the other for this purpose has exercised a direct influence on the value of the metal so selected.

Until recently the attempt has never been abandoned, either by the separate action of particular countries or by a group of states such as that of which the Latin Union is composed, to neutralize, as far as possible, the evils and inconveniences of two standards of value with no connecting link between them, by establishing a fixed legal ratio of weight at which they should always be exchangeable one for the other.

It may be stated generally that during the last century the national unit of coinage which constituted the standard of value in the principal countries practically rested on both metals, silver being usually the nominal standard with gold rated to it, at the discretion of each government.

In the United Kingdom, from 1717 to 1816, this system prevailed, the ratio of gold to silver having been fixed at 1 to 15.21.

In the United States of America the double standard was originally adopted in 1786 with a ratio of 1 to 15.25; changed in 1792 to 1 to 15, and in 1834 to 1 to 16.

In 1803 the double standard, with a ratio of 15½ to 1, was definitively adopted by France, and in 1865 the formation of the Latin Union, ultimately consisting of France, Italy, Belgium, Switzerland, and Greece, extended and confirmed it.

The changes in monetary policy which have taken place during the last fifteen years, both in Europe and in the United States of America, have on the one hand largely increased the area in which gold is used as a standard of value, while diminishing that in which silver is so used, and on the other, by entirely removing the restraining influence of legislation on the relations of the two metals, have left the law of supply and demand to operate independently on the value of each, instead of setting in motion a compensatory or equilibratory action upon both.

The effect has, in my opinion, been to cause an increased demand for gold and a relatively diminished demand for silver.

9. An examination of the international movements of gold and silver during recent years appears to support this view.

In dealing with the statistics of the export or import of the precious

metals it must be recollected that they are necessarily imperfect, and that no reliance can be placed upon any apparent movements which are not of considerable magnitude, distinct and well defined, but they nevertheless afford general indications of much significance.

10. It will be convenient to give the first place to the United States.

Average of the financial years—	Net imports of gold.	Net exports of gold.
1851–'55*	.....	$34, 280, 000
1856–'60*	.....	49, 204, 000
1861–'63*	.....	19, 498, 000
1864–'70	.....	47, 639, 000
1871–'75	.....	40, 926, 000
1876–'80	$11 750, 000	.....
1881–'85	21, 070, 345	.....

* Includes silver, but to the end of 1860 the amount was mainly gold.

The evidence in this case is most remarkable. Up to 1876 the United States yearly supplied large quantities of gold to the rest of the world. Since 1876 she has been receiving gold from other countries. The influence which stopped the flow of gold from the United States, and reversed the direction of the current, had its origin in that country. It was therefore a new demand for gold, and must have tended to raise the value of gold.

Let us now consider England:

Average for the years—	Net imports of gold.	Net exports of gold.
1858–'60	£3, 795, 000	.....
1861–'70	5, 546, 000	.....
1871–'76	3, 345, 000	.....
1877–'80	.....	£1, 400, 000
1881–'85	.....	465, 000
1886	.....	391, 450

The evidence in the case of England is just as distinct as it is in the case of the United States. Up to the end of 1876 there was a large and continuous flow of gold into the country; since 1876 the supply has ceased, and England has been losing gold.

Next as to France:

Average for the years—	Net imports of gold.	Net exports of gold.
	Francs.	*Francs.*
1851–'60	318, 435, 000	.....
1861–'70	191, 014, 000	.....
1871–'73	.....	125, 115, 000
1874–'78	415, 472, 000	.....
1879–'84	.....	70, 696, 000

Dr. Soetbeer has given grounds for doubting the accuracy of the French statistics of the import and export of the precious metals; but, allowing for the disturbance caused by events in connection with the Franco German war, the flow of bullion is in harmony with what we observe in the case of England, and the features of the change are so

marked that we may feel sure that though they might be modified, they would not be obliterated, if more accurate statistics were available.

In the case of Germany the figures given are those of the German customs district, which are acknowledged not to be complete, but are nevertheless significant:

Average of years.	Net imports of gold	Net exports of gold.
	Marks.	*Marks.*
1872-'79	68,126,000	
1880-'85		11,483,000

For the other nations it is unnecessary to give figures in detail. Italy took special measures to accumulate gold, which has since shown a tendency to leave that country. Austria-Hungary has also accumulated gold, and so have the Scandinavian countries. In all these cases the flow of gold was intended to meet a new demand, and its influence would be in the direction of lowering prices.

Let us now turn to the East, and consider the evidence of the flow of silver to and from those countries.

11. Mr. Giffen, of the board of trade, has given the following table, showing the imports and exports of silver into and from China in her trade with the United Kingdom, France, British India, and the United States:

Year.	Net imports of silver.	Net exports of silver.	Year.	Net imports of silver.	Net exports of silver.
1862	£2,598,000		1875	£2,064,000	
1864	2,080,000		1876	3,806,000	
1865	1,131,000		1877	5,348,000	
1866		£3,180,000	1878	3,254,000	
1867		3,967,000	1879		£29,000
1868		2,403,000	1880		189,000
1869		43,000	1881	1,581,000	
1870		2,943,000	1882		110,000
1871		3,637,000	1883	1,205,000	
1873		745,000	1884	2,105,000	
1874	141,000				

It will be seen that the direction of the current was reversed after 1872; China was losing silver up to 1872, and after that year she began to import it. The change appears to indicate the effect both of the reduced demand for silver elsewhere and of its increased production.

The figures of the net imports of silver into India are as follows:

Years.	Net imports of silver.	Years.	Net imports of silver.	Years.	Net imports of silver.
	Rs.		*Rs.*		*Rs.*
1855-'56	82,000,000	1865-'66	187,000,000	1875-'76	16,000,000
1856-'57	111,000,000	1866-'67	70,000,000	1876-'77	72,000,000
1857-'58	122,000,000	1867-'68	56,000,000	1877-'78	147,000,000
1858-'59	77,000,000	1868-'69	86,000,000	1878-'79	40,000,000
1859-'60	111,000,000	1869-'70	73,000,000	1879-'80	79,000,000
1860-'61	53,000,000	1870-'71	9,000,000	1880-'81	39,000,000
1861-'62	91,000,000	1871-'72	65,000,000	1881-'82	54,000,000
1862-'63	126,000,000	1872-'73	7,000,000	1882-'83	75,000,000
1863-'64	128,000,000	1873-'74	25,000,000	1883-'84	64,000,000
1864-'65	101,000,000	1874-'75	46,000,000	1884-'85	72,000,000

It will be observed that there was a distinct falling-off in the imports of silver between 1870 and 1876 and a subsequent increase, but some explanation is necessary to show the true significance of the figures. During a portion of the time for which the figures of import of silver are given there was an immense increase in the demand for Indian cotton, arising from causes connected with the American war, payment for which was largely taken in silver. There was also heavy borrowing in England on account of the mutiny and of the extension of public works by the Government in India, which had the effect of reducing for the time the remittances from India on public account. But taking into our account the ten years immediately preceding 1874 and those which have followed, it will be found that the average net imports of silver in both periods is, as nearly as possible, the same, viz, about £7,500,000 sterling.

It may be inferred from this fact that these imports have been larger than they would have been had not the par been broken, if indeed there might not have been an export of silver to Europe.

The continued magnitude of the imports of silver into India is in harmony with what has occurred in China, and it presents a marked contrast to the movements of gold in Europe.

12. It must be borne in mind that the withdrawal of inconvertible paper in France and the United States during recent years must neces sarily have had a considerable effect in contracting the currencies of the world, and that owing to the change in monetary policy to which we have adverted, the demand for metallic money caused by these resumptions of specie payments fell mainly upon gold, instead of falling, as would formerly have been the case, upon both metals.

13. I think, therefore, that the recent changes in the relative value of the precious metals *inter se*, although probably to some extent due to a diminished demand for silver, are mainly due to an increased demand for gold. I believe it to be impossible to determiue in what proportions the two causes have operated.

CAUSES OF CHANGES IN GOLD AND SILVER PRICES.

14. But the main practical interest of the question we are examining is derived from the fact that gold and silver are used as standard measures of value, and that any divergence in their relation to each other must be attended by an equal divergence between the things respectively measured by them. The more important part of our inquiry, therefore, relates to the cause or causes of the divergence between gold and silver prices.

15. This divergence may have arisen from either of the two following causes: (*a*) A divergence between gold and silver solely due to a change in their relative value, *inter se*. (*b*) A simultaneous change affecting commodities, in combination with the former cause.

For instance, gold and silver may have diverged in value relatively to each other (say) 30 per cent., from a rise in gold and a fall of silver of 15 per cent. respectively.

But the corresponding divergence in gold and silver prices may have arisen either from this cause alone, or from a rise or fall in commodities co-extensive with the rise in gold, or the fall in silver, viz, 15 per cent.

If due to the first cause alone, gold would have appreciated and silver depreciated, in relation to commodities, 15 per cent., while gold prices would have fallen and silver prices risen 15 per cent.

But if due to the second cause, or a combination of causes, either gold

would not have appreciated, nor gold prices fallen, while silver would have depreciated 30 per cent., and silver prices risen 15 per cent. from causes affecting silver, and 15 per cent. from causes affecting commodities, or silver would not have depreciated, nor silver prices risen, while gold would have appreciated 15 per cent. from causes affecting gold, and 15 per cent. from causes affecting commodities.

It is therefore necessary, in order to ascertain the operation of these two sets of causes in the present case, to trace the course of both gold and silver prices during the period of the divergence.

GOLD.

16. First, then, as regards gold prices. It might perhaps be sufficient to refer to the conclusions of the royal commission on the depression of trade, and to the evidence by which they are supported as to the fall in gold prices in recent years, but an independent examination of the various estimates by competent statists shows that while differing in some important respects, and in the evidence which they afford as to the degree and extent of the fall, there is a remarkable concurrence of testimony that the period under review has been characterized by a marked reduction of gold prices affecting most important commodities, and especially the great staples of wholesale international trade.

Irrespective of these estimates, the statistics of quantities and values of the imports and exports of the United Kingdom, published by the board of trade, appear to me to place the question beyond the reach of controversy, as regards this country, and similar evidence is afforded by the trade accounts of other countries (France, Germany, United States of America, and Italy).

UNITED STATES.

Summary table comparing the progress of imports and exports as stated in money in the United States with the progress of entries and clearances of shipping.

Compiled from tables, p. 177 *et seq.* of appendix to first report of royal commission on trade depression, continued to date.]

Years.	Imports per head of population.		Exports per head of population.		Entries and clearances of shipping.	
	Amount.	Increase or decrease on previous period.	Amount.	Increase or decrease on previous period.	Tons per head.	Increase or decrease on previous period.
	£ s. d.	*Per cent.*	£ s. d.	*Per cent.*	*Tons.*	*Per cent.*
1855–'59	1 17 8	.....	1 13 7	.....	0.44	.....
1860–'64	1 14 10	— 7.52	1 7 3	— 18.86	0.47	+ 6.82
1865–'69	1 18 2	+ 9.57	1 3 7	— 13.46	0.40	— 14.89
1870–'74	2 18 7	+ 53.49	2 9 11	+111.06	0.57	+ 42.50
1875–'79	2 2 5	— 27.60	2 16 3	+ 12.69	0.62	+ 8.77
1880–'84	2 15 7	+ 31.04	3 5 11	+ 17.19	0.68	+ 9.68
1885–'87 (three years only	2 11 7	— 7.20	2 18 0	— 12.01	0.62	— 8.82

FRANCE.

Summary table comparing the progress of imports and exports as stated in money in France with the progress of entries and clearances of shipping.

[Compiled from tables, p. 177 *et seq.* of appendix to first report of royal commission on trade depression, continued to date.]

Years.	Imports per head of population.		Exports per head of population.		Entries and clearances of shipping.	
	Amount.	Increase or decrease on previous period.	Amount.	Increase or decrease on previous period.	Tons per head.	Increase or decrease on previous period.
	£ s. d.	*Per cent.*	£ s. d.	*Per cent.*	*Tons.*	*Per cent.*
1855–'59	1 18 4	.....	2 1 11	.....	0 23	.....
1860–'64	2 9 1	+ 28.04	2 11 4	+ 22.46	0 26	+ 13.04
1865–'69	3 2 8	+ 27.67	3 2 11	+ 22.57	0 33	+ 26.92
1870–'74	3 15 8	+ 20.75	3 15 0	+ 19.21	0 41	+ 24.24
1875–'79	4 6 7	+ 14.43	3 14 11	— 0.11	0 52	+ 26.83
1880–'84	5 1 4	+ 17.04	3 13 5	— 2.02	0.69	+ 32.69
1885–'87 (three years only)	4 6 0	— 15.13	3 6 10	— 8.97	0.70	+ 1.45

GERMANY.

Summary table comparing the progress of imports and exports as stated in money in Germany with the progress of entries and clearances of shipping.

[Compiled from tables, p. 177 *et seq* of appendix to first report of royal commission on trade depression, continued to date.]

Years.	Imports per head of population.		Exports per head of population.		Entries and clearances of shipping.	
	Amount.	Increase or decrease on previous period.	Amount.	Increase or decrease on previous period.	Tons per head.	Increase or decrease on previous period.
	£ s. d.	*Per cent.*	£ s. d.	*Per cent.*	*Tons.*	*Per cent.*
1872–'74 (three years only)	4 6 3	.....	2 16 7	.....	*0.26	.....
1875–'79	4 6 1	+ 0 19	3 3 0	+ 11.34	0.27	+ 3.85
1880–'84	3 8 3	— 20.72	3 8 8	+ 8.99	0.32	+ 18.52
1885–'87 (three years only)	3 3 9	— 6 59	3 3 10	— 7.04	†0.35	+ 9.37

* Average for years 1873 and 1874. † Average for two years, 1885 and 1886.

ITALY.

Summary table comparing the progress of imports and exports as stated in money in Italy, with the progress of entries and clearances of shipping.

[Compiled from tables, page 177 *et seq.* of appendix to first report of royal commission on trade depression, continued to date.]

Years.	Imports per head of population.		Exports per head of population.		Entries and clearances of shipping.	
	Amount.	Increase or decrease on previous period.	Amount.	Increase or decrease on previous period.	Tons per head.	Increase or decrease on previous period.
	£ s. d.	*Per cent.*	£ s. d.	*Per cent.*	*Tons.*	*Per cent.*
1861–'62 (three years only)	1 10 4	.....	0 19 5	.....	0.25	.....
1863–'67	1 13 10	+11.54	1 2 10	+17.60	0.31	+24.00
1868–'72	1 9 1	+14.04	1 7 3	+19.34	0.30	— 3.23
1873–'77	1 17 1	+27.51	1 11 6	+15.60	0.30	.....
1878–'82	1 13 6	— 9.66	1 10 10	— 2.12	0.33	+10.30
1883–'87	2 0 0	+19.40	1 9 4	— 4.86	0.42	+27.27

The following figures from Mr. Giffen's reports to the board of trade show that the declared value of our foreign trade in the under-mentioned years was as follows, the progress of the trade to 1873 having been for many years almost unbroken:

1873	£626,000,000	1885	£584,000,000
1879	554,500,000	1886	562,500,000
1883	667,000,000	1887	583,500,000
1884	623,000,000		

If, however, the trade of the three latter years be valued at the prices of 1873, it would be represented by the following figures:

1879	£711,000,000	1885	£835,000,000
1883	861,000,000	1886	858,000,000
1884	844,000,000		

The average for the last four years is—

Declared value	£609,100,000
Value at prices of 1873	849,500,000

showing an average falling off of £240,400,000, or about 29 per cent.

Even a more striking proof of the decline in value of British trade as compared with volume is afforded by the fact that while we have seen the total value of that trade declined from £626,000,000 in 1873 to £583,641,000 in 1887, the total tonnage employed in carrying it advanced from 37,934,422 in 1873 to 56,170,447 in 1887.

WAGES.

I think that further evidence might have been taken with advantage as to the course of wages in this and other countries with a gold standard, but although there has been no general fall in wages corresponding with the fall in prices, the information collected by the royal commission on trade depression as well as by the present commission, appears to indicate a reduction in the wages of agricultural labor in many districts, and, although latterly there are indications of improvement, due to greater commercial activity, a manifest tendency in recent years towards a decline in other important industries.

It is necessary to remark, in reference to this question, that the mere absence of a fall in wages is not of itself sufficient to prove that there has been no appreciation of the standard, as this process may, in certain circumstances, have manifested itself in preventing a rise. In the present case there is no doubt that the course of wages for a considerable period prior to 1873 was in an ascending scale, and that it has suddenly been arrested, if not to any great extent reversed.

In an important paper by Mr. Giffen, read before the Statistical Society in 1886, it is shown by ample statistics that the rise in money wages of the working classes in the United Kingdom during the last fifty years has been between 50 and 100 per cent., and that this progressive improvement appeared to culminate about 1873, since which time there has been little increase, and in some cases a decrease, indicating the presence of some cause of a general kind which had counteracted an economic movement due to other causes which were still in full or increased operation.

SILVER PRICES.

17. The evidence as to prices measured in silver is much less complete, owing to the absence of authentic statistics or estimates by competent authorities, but it is, nevertheless, in our opinion, sufficient to justify a general conclusion.

We have not been able to obtain any evidence pointing to a rise of prices in silver using countries, and the commission has been compelled to rely on general statements in the absence of well-authenticated and adequate statistics. In most of these the condition of the currency renders the compilation of such statements difficult and of doubtful value; but I think that the magnitude and importance of British India, combined with the fact of its possessing a sound system of currency based on a metallic standard, may be considered to give it a representative character, and to render it a field of useful if not of decisive inquiry.

I have therefore sought in the movements of prices and of the precious metals in that empire for the means of comparison with the gold prices of the western countries.

For this purpose the commission obtained, both from the India office and from the government of India, all the available materials for forming an opinion on this subject of Indian prices, and append various tables.

The imperfection of these materials is apparent on the surface, from causes which are familiar to all those who are acquainted with the conditions of India, so that it is unnecessary to do more than to refer to the explanations given on this head both in the written and oral evidence.

But there can be little doubt that during the years succeeding 1873 there is no evidence of a rise in the general level of prices in India, and that although there has been in some provinces and districts a rise in the wages of skilled labor, the general wage level, as indicated by the wages of unskilled labor, has not as yet risen.

Mr. O'Conor, the assistant secretary to the government of India in the department of finance and commerce, has prepared at our request a statement of Indian price and wage levels from 1861 to 1873 and from 1874 to 1887, from which we gather the following results: (1) That, on the whole, the food grains of India have for the last seven years been cheaper than in the fourteen years immediately preceding them. (2) That the general level (average) of prices for the fourteen years from 1874 to 1887 is lower, except for wheat and rice, than in the thirteen years from 1861 to 1873. (3) That in the case of the principal exports, wheat, rice, cotton, linseed, the production of which covers vast areas of land, there has been an increase only in rice. Wheat and cotton have fallen and linseed is nearly stationary. (4) That of other exports, jute and shellac alone show any marked increase, while saltpeter, silk, and sugar have fallen.

These general results correspond in the main with the conclusions to be drawn from the returns furnished by the India office, as well as with the statements of other witnesses; nor is there any evidence afforded by the returns of silver coined in India during the years under review which would tend to show that the currency has undergone any abnormal expansion.

On the whole, we have been unable to obtain evidence that there has been a rise in the general level of silver prices in India or in other silver-using countries; on the contrary, it appears to be established that in several important staples of international trade there has been a decline in silver prices.

In gold-using countries, where price lists and market quotations are not available with a view of ascertaining silver prices, it is necessary to convert the index numbers of the several tables of gold prices into figures which represent silver prices according to the gold prices of silver on the dates to which those numbers refer.

The result of this comparison shows that since 1873 (the date of the abandonment of the fixed ratio by the Latin Union) silver prices have declined as well as gold prices, although more slowly, and to a considerable less extent.

18. I thus arrive at the conclusion that there is evidence of a very marked fall in gold prices in so many commodities as to give it a general character, and that in silver prices whatever change has taken place has rather been in the same direction, although to a far less extent. But it is essential to observe that in the foregoing remarks I have confined myself strictly to a statement of the facts, so far as I have been able to ascertain them, and carefully avoided all reference to the causes of the recent course of prices.

I agree, therefore, with those who think that the evidence justifies the conclusion that the period under revision has been one of falling prices, and that there is nothing in the facts which is inconsistent with the opinion that to whatever extent these causes may have contributed to the result, there has been no fall in gold prices attributable to the appreciation of the gold standard, nor does the recent partial recovery in the prices of certain commodities and in freights referred to in section 24 of Part II of the Report at all invalidate this opinion.

19. We are now in a position to form an opinion as to which of the two sets of causes specified in paragraph 15 have operated in the present case in creating the divergence between gold and silver prices.

If this divergence had been due to the first set of causes solely, viz, to some change in the relative value of the two metals, that change must have taken one of the three following forms: (1) An appreciation of gold; (2) a depreciation of silver; (3) a combination of both.

But in either of the two latter cases the third factor in price, commodities, having been "ex-hypothesi" constant, silver prices must have risen to the whole extent of the divergence in the first case, and to a part of it in the second, of which, as we have seen, there appears to be no evidence.

These two explanations are therefore inadmissible, and if the divergence is due to causes affecting the metals alone, it must be due to appreciation of gold.

But if it be due to the second set of causes, viz, a combination of changes in one or both of the metals and in commodities, the cause must be either (*a*) a depreciation both of silver and commodities to the full extent of the divergence, or (*b*) a depreciation both of silver and commodities to the extent of a part of the divergence, with an appreciation of gold to the extent of the difference.

Either of these hypotheses is consistent with the facts of price given above.

We are then left with three possible explanations, one derived from the first, and the others from the second set of causes: (1) Appreciation of gold, silver and commodities being constant; (2) depreciation of silver and commodities in relation to gold, gold remaining constant; (3) appreciation of gold, and depreciation of silver and commodities in relation to gold.

I do not think that the facts before us bear out either of the two first of these explanations, although more consistent with the first than the second.

I can not doubt that cheaper production and transport, combined with other causes which have increased the efficiency of labor, have had some share in the fall of prices during the last fifteen years; but these it must be observed would have affected equally both gold and

silver prices, and can not therefore explain the divergence between them, except on the assumption that silver also has depreciated to the same extent in relation to gold, a contention which will be examined further on.

The second explanation requires the belief that the reduction in the yearly supply of gold to countries outside the United States of £16,770,000 has had no effect on the value of gold in those countries, while the addition of £4,558,000 to the supply of silver has lowered its value by about 28 per cent.; that gold prices have fallen 28 per cent. from cheapening of production, and that the silver prices of commodities would also have fallen 28 per cent. had it not been for an increased supply and reduced demand for that metal which counteracted this fall; in other words, that silver prices would have fallen from 100 to 72 if it had not been for the increased supply of silver relatively to the demand, and that the increased supply of silver and reduced demand for it have exercised an influence on silver prices equivalent to what would be required to raise from 72 to 100 or by 39 per cent., while a more than proportionate increase in the demand for gold, and a more than threefold greater reduction in the supply of that metal has had no effect on gold prices.

An elaborate argument will be found in Part II of the report, sections 48–71, in support of this second explanation, in which the divergence between gold and silver is mainly attributed to the depreciation of both silver and commodities.

This contention has been so fully dealt with by Mr. Barbour in his note, whose views I entirely share, that I have little to add.

It has been contended that a heavy fall in the gold price of silver may have been caused by the effect of the increased supplies of the last few years operating on a stock diminished by the whole quantity of silver which exists in the form of subsidiary coin in the currencies of Europe and the United States, and which is kept at a gold value by legislation estimated by M. Soetbeer at £361,433,333.

But this argument appears to lose sight of the effect on the value of silver of the withdrawal from the markets of the world of this large portion of the stock, which is at present locked up in the currencies of gold-using countries, and no longer available for export.

Independently of this consideration, however, it must be observed that if silver has depreciated because the increased supply has operated on a diminished stock, it would not have depreciated if this cause had been absent and it had operated on the whole stock.

If, then, as is assumed, the gold standard has not appreciated since the rupture of the bimetallic par—and silver would not have depreciated except for that rupture—the standard of value in the West, which then practically consisted of both metals fused for this purpose into one, would have been unaffected, and the fall of 28 per cent. in the price of commodities from causes directly affecting them, as is alleged, would have been manifested both in gold and silver prices, *i. e.*, in prices both in East and West.

But it is impossible with the same metallic stock of gold and silver, and the same quantity of commodities in both cases, that there could be a fall of 28 per cent. in the price of the latter, both when measured against both metals in combination, and when measured against gold alone.

Therefore the gold standard must have appreciated in some degree, even according to this theory, from causes directly affecting that standard, viz, the recent changes in monetary legislation.

The question is not whether gold has appreciated from causes directly

affecting gold, but whether the standard of value in gold-using countries has appreciated from causes directly affecting the standard. This distinction is important.

I also agree with Mr. Barbour in his observations on section 61 of Part II of the Report, on the effect of an alleged increase in the indebtedness of India to England on current accounts in checking the export of silver to India.

In addition to the difficulties enumerated by Mr. Barbour, which must attend all attempts to draw up a correct statement of international indebtedness in the case of India, which have hitherto baffled the most experienced accountants, I would observe that we can only hope for an approach to accuracy by extending the account over a very long period of time, so as to include all loans contracted in this country.

Two general principles may, perhaps, be stated: (1) That the excess value of the net exports of goods over the net import of specie represents the amount of the home charges, including the interest on debt. (2) That the excess of remittances over the surplus or net export of goods represents the annual increase of capital debt.

But if an attempt be made to trace the operation of these principles in any limited period, they will often be found more or less at variance with apparent facts.

The remark in section 68 of Part II as to the effect of the India council bills appear to me, for this reason, to overrate their influence on exchange, which can only be temporary in acting as a substitute for silver, and thus preventing its export to India.

The council bills are merely the mode by which the government of India pays its obligations to England. If there were no more council bills there would be no remittance in their place, for there would be no more obligations to discharge. The export trade of India would be so much less, and there would be no greater demand for silver than at present. It is a confusion between cause and effect.

Another reason for rejecting this explanation is the remarkable coincidence in the fall of the gold prices of silver and of commodities, shown in a separate paper by Mr. Barbour, which is hardly to be reconciled with the belief that it can be due to causes independent of each other, and points rather to a common cause, viz, the appreciation of gold. But unless this explanation be accepted, the argument of sections 48–71 of Part II of the report falls to the ground.

It is therefore to the third of these alternatives that I am rather led to look for an explanation of the phenomena under investigation, viz, the proposition that the fall in gold prices is due partly to appreciation of gold and partly to depreciation both of silver and commodities relatively to gold.

What proportion of the fall is due to each of these causes I am unable to say, but I strongly incline to the belief that it is due in a far larger measure to the former than to the latter.

My reason for this belief may be shortly stated.

I have said that I did not attach much importance to the change which has taken place of late years in the relative supply of gold and silver in producing the divergence of value, and that I attributed this rather to a change in the conditions of demand.

From this point of view it seems probable that as the demand for gold for currency practically only arises in countries with a gold standard, while the demand for silver for currency arises both in countries with a gold and in those with a silver standard, the increased demand for gold due to recent monetary legislation would have had a much greater

effect on its value than that which any diminished demand for silver, due to those causes, would have had upon the value of the latter metal.

To sum up, therefore, my conclusion upon this branch of our inquiry:

It appears to follow from the foregoing reasoning that, as between gold and silver "*inter se*," regarded as standards of value, there has been an appreciation of gold and a depreciation of silver in unascertainable proportions.

But that in considering gold and silver in their relation to commodities, gold being a commodity in countries with a silver standard and silver being a commodity in countries with a gold standard, and thus using the terms "appreciation" and "depreciation" of the precious metals in their popular sense, there has been an appreciation of gold to the whole extent of the divergence from a combination of causes, and not only no depreciation of silver, but probably a certain "appreciation" of this metal also.

The impression left upon my mind by the results of the inquiry is that if the legislative changes made in 1873, and subsequently, had not taken place, there would probably have been some appreciation of the bimetallic standard, *i. e.*, both of gold and of silver, due to causes directly affecting commodities; but that the effect of those changes has been to diminish the relative demand for silver, and to increase the demand for gold, both relatively and positively, thus reducing within comparatively narrow limits the appreciation of silver, while seriously aggravating the appreciation of gold, and leaving the level of silver prices with little alteration, while causing a marked fall in the level of gold prices.

CAUSES OTHER THAN APPRECIATION OF GOLD.

20. Having thus arrived at the conclusion that there has been a distinct appreciation of gold, due in a considerable degree to causes primarily affecting that metal, it is not necessary to discuss at any length the reasons and arguments which have been advanced to prove that there has been none, but so much prominence has been given to these considerations, both by several witnesses and in the report of our colleagues, that some remarks are required.

This view is sustained by two different lines of reasoning.

The one is directed to show that the fall in gold prices, to whatever extent it is admitted, is to be explained by causes directly connected with commodities.

The second appeals to the effect of the extension of credit, and of banking and other expedients for economizing the use of gold, which it is said have operated in neutralizing any tendency to its appreciation.

21. Much stress has been laid on the fall of prices due to what is described as an economic revolution, and a new epoch in the conditions of production, transport, and mechanical and other scientific improvements in manufacture and agriculture; upon the untrustworthiness of averages between different commodities differing in relative importance; on the absence of retail and local prices in such averages; and perhaps, above all, in the omission of wages from the comparisons.

In answer to these objections, it is to be said that those undoubted causes of a fall in the prices of many commodities may be at once admitted, without in any way proving that they may not have coincided with and aggravated the effects of an appreciation of gold, and that they are insufficient to account for the fall in the gold price of silver; also that there is no reason to assume that they commenced to operate in 1873; that, in adopting the system of index numbers, its authors

were fully alive to its defects, and that, after making every allowance for them, the most careful and thoughtful economists, such as Cairnes and Jevons, both held it to be sufficiently trustworthy to found upon it practical conclusions with every reasonable confidence; that retail prices will not immediately correspond with wholesale, although ultimately adjusted to them; that wages will probably be the last department which will exhibit signs of reduction, and that we have received much evidence that these have way in important branches of industry.

The general argument which is also urged in section 24 of Part II that there is no evidence of a universal fall, extending to all commodities, all prices, and all wages, and that an appreciation of the standard can only be attested by such a result, scarcely appears to me to call for much remark, as I can not doubt that the operation of a subtle cause such as this would, from the nature of the case, be gradual, unequal, irregular, often local, and unattended by any uniform and universal manifestations.

22. Under the first head, I also think that it would be difficult to show that the supply of commodities generally has increased, or the cost of production been diminished, during the last fifteen years in a greater degree than in various periods of similar length before that date, when no very general or permanent fall of prices resulted. Those who allow that prices have fallen since 1873, and deny this to have been the effect of an appreciation of gold, must point out something else in the progress of industry since that date entirely different from and even contrary to the progress of the preceding period. If it be said that the gold discoveries in 1850 and the succeeding years counteracted the effect on prices which would have been produced by the increased supply of commodities in those years, this only shows how powerful is the influence of the supply of and demand for the precious metals, and justifies those who contend that the *extra demands* upon gold, owing to the demonetization of silver and the rupture of the bimetallic par, have since 1874 intensified the effect of the development of production and diminution of cost during the latter period.

23. In the next place, I remark that an increase in the supply of commodities involves new demands for the precious metals to be used as currency and reserve, for hoarding, for ornaments, and for use in the arts; so that not merely may the value of commodities fall in relation to gold, owing to increase of supply, but if the commodities of which the supply have been increased be of great importance and the number considerable, the value of gold generally may rise owing to the increased demand for it.

In no other country have the development of natural resources, the increase in production, and the extension of facilities for transport kept pace since 1873 with the United States, and it is in this country that the demand for gold has most rapidly increased.

24. Again, admitting an increase of supply at cheaper cost in certain commodities, and a considerable diminution in the cost of transport since 1874, and as a consequence the fall of the prices of these articles due to these causes, I am of opinion that the ultimate effect should have been to have stimulated the demand for other articles, the price of which would consequently have risen. If so, the fall of prices, which is a marked characteristic of the last fifteen years, would not have occurred at any rate to so great an extent.

25. And finally, if gold prices have fallen solely owing to causes connected with commodities, silver prices should also have fallen, unless it can be shown that the fall in silver prices has been counteracted by

an increased supply and a diminished demand, which is not, I think, borne out by the facts of the case.

26. With respect to the second line of argument, I must begin by stating that I do not share the views expressed in Part II of the report, as to the effect of credit upon prices. The question is one of such complexity, and has hitherto been so imperfectly investigated by economists, that it can not be adequately discussed in connection with our present inquiry, but I believe the operation of credit to be rather that of adding incalculably to the number of transactions, as well as to the circulating medium required to effect them, than of diminishing the quantity of metallic money necessary to supply the requisite currency.

As a matter of fact I doubt whether, on the whole and in the long run, it has been found that the development of credit has diminished the quantity of metallic money required for currency purposes.

I concur in the opinion of Mr. Jevons, contained in the following passage:

> While the elasticity of credit may certainly give prices a more free flight, the inflation of credit must be checked by the well-defined boundary of available capital, which consists, in the last resort, of the reserve of notes, equivalent to gold in the banking department of the Bank of England. Prices may temporarily rise or fall independently of the quantity of gold in the country, ultimately they must be governed by this quantity. Credit gives a certain latitude without rendering prices ultimately independent of gold.

And again, page 176:

> It is the aggregate of coin and gold in circulation or reserve, in short, the supply of gold as compared with the work it has to do, which determines the range of prices, and which must in the last resort be used to make payments either in an internal or foreign drain.

But without entering further upon this question, it is enough for our present purpose to observe that any extension of credit instruments in the period under review will undoubtedly have taken place rather in the chief gold-using countries than in those with a silver standard, thus tending to sustain prices in the former rather than in the latter, and that it is precisely in the first that prices have fallen, while in the latter they have been comparatively unchanged.

If, therefore, these agencies are held to affect prices, it is incontestable that the process which any extension of them would have set in motion would have been that of a fall in the value of gold, or at least an arrestation of a rise, and a relative rise in the gold price of silver, which in countries with a gold standard is a simple commodity, instead of which the one fact as to which all are agreed is that the gold price of silver has fallen 28 or 30 per cent.

27. The same remarks are applicable to the effect of any economies of gold by banking and other expedients, such as postal orders, the telegraph, and more rapid means of transport, the use of securities, etc., referred to in section 33 of Part II of the report, and I must add my opinion that there seems no sufficient reason for supposing that there has been any such marked progress in these economies since 1873, as compared with preceding periods, as to have produced the consequences ascribed to them.

28. I do not think that the influence of credit or of economies in the use of gold since 1873 has any material bearing on the question before us; and I can not therefore admit the force of the argument in section 53 of Part II.

29. In section 36 of that report a reference is made to what is called the "nexus" between prices and the metal which forms the standard of value. In the remarks which follow, the difficulty of the question ap-

pears to me to be complicated by considerations which do not really affect the main issue.

According to Mr. Mill the price of a thing is its value in money. The "nexus" therefore between money and anything else for which it is exchanged is the same as that between any other two commodities.

If the quantity of gold or of iron increases relatively to the quantity of anything else for which it is exchanged its purchasing power is diminished.

If the quantity of gold or of iron decreases relatively to the quantity of anything else with which it is exchanged its purchasing power is increased.

Whatever may be the effect of what are called "substitutes for gold" as money, the fact remains that an ounce of gold will at one time exchange for more wheat or iron than at another time, and the question which, as I understand it, has been referred for inquiry is whether at the present time the purchasing power of gold has increased, and, if so, to what causes such increase is due.

30. Another argument to which much prominence has been given in our inquiry is that if there had been any real appreciation of gold due to scarcity it would be visible in a dimunition of the bank reserves and in a high rate of discount.

I do not believe, and in this view I believe that I am in accordance with most economical authorities, that there is any necessary connection between the abundance or scarcity of the standard metal and the rate of interest or discount on money. The value of money in the money market and in the produce market are two totally different things. The one is the term used for the use of capital, not of gold, except so far as it is capital, and the demand for capital on loan has no necessary relation to the demand for gold in exchange for commodities.

The rate of discount depends on the activity or depression of trade, and as a matter of fact it will, I believe, be found that when gold has been most abundant, as at the time of the gold discoveries in Australia, the rate of discount was unusually high. During 1854–1857 the rate was only for a few months below 5 per cent.; for more than half a year it stood at 6 and 7 per cent., and at the end of 1857 it remained for nearly two months at 10 per cent.; again in 1861 it rose to 6 and 8 per cent.

On the other hand, in periods of depression, the rate of discount and interest is low, because there is a diminished demand for money on loan, business being restricted and enterprise checked when prices are falling.

Table of the rates of discount and gold production.

[Showing that although the production was very much smaller between the years 1844–1852 than between 1853–1863 the average rate of discount was lower.]

Year.	Average rate of discount.	Production.
	£ s. d.	
1844	2 10 0	£7, 639, 000
1845	2 13 8	7, 639, 000
1846	3 6 6	7, 639, 000
1847	5 3 6	7, 639, 000
1848	3 14 5	7, 639, 000
1849	2 18 7	12, 700, 000
1850	2 10 1	14, 200, 000
1851	3 0 0	16, 600, 000
Eight years' average	3 12 3	10, 211, 000

Table of the rates of discount and gold production—Continued.

Year.	Average rate of discount.			Production.
	£	s.	d.	
1852	2	3	0	£36, 550, 000
1853	3	13	10	31, 090, 000
1854	5	2	3	25, 490, 000
1855	4	17	10	27, 015, 000
1856	6	1	2	29, 520, 000
1857	6	13	3	26, 655, 000
1858	3	4	7	24, 930, 000
1859	2	14	7	24, 970, 000
Eight years' average	4	6	4	28, 275, 000
1860	4	3	7	23, 850, 000
1861	5	5	4	22, 760, 000
1862	2	10	7	21, 550, 000
1863	4	8	2	21, 390, 000
Twelve years' average	4	4	10	26, 314, 000

Thus, the first eight years show a total production of £81,686,000, average discount 3.6125.

The second eight years show a total production of £226,220,000, average discount 4.3841.

Twelve years show a total production of £315,770,000, average discount 4.3437.

The term "scarcity of gold" is a misleading expression. It is not scarcity in the sense of scarcity of bread or meat. It seems to me that if there is less gold less is wanted for currency, except to sustain prices. This, therefore, does not cause a greater demand for gold which is intended for new production and not for circulation. On the contrary, when prices fall business contracts, and production is checked; capital in the form of gold accumulates in the banks, and the rate of interest and discount falls.

31. Another theory which has received support from several quarters, and which attributes the fall in gold prices to other causes than the appreciation of gold, is that it has been brought about by a fall in the gold price of silver, acting in the first instance upon the prices of commodities exchanged in the trade between gold and silver using countries, and ultimately upon the general level of all prices.

This view has been set out at length in sections 81 and 82 of Part I of the report, and in section 9 of Part III. There is no doubt that some color is given to this theory by the remarkable coincidence between the course of the index numbers of the prices of commodities generally and the course of the price of silver, but in considering the question it is necessary to distinguish between cause and effect.

If the fall in the gold price of silver was due to the depreciation of silver alone, silver prices would have risen, while gold prices would have at first remained the same.

In this case the producer in silver-using countries could not afford to take a lower gold price, and his competition would not, therefore, have caused a depression in gold prices.

It is because, as I think, this fall in gold prices is largely, if not mainly, due to the appreciation of gold, and because silver is not depreciated in relation to commodities, that the producer in silver-using countries has been enabled to sell his produce at a lower gold price.

I, however, think that even upon this assumption it is probable, for the reasons given in section 81, of Part I, that the advantages tem-

porarily given to the producer in silver countries have stimulated the exports of certain articles, as, for instance, of Indian wheat, and thus tended to increase the supply in gold-using countries and beat down their price, and that this process may have had an appreciable, although a limited, effect in aggravating the fall of gold prices. This cause, however, to whatever extent it has operated, I regard rather as collateral and contributory than as primary in its effect on gold prices.

32. Having thus examined the different causes of the divergence in value between gold and silver, and their respective effects upon gold and silver prices, I add some remarks as to their bearing upon the matters of practical business, to which attention is directed.

India.—(*a*) Remittances of Government. (1) For old and fixed contracts. (2) For new and current contracts.

The very serious nature and extent of the effects of the divergence upon these remittances are shown at some length in sections 94 to 100, of Part I, and I need not therefore repeat them.

33. But I can not express too strongly my sense of the injurious, not to say disastrous, effect of the absence of a common standard between this country and its greatest dependency.

It is not too much to say that it renders all continuity of financial policy impossible in a country in which successful government especially depends upon finance, and in which the financial difficulties of the future are grave enough without this additional source of unnecessary and lamentable weakness.

PRIVATE REMITTANCES.

34. Persons in India who have to make remittances home in gold have suffered in the same manner and to the same extent as the Government. Their remittances, when converted into gold, undergo at the present time an apparent loss of about 33 per cent., except when this is alleviated by a fall in the gold prices of the articles or services in payment of which the remittance is made.

The private remittances, as a whole, comprise not only the savings of Europeans resident in India, both in the service of Government and in other capacities, but the dividends upon Indian investments due to residents in England, and remittances by banks and merchants in the course of commercial transactions.

It is not possible to ascertain their total amount, but when it is considered that most of the joint-stock enterprises, such as railways and many agricultural and manufacturing undertakings, have been created by British capital, it is evident that a large part of their profits must be remitted to England, and that these must suffer heavily by the fall in the exchange.

There is, however, this distinction to be noted between the remittances of Government to defray fixed charges and those of private persons who remit their savings or profits. In the case of the first an additional number of rupees is required to discharge a fixed sterling obligation. In the second case the same number of rupees is remitted with a smaller outturn in sterling. The effect, therefore, of the first is to increase the exports from India, while no such consequence attends the second.

ON PRODUCERS, MERCHANTS, AND TAX-PAYERS OF INDIA.

35. Before I proceed to deal with the respective interests of these several classes it may be convenient to state my views with regard to

the general effect produced upon the international trade between a gold and a silver using country by changes in the relative value of the two metals. Such changes as I have already pointed out must be attended or followed by proportionate changes in the levels of gold and silver prices. But while any change in the relative value of the two metals will take effect simultaneously in both countries, the adjustment of all prices, including the wages of labor, to the altered relation is necessarily not only gradual and unequal, but in regard to existing contracts, the wages of labor, and all payments regulated by custom, often so slow and doubtful in its operation as greatly to affect the relative conditions of production in the two countries. While the adjustment is proceeding the producers in one country may possess a distinct advantage over those in the other, from the fact that prices may have fallen in the first and not in the second, while fixed charges, such as rent, interest on loans, and wages, remain for a considerable time unaltered.

When the process of adjustment has been completed, and all prices, including wages and fixed charges, have accommodated themselves to the altered relation of the standards, the conditions of exchange between the two countries will, so far as this cause alone is concerned, be the same as before.

I can not help thinking that the widely-prevalent opinion that the divergence in value between gold and silver has operated as a stimulus to exports from India and other silver-using countries is largely due to the impression which existed in the earlier period of that divergence, and which was strengthened by the report of the silver committee of 1876, that it had been caused by a depreciation of silver as a standard of value against commodities. If this had been the case we should have expected a marked flow of silver to India in preference to other commodities, and a temporary increase of exports from India, thus causing a stimulus to Indian exports and a check to the import trade in goods until an equilibrium had been reached. But no such effects need be produced by a divergence due to the appreciation of gold which, as will have been seen by my previous remarks, has been, as I think, the principal cause of the recent disturbance.

From this latter point of view the process which has been in operation would appear to have been of the following nature, confining our attention, by way of illustration, to the trade between India and the United Kingdom for the sake of greater clearness.

The appreciation of gold has caused a fall in the price of commodities in general, including silver, in the United Kingdom as a gold-using country.

The absence of depreciation of silver in India has left prices in that country generally stationary.

The English producer, being unable at once to adjust his fixed charges and wages to the fall in the price of his product, has been compelled to forego a part of his profit. The Indian producer, having escaped a fall in the price of his product, has remained unaffected by the monetary disturbance, and has thus and to this extent been placed at an advantage as compared with the English producer.

Both English and Indian producers have had to submit to a lower gold price in the English market, but, as this lower gold price produces the same number of rupees as the higher gold price did before, the Indian producer has not suffered, while the English producer, from the cause mentioned above, has undergone a loss of profit.

If this loss were caused by any special disadvantage of the Indian trade, it would, no doubt, have led to a contraction of the exports to

that country, but as it is equally incurred in other branches of trade, the effect has probably been to stimulate them with a view of counteracting the loss by larger sales.

The general principles which in the long run control and determine the course of trade on the occurrence of a divergence in the value of the two metals between countries with a gold and with a silver standard appear to be these, and to be in accordance with what would seem to have been the facts in the present case.

The divergence in value of gold and silver must be attended or followed by a proportionate divergence in gold and silver prices. When this process, which must be gradual and unequal in its operation, has been completed, and all prices, including wages and fixed charges, have adjusted themselves to the altered level, the conditions of exchange between gold and silver using countries will, so far as this cause alone is concerned, be the same as they were before.

But during the process of adjustment, which may extend over many years and cause infinite evil, a considerable disturbance in those conditions will probably take place from the very nature of the process. In what does this process consist? It must consist in a rise of prices in one country and a fall of prices in the other, or a rise or fall in different degrees in both, but in all cases the relative effects will greatly depend upon the extent of the divergence. It seems, however, probable that those effects will be more marked in a case characterized by appreciation of the standard in one country and by depreciation of the other than where the movement of prices in both countries is in the same direction, although in different degrees.

In the former case, it appears to me that the real exchange between two countries trading with each other must be affected by whatever affects their relative conditions of production, and it must be admitted, I think, that whatever may be held to be the effect on a country as a whole of an appreciating or a depreciating standard, as regards the producing classes at all events, a country in which prices are rising or are stationary is at an advantage in its relation to a country in which they are falling, owing to the fact, already stated, that a considerable time must necessarily elapse before the fixed charges and the wages of labor can adjust themselves to the lower scale. This process of adjustment, when it takes place on a descending scale, is one of infinite loss and difficulty to all those who are affected by it, and we attribute much of the depression of trade and diminished employment of labor and profits on capital to the operation of this cause.

36. Applying these general principles to the case of India, it seems probable that if the fall in the exchange had stimulated the export trade, and thus benefited the Indian producer, the same cause would have checked the import trade; but the trade accounts for the period under review show that, while there has been a great growth in the foreign trade of India as a whole, the progress of the import trade has kept pace with that of the export trade.

This remark applies both to the total foreign trade of India and to that part of it between India and this country.

The statistics of the trade are given in the Appendix to our first report (Tables B and C, p. 338).

These facts are scarcely consistent with the opinion that the Indian producer has greatly benefited by the fall in the exchange, but a still stronger reason for the conclusion that no marked effect upon the Indian producer has been felt is afforded by the fact, which appears to be unquestionably established by the tenor of the evidence, that there

has been no such general rise in the prices of the staple products of India as to afford ground for thinking that there has been any special cause at work tending to an abnormal increase of production.

I am not, therefore, disposed to think that the divergence in value of the precious metals has, down to the present time, affected in any marked degree the general condition of the Indian producers as a class, although there is much evidence to show, what probably has been the case, that at particular moments a fall in the exchange has led to an increased demand for special products, such as wheat, and temporarily acted as a bounty upon its export until the fall in the gold prices of such wheat in Europe has restored the trade to its former level. This effect, therefore, is rather due to the progressive nature of the divergence than to the fact of such divergence once for all.

36. I am, however, far from thinking that the absence of a common standard of value between the United Kingdom and India, and the frequent fluctuations which are inseparable from the present absence of fixity in the ratio between the metals of which they consist, are unattended by evil effects in the long run, even to the producers and merchants of India. However, it may be true that in the long run any change in the relative value of gold and silver may be followed by corresponding changes in the prices of commodities and the wages of labor, it is notorious that the two things are not identical in point of time, and that, with respect to contracts and obligations which are either permanent or which extend over many years, the adjustment is either impossible or slow and gradual in its operation, so as greatly to affect the relative conditions of production between the two countries. In the present case we have received evidence that, although it may be true that the fall of gold prices has been followed and neutralized by a corresponding fall in the prices of Indian products in Europe, still that, owing to the fact that the Indian producer has not been affected by any change in the standard of value, while the producer in Europe has been obliged in many cases to accept lower prices, with no corresponding fall as yet in the fixed charges to which he may be liable, the former has been placed in a relatively better position and been able to compete under more favorable conditions than before. To this extent I am, therefore, disposed to think that the Indian producer may have benefited by the fall in exchange, and that in this sense he may be said to have received a bonus or bounty on the exportation of his products; but I am unable to accept the view, which has been pressed upon us by many witnesses, that the fall in exchange can operate permanently as a bounty on Indian exports, holding as I do the opinion that this fall is mainly due to an appreciation of gold, which must in course of time equally affect the gold prices of the main articles of Indian export and import.

Nor can I doubt that the Indian producer is distinctly injured by the unstable nature of the exchange between gold and silver using countries, which cannot fail to render the conditions of production, so far as regards the staple exports, more or less uncertain and insecure, as well as by the unquestionable check which is thus caused to the investment of British capital in industrial undertakings.

I believe that the present high rate of interest on money in India in first-class securities, such as mortgages on solid and improving property, is largely due to this unstable condition of the exchange, which necessarily deters western capitalists from such investments, and that India is thus deprived of one of the great advantages of British rule in providing her with cheaper capital and improved credit.

37. On the other hand, the apparent stimulus which has been given

to the trade of India in some branches (especially to the cotton trade) with silver-using countries appears to afford a useful illustration of the disturbance which may be caused by the unsettled exchange, as it seems to show that a stable exchange may account for the partial transfer of a trade from a country where this condition is absent to one in which it exists.

38. If this be the case, it appears probable that the continuance of an unstable exchange will tend to operate very unfavorably on the progress of British trade with the East and with silver-using countries generally, and it must be borne in mind that nearly two thirds of the British export trade in cotton manufactures, both yarn and piece-goods, is carried on with these countries, on which, owing to the protective tariffs of most of the gold-using countries, the British manufacturer has been compelled more and more to rely. We cannot, therefore, but regard this aspect of the question under consideration as of great prospective interest.

39. I have nothing to add to the remarks in Part III, section 16, on the position of the Indian tax-payer, except to observe that, in considering the future, I cannot but regard as a matter of serious moment the possibility of a still further relative depreciation of silver or appreciation of gold. This possibility is indeed so present to the minds of many of those whose opinion is entitled to much consideration that it has been urged as one of the principal objections to the adoption of rated bimetallism, from the fear that the excessive production of silver would drive all the gold out of the currencies of the countries which adopted it. It seems, therefore, necessary to take it into account in considering the practical policy to be pursued.

EFFECTS ON UNITED KINGDOM.

40. But it is upon the general trade of the United Kingdom, and the industrial condition of this country generally, that I think the injurious effects of the recent currency changes have been chiefly felt.

41. I observe the following paragraph in the final report of the Royal Commission on the Depression of Trade and Industry:

> We expressed in our third report the opinion that this fall in prices, so far as it had been caused by an appreciation of the standard of value, was a matter deserving of the most serious independent inquiry; and we do not, therefore, think it necessary to investigate at length the causes which have brought it about. But we desire to give it a leading place in the enumeration of the influences which have tended to produce the present depression.

42. The result of this inquiry has been to produce upon my mind a similar impression, and if the conclusion at which I have arrived, as to the nature of the divergence in the relative value of the two metals be correct, the effect upon the trade and industry of the United Kingdom must have been that of an appreciating standard of value. I hold, for reasons which are given at greater length in section 85, of Part I, that this is a distinct and serious evil, especially to the industrial and working classes. Absolute stability in the standard of value being unattainable, it is, in my opinion, better in the interests of those classes, and probably in the general interests of society, that the tendency should be rather towards depreciation than appreciation. Whatever the drawbacks and inconveniences of this former process, and they are far from inconsiderable, it at least tends to benefit the commercial and industrial classes and the general tax-payer, rather than the unproductive classes, and to improve the condition of the great body of the people.

The contrary effect is produced by appreciation; in this case, those who are enjoying acquired wealth benefit at the expense of those who are in process of acquiring it, and the active and enterprising members of society suffer.

If the relation of debtor and creditor must be disturbed, it is in the interest of trade and industry that the change should be favorable to the debtor rather than to the creditor.

43. The appreciation of the standard of value, so far as it is due to causes affecting the metal or metals of which it is composed, has been, in my opinion, primarily caused by the rupture of the bimetallic par. If this had been maintained there might still have been, if my view is correct, a fall in prices due to causes affecting commodities, but the effects of such a disturbance would have been very different; they would have affected debtors relatively rather than positively, while they would have left the tax-payer in no worse a condition than before, although benefiting the annuitant.

44. In the foregoing remarks I have dwelt more especially upon the evil effects which have been caused by the particular and accidental form which the divergence between gold and silver prices during recent years has assumed, viz, that of an appreciation of the gold standard and a corresponding fall of gold prices; but in placing on record my view as to the general and permanent evils arising from the absence of a fixed legal ratio between the two metals, I desire to express very distinctly the opinion that I attach far more importance to the injurious effects of constant fluctuations in their relative value, in imparting a character of uncertainty and insecurity to the international exchanges between gold and silver using countries, than to a mere alteration in their relation to each other, in one form or other, whether by a rise or fall of either metal. It is necessary to give prominence to this view, because it is sometimes said that a bimetallic standard is advocated mainly for the purpose of raising prices and benefiting debtors. It is entirely forgotten by those who entertain this idea, that if the divergence in the relative value of the two metals had taken the form of a depreciation of silver, the adoption of rated bimetallism would have the effect of lowering prices and benefiting creditors in countries with a gold standard.

It is moreover essential to remember that this aspect of the question is not affected by the difference of opinion in the commission as to the secondary causes of this present divergence.

45. I therefore find that the effects of the divergence have been distinctly injurious, and that the original cause has been the change in monetary legislation in the years immediately preceding and following 1873. The present divorce of gold and silver is nothing more nor less than a great and novel experiment. To speak of a return to a system which practically prevailed for nearly two hundred years as a "tremendous change" and a "leap in the dark," as it is described in section 120 of Part II, appears to me to be a great exaggeration.

Unless we go back to a period which affords no ground for useful comparison we have nothing but the experience of the last fifteen years to guide us in forming an opinion as to what the consequences may be, of substituting what has been called "unrated" for "rated" bimetallism in "the world's" currency. So far that experience is far from encouraging. Serious inconveniences in international trade have manifested themselves, prices have been greatly disturbed, and no present prospect appears of an abatement of these evils.

46. But it is chiefly to the future that those who view with anxiety the present monetary disorder look with apprehension.

For the future there is, and can be, no security whatever. Any large addition to the stock of either metal, or any large deficiency in its supply, any change of policy in any important country, dictated by real or supposed national interest, such as the adoption of a gold standard by India, a further divergence in the ratio, rendering illicit coinage of silver in countries where it is kept at an artificial value profitable, might produce serious embarrassment, and in India a political and financial crisis.

It may be safely affirmed that no country in the world can be secure or satisfied with the present state of things. It is neither monometallic nor bimetallic in the popular sense of the term, and can only be properly described by the French term as the system of the *étalon boiteux*.

I concur in the opinion expressed at the Monetary Conference in Paris, in 1878, by the British delegates, that a further demonetization of silver, which may be the result of inaction, might bring about a commercial and financial catastrophe.

If then there can ever be a case which calls for international concert this certainly appears to be one.

FUTURE SUPPLIES.

47. Some reference is necessary to the question of the prospect of the future supplies of gold and silver. I should have been glad if it had been found possible to receive more evidence on this head, but I doubt whether any very useful purpose would have been served by it. As regards the conditions of future production (and on this point there seems to be a very general concurrence of opinion) it seems probable that while there will be a continuous supply of both metals in fluctuating quantity, there is little prospect of any such vast and rapid increase in the supply of either of them as has taken place on former occasions, and especially at the period of the Californian and Australian gold discoveries, but it appears to me that any opinion on this subject must be so speculative in its character that it would be unsafe to give an important place to this element in the problem in deciding on the practical measures which it is advisable to adopt.

PROPOSED REMEDIES.

48. With regard to the possible remedies for the serious evils which, in my opinion, have been caused, and will continue to be caused, by recent changes in the relative values of the precious metals, I have little to add to the recommendations of the joint report.

49. Convinced as I am that the primary cause of those changes has been the final rupture of the bimetallic par maintained by the Latin Union until 1873, I can not doubt that a remedy should be sought in a return to the system of a fixed ratio between gold and silver, if it be possible to establish it over a sufficiently wide area to insure permanent stability.

50. What the extent of the area sufficient for such a purpose would be is a question on which very different opinions prevail, but I should hesitate to recommend any course which would conduct Her Majesty's Government to the adoption of a bimetallic standard in the United Kingdom which did not include the principal commercial countries and groups of countries of the world, such as the United States of America,

the Latin Union, the German Empire, the United Kingdom, and British India.

51. I believe, however, that if an agreement could be arrived at between these powers by which their mints were respectively open at all times to the free coinage of both metals into legal-tender money at a common fixed ratio, such coins being available for the payment of all debts at the option of the debtor, all future fluctuations in their relative value would be confined within very narrow limits, and that a common international standard would be secured, possessed of the greatest attainable degree of stability.

52. This is, however, a remedy the application of which is only possible by international concert, and I have no means of knowing what prospect there may be at the present time of the co-operation of the powers concerned for such a purpose.

53. I can only observe that on the occasion of the Monetary Conference of 1881, at Paris, it appeared probable that if the assent of Her Majesty's Government could have been obtained such an arrangement as I have suggested would have been acceptable to the other powers. I therefore think, that if any future occasion should present itself which appears favorable to renewed negotiations with a view to another conference with a similar object, it is one which Her Majesty's Government should do all in their power to promote.

It would be useless to enter upon a consideration of the details of any such arrangement, in anticipation of discussions which can only possess practical value in connection with an international conference. The questions involved are of a kind which affect so many interests in other countries as well as in the British Empire that the materials are not available for definite and final conclusions as to the precise nature of any arrangement, except as regards the essential principles to which I have already adverted.

54. But on one point it is necessary, in anticipation of any international negotiations, to state the views which I have been led to entertain, viz, the permanent relation which it is desirable to create between the two metals in the event of the adoption of a fixed ratio under international sanction.

55. I so far differ from the opinion of some of my colleagues as to think that the expediency of establishing such a ratio should not be held to depend upon the possibility of its being fixed at the average market ratio of the last two or three years. I think that any ratio, within the extreme limits of that which prevailed prior to 1873 and that of the present time, would be preferable to none.

56. And while I am far from underrating the objections to an arbitrary interference with prices and existing contracts by the creation of a ratio widely differing from the market ratio, I doubt whether the consequences would affect existing interests so seriously as is sometimes thought if the change of standard were gradual and prospective and not immediate in its operation.

57. I also think that in considering the objections to the action of Government in disturbing the standard of value there is something to be said against the adoption of a ratio which might prevent any natural recovery from the present depression of gold prices, and render permanent in the case of India the present heavy loss on the Government remittances which has been caused by the recent divergence.

58. Whether on the balance the general interests of India would be better served by a return to the former ratio, or by the adoption of one approximating to the market ratio, is a question on which different

opinions are held by those entitled to speak with authority, and which involves so many considerations, both political and economical, that I think it should be left in a great degree to the decision of the Government of India.

59. I would, however, observe that while, on the one hand, it is possible thal a return to the former ratio might, by causing an increased demand for silver in Europe, check its flow to India, and thereby tend to lower prices in that Empire, it is difficult to believe that the opening of the Indian mints to gold would not have an effect in attracting into the currency a portion of the gold which exists in such large quantities in India in hoards, the accumulation of which has probably increased under recent conditions, and which a fall in the value of gold would probably have a tendency to diminish.

60. But I think that this is a question which can only be determined by a conference, at which the interests of other countries, as well as those of the British Empire, can be fully represented and considered, and, therefore, that, if such a conference were at any time to be held, Her Majesty's Government should enter it, unfettered by any previous expression of opinion on this important point.

OBJECTIONS.

61. In addition to the objections to this policy which have been enumerated in our joint report I would add the following:

(*a*) That a bimetallic ratio would probably give a worse rather than a better standard of value, because the momentary standard is always the overestimated metal, which would give a constant advantage to the debtor, and that silver has during the last thousand years fallen more than gold, and that while both have depreciated in comparison with corn and the chief raw materials, it is probable that silver is more subject to depreciation than gold. The ratio would, therefore, tend to discourage the production of the dearer metal, which it is desirable to encourage.

With respect to this objection I would observe that it in no way follows from the fact that the momentary standard is the overestimated metal under a bimetallic system, that a worse rather than a better standard of value would be secured. This will entirely depend on the cause of the divergence between the two rated metals. If that cause be the depreciation of one of them in comparison with things in general, the effect will be as is supposed, but if the cause be the appreciation of one of them as against things in general, the overestimated metal will be the better standard of the two.

Nothing is more impossible than to predict with confidence what the future relations of the two metals if they remain unrated may be, but at the present time, if the conclusions at which we have arrived in this report are sound, it is evident that silver has varied considerably less than gold in its relation to commodities.

Although it may be true that during the last thousand years both metals have fallen in value in comparison with corn and raw materials, this has not been the case as regards gold since the early part of the present century, a period which serves far better for practical purposes of speculation.

It appears to me, in view of the enormous expansion of trade and commercial transactions in modern times, and the increased efficiency given to human labor by improved methods of production and transport, that it is only by the full and free utilization of both metals as

standards of value that a progressive tendency to appreciation, and therefore to instability, can be averted.

(*b*) The objection, that in the event of a great war in which any one of the contracting powers were engaged, it might probably be necessary for it to resort to a forced paper currency.

In such a case I see no reason to suppose that one metal more than the other would be thrown on the markets of the world, thus disturbing the ratio, or that any other effect would be produced, which would not equally follow a similar policy, if there were no convention, viz, a temporary addition to the currency of the world attended by an inflation of prices which, when specie payments were resumed, would be followed by a collapse. This is no doubt an evil, but it appears to me to be one the effects of which would be more serious if one metal alone was the general standard of value. It must also be remembered that the present unsettled relations between gold and silver constitute one of the main difficulties in the resumption of specie payments, and the adoption of a metallic currency by countries, such as Russia, Austria, and several South American States, in which the system of a forced paper currency still prevails, and that its continuance may compel them at some future time to resume on gold.

(*c*) The answer to the objection derived from an alleged breach of faith with creditors, must mainly depend upon the view which is taken of the magnitude of the evils which have already arisen, and may reasonably be expected to arise in future from the absence of any legal ratio between the two metals. If these evils are inconsiderable and can be regarded without serious apprehension for the future, it may well be thought that they do not justify measures which arbitrarily affect the standard of value, and may disturb existing contracts.

But a different set of considerations arise if, as I have stated them in my belief to be, they are of a nature seriously to impair the general interests of the country, to compromise our commercial policy, and to imperil the financial position of our greatest dependency.

From this point of view it will probably be admitted that, as in other cases of national emergency, the interests of a portion of the community, however important, should not be allowed to stand in the way of a reform which is thought to be required in the interests of the Empire as a whole.

62. I fully appreciate the reasons which have weighed with those of my colleagues who are opposed to so great a change as that which has been suggested, on what have appeared to them doubtful and insufficient grounds, and it is with much hesitation that I venture to differ from the opinions of some of them, such as Sir J. Lubbock and Mr. Birch, whose practical experience and authority are much greater than mine, but after giving due consideration to all the objections which have been urged against it, I do not think that they are such as ought to be allowed to stand in the way of the course which has been recommended in sections 34, 35, of Part III., even on purely national grounds, even if the question were not one of much wider significance.

63. A common standard of value between the principal commercial countries is an object the importance of which can hardly be exaggerated, and it appears to me to be almost an essential condition of the fulfillment of the policy of free trade.

64. If this opinion be accepted, it may be safely affirmed that, in the present state of the world, the object in view can only be attained by the method which has been proposed, and I can not doubt that if a sufficiently wide area of agreement between the leading commercial coun-

tries could be secured, this great international reform might be successfully accomplished.

65. To sum up the preceding remarks:

(*a*) The primary cause of the divergence in the relative value of gold and silver in recent years is to be found in the monetary legislation of the period, by which the regulating effect of law in maintaining practical stability in their relation to each other was removed.

(*b*) The forces set free by the withdrawal of this influence have operated in largely increasing the demand for gold, and in diminishing to some extent the demand for silver, thus causing a distinct appreciation of the former, and a certain depreciation of the latter, considered in their relations *inter se*.

(*c*) These effects have been increased by a diminished production of gold, and an increased production of silver.

(*d*) Concurrently with these changes there has been a large addition to the supply of important commodities due to the increased efficiency of labor, both in production and transport, thus causing a reduction in their prices.

(*e*) The joint result of those several causes has been a considerable appreciation of gold, causing a marked fall in gold prices and some appreciation of silver, although apparently not enough to produce any distinct effect on the general level of silver prices in countries with a silver standard.

(*f*) The inference to be drawn from these conclusions appears to be that the divergence is due far more to the appreciation of gold from monetary causes, than to the depreciation of silver and of commodities from other causes affecting them both in equal degree.

(*g*) The effects of the divergence have been injurious. (1) From an appreciation of the gold standard. (2) But far more from instability of exchange between gold and silver using countries, and especially between the United Kingdom and India.

(*h*) The remedy for these evils is to be sought in the adoption, if possible, of the free coinage of both metals into legal-tender money at a fixed ratio between them, over a sufficient international area, for the following reasons:

(*k*) A single standard of value is admitted to be of so much importance that in all civilized countries it is always adopted as a basis of national exchange and contracts.

(*l*) Such a standard can only be less important in international transactions because they are less numerous, and the inconveniences of different standards of value are less intolerable; but it is not denied that they exist, and that as the foreign trade of commercial countries assumes year by year larger proportions, so do the evils of different standards of value year by year increase in magnitude.

(*m*) But it is impossible to create a common standard of value in the international transactions of countries which now use gold and silver respectively as a standard, if such common standard is to consist of one metal only, neither gold nor silver existing in sufficient quantity for such a purpose, without causing such a disturbance in prices as would amount to a commercial and financial revolution.

(*n*) Therefore, it is only by the full utilization of both metals through the adoption of free coinage into legal-tender money of both, with a fixed ratio between them, within a sufficient international area, that this result is attainable.

(*o*) It only remains to consider whether it is better, both metals being indispensable for the purposes of the world's currency, that they should

be rated or unrated. If they are rated a single standard of value may, it is held, be secured for national and international exchanges. If they remain unrated they will continue to be liable to constant variations in relative value, and all the evils of two different standards of value in the trade of the world, and even within the limits of the British Empire itself, will still be allowed to hamper and restrict commercial progress.

(*p*) It is thought that of these two alternative courses, the first is preferable, but as it can only be rendered successful by the concerted action of the principal commercial powers, no opinion is expressed as to the possibility of its adoption.

LOUIS MALLET.

NOTE BY MR. BARBOUR.

GROUNDS OF DISSENT FROM PART II.

I regret that I have been unable to sign Part II of the report.

The following are the reasons which prevent me from doing so:

The method adopted for deciding whether the change in the relative value of the precious metals in recent years is due to appreciation of gold or depreciation of silver is not satisfactory, especially as gold prices and silver prices are not dealt with in the same way. Sufficient importance is not attached to the dangers and difficulties of the future if the hope of establishing comparative stability of relative value between the precious metals be finally abandoned. Too great weight is attached to the risks and difficulties attending the establishment of the full legal tender of both gold and silver in this country. The remedies or palliatives proposed are, in themselves, insufficient to secure a satisfactory settlement of the question.

Although I concur in the conclusions arrived at and remedies proposed in Part III, it appears to me that the subject might with advantage have been treated in a somewhat different way, and some of the arguments and objections set forth at greater length. I have therefore decided, after much hesitation, to add the following remarks on my own behalf.

WHAT IS MEANT BY "APPRECIATION OF GOLD" AND "DEPRECIATION OF SILVER."

2. The terms of the order appointing the commission may be said, briefly, to require us to examine: (1) Whether the changes in the relative values of the precious metals are due to appreciation of gold or depreciation of silver; (2) whether these changes are causing permanent and important evils; (3) whether these evils (if they exist) can be remedied by measures which would not give rise to other evils equally great.

The first question that arises on this reference is what meaning should be attached to the expressions "appreciation of gold" and "depreciation of silver."

3. Strictly speaking, "appreciation of gold" means an increase in the value of gold, but value expresses a relation, and gold can not increase in value except in relation to some other thing for which it is, or can be, exchanged. The phrase "appreciation of gold," when not used with special reference to an article, or a group of articles, for which gold is exchanged, can only mean a rise in the general purchasing power of gold, or, in other words, a rise in the average purchasing power of gold in reference to things in general.

No method has been devised whereby the average purchasing power of gold, in this very wide sense, can be determined with accuracy.

If the gold price of every commodity and of every kind of labor had fallen in all parts of the world, there could be no question but that there had been an "appreciation of gold." On the other hand, if the silver prices of all commodies and of every kind of labor had risen, we might safely say that there had been a depreciation of silver. But the facts are not so simple; the gold prices of all commodities and services have not fallen; the silver prices of all commodities and services have not risen. The task of combining the average prices of all commodities and of every kind of labor in all parts of the world, and of allowing for variations in the quality and quantity of each article, and of efficiency in every kind of labor, in such manner as to accurately measure appreciation or depreciation in the sense just referred to, is one which has not been, and probably never can be, successfully accomplished.

4. Results of a more or less useful character might be obtained by arranging commodities and different kinds of labor in groups, obtaining an approximate statement of the change in the purchasing power of gold in relation to each group, and drawing a general conclusion from a consideration of the aggregate of these statements. But, unfortunately, an invidious meaning is generally attached to the terms "appreciation" and "depreciation" when used in relation to the standard of value, and inquirers do not always approach the question of the appreciation of gold or depreciation of silver with impartial minds. An excessive issue of inconvertible paper money is always attended with a fall in the value of such money below its nominal value in gold. It is then said to be "depreciated," and the statement is accurate so long as it is understood to mean that the nominal value of the paper money is greater than its actual gold value in the market. All the evils which generally attend the overissue of inconvertible paper become attached in the public mind, by a natural process, to the phrase "depreciation" of the standard, and "appreciation" is held to indicate evils of an opposite nature, but equally grave in character. As a consequence of this state of feeling the advocates of any standard of value instinctively feel that their case is materially prejudiced in public opinion if they admit that that standard has either appreciated or depreciated, though it is quite certain that every standard must, as a rule, be either appreciating or depreciating in some degree.

5. A further complication has been introduced into the question by a proposal to limit the meaning of the phrase "appreciation of gold" to a rise in the value of gold due primarily to causes affecting gold. I venture to think, with all deference to those who hold the opposite opinion, that the distinction attempted to be drawn is radically unsound, and that any attempt to apply it in practice would only produce error and confusion.

It is impossible to separate the causes producing an alteration in the relative value of gold and commodities into causes primarily affecting gold and causes primarily affecting commodities. A great increase in the production of commodities means a great increase in wealth, and would ordinarily be attended with an increase of demand for gold. The prices of some commodities would fall because they were produced in increasing quantities; the prices of commodities generally would tend to fall because there was an increased demand for gold, and there are no means of saying how much of the alteration in price in the case

of any commodity is due to increased production and how much to increased demand for gold.

If, as has just been shown, it is impossible to determine with accuracy the increase in the general purchasing power of gold, *à fortiori*, it is impossible to determine what portion of such increase is due to causes primarily affecting gold.

EXPEDIENCY OF AVOIDING THE USE OF THE TERMS "APPRECIATION OF GOLD" AND "DEPRECIATION OF SILVER."

6. Looking, then, to the invidious meaning attached to the terms "appreciation" and "depreciation," as applied to the standard of value, to the impossibility of measuring with precision the change in the purchasing power of the standard, and to the opening for endless controversy which is afforded by any attempt to do so, it appears desirable to avoid as far as possible the use of the terms "appreciation" and "depreciation."

An examination of the order of reference to the commission will show that the practical issues involved do not necessarily require a precise apportionment of the extent to which either gold or silver may have appreciated or depreciated. The question of practical interest is whether the changes in the relative values of the precious metals are causing serious evils, and whether it is possible to remove these evils without causing other evils equally great. The question of the appreciation of gold or depreciation of silver is really subsidiary to this main issue. If it can be shown that the changes in the relative value of the precious metals are causing serious evils, and that it is possible to remove these evils without causing other evils equally great, it will be just as desirable to do so, whether we hold that gold has appreciated and silver depreciated, or come to the conclusion that silver has appreciated and gold depreciated.

7. I propose, therefore, to invert to some extent the order of the reference, and to consider in the first place what evils (if any) the changes in the relative values of the precious metals are causing, and whether it is desirable to attempt to remove them. I shall entirely avoid the use of the terms appreciation of gold and depreciation of silver, unless when referring to arguments in which these phrases are used, and I shall deal with the facts which are alleged to indicate appreciation of gold or depreciation of silver, simply as a portion of the evidence of the existence of evils arising from the alterations in the relative value of gold and silver.

ACKNOWLEDGED EVILS CAUSED BY THE CHANGES IN THE RELATIVE VALUE OF THE PRECIOUS METALS.

8. It is an evil of great magnitude that since 1873 the nations of the world should have been divided into two groups using different metallic standards, which in that time have altered nearly 30 per cent. in relative value. Every person in this country who had his capital invested in silver-standard countries has, from his point of view, lost on an average 2 per cent. of his capital every year for the last fifteen years. Every person residing in a silver standard country who had his capital invested in a gold-using country finds that 1,000 rupees so invested is now worth very nearly 1,430 rupees, a gain, from his point of view, of 43 per cent. in that time, or very nearly 3 per cent. per annum, over and above whatever the rate of interest on his investment may have been.

9. Nor is it reasonably open to doubt that competing industries in the gold and silver countries respectively have been seriously affected by such a change. Adjustments of wages and fixed charges are no doubt continually taking place, but adjustments corresponding to an alteration of 30 per cent. in price can hardly have taken place with complete effect in so short a time, and where these adjustments take the form of a fall in wages they are necessarily attended with friction, loss, and inconvenience.

10. So marked a change in the relative value of the two standards in the short space of fifteen years necessarily produces a feeling of uncertainty as regards the future, and those who have capital to invest must seriously consider the relative advantages of investment in gold standard and silver standard countries. This argument applies not merely to investments at a fixed rate of interest, but to investments for profit in industrial enterprises.

The excess rate of profit in industrial enterprises conducted on a silver basis must be sufficient to balance the prospect of a loss of capital from a fall in the relative value of silver, and an exaggerated estimate of the probability of such loss, and of its amount, would doubtless be taken by many, if not most, investors. I do not hold the extreme view that there would have been no fall in the rate of interest and no reduction in the rate of profit in industrial enterprises in gold-standard countries if there had been no currency changes, and no divergence in the relative value of gold and silver, for there have obviously been other causes at work which would, in any case, have produced a material effect in this direction. On the other hand, I see no reason to doubt that the uncertainty as to the future relative value of the two standards, and the prospect of a fall in silver relatively to gold, have checked the flow of capital to silver-standard countries, and caused it to be retained in gold-standard countries more largely than it otherwise would have been, and that both the rate of fixed interest and the rate of profit in industrial enterprises are lower in gold countries and higher in silver countries than they would have been if there had been a common standard. These are the results which would naturally flow from such a state of things, and the actual facts, so far as we are acquainted with them, confirm the conclusions based on what may be called theoretical considerations.

11. Before passing from this portion of the question it is desirable to call attention to the effect which the alteration in the relative value of the precious metals has had on the value of the savings of those nations whose accumulations of wealth largely take the form of hoards of the precious metals.

The native of India who put away 1,000 rupees in silver in 1873, now finds it worth exactly 1,000 rupees; but the native of India who hoarded 1,000 rupees in gold in 1873 now finds his hoard worth about 1,430 rupees.

The hoard of each has been equally safe, but the one has made a gain of 43 per cent. as compared with the other. This fact has a special bearing on the possible results of any further steps in discarding silver as standard money.

The alteration in the relative value of silver, hitherto, has been gradual and unforeseen. Every rise in the silver price of the metal gold acted for the time as a check on purchases of that metal, but attention has now been directed to the question of the relative value of the precious metals, and every step towards the further demonetization of silver would have an exaggerated importance attached to it.

If the opinion prevailed in the East that the gold price of silver would fall another 30 per cent. during the next fifteen years, an impulse would be given to the hoarding and accumulation of gold in preference to silver, and to the withdrawal of capital from silver countries, which might have very serious results.

12. The fluctuations in the relative value of gold and silver are also a distinct hindrance to trade between gold and silver using countries, but on this point I do not desire to add anything to what is contained in Part II of the report.

13. The fall in the relative value of silver has most injuriously affected the financial position of the government of India. Taking the average price of silver at 60⅞*d.* per standard ounce in former times, and its present price at 42*d.* per ounce, the increase in the number of rupees required to meet a fixed gold obligation is very nearly 45 per cent. In other words, a fixed charge which could formerly have been met by the expenditure of 1,000,000 of rupees, now requires the expenditure of no less than 1,450,000 rupees.

This change not merely imposes a burden on the Indian finances at the present time, but the uncertainty as regards the future exercises a paralyzing influence. If no remedy can be devised, the only safe course will be for the Indian government to avoid as far as possible contracting any new obligations payable in gold, and for India to depend more and more upon her own resources of all kinds and those of other silver-using countries, and even this policy may, in the case of the occurrence of events which are not beyond the range of probability, fail to avert political and economic dangers of a very serious character.

14. Nor can Great Britain divest herself of her responsibility in this matter by allowing the Indian government to act as it may think best. The government of India is only another name for the agency whereby the administration of the Indian Empire is carried on by this country; the gold obligations which now constitute the difficulty of the Indian government were incurred with the knowledge and approval of the English Government, and are very largely due to the connection between the two countries; the original impulse towards the monometallic gold standard, from which have sprung the existing currency difficulties, was given by England in 1816; it was strengthened by her suggestion, in connection with the International Monetary Conference of 1867, that France should adopt the single gold standard; and the interests of England and India are now so intimately connected that they can not be separated in a question of this kind.

If Great Britain can not, with reference to her own position and interests, take such steps as will relieve India from the existing currency difficulties, justice requires that in deciding on any measure which India may be in a position to adopt in connection with the settlement of the question the interests of India alone should be considered, but this course will neither relieve Great Britain from her responsibility in the matter, nor protect her from the consequences, direct and indirect, of further currency changes, or of changes in policy on the part of the Indian Government rendered necessary by existing financial difficulties.

EFFECT OF THE ALTERATION IN THE RELATIVE VALUE OF GOLD AND SILVER ON PRICES MEASURED IN GOLD.

15. Gold and silver having altered in relative value, it follows that there must be a corresponding alteration in the actual gold and silver prices of articles interchanged between countries using these metals as standards of value, subject of course to such modifications as may have

been caused by alterations in the cost of transport of different commodities between the two groups of countries.

So much is beyond question; but theory does not require us to believe that there is necessarily an immediate and corresponding alteration in the prices of articles not so interchanged, or in wages paid in gold and silver countries, and as experience does not show that any such change takes place at once, and to the full extent, it should not be assumed that this is the case.

The question, so far as concerns countries using the gold standard, which we must now attempt to decide, is this:

How far have the alterations in the relative value of gold and silver been attended with a change in gold prices and wages in the direction of a fall? Would any of this fall have been prevented if no currency changes had been made, and would such prevention have been a gain or the reverse?

16. The prices to which we should look in the first instance in dealing with this problem are those of the articles which are interchanged between the gold and silver countries, and they are practically all the main articles of international trade. It is in the prices of these articles that the full effect of the alteration in the relative value of gold and silver must disclose itself at once, and it is through them that a connection is established between the scales of wages and of prices of articles locally produced and consumed in different countries.

As to the course of gold and silver prices of these articles in recent years there is no room for doubt. The alteration in prices corresponding with the altered value of gold and silver has affected gold prices and not silver prices; the latter prices appear to have fallen rather than risen. The facts are so obvious and have been so fully set forth as to make it unnecessary to repeat the statistics which prove them.

17. As regards articles of minor importance, locally produced and consumed, and which do not to any considerable extent enter into the international trade of the world, our information is much less complete.

On the whole, there would appear to be a tendency to a fall in such prices in this country. There is very little evidence as to the prices of similar articles in countries using the silver standard, but such evidence as is forthcoming does not show any marked tendency towards a rise in prices.

18. Statistics of wages are difficult to collect and combine, and those which exist are very defective. In this country there is distinct evidence of a fall in wages, but the fall has not affected all industries in the same proportion. It has been said that in some countries using the gold standard there has been no fall in wages, but, so far as the evidence before the commission goes, there is no proof either on one side or the other. In India, which may be taken as the best example of a silver-using country, there would appear to be a decided tendency towards a rise in the wages of some kinds of skilled labor, but not much change in the wages of unskilled labor, and the increase in rail ways and mills in that country would naturally be attended with an increased demand for skilled labor.

ALLEGED CAUSES OF THE GENERAL FALL IN GOLD PRICES AND OF THE DIVERGENCE IN THE RELATIVE VALUE OF GOLD AND SILVER.

19. I have stated briefly the facts (very imperfect), so far as information is available, regarding the course of wages and prices as measured in gold and silver respectively in recent years, and it will now be con-

venient to notice some of the explanations that have been given of the influences which have caused gold prices to fall and gold and silver to diverge in relative value, and to consider how far these explanations are consistent with ascertained facts.

20. Before doing so I wish to call attention to certain very common errors and prepossessions which are liable to influence, unconsciously, the reasoning of those who deal with questions connected with the currency.

It should be borne in mind, in the first place, that there never was, and never can be, such a thing as a fixed and invariable standard of value which will measure any quantity of wealth in the same way and with the same accuracy as the yard measure will measure length; and in the next place, that the pound sterling is a certain weight of a metal called gold, and that gold is a commodity, and liable to vary in value according to the law of supply and demand, like all other commodities.

It should also be recollected that every one using any commodity as the standard of value treats it in practice as absolutely fixed in value, and measures all variations in the relative value of other commodities by means of it, and that consequently the impression gradually grows up that the standard of value is in reality as invariable as it seems to be. That no standard of value is, in this sense, invariable, is easily seen by contrasting the fluctuations in the relative value of any two articles used independently as standards of value. The alteration in the relative value of the gold and silver standards in recent years is a case in point.

21. A jury of Englishmen, drawn from the ranks of men engaged in practical business, would almost irresistibly be led to the conclusion that gold had been perfectly stable in value in recent years, and that silver had fallen in value, and they would be able to give plausible reasons for holding that opinion.

A jury of Chinamen, or natives of India, would have an equally strong bias in the other direction, and would have just as little hesitation in declaring that it was a matter falling within their daily experience as practical men of business that silver had remained steady in value, and that the change was in gold; nor would they experience any difficulty in asserting equally plausible reasons for this opinion.

It is this prepossession which leads so many men of practical experience in financial matters to hold opinions which involve the assumption that the supply of and demand for gold have really no effect on the value of that metal. If more gold is produced it is absorbed in a vast ocean of circulating medium without producing any perceptible effect; if less gold is produced, and if the demand for gold increases, the deficiency is at once made up by an expansion of credit. In short, they appear to believe that by an accidental and unregulated combination of the metal gold, and of credit in its innumerable forms, which expands or contracts according to subtle influences operating on the human mind, we have obtained a measure of value which is as perfect in its way as the yard or inch, though nothing is more certain than that such a measure of value can exist only in the imagination.

22. When the gold price of silver began to fall, the opinion was very generally entertained that the fall was due to increased production of silver. It was argued that silver would flow in increasing quantities to the silver-using countries, and that prices and wages would rise in those countries. Attention was called as early as 1876, by the government of India, to the fact that it was gold prices that were falling, and not silver prices that were rising, and the experience acquired since that

year has conclusively shown that the fall in the gold price of silver has been accompanied by a great fall in gold prices and not by a rise in silver prices.

It has lately been said that the explanation was incomplete, and not positively erroneous; that simultaneously with the great production of silver there was a great lowering of the real cost of producing commodities; that gold prices have fallen from this cause, and that the fall in silver prices, which would have taken place from a lowering of the cost of production of commodities, has been balanced by the increased production of silver.

It can be shown that the facts relating to the supply of and demand for the precious metals lend no support to this theory.

23. In 1881–'85, as compared with 1866–'70, the production of gold fell off by about £6,000,000 yearly, while the production of silver only increased by about £12,000,000 yearly (valuing silver at the ratio of 1 to 15½). Why should an increase of £12,000,000 yearly depreciate the silver standard by about 22 per cent. when a decrease in the production of gold by £6,000,000 yearly had no effect on the gold standard?

If we consider the increased demand for both gold and silver by the United States in recent years we obtain very remarkable results. The figures given in paragraph 36 of Part I show that the supply of new gold to the markets of the world outside the United States was less in 1881–'85 than in 1886–'70, or even 1871–'75, by no less than £15,000,000 yearly; while the figures in paragraph 27 (*c*) show that the excess yearly supply of silver in 1881–'85 over the supply in 1866–'70 was only about £5,300,000, and there was practically no increase of supply in 1881–'85 as compared with 1871–'75.

Why should a reduction in the supply of gold to certain countries to the extent of £15,000,000 yearly not affect the value of gold in these countries, when an increase in the supply of silver by £5,300,000 yearly has so marked an effect on the value of that metal?

It can not reasonably be argued that a falling off of 63 per cent. in the supply of gold to certain countries had no effect on the value of gold in these countries, while the maintenance of the same average supply of silver to India lowered the value of the standard of that country by 22 per cent.

24. The argument that the divergence in the relative value of gold to silver is not due simply or mainly to increased supply of silver relatively to the demand for that metal, is strengthened when we consider the alterations in recent years in the respective demand for the two metals.

Wherever, outside the United States, gold has been substituted for silver, the increased demand for gold should equal the reduced demand for silver. In addition, gold has been substituted for paper to some extent, and the fact that a large quantity of silver coin is now overvalued, and not available for international purposes, as well as other causes, has led to considerable accumulations of gold in certain countries over and above what would in other circumstances have been thought necessary.

Another important factor in the question is the apparent growth of the demand for gold for non-monetary purposes. On this point I can not do better than quote the words of Dr. Soetbeer:

> I have already ventured upon the attempt to make an approximate estimate of the application of the precious metals to industrial purposes in the civilized countries, taking an average of the last few years, of course allowing a large margin for error. I have again brought them forward because there are applications of the metals which were then either partially or wholly unknown to me, and which might lead to

an alteration of the estimate. However considerable the colossal sum of gold annually applied to ornamental and other industrial purposes may at first sight appear, all doubt of the probable truth of the estimate will disappear when we consider how enormously the demand for gold articles and for manufactured gold goods has arisen, owing to increase of population and prosperity.

In silver, unfortunately, no such additional demand for industrial purposes has been hitherto noticeable.

It is worthy of notice that while the total yearly supply of new gold to countries outside the United States appears from the figures given in paragraph 36 of Part I to have been only £9,672,000 in recent years, Dr. Soetbeer estimates the consumption of new gold for industrial purposes in the same countries at 70,500 kilos. yearly, or about £9,835,000.

It follows from these figures that the total supply of monetary gold in civilized countries outside the United States in very recent years must actually have been diminishing by the quantity necessary to make up the amount by which the supply of new gold fell short of the quantity used for industrial purposes and absorbed in the less advanced countries.

25. In face of the facts just stated there appears to be no good ground for the contention that gold prices have fallen (say) 28 per cent., simply from altered cost of production of commodities, and that silver prices have not fallen 28 per cent., owing to the influence exerted on them by the increased production of silver and reduced demand for it.

A fall in the gold price of silver amounting to 28 per cent., assuming the gold prices of commodities to remain stationary, would necessitate a rise in silver prices of no less than 39 per cent. To believe that the alterations in the demand for and supply of the precious metals just referred to, have not affected gold prices in any degree, and have exercised an influence on silver prices corresponding to that which would be required to raise them 39 per cent., is practically to suspend the operation of the law of demand and supply in the case of one of the precious metals, while holding that it applies in full force to the other. No satisfactory reason can be shown for making such a distinction between the laws affecting the value of gold and those affecting the value of silver, and this contention appears to be due to that prepossession in favor of the stability of the standard of value which we are accustomed to use, to which I have already referred.

26. The following figures are not without interest in connection with this portion of the question:

Period.	Average yearly net imports of—	
	Gold into England.	Silver into India.
1858–1860	*£3, 795, 000	†£10, 300, 000
1861–1870	*5, 546, 000	†9, 700, 000
1871–1876	*3, 345, 000	†2, 800, 000
1877–1880	—1, 400, 000	†8, 400, 000
1881–1885	— 468, 000	†6, 100, 000

*Financial years. †Ten rupees taken as equivalent to one pound sterling.

I do not know how it can reasonably be contended that the Indian standard in 1885 was depreciated to the extent of 25 per cent. as compared with the years 1858 to 1870 by an excess supply of silver, when the supply of silver was one-third less in the latter than in the former period, and that at the same time the English standard was wholly unaffected, although the supply of new gold actually ceased for a time,

and more gold was exported than imported. The accuracy oft he English figures of the import and export of gold is no doubt open to question, but I do not think it can seriously be questioned that the supply of new gold to England has materially fallen off in recent years.

27. As the statistics of the demand for and supply of the precious metals show that the influences tending to raise the value of gold have been of greater magnitude than those tending to lower the value of silver, an attempt has been made to show that credit and expedients for economizing gold have counteracted the effects of the undoubted increase of demand for gold and reduction in supply.

Credit is a term of wide and indefinite meaning, and appears to include a number of things differing in themselves and in their effects on prices or the relation of exchange of the standard commodity for other commodities.

It is conceivable that a system of credit might effect an economy of gold; might enable 500,000 sovereigns to do work which formerly required 1,000,000 sovereigns. So far its influence would be exerted in the direction of lowering the value of gold and so increasing prices, by practically increasing the supply of that metal.

It is also not merely possible but probable that at certain times a great extension of what is called credit merely indicates the springing up of a new class of business for which credit is required, and an extension of credit of this nature could not have any direct effect on the value of gold.

A great extension of credit in a poor and backward country might have the effect of enabling men of enterprise to obtain a supply of capital, and might in this way increase the quantity of commodities produced, and so have a material effect in the direction of reducing the prices of certain articles. The increase of wealth which would accompany this increase of commodities might in turn increase the demand for gold, and thus have a further effect in lowering prices. It would obviously be impossible in such cases to analyze the resultant alteration in prices and say how much of it was due: (1) To positive economy of gold; (2) to increase in the quantity of commodities; (3) to increased demand for gold.

28. It has been urged that there have actually been such increases in the economies of gold in recent years as to counterbalance the special demands for that metal and the falling off in supply. I can only say that, so far as I can form a judgment on the question, this fact has not been proved, and that, on the whole, there does not appear to be any evidence in support of it in which confidence can be placed. Even assuming that there has been a great extension of the banking system on the continent in recent years, there is not a particle of evidence to show that such extension has done more than, or even so much as, cover the increase of that class of business in which credit is ordinarily employed.

In December, 1873, the note circulation of the Bank of France amounted to 2,886,300,000 francs, while the total amount of gold in the bank was only 611,300,000 francs. In June, 1886, the note circulation was almost the same (2,828,308,470 francs), while the gold reserve was 1,377,367,074 francs, showing an increase in the use of gold of over £30,000,000. If we included the increase in the metallic reserve in the form of silver coins (equivalent in France to gold) the total additional demand would be more than £69,000,000.

I can find no evidence of any economy of gold in recent years which would in any appreciable degree balance so great an increase in demand.

29. Stress has also been laid on the economy in the use of gold effected by the extension of railways and telegraphs. That some economy is effected in this way can not be doubted, but it is impossible to show the amount of the economy, and it is probable that the increase in wealth due to the construction of telegraphs and railways and the stimulus to the exchange of commodities between different regions to which they give rise more than counterbalance the economies. The case of the United States in recent years affords a striking example of the futility of attempting to argue that the extension of credit and the construction of railways and telegraphs necessarily effect any considerable economy in the use of gold. It is stated by the Hon. David A. Wells that "there has been during the last fifteen years a great development in the United States in the use of checks, bank credits, and bills of exchange, and other instrumentalities whereby the use of precious metals is economized." And we know that simultaneously there has been a marvelous extension of railways and telegraphs.

These changes are put forward as the great causes of economy in the use of gold, and yet we find that simultaneously the demand for and absorption of gold by the United States has very greatly exceeded that of any other country.

30. It is hardly necessary to examine the alleged instances of the economies of gold in this country, based on such facts as the great extension of the use of postal notes and checks for small amounts. In neither case is any attempt made to estimate the actual amount of the economies of gold, and in the case of postal-notes it can be shown that the economies are, at best, comparatively trifling. In the case of checks for small amounts, there has probably been some economy; but there is little reason to suppose that its amount is considerable, or sufficient to meet the increase in the demand for gold, which naturally follows an increase of wealth and population. It is probable that the increase in the number of checks for small amounts arises, to some extent, from a change in the mode of business, due to the habit of paying at once instead of running up bills.

31. I understand, however, from section 50 of Part II, that the theory of the fall in the value of silver owing to the *mere increase* in the quantity of silver produced is practically abandoned, and that the fall in the value of silver is ascribed according to one theory to the increase in quantity *plus* sentimental considerations which acted on the value of silver when it ceased to be freely coined into money in the West, and according to another theory to the increase in quantity coinciding with a great cheapening of English goods and an increase of the international indebtedness of the countries which chiefly absorb silver, and especially of India.

These theories are contained in sections 51–67 of Part II, and the following is as correct a summary as I am able to make.

Gold prices have fallen on account of the increased or cheaper production of commodities. Other things being equal, silver prices would have fallen to the same extent, but it so happened that simultaneously silver became a mere commodity in the West and in the United States. Apprehensions were entertained regarding its future; sentimental considerations play a great part in determining market prices; a depressed market, in the absence of some new stimulus, generally tends to further depression, and consequently a direct effect was produced on silver in excess of what might reasonably be anticipated from a consideration of alterations in its supply and monetary use only.

The case of gold was different. There is no great central market where gold is disposed of by sale, where the daily quotations of price influence men's minds. Consequently, assuming the alterations in the supply and use of the two metals to be of equal potency, a greater depreciation of silver might be manifested than of gold.

The second theory is that, simultaneously with the great and general reduction in cost of production which is said to have occurred, there was an increased production of silver to the extent of £10,000,000 yearly. This was primarily an addition to the markets of the civilized world. In this portion of the world there was a stock of about £392,000,000 worth of silver coins, but the whole of this amount was maintained at an artificial value, with the exception of about £82,500,000. Consequently the addition of £10,000,000 yearly to a stock of only £82,500,000 had a great effect on the value of silver, and silver fell largely in value in the markets of the civilized world.

The East, and India especially, is the great absorber of silver, and under ordinary circumstances this silver would have flowed to the East and raised wages and prices; but simultaneously there was a great and general cheapening of production, leading to a fall in gold prices, so that the fall in gold prices balanced the profit to be derived from exporting the cheap silver and importing Eastern goods, and consequently there was no increase of demand for silver. There has also been a growing balance of indebtedness against India which helped to reduce the demand for silver in that country.

32. The preliminary objection to this method of dealing with the question is that gold and silver have not been treated alike. Causes have been shown to exist which would tend to cause a fall in the prices of certain commodities, whether measured in gold or silver, and it has been assumed (not proved) that these causes were sufficient to balance the effect of any influences which may have tended to cause a rise in prices, and, in addition, to cause the whole or nearly the whole, of the fall in gold prices which has actually taken place. The fall in gold prices having been explained by this means it became necessary to account for the absence of so great a fall in silver prices, and theories have been devised for this purpose, which appear to me to be far-fetched and insufficient.

I venture to think that it is not possible to test variations in the standard of value by examination of the prices of particular commodities, and that to whatever standard this method is applied the result will always be the same, namely, that alterations in price will appear to have been produced entirely by causes affecting commodities. On this point I can quote the opinion of an economist (Professor Jevons) who devoted much time and labor to this subject.

"Not a few able writers, including Prof. T. C. Leslie, who lately addressed you on the subject, are accustomed to throw doubt upon all such conclusions by remarking that until we have allowed for all the particular causes that may have elevated or depressed the price of each commodity we can not be sure that gold is affected. Were a complete explanation of each fluctuation thus necessary, not only would all inquiry into this subject be hopeless, but the whole of the statistical and social sciences, so far as they depend upon numerical facts, would have to be abandoned. It has been abundantly shown by Quetelet and others that many subjects of this nature are so hopelessly intricate that we can only attack them by the use of averages and by trusting to probabilities. The price of any one commodity, even silver, utterly fails as a measure of the value of gold, because it is sure to be affected by nu-

merous conflicting causes of rise and fall, no one of which we can accurately estimate. Even the intimate knowledge which a merchant gains of the commodity in which he deals is insufficient to enable him to explain, still less to predict, the changes in its price with confidence."

33. It is probable that this inability to detect an alteration in the standard by examining the causes of the changes in price of commodities largely arises from the fact that we are accustomed to measure the demand for a commodity by the price which people are willing to give for it, and that the increase or decrease in the value of the standard appears to us to be simply a decrease or increase in the demand for commodities. If the price of an article rises, the supply remaining the same, it is usual to say that the change is due to increased demand. The increased demand may be due to the fact that people have a stronger desire for the commodity, or that they have more of other things to give for it, or that, the value of money having fallen and the real demand (that is, desire to possess and supply of commodities to give in exchange) remaining the same, the nominal demand, or demand measured in money, has increased. Consequently, every alteration in the value of the standard assumes the form, in practical business, of an increase or decrease in the demand for commodities relatively to the supply, using the word "demand" with the meaning which is ordinarily attached to it.

There is one way, however, in which the soundness of this method of testing variations in the standard can be verified. Let the same test be applied with equal care to both gold prices and silver prices in the gold-using and silver-using countries respectively. If it can be shown that gold prices are just what changes affecting commodities would make them, and that silver prices are just 39 per cent. higher than what they ought to be, having regard only to changes affecting commodities, the depreciation of silver to the extent of 28 per cent. will have been proved, and the correctness of the method vindicated. Until this is done, the argument that silver must have depreciated because gold prices, or certain gold prices, appear to have fallen from the supply increasing more rapidly than the demand, is without force.

34. Referring to the first theory, it seems open to doubt whether prices in the great markets of the world, such as those in which silver is bought and sold, are determined by what may be called sentimental considerations except for comparatively short periods. The price of silver is no doubt fixed from time to time by the buyers and sellers in the markets of the gold-using countries, and their minds are liable to be influenced by what may be called sentimental considerations; but if these considerations lead them to fix a price which is either higher or lower than the economic conditions will justify, a force is immediately brought into play which tends to redress the error. If the London market were to fix the price of wheat to-morrow at 20*s.* a quarter, from sentimental reasons, a force would come into play which would very quickly cause the price to rise. If, on the other hand, sentimental considerations led to the price being fixed at 60*s.* a quarter, there would be such an increase of supply that an immediate fall would be produced. Local markets, no doubt, take their prices to a very large extent from the central markets, but there is no ground for supposing that a central market can permanently impose on other markets a scale of prices which is inconsistent with the existing economic influences.

Nor does there appear to be any ground on which it can justly be said that a depressed market, in the absence of any new stimulus, generally tends to further depression. On the contrary, a depressed

market, in the absence of any new and special cause of depression, always tends to a recovery from depression. This must be so, unless it be the case that a fall in value neither tends to increase consumption nor to diminish production.

London does not produce silver and consumes comparatively little, and it is not reasonable to assume that sentimental considerations acting on the minds of the buyers and sellers of silver in London, or in any other city or country in the West, can have depreciated the monetary standard of such countries as India or China by 30 per cent.

The position would be indeed serious if London or the West generally possessed the power which is ascribed to it. How could a country, however rich or powerful, protect its standard of value against so subtle an influence? If this theory were correct, sentimental considerations acting on the minds of persons who neither produce nor consume silver, and who merely act as middle-men between the producer and the consumer, might seriously depreciate the monetary standard of a whole continent.

35. Turning to the second theory, I venture to think that there is no ground for the assumption that the value of silver is primarily determined in the markets of Europe and America by a comparison of the quantity of silver offered for sale with the quantity of silver in those countries in the form of coin of full weight to which it may be added. The demand of the East is the chief demand for silver, and silver is continually being shipped from Europe to the East and from America to China. Can it be credited that, in determining the price of silver in the first instance, the chief source of demand is overlooked, and the value of silver fixed simply with reference to the supply and the less important demands for it?

A minor but important objection is that, in putting the increase in the supply of silver at £10,000,000 worth yearly, the great increase of demand for silver in the United States has been overlooked. The figures given in section 27 of Part I show that the increase has not been £10,000,000 sterling, but £5,300,000, rating silver at 1 to 15½, or about £3,700,000 at the present sterling value of silver.

Nor is it easy to see why the cheaper production of English goods should prevent silver from going to the East, as has been sometimes alleged, any more than the cheaper production of cotton goods should prevent hardware from going there. If the silver that was offered for sale did not go to the East, where did it go, and where is it now? The East has taken all the silver that was offered, and must do so while its standard is silver.

If the large imports of cheap Western goods have lowered the value of silver, there is a remedy which the silver-using countries can apply. They have only to impose protective import duties so as to shut out these cheap goods. I do not doubt that the sudden imposition of heavy import duties in the silver countries would for a time have the effect of increasing the demand for silver and raising its price, but would this be its permanent effect? Is it not the case that a measure of this sort ultimately diminishes exports just as much as it does imports? If so, protective duties would not permanently increase the demand for, and raise the value of, silver.

36. With all deference to those who hold a different opinion, it appears to me that the explanation given in section 60 of Part II, why silver has not gone to the East, is unsound. Commodities, it is said, have fallen in gold price from causes affecting commodities; silver has fallen in gold price in Europe from the same cause. If the only change had been the

fall of silver in gold price the demand for the East would have absorbed large quantities of silver, because it would have been profitable to export the cheap silver to the East and purchase eastern commodities and import them into Europe. But as commodities had fallen in gold price from causes affecting commodities, there was no such profit to be made by the export of silver, because the reduced gold price exactly balanced the extra profit that would have been derived from the lowered value of silver. Consequently, silver fell in value without any considerable quantity of it being exported to the East.

However ingenious this explanation may appear at first sight, it contains a fatal flaw. The fall in prices from increased production would have affected silver prices just as much as gold prices; and the lower gold price for which the imported Eastern commodities sold would have been exactly balanced by the lower silver price for which they could have been purchased. If under such circumstances silver had also fallen relatively to gold, the profit to be made by exporting the cheaper silver would have been undiminished. The explanation, in fact, assumes (1) that the increased production of commodities would only affect gold prices and not silver prices, and (2) that silver prices were maintained 39 per cent. higher than they otherwise would have been by a not very great increase in the supply of silver which did not go to India.

37. It is always a matter of extreme difficulty to draw up a correct statement of the balance of international indebtedness, because it is not easy to ascertain what items should be shown on each side of the account, because the amount of some of these items can only be ascertained approximately, and because the value of other items is quite unknown.

The first objection I take to the statement in section 66 is that it avowedly omits the following three items, the omission of any one of which, as I hope to show, is sufficient to destroy the entire value of the argument: (3) Freights on exports, minus expenses incurred in India; (4) private remittances of money and securities from India; (8) private remittances of money and securities to India.

They are said to be "probably unimportant as compared with the others, and there is no reason for thinking that they would materially alter the balance."

It may be admitted that these items are small as compared with the total value of the exports or imports, but they are not small as compared with the net result on which the question of indebtedness depends, and an error of two or three millions sterling, owing to the omission of these items, might totally alter the aspect of the question of indebtedness. For example, India has exported more than 1,000,000 tons of wheat in a single year, the freight on which may be taken at £1,000,000 sterling, or say Rx. 1,400,000. The freight payable on rice and seeds would come to quite twice this amount, and there is besides the freight payable on very many other articles. The omission of freight alone vitiates the account by more than Rx. 5,000,000 yearly, an amount sufficient to entirely alter the character of the result.

In reality, however, the omission of freight on exports has not vitiated the result to anything like this extent. Freight on exports has been wrongly shown as a liability of India, and the omission of this item in the account has merely redressed the error. India has been charged the freight on imports, because this freight is included in the valuation of the imports as landed in India, and she can not fairly be charged with the freight on exports also. India should, however, have been

credited with that portion of the expenditure in connection with freight on exports which was incurred in India.

38. It is impossible to say what the amount of private remittances of money and securities may be in any year, but they vary from year to year, and may, between any two years, make a difference of several millions on one side of the account or the other, an amount quite sufficient to entirely alter the character of the result deduced from the figures.

I may also point out that private remittances of securities from India have been wrongly shown under liabilities of India, and private remittances of securities to India have been wrongly shown as a means of payment. The items ought to be transposed. If somebody in India sells an Indian security to somebody in England, the transaction counts in the international trade for the time being as an export from India, and therefore as a means of discharging an international liability.

Although this error has been made in the text of section 66, the remittances of enfaced paper have been correctly dealt with in the actual account. A further explanation, however, is needed in regard to this matter. If an Englishman in India saves money and invests it in government paper, and on return to England has his government paper enfaced and brings it with him, the transaction does not affect the international account of the year either one way or the other.

39. Another objection is that the value of the exports and imports of merchandise can not be ascertained exactly. If the export of merchandise happened to be overstated in any year by only 2 per cent., and the imports understated in the same proportion, the error in the final result would be no less than Rx. 3,100,000, an amount sufficient to entirely alter its character. If the error was in the opposite direction in the next year, there would be an apparant difference in the international indebtedness of the two years of Rx. 6,200,000.

The imports on government account have also been wrongly included in the imports of merchandise. They are paid for by the India council bills, and India can not be made to pay for them twice; first, when they are imported as merchandise, and, secondly, when bills are drawn for their value. The error arising from this cause alone was no less than Rx. 3,844,000 in 1885–'86, Rx. 3,115,000 in 1886–'87, and Rx. 2,619,000 in 1887–'88.

40. Another source of error is, that in many years, a considerable amount of the imports (such as railway plant and machinery) really represents the investment of English capital in India, is not paid for at the time, and consequently has no effect on the exchange of the year. Of course all investments of foreign capital affect the exchange in subsequent years when profits or interest come to be remitted from India, but such investments are generally made in industries connected with the international trade, and, so far as they increase Indian exports, they counteract the tendency to a fall in the exchange, owing to the remittance of profits. It is quite possible, and even probable, that an investment of foreign capital in India might so increase the exports as to favorably influence the exchange. For example, if £1,000,000 is invested in jute-mills, and such investment increases the exports of India by £200,000 yearly, while only necessitating the remittance of £50,000 yearly, on account of the profit, the international account has been altered in India's favor to the extent of £150,000 (£200,000 minus £50,000), and the tendency is to raise and not to lower exchange. The investment of foreign capital in tea gardens in India is a case in point. The whole of the exports of tea from India are due to this cause, and the value of these exports is much more than sufficient to cover the remit-

tance of profits and pay for such articles of import as are required in the manufacture of tea. The international equation has, consequently, been altered to the advantage of India, and not to her disadvantage, by these investments.

41. Apart from this question of the untrustworthiness of the account of India's international indebtedness as actually made up, there is the further objection, that when two standards are altering in relative value, the balance of indebtedness always turns in favor of the country where the standard is relatively appreciating. Let us suppose that there are two countries which trade together and have different standards, and that after the relative value of the two standards has remained steady for a time, one of them begins to appreciate and all prices measured in that standard begin to fall. The rate of exchange having been fixed by the course of business will remain the same until an influence comes into operation which alters it. In the mean time the fall in the prices of articles imported into the country where the standard is appreciating checks such imports, while the fall in the prices of exports stimulates them. An unfavorable balance of trade is thus created, and the two standards alter in relative value. An unfavorable balance of trade is the mode by which an alteration in the relative value of two independent standards shows itself, and proves absolutely nothing as to whether the cause of the alteration is increase in the value of the one standard or fall in the value of the other standard.

I entirely agree with the remarks contained in sections 63 to 65 of Part II, but wish to add, that the relative scale of prices in two countries is the predominating influence in permanently determining the flow of bullion from one to the other, and it does so by acting on the balance of international indebtedness. I fully believe that if the system of double legal tender had been maintained less silver would have been exported to the East in recent years, but it does not follow that this result would have been due to a reduction of demand for silver in India. The distribution of the precious metals when used as standards of value is determined by the relative demand of different countries. A cessation of the flow of silver to India under a system of double legal tender, might indicate that the Western demand was stronger and not that the Eastern demand was weaker. The general fall in prices, and the reduction in the supply of gold in Europe, appear to me to prove that the reduced supply of silver to the East, which would have occurred if the old system had been maintained, would have been due to an increase of demand in the West rather than the falling off of the demand for the East.

42. If an unfavorable balance of indebtedness was growing up against India simply because she had larger payments to make without receiving a direct commercial equivalent, such a state of things would check not merely the import of silver into India, but the import of every commodity. Is it, then, the case that the exports of merchandise from England to India have grown less rapidly than exports from England to other silver-using countries? If this is not the case, the growing indebtedness of India can not have specially checked imports into India, imports of silver included.

Taking the three quinquennial periods from 1873 to 1887, it will be found that English exports to India increased in value 14.1 per cent. in the second period, and in exactly the same proportion in the third period.

Taking the other silver-using countries, China, Straits Settlements, Japan, Ceylon, Mauritius, Mexico, and Central America, the increase in

the second period is only 6.7 per cent., while there was an actual decrease of 2.8 per cent. in the third period.

If the exports from England to India have increased much more rapidly than the exports from England to other silver countries, it is clear that any special hindrance to exports of all kinds (including silver) from England to India, arising out of the drawings of the India council, must have been of comparatively minor importance.

43. It is commonly said that if one country has a payment to make to another, the country which has the payment to make trades to a disadvantage. The theory, as a theory, is unassailable; but in practice there are many more important factors which influence international trade, and, as has already been shown, if the payment is made on account of foreign capital judiciously invested, the net effect of the whole transaction may be to improve the relative position of the country which has the payment to make.

Payments for which no direct commercial equivalent is received are made in an increasing amount to England every year by foreign countries, and, consequently, the relative position of England in the international trade should, according to the theory just stated, be steadily improving, and England should be receiving an increasing quantity of foreign produce in exchange for her exports; yet the facts since 1873 do not bear out this contention. If we take the price of a certain quantity of English exports in 1873 at £100, and the price of a certain quantity of English imports at the same figure, the prices of the same quantities in 1886 will be £62 and £69 respectively, according to Mr. Giffen's figures.

We thus see that, if a certain quantity of English exports were exchanged for a certain quantity of imports in 1873, the same quantity of exports would in 1886 have failed to exchange for the same quantity of imports in the proportion of 62 to 69.

In other words, goods for goods, England was making a worse bargain internationally in 1886 than 1873 by 11 per cent.

It is true that in 1873 England was exchanging her exports for foreign products on specially favorable terms, but the figures just given show that the question of the relative indebtedness of different nations is a comparatively minor factor in determining the conditions of the international trade.

44. There are no figures of equal authority which can be used in determining on what terms India is now trading with other countries as compared with former times, but all the inquiries I have made point in the same direction, namely, that a certain quantity of Indian produce laid down at Calcutta or Bombay will at the present time exchange for a larger quantity of imported goods than it would have done in 1870 or 1873. The theory that India is hampered in her foreign trade by the drawings of the India council appears, therefore, to be without foundation. That India would be wealthier if these drawings ceased, while India retained the advantages arising from the causes which have brought about the drawings may certainly be admitted; that India would now be importing more goods of all kinds, including silver, if the causes which have led to the drawings of the India council had never come into operation, is not merely unproved, but is absolutely opposed to the facts so far as they can be ascertained.

45. It will be convenient to sum up the objections which I take to the explanation given of the fall in gold prices and the alteration in the relative value of gold and silver:

(1) The method adopted for testing the variation in the standard by

examining the causes for the rise or fall in price of particular commodities is unsound.

(2) It is misleading to apply it only to gold prices and not to silver prices.

(3) The theory that silver has fallen in value from sentimental considerations rests on no good basis.

(4) The theory that the cheapening of commodities prevented the cheap silver from being exported to the East is founded on the fallacy that increased production of commodities would affect gold prices and would have no effect on silver prices.

(5) The account showing the growth of an unfavorable balance against India is untrustworthy.

(6) An alteration in the relative value of two standards is always attended with a growing balance of indebtedness in favor of the country where prices are falling, and proves nothing as to the causes of the alteration in relative value of the two standards.

INDEX NUMBERS.—THE RELATION BETWEEN GOLD, PRICES, AND THE RATE OF DISCOUNT.

46. There are other questions of great complexity connected with the currency question which I would gladly have avoided, but as they have been raised, and stress laid on the evidence which they are supposed to afford, I can not avoid dealing with them.

They are: (1) What value is to be attached to the evidence afforded by what is known as the system of index numbers? (2) How does gold affect prices? (3) What is the relation between prices, the supply of gold, and the rate of discount?

47. The evidence of the system of index numbers is to the effect that as regards commodities constituting a large and important section of the wealth of the world, the purchasing power of gold has in recent years materially increased. They also show that in regard to most, if not all, commodities included in this group, the purchasing power of gold has increased, though in very varying degrees. They do not show that the average purchasing power of gold in respect to everything has increased, but this result may with some probability be inferred unless it can be shown that the rise in the value of gold in relation to the articles included in the various systems of index numbers is balanced by a fall in the value of gold in relation to other articles. This has not been done.

48. Price is the relation of exchange between the standard commodity and other commodities, and there does not appear to be any difficulty in holding that an increase or decrease in the standard commodity affects the ratio in which it exchanges for other things. It would, indeed, be very difficult to hold the contrary view.

There is better ground for holding that an increase or decrease in the quantity of gold has less effect on prices than is sometimes supposed; it appears, however, to be quite possible that an injurious fall of prices, or rise in the value of gold, may take place in a country without a reduction in the total supply of gold to the world, and due simply to the increased demand for gold arising from an increase in the production of commodities in another country. In face of the fact that gold and silver have altered 30 per cent. in relative value in fifteen years, and that gold and silver prices of articles interchanged between the gold and silver countries have altered in a corresponding degree, it can not reasonably be held that the standard has practically no effect on the rise or fall of prices.

49. Arguments have been drawn from the low rate of discount in recent years to show that there can have been no "scarcity of gold." The question of the connection between the supply of gold, the rate of discount, and prices, is probably the most difficult and obscure in all political economy, but this at least is certain, that there is no connection between the permanent or average rate of discount and the purchasing power of gold. The contention, however, is that gold exercises no influence on prices (in the more advanced countries) except through the rate of discount, and that as the rate of discount has been low and uniform in recent years there can have been no such scarcity of gold as to cause a fall in prices.

The argument is, at first sight, plausible, but to establish its soundness it would be necessary to show that the rate of discount is necessarily high and fluctuating when the standard is rising in value, and low and uniform when the standard is falling in value.

There have been many cases in which the standard was undoubtedly depreciated by an overissue of inconvertible paper. There have been other instances where the reverse process took place, and a depreciated paper underwent relative appreciation by a return to specie payments. If the argument just referred to were sound, it should be possible to show that in the former class of cases the rate of discount was low and uniform, and in the latter class that it was high and fluctuating. This has not been done, and the ablest economists are, I believe, of opinion that it could not be done. Until the principle has been established by an appeal to undoubted facts the argument founded on a low and uniform rate of discount is without force.

Nor can it be said that gold only acts on prices through an actual rise in the rate of discount. The apprehension of a rise may exercise a very potent influence on the mind.

The theory that a general increase in the purchasing power of gold can not take place without an actual scarcity of gold being experienced for purposes of business appears to be based on the assumption that in such cases the general average of prices would remain unaffected until it was suddenly discovered that there actually was not enough gold to meet the demands for that metal. This assumption overlooks the fact that what we call the average of prices is made up of an indefinitely great number of transactions between intelligent beings, and that in each such transaction the prospects of the future are discounted, and the demands upon gold gradually and insensibly adjusted to the available supply.

50. The value of gold may rise not merely because there is a reduction in the total quantity of gold, but because there is an increased demand for it.

If there are three countries, A, B, and C, of which A and B have the same, and C a different standard, and if from increase of wealth in A an economic influence comes into play which causes a flow of the material of the standard from B to A, I see no reason why a fall should not occur in the first instance in the prices of certain articles in A, followed by a fall in prices in B; the final result might be a flow of (apparently) superfluous gold from B to A, and a rise in the value of gold in B, unattended by any cheaper or increased production of commodities in that country, or by any perceptible rise or rapid fluctuations in the rate of discount.

The other country, C, having a different standard, would not be affected in the same way. The economic changes at work in A might tend to cause a flow of the commodity used as the standard from C to

A, but such flow being rendered impossible by the difference in standard, the result would be that the general level of prices in C would be unaffected, and trade between the two countries would be adjusted by an alteration in the rate of exchange between A and C; in other words, an alteration would disclose itself in the relative value of the standard of A and B on the one hand, and C on the other, which might be correctly described as an increase in the value of the standard in A or B rather than as a fall in the value of the standard in C.

INJURIOUS INCREASE IN THE VALUE OF GOLD.

51. I have made the preceding remarks on the influence of gold and credit on prices, and the connection between gold, the rate of discount, and prices, with much unwillingness, for I can not pretend to explain the subtle phenomena connected therewith. They are merely intended to show that the question of an injurious rise in the purchasing power of the standard can not be decided by speculations of a hazardous character, regarding the connection between prices, gold, credit, and the rate of discount. The questions to be decided are not speculative but practical. Has the purchasing power of the standard in any country or countries increased? If so, has such increase been injurious, and could it have been avoided in whole or in part?

In the present state of our knowledge the question of an increase in the purchasing power of the standard can only be decided by an actual appeal to wages and prices.

The further question, whether any portion of the fall could with advantage have been avoided, is one which must be decided on different considerations, and with reference to the effects which may have attended the increase in the purchasing powers of the standard.

52. Dealing with the question from a practical stand point, what we find in this country is: (1) A great, and with some exceptions, a general fall in prices. (2) Complaints of the burden of fixed charges, rents, royalties, railway freights, and so forth. (3) A reduction in the rate of profit and of interest. (4) A certain amount of want of employment. (5) Considerable reductions in money wages in very many industries. (6) A long-continued period of what is called "depression" in trade and industry.

These facts indicate a state of affairs in which an increase in the value of gold, whatever the cause of such increase may be, has produced injurious results, and the reduction in the amount of income per head of population, assessed to the payment of income tax shown by the figures in Appendix B., coupled with the tendency to a fall in wages, appears to me conclusive on this point. It has been urged by more than one economist that in recent years influences have come into operation which have increased the share of the products of industry which falls to the wage-earning classes. Assuming this view to be correct, it would follow that, under ordinary conditions, their rates of money wages should have materially increased, and the fact that they have not done so, and have even fallen in some degree, affords a strong confirmation of the view that there has been a general rise in the value of gold.

53. If it had been possible to employ both gold and silver as standard money in the same manner in which it was formerly possible to do so the increase in the value of gold would have been lessened, and beneficial results would have followed, unless the change in the direction of lower-

ing the value of gold would have been so great as to produce injurious consequences of an opposite character.

The question of the actual amount of good which would have been done by the maintenance of the old system appears to be one on which it is impossible to arrive at any precise conclusion, but it is a noteworthy fact that the periods of heavy fall in gold prices, and of a fall in the income per head of population assessed to the payment of income tax, coincide in a remarkable manner with the periods of heavy fall in the gold price of silver, as is shown in Appendix B to this note. It is, fortunately, much more easy to decide whether the maintenance of the old system would have led to an injurious fall in the value of gold. In the first place, it will be observed that in silver-using countries no evil results, so far as regards the working of the standard of value in use in those countries, appear to have followed the divergence in the relative value of gold and silver. Prices have not risen in any injurious degree or even to any perceptible extent; there are no complaints of the burden of fixed or customary payments; there is no decrease of employment leading to a lowering of wages, and though there may be some tendency to a rise in money wages, yet it can not be said that any injurious results are flowing therefrom. The feeling of depression in trade has not been so great as in countries using the gold standard. Netherlands India, where the gold standard was adopted, has assuredly not gained by the change in comparison with the other eastern countries which maintained the silver standard.

If there is no reason to suppose that the maintenance of a purely silver standard in recent years has injured any country, except in so far as it may have had financial and commercial relations with countries using the gold standard, it necessarily follows that the maintenance of the old system of double legal tender would not have produced injurious results either in the countries that did so or in countries using the single gold standard.

54. Nor do the figures of the production of silver afford any ground for alarm. If the supply of gold to countries outside the United States has fallen off by £15,000,000 yearly, and the supply of silver to the same countries has only increased by £5,000,000 yearly, there is no reason to fear that an arrangement whereby the deficiency in the gold supply would have been counteracted to the extent of one-third of its amount by silver would have produced an injurious fall in the value of gold. Even if the higher gold price of silver had caused an increased production of that metal to the extent of £10,000,000 yearly, the additional supply would not have done more than meet the reduction in the supply of gold. In the period from 1821 to 1840 the annual average supply of both gold and silver amounted to about £7,200,000 yearly. In the period 1861–'70 the average yearly supply was about £37,400,000, an increase of more than £30,000,000 yearly. A similar increase in excess of the production of 1861–'70 would bring the total production of the present time up to £67,400,000 yearly, and as the production of gold is about £20,000,000 yearly, the production of silver would have to increase to £47,000,000 yearly to make up this total. There is no good ground for supposing that the total production of silver would increase to this figure even if the price of silver rose to 60⅞*d.* per ounce, or, if it did, that it could be maintained at that rate; and as the total stock of both gold and silver, as well as the total wealth of the world, is now much greater than in 1840, an increase of £30,000,000 yearly would in all probability produce a much less effect than at the time of the great gold discoveries.

55. Summing up the conclusions to which these facts and arguments point, it may be said that there is every reason to believe that the maintenance of the old system of double legal tender would have been a gain to this country by mitigating or preventing, in a greater or less degree, an injurious increase in the value of gold (from whatever cause it may have arisen), and there is no ground for supposing that it would have lowered the value of gold to such an extent as to produce any injurious results.

In the preceding arguments, and in the calculations on which they are based, I have assumed that the ratio of 1 to 15½ was preserved. If a system of double legal tender were adopted in the present day at or near the market ratio of gold and silver, an additional safeguard would be provided against any possible injurious lowering of the value of the standard, but there does not appear to be any good ground for apprehensions of this nature.

ADVANTAGES WHICH WOULD HAVE BEEN GAINED BY THE MAINTENANCE OF THE SYSTEM OF DOUBLE LEGAL TENDER.

56. It may then be said that if the old system of double legal tender had been maintained: (1) A purely beneficial influence would have been exerted in the direction of preventing a rise in the value of gold; (2) trade between gold and silver using countries would have been facilitated; (3) industries in gold countries which compete with similar industries in silver countries would have been relieved from unfair though temporary causes of depression; (4) there would have been no impediment, arising from currency causes, to the free employment of capital in countries where the return promised to be greatest; (5) the financial difficulties of the Government of India, arising from an alteration in the relative value or the two standards, would have been prevented.

It can not be doubted that these gains would, in the aggregate, have been of great importance, and, as has been shown, they would not have been attended with any counterbalancing evil in the direction of an injurious depreciation of the standard.

NO PERMANENT AND SATISFACTORY SOLUTION OF THE CURRENCY QUESTION POSSIBLE WITHOUT THE ADOPTION OF THE SYSTEM OF DOUBLE LEGAL TENDER.

57. The arguments in favor of a reversion to the old system, which are based on the possible dangers and difficulties of the future, are still stronger.

We can state, with some attempt at accuracy, the evils which the abandonment of the system of double legal tender has actually produced up to the present date, but we can not measure the magnitude of the evils which it may produce in the future.

There must be some line of monetary policy which in the future will give the most satisfactory results, and it is that policy which we should attempt to discover.

An obvious line of policy would be to demonetize silver as standard money everywhere, and to replace it by gold, but the experience of the last few years shows that this course would be attended with the most serious risks, and it hardly seems necessary to consider it as a possible solution of the currency question. If this policy were inevitable the free coinage of silver by the Indian mints should be stopped at once; the greater the delay in doing so the greater the ultimate loss to India. This would be the first step, but what the final result would be it is impossible to conjecture.

Another course would be to divide the nations of the world into gold-standard and silver-standard countries, and admit once for all that there must be two independent metallic standards in the world. A little reflection will show that the objections to this course are also insuperable. No satisfactory principle can be devised on which the division could be based. It has been suggested that gold should be used by wealthy nations and siver by poor ones, but it is difficult to suppose that the nations which it was proposed to stamp as "poor" would accept the classification, and it is quite certain that they would not promise to remain poor in order that the accuracy of the classification might remain unimpaired. On the contrary, the very fact that the nations using silver were to be considered "poor" might be a powerful inducement to a progressive country to change from the silver to the gold standard. Nor is it quite certain that the relatively wealthy nations of to-day will always retain the same position.

A third course would be an agreement that no nation should make any change in its currency arrangements in future. But an arrangement of this nature is easily seen to be impracticable. If gold prices and wages should in time fall so largely as to lead to the belief that gold was a very undesirable monetary standard, could a nation be blamed for attempting to escape from it? If silver fell still more in value relatively to gold, could a country like India, which has intimate financial relations with Great Britain, be prevented from adopting the same standard as Great Britain? Would England and her dependencies which now use silver formally renounce for all time the hope of some day establishing a common standard? Could the United States be induced to continue to coin so many silver dollars every year, no matter what might happen?

France and other countries have a large amount of silver coins, the nominal value of which is now about 44 per cent. in excess of the market value of the silver contained in them. The position must have been very nearly, if not quite, reached at which false coining in good silver will be so profitable as to lead to its being practiced on an extensive scale. If false coining on a considerable scale took place, could France be prevented from withdrawing her silver coins and replacing them, wholly or in part, by gold? Above all, what is to be done with countries which now use inconvertible paper? They could not be bound down to continue to do so, and if they returned to a metallic standard they must choose either gold or silver. Even if the countries of the world were permanently divided into gold-using and silver-using nations, or if all nations agreed to preserve the *status quo*, we should remain liable to continual fluctuations in the relative value of the two standards, with the attendant risks and inconveniences.

58. No solution of our present currency difficulties can be either satisfactory or permanent which does not give practically the same monetary standard to every country; which does not provide for the full use of both the precious metals as standard money; and the less the inducement to change of standard the sounder and safer will the system be.

These requirements would be completely met by a system under which silver was made the legal standard in every country, any country which wished to do so being at liberty to make gold also full legal tender on the sole condition that the ratio for the legal tender of both gold and silver shall be the same everywhere. The effect would be exactly the same if those countries that wished to make both gold and silver legal tender chose gold as the standard and made silver legal

tender at a certain ratio. What is absolutely essential to the success of the system is that silver should be legal tender as well as gold in certain countries, and what is desirable is that the number of countries using the single gold standard should be reduced to a minimum.

Assuming that this system were generally accepted, put into practice, and maintained, I can see no evils that would arise from it.

If it be said that some nations or banks would hoard gold, it may be replied that they do so now, and that under the proposed system, when silver would be freely available for international purposes, the inducement would be less.

If it be said that nations wishing to go to war would accumulate gold, the same answer may be given, and it may be added that with silver freely available as money the hoarding of gold would be of less importance.

If it be said that nations might issue inconvertible paper, it may be replied that they might do so under the present system, that the issue of inconvertible paper would not interfere with the system of double legal tender, and that the evils of such issue would be less when they could be spread over the whole world.

If it be said that in the course of ages the value of gold as compared with silver might rise above the legal ratio, I would ask what evils would flow therefrom? The cheaper metal (silver) would be the standard in every country, and there would be no fluctuation in the relative value of the standards of different countries. Every person having a debt due to him would be entitled to receive either gold or silver at the legal ratio. If he is paid in silver he is paid in a metal which is freely coined into money everywhere, and he suffers no loss or inconvenience. If he is offered gold at any ratio other than the legal ratio, he need not accept it unless he likes. If he accepts it at a value other than the legal ratio, it can only be because it suits him better to do so than accept a metal which is money everywhere, and if it suits him to do so he suffers no inconvenience therefrom, and he can have no ground of complaint. Under such a system, in short, each of the metals would, by a natural process, be devoted to that purpose for which it was best suited, and the existence of a temporary premium or agio on either of them would merely indicate that that metal was in such demand for some special purpose as to make it worth the while of the person who wanted it to pay something for the advantage.

NO REASONABLE GROUND FOR SUPPOSING THAT THE SYSTEM OF DOUBLE LEGAL TENDER, IF ONCE GENERALLY ACCEPTED AND INTRODUCED, WOULD BE ABANDONED.

59. The fear that some nations might abandon the agreement, either from hope of gain to themselves or from a desire to injure other nations, is chimerical. There is no ground for supposing that in such case the great nations of the East, such as India and China, will abandon the use of silver, and there are very obvious reasons which will prevent the American Continent from doing so. Nor is there really any danger that the Latin Union would abandon the use of silver, to which the people have so long been accustomed. If Germany, after adopting the single gold standard, reverted to the use of silver also, is it likely that she would make a third change?

A nation could only depart from the system through a hope of benefiting itself or of injuring its neighbor.

Assuming that all nations had the same standard, could any one nation hope to benefit itself by adopting a different standard from that of other nations? Or could it hope to injure another nation by a meas-

ure which would give it a different standard from all the rest of the world, and would leave the nation it wished to injure in monetary alliance with all other nations? England, no doubt, adopted the single gold standard in 1816, but the change was made in ignorance of the effects of an universal abandonment of the system of double legal tender, and without any intention of injuring other countries. It is a significant fact that silver was abandoned as the English standard in 1816, in direct opposition to the advice of Ricardo.

60. We know that at one time the opinion was held universally, or almost universally, that the wealth of a country depended on the quantity of the precious metals which it contained; that the export of these metals was prohibited, and that legislation was directed to controlling trade in such a way as to try to secure a continual stream of gold and silver into each country. Attempts were frequently made to attract gold (while still retaining silver) by raising the legal ratio of gold relatively to silver, and in very early times the absurd device was adopted of attracting silver by enacting that the crown or 5-shilling piece should pass for 7*s.* 6*d.*, the theory being that silver would flow where its value was greatest, and that by calling the crown 7*s.* 6*d.* instead of 5 shillings a higher value was thereby given to the silver contained in it. In Appendix A to the Note will be found an extract from Gerard de Malynes's *Lex Mercatoria*, which shows what was the state of opinion on this subject in the reign of Henry VIII. In chapter xii of Lord Liverpool's Coins of the Realm will be found a full account of the measures which James I adopted for the purpose of attracting gold while also retaining silver. It is an historical fact that the ratio of 1 to 15½ (by which gold was overvalued at that time) was adopted in France in 1785 with the avowed object of attracting gold.

Nobody is now afraid that other nations will drain them of their wealth by attracting gold and silver, and the only Government which is accumulating gold (the United States) is actually alarmed at this result, and adopts special measures to throw it on the open market again.

May it not then happen that the prejudice in some minds in favor of gold as the sole monetary standard will disappear as completely as the old mercantile theory? It is based partly on a mistaken belief that gold must be the best standard because it contains much value in little weight and bulk, and partly on the alleged greater convenience of gold as coin. There is no ground for the former belief that will stand examination, and the greater convenience of gold as coin extends only to large payments, which are now generally made in paper. For the vast proportion of payments, even in the wealthiest countries, silver is more convenient than gold. If all silver coins disappeared from England the inconvenience caused by having to make all small payments with copper coin would be greater than the inconvenience of having occasionally to make large payments in silver if the gold coins disappeared.

The world has in reality had no experience of the single gold standard except since 1873, and the experience acquired since that date is decidedly against continuing the experiment.

ENGLAND WOULD GAIN FINANCIALLY, INDUSTRIALLY, AND COMMERCIALLY BY THE CHANGE.

61. The argument that the financial position of England, and especially of London, would be injuriously affected, will not stand examination.

The financial position of England depends very largely on the fact that her savings are great, and that she every year accumulates capital, which is either directly invested or lent to others. Could her posi-

tion in this respect be injured by a change which increased the demand for loans on the part of silver-standard countries, and facilitated the investment of capital in such countries?

Her financial position also depends to some extent on her insular position and security from invasion, and in these respects it would be unaffected by a change in standard.

It also depends largely on her being a great trading power, carrying on business with all parts of the world, and in this respect her position would be improved if England's standard was the standard of the world instead of being the standard of one-half of it.

Her financial position also depends on the prosperity of her industries, and these industries would gain rather than lose if any considerable divergence between the gold and silver standards could be prevented.

It is also said that bills are drawn on London and arrangements made for the settlement of financial transactions there because confidence is felt that gold can always be obtained in England if necessary.

But if silver were freely coined into standard money in all parts of the world, the advantage of being paid (in case of necessity) in gold instead of silver would disappear, unless in those very few cases in which that metal might be required for some special purpose. Such cases would be very few; and as London is the great silver market, though silver is not the standard, there is no reason why it should not continue to be a great market for gold, though gold was no longer the sole standard. On the whole there seems no reason to doubt that if the proposed system were introduced carefully and with the consent of the country the financial interests of England or London would not suffer in any respect, while in some important points they would materially benefit. The money-changer may, no doubt, make a profit, at the expense of somebody else, by a difference of standards; legitimate banking and financial business, as well as the interests of the industrial and commercial classes, can only be promoted by unity of monetary standard.

CONCLUSION.

62. For the reasons already stated I have agreed to the recommendations made in Part III, that the system of double legal tender should be established in this country, as the result of an understanding with other civilized countries. In view of the magnitude and importance of the question, of the possibility of opposition from influential classes, and of the difficulty of settling the ratio for legal tender at the present time to the satisfaction of all concerned, the change should be made gradually and after careful preparation.

63. Nobody desires that silver should continue to fall relatively to gold, and everybody, or almost everybody, would be glad to see it rise somewhat. Apart altogether from the question of gold prices, a further fall in the relative value of silver might lead to the United States or the Indian government ceasing to coin that metal, with consequences which can not be foreseen, but which must be serious. Or it might lead to the imposition of heavy import duties in India with injurious consequences both to England and to India. In England an ounce of standard silver is coined into 66*d.*, while the market price of the silver is (or was a few days ago) 42*d.* The gain on false coinage of English silver money in good silver is consequently no less than 57 per cent., and it is known that false coinage of this nature has already taken place, though there is no evidence of its having occurred, as yet, on a large

scale. It is undesirable to maintain this temptation to such fraud; it would be very dangerous to allow it to increase, and it ought, if possible, to be reduced.

A similar state of things exists in France, America, and every other country which uses either token coins of silver or silver coins which, though full legal tender, are now overvalued.

Dr. Soetbeer estimated the nominal value of the total supply of silver coins in civilized lands at £392,000,000 at the close of 1885, and it is no doubt somewhat greater at the present day. Nearly the whole of this coin is overvalued and its market value as silver is about £110,000,000 below its nominal value; in other words, at the present price of silver it would require an expenditure of £110,000,000 in the purchase of silver to increase these coins in such manner as to make their value as silver equal to their legal value. This state of things constitutes a danger not only for the countries which hold this silver but for all countries using either the gold or silver standard.

64. On every ground of expediency, therefore, it would seem desirable to adopt at once any measure which, without being attended with evil results, would tend either to raise the value of silver or to prevent a further fall. For these reasons I have no hesitation in supporting the adoption of the measures suggested in the Part II of the report, namely: (1) The repeal of the duty on silver plate; (2) the issue of 10*s.* notes based on silver, the half-sovereign being gradually withdrawn; (3) the issue of £1 notes based on silver.

As I do not hold that the fall in the value of silver relatively to gold has been caused mainly, or very greatly, by the increased supply of silver, I am not of opinion that the additional demand for silver created in this way would of itself have much permanent effect on the relative value of the two metals, but it would certainly have some effect, and the proposed measures would tend to create confidence in, or remove doubts as to, the future position of silver. This change of feeling might have a considerable effect both on certain classes of the public in this country and on other Governments. There would probably be no difficulty in combining these measures with concerted action on the part of foreign Governments tending in the same direction. The result could not fail to be a tendency to diminish the divergence in relative value or to prevent it from proceeding so far as it otherwise would, and to this extent the effect would be beneficial in every respect. A feeling of confidence in silver would be generated, and if the small notes based on silver came into general use the apprehensions of those who fear inconvenience from the more extended use of that metal in this country would disappear.

65. The further measure which would remove many difficulties and insure a final and satisfactory solution of the question is the recognition by the British Government that the system of double legal tender is one which must ultimately be adopted and towards which we should gradually move.

Such recognition would tend to remove the inducement which now exists to the hoarding and accumulation of gold rather than silver, and would bring into play influences which would have an exactly opposite effect. The metal which was likely to rise in relative value would be hoarded and accumulated rather than the metal which was likely to fall. In the meantime the action of Great Britain might remain unfettered both as to the time and manner of introducing the system of double legal tender and the conditions under which it would be adopted.

All which is submitted for Your Majesty's gracious consideration.

D. BARBOUR.

Appendix A to Mr. Barbour's note.

[Gerard de Malynes—Lex Mercatoria, pp. 308, 309.]

This daily enhancing began in the time of Henry VIII, who went about to reform the same; but afterwards, finding if he should still enhance his price of moneys likewise they would still advance theirs more and more, he began but moderately; and whereas the Angell Noble (so called) was at six shillings eight pence, he caused the same to be valued at seven shillings and four pence, by a proclamation in the eighteenth year of his reign, and within two months after at seven shillings six pence; and withal he did write unto other princes concerning the same, and commissioners came over about it, but all was in vain, whereupon he gave an absolute authority to Cardinal Wolsey by letters patent as followeth:

"Henry the Eighth, by the Grace of God King of England and of France, Defender of the Faith, Lord of Ireland, to the Most Reverend Father in God, Our Most Trusty and Most Entirely Beloved Councillor the Lord Thomas, Cardinal of York, Archbishop, Legat de Leicestre of the See Apostolic, Primate of England, and our Chancellor of the same, greeting: Forasmuch as coins of money, as well of gold as of silver, be of late days raised and enhanced both in the realm of France, as also in the Emperor's low countries and in other parts, unto higher prices than the very poiz weight and fineness and valuation of the same, and otherwise than they were accustomed to be current; by means whereof the money of this our realm is daily, and of a long season hath been, by sundry persons (as well our subjects as strangers, for their particular gain and lucre) convoyed out of this realm into the parts beyond the seas, and so is likely to continue more and more, to the great hindrance of the generality of our subjects and people, and to the no little impoverishing of our said realm, if the same be not speedily remedied and foreseen, we, after long debating of the matter with you and sundry other of our council, and after remission made unto outward princes for reformation thereof, finding finally no manner of remedy to be had at their hands, have by mature deliberation determined that our coins and moneys (as well of gold as of silver) shall be by our officer of our mint from henceforth made at such fineness, lay, standard, and value as may be equivalent, correspondent, and agreeable to the rates of the valuation enhanced and raised in outward parts as is afore specified."

Appendix B to Mr. Barbour's note.

THE FALL IN THE GOLD PRICE OF COMMODITIES SINCE 1873 COMPARED WITH THE FALL IN THE GOLD PRICE OF SILVER DURING THE SAME PERIOD.

1. In the following table the index number of the Economist for January 1, 1873, is represented by 100, and proportionate numbers are given for subsequent years. The gold price of silver for January, 1873, is also taken at 100, and the price of silver for January of each subsequent year is represented by proportionate numbers:

1	2	3	4	5	6	7
Year.	Index number.	Price of silver.	Fall or rise in index number as compared with preceding year.	Fall or rise in price of silver as compared with preceding year.	Fall or rise in index number as compared with 1873.	Fall or rise in price of silver as compared with 1873.
1873	100	100				
1874	97.7	98.1	— 2.3	—1.9	— 2.3	— 1.9
1875	94	96.1	— 3.7	—2	— 6	— 3.9
1876	91.7	92.7	— 2.3	—3.4	— 8.3	— 7.3
1877	92.5	96.1	+ 0.8	+3.4	— 7.5	— 3.9
1878	85.8	89.8	— 6.7	—6.3	—14.2	—10.2
1879	74.6	84	—11.2	—5.8	—25.4	—16
1880	85.8	87.7	+11.2	+3.7	—14.2	—12.3
1881	80.5	85.8	— 5.3	—1.9	—19.5	—14.2
1882	82.8	86.8	+ 2.3	+1	—17.2	—13.2
1883	79.8	84	— 3.0	—2.8	—20.2	—16
1884	74.6	85	— 5.2	+1	—25.4	—15
1885	70.8	83	— 3.8	—2	—29.2	—17
1886	68.6	78	— 2.2	—5	—31.4	—22
1887	70.1	77.4	+ 1.5	—0.6	—29.9	—22.6
1888	75.3	74.4	+ 5.2	—3	—24.7	—25.6

2. Taking the period 1873 to 1886, it will be seen that there was an almost continuous fall in the prices of commodities, the downward tendency being checked temporarily in only three years—1877, 1880, and 1882.

The course of the gold price of silver very closely coincides, the downward tendency having been checked in only four years—1877, 1880, 1882, and 1884.

3. It will also be seen from columns 6 and 7 that, up to January, 1879, the course of prices was steadily downwards (excepting 1877), and that the course of the price of silver was also steadily downwards, with the exception of the same year.

In both cases the maximum depression for the time was reached in 1879, and in the following year there was a marked rise both in the gold prices of commodities and the gold price of silver, this rise being entirely lost by January 1, 1884, in the case of commodities, and very nearly lost in the same year by silver.

In 1884 the index number for commodities was 74.6 as against exactly the same number in 1879, while the price of silver in 1884 was 85 as against 84 in 1879. Between January 1, 1884, and January 1, 1886, the gold prices of commodities fell, and so did the gold price of silver. Subsequently to 1886 the agreement ceases. The gold prices of commodities rose in 1887 and 1888, while the gold price of silver fell.

4. The following table is constructed on a similar plan, Mr. Sauerbeck's index numbers being substituted for those of the Economist, and the price of silver being taken as the average of the year, because Mr. Sauerbeck's prices are also the average of the year:

Year.	Index No.	Price of silver.	Fall or rise in Index No. as compared with preceding year.	Fall or rise in price of silver as compared with preceding year.	Fall or rise in Index No. as compared with 1873.	Fall or rise in price of silver as compared with 1873.
1873	100	100				
1874	91 9	98 4	—8. 1	—1. 6	— 8. 1	— 1. 6
1875	86. 5	96. 0	—5. 4	—2. 4	—13. 5	— 4. 0
1876	85. 6	89 0	— .9	—7. 0	—14. 4	—11. 0
1877	84. 6	92. 5	—1. 0	+3. 5	—15. 4	— 7. 5
1878	78. 4	88. 7	—6. 2	—3. 8	—21 6	—11. 3
1879	74 8	86. 5	—3. 6	—2. 2	—25. 2	—13. 5
1880	79. 3	88. 2	+4. 5	+1. 7	- 20 7	—11 8
1881	76. 6	87. 2	—2. 7	—1 0	—23. 4	—12. 8
1882	75 7	87. 1	— .9	— .1	—24. 3	—12. 9
1883	73. 9	85. 3	—1. 8	—1. 8	—26. 1	—14. 7
1884	68. 5	85. 4	—5. 4	+ .1	—31. 5	—14. 6
1885	64 9	82. 0	—3. 6	—3. 4	—35. 1	—18. 0
1886	62. 2	76. 5	—2. 7	—5. 5	—37. 8	—23. 5
1887	61. 3	75. 2	— .9	—1. 3	—38. 7	—24. 8

5. Mr. Sauerbeck's Index Nos. show a considerably greater fall than those of the Economist, and the agreement in details with the fall in silver is not so close up to 1886, but the general course is the same.

From 1873 to 1879 there is a continuous fall in gold prices, averaging 4.2 yearly, while the average yearly fall in the price of silver is 2.2.

In 1880 there is a rise both in the gold price of commodities and in the gold price of silver, and from 1880 to 1883 the average fall in prices of commodities is only 1.8 yearly, while the average fall in the price of silver is only .9 yearly.

After 1883 the prices of commodities fall rapidly, while it is only after 1884 that the price of silver fell rapidly.

6. There appear, from these figures, to be three well-marked periods in the case of commodities:

I. From 1873 to 1879 a steady and continuous fall, the rate of fall being markedly reduced in 1876 and 1877.

II. From 1879 to 1883 a marked rise in the beginning, followed by a continuous but not rapid fall.

III. After 1883 a heavy fall, continuing to 1887.

The following are the corresponding periods in the case of silver:

I. From 1873 to 1879 a fall, which is continuous, with the exception of one year, the rate of fall being unusually high in 1876 (the year of panic), and a portion of this fall being recovered in 1877.

II. From 1879 to 1884 a marked rise in the beginning, followed by an almost continuous but not rapid fall.

III. After 1884 a heavy fall, continuing to 1887.

7. In the following table the Index Nos. of Dr. Soetbeer are used in the same way as before:

Year.	Index No.	Price of silver.	Rise or fall in Index No. as compared with preceding year.	Rise or fall in price of silver as compared with preceding year.	Rise or fall in Index No. as compared with 1873.	Rise or fall in price of silver as compared with 1873.
1873	100	100	.....	.....	.....	.....
1874	98.5	98.4	—1.5	—1.7	— 1.5	— 1.7
1875	94.2	96.0	—4.3	—2.4	— 5.8	— 4.1
1876	92.7	89.0	—1.5	—6.9	— 7.3	—11.0
1877	92.7	92.5	0.0	+3.4	— 7.3	— 7.6
1878	87.6	88.7	—5.1	—3.8	—12.4	—11.4
1879	84.7	86.5	—2.9	—2.2	—15.3	—13.6
1880	88.4	88.2	+3.7	+2.6	—11.6	—11.0
1881	87.6	87.2	—0.8	—1.8	—12.4	—12.8
1882	88.4	87.1	+ .8	— .1	—11.6	—12.9
1883	88.4	85.3	0.0	—1.8	—11.6	—14.7
1884	82.6	85.4	—5.8	+ .1	—17.4	—14.0
1885	78.9	82.0	—3.7	—3.4	—21.1	—18.0

8. In these figures also will be found an agreement of the same kind. From 1873 to 1879 there is a marked fall in gold prices, with a cessation of fall in only one year, 1877, the year in which the price of silver rose. In 1880 there is a rise in both sets of figures, and for three years there is very little alteration in gold prices, and for four years only a slight fall in the price of silver. After 1873 gold prices fell largely, and so did the price of silver after 1884.

9. Fluctuations of the same character may be observed in the prices of British imports and exports as calculated by Mr. Giffen.

The following are the figures taken from paragraph 49 of Part I of the report:

Year.	Price of exports.	Price of imports.	Year.	Price of exports.	Price of imports.
1873	132	107	1880	.....	93
1874	.....	.....	1881	92	92
1875	114	101	1882	.....	.....
1876	105	96	1883	92	89
1877	101	99	1884	90	84
1878	.....	92	1885	87	79
1879	92	88	1886	82	74

10. In the case of exports the three periods are well marked. There is a continuous fall to 1879, and steadiness of price (so far as figures are available) from 1879 down to 1883, after which a continuous fall again sets in

In the case of imports we have a continuous fall down to 1879, with the exception of a temporary rise in 1877. In 1880 there is a considerable rise, followed by a gradual but not heavy fall down to 1883, after which year the fall again becomes heavy.

11. The same three periods can be traced in the average values of the imports and exports of the United Kingdom per head of population.

The following are the figures:

Year.	Imports per head of population.	Exports per head of population.	Year.	Imports per head of population.	Exports per head of population.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
1873	11 10 9	7 18 7	1880	11 17 7	6 8 10
1874	11 7 9	7 7 5	1881	11 7 2	6 13 11
1875	11 7 9	6 16 1	1882	11 14 0	6 16 10
1876	11 6 0	6 0 10	1883	11 19 9	6 14 8
1877	11 14 11	5 18 6	1884	10 16 11	6 9 7
1878	10 17 3	5 13 9	1885	10 4 3	5 17 3
1879	10 11 8	5 11 8	1886	9 10 7	5 15 9

12. In the case of imports there was a continuous fall from 1873 to 1879, with the exception of the one year 1877. In 1880 there was a rise, which was maintained with some fluctuations up to 1883, when a rapid fall set in.

In the case of exports there was a continuous fall down to 1879. After 1879 a rise set in, which was not altogether lost even in 1884. After 1884 a rapid fall set in.

13. The three periods can be traced, though more indistinctly, in the returns of the amount produced by each penny of the income tax per head of population.

The following are the figures:

First period.		Second period.	
Year ending April 1—		Year ending April 1—	
1874	£17. 1	1881	£17. 0
1875	17. 6	1882	17. 2
1876	17. 7	1883	17. 4
1877	17. 2	1884	17. 6
1878	17. 3	Third period.	
1879	17. 1	1885	17. 5
1880	16. 9	1886	17. 3
		1887	17. 1

It should be recollected that certain changes were made which affected the returns for 1877, and of course the amount assessed rather follows than keeps pace with the actual income.

14. It is instructive to compare the figures in this paper with the following facts regarding the fall in the gold price of silver.

Between 1872 and 1879 the fall in the price of silver was from 60$\frac{5}{16}$*d.* per ounce to 51$\frac{1}{4}$*d.* per ounce, being 1.29*d.* per ounce yearly, or 2.1 per cent. yearly, spreading the percentage of fall uniformly over the seven years.

Between 1879 and 1884 the fall in the price of silver was from 51$\frac{1}{4}$*d.* per ounce to 50$\frac{3}{8}$*d.* per ounce, being only .12*d.* per ounce yearly, or .23 per cent. yearly.

From 1884 to 1887 the fall in the price of silver was from 50$\frac{3}{8}$*d.* per ounce to 44$\frac{5}{8}$*d.* per ounce, being 2*d.* per ounce yearly, or 3.9 per cent. yearly.

Not merely, then, is there a certain amount of agreement between the yearly fluctuations of gold prices of commodities and the gold price of silver, but there is a very close agreement in the three well-marked periods into which the years since 1873 naturally fall.

15. It would appear that since 1873 there has been some law closely connecting the fall in gold prices with the fall in the gold price of silver, though its working is obscured by other influences.

But changes in the relative value of gold and silver may at one time be accompanied by changes in the level of gold prices, silver prices remaining comparatively unchanged, and at another time by changes in the level of silver prices, gold prices remaining more nearly the same.

Within the last two years average gold prices have ceased to fall, and may even have risen slightly, but silver has continued to fall, though the rate of fall in 1887 and 1888 is less than in 1885 and 1886, and there has been recently a cessation of fall and even a certain amount of rise.

NOTE BY MR. SAMUEL MONTAGU, M. P.

While agreeing with Part III of the report, I consider it necessary to indicate what, in my opinion, would be the most desirable ratio to fix and maintain by an international convention. I fear that the divergence of gold and silver has extended so far, that the reversion to the old ratio of 15½ to 1 could not take place without certain disadvantages. I prefer, therefore, that a ratio of 20 to 1 should be the one selected at an international conference.

If that course were adopted the large export trade from India would remain unaffected, and in consequence we should continue to import raw materials from India and China at moderate prices. On the other hand, the Indian government could calculate on a stable price for silver of about 4*s.* per ounce, and a steady exchange of about 1*s.* 6*d.* per rupee, thus avoiding all the dangers which a further fall of silver would produce. The probable effects of the establishment of a ratio of 20 to

1 are indicated in a paper submitted to the commission and printed in the appendix.

It is also necessary to call attention to the fact that, owing to the depreciation of silver in gold-using countries, illicit coinage in good silver has taken place. Fears are entertained that with a further fall on the gold price of silver this evil is likely to extend, especially in this country, our coinage being issued at 5*s.* 6*d.* per ounce, or at a premium if over 50 per cent. above the present market price of silver. It is therefore argued that unless a bimetallic convention be effected, our coinage should be increased in weight at an expenditure of several millions sterling.

SAMUEL MONTAGU.