

IV.—*Bimetallism.* By Sir David Barbour

[Read Tuesday, 2nd April, 1895.]

*Preliminary.*

I HAVE to apologise for bringing before such a Society as that which I now address a paper which I cannot help feeling deals inadequately with the great question of our future standard of value.

To many of you my remarks must appear elementary, and perhaps commonplace; but for what seemed to me good reasons, I have decided to address myself to those who are now turning their attention to the currency question for the first time, rather than to those who have already devoted themselves to the study of monetary problems. I have, therefore, begun at the beginning, and tried to give a brief outline of the questions at issue.

If I deal less fully with the subject than its magnitude and importance deserve, you will recognise that there is only a limited time at my disposal, and that I must not trespass too far on your good nature.

*Money Indispensable in Civilized Life.*

A monetary standard, and money of some sort, are indispensable conditions of even the most moderate degree of civilization.

The alternative is barter, and a few minutes' reflection will be sufficient to show that modern civilized life would be simply impossible under a system of barter.

Professor Jevons tells a story of a lady who gave a concert in the Society Islands on the condition that she was to receive a third part of the receipts, and who found herself at the close of the performance the proud, but hardly the happy, possessor of three pigs, twenty-three turkeys, forty-four chickens, and five thousand cocoa-nuts, besides considerable quantities of bananas, lemons, and oranges.

It was impossible to dispose of all this property at once in a place where there was no money, and the difficulties of the situation could only be met by feeding the pigs and poultry with the fruit.

The case is interesting as an example, on a very small scale, of the sort of difficulties to which the want of money would give rise. You can, if you wish, work out for yourselves the difficulties that would arise if every clerk on all the Irish railways had to bargain with the public as to the quantity of farm produce he would accept in payment of fares and freights. You can also consider what the feelings of the Directors would be under a system of barter, when they had to reckon up their traffic receipts for the previous six months, to make arrangements for the disposal of the earnings, and consider proposals for the declaration and payment of a dividend!

In short, gentlemen, it must be admitted that a monetary standard, and money of some sort, are indispensable conditions of even the most moderate degree of civilization.

### *Use of both Gold and Silver as Money.*

Various articles have been used at different times, and in different countries as money:—furs, skins, cattle, shells, beads, corn, cloth, mats, salt, nails, and soforth.

It was, however, ultimately recognized that gold and silver were the best materials for use as a medium of exchange, and they have been so used from the earliest times of which there is any historical record.

There is no doubt that in very early times gold and silver circulated simply by weight, as they still do in many parts of China.

A friend of mine, Mr. H. E. M. James, who travelled in China in 1885, writes as follows:—"For current expenditure travellers use what is called broken sycee, *i.e.*, ingots split up by a blacksmith into fragments varying from a quarter of an ounce to two ounces. Each of these must be weighed when changed,

and then not only are faults found with the fineness of the silver, but different money-changers' scales vary."

A remedy for the class of difficulties to which Mr. James alludes was found in the issue, by authority, of coins of definite and guaranteed weight and fineness. Where both gold and silver were used as the medium of exchange there remained the further difficulty of determining the relative value of the gold and silver, whether coined or uncoined. To remove this difficulty it was necessary that the rulers of the day should declare the ratio at which either gold or silver would be taken in payment of taxes or tribute, or might be used in the discharge of debt. No doubt the ratio declared by authority for the receipt of gold or silver in payment of taxes, or for their use in the discharge of debt, was what was considered to be the average market ratio of the day, but this system of using both metals as money, at a ratio declared by authority, had a remarkable effect in preventing or limiting fluctuations in the relative value of the two metals, and is the origin of what has been known in very recent times by the somewhat awkward name of bimetallism.

I call your special attention to the fact that the use of gold and silver as money, at a ratio fixed by authority, had its origin in the very earliest times, and is not a modern invention.

I will read you a passage from Professor Max Müller, which will show the opinion of this great authority on the question of the antiquity of bimetallism.

"Thousands of ancient coins have thus been tested, and the result has been to show that the ratio between gold and silver was fixed from the earliest time with the utmost accuracy.

"The ratio, as Dr. Brugsch has shown, was one to twelve-and-a-half in Egypt; it was, as proved by Dr. Brandis, one to thirteen and one-third in Babylonia, and in all the countries which adopted the Babylonian standard. There have been slight fluctuations, and there are instances of debased coinage in

ancient as well as in modern times. But for international trade and tribute, the old Babylonian standard was maintained for a very long time.

“These numismatic researches, which have been carried on with indefatigable industry by some of the most eminent scholars in Europe, may seem simply curious, but, like all historical studies, they convey some useful lessons.

“They prove that, in spite of inherent difficulties, the great political and commercial nations of the ancient world did succeed in solving the bimetallic problem, and in maintaining for centuries a fixed standard between silver and gold.”

The materials do not exist for a complete history of the use of gold and silver as money, and, in any case, the time at my disposal is insufficient to enable me to do more than merely glance at that history in our own country, and in recent times.

It must suffice to say that from the very earliest times up to the present day both gold and silver have been used as money. Sometimes there was no ratio declared between them by authority; when there was a ratio each country fixed it as it thought best, and varied it from time to time.

### *Gold and Silver Money in England.*

The old standard of England was silver, not gold, and it was not till the reign of Edward III. that a successful attempt was made to put gold coins into circulation; but from that time both gold and silver coins circulated as money in England, the ratio of exchange between them being declared from time to time by royal authority. The legal standard of the country continued to be silver, but coins of both metals were in circulation, and were frequently debased, and the ratio of exchange between them altered.

Among other fallacies which prevailed in those days it was commonly held that the wealth of a country depended on the quantity of gold and silver money which it contained.

It was quite a common practice for a ruler to deliberately overvalue the gold coins with the intention of attracting gold from foreign countries, and great surprise was experienced when it was found that the over valuation of gold necessarily involved the under valuation of silver, and that though gold was attracted by this device silver was driven out to an equal extent, and no perceptible effort was produced on the aggregate quantity of gold and silver money contained in the country. This result was due to the operation of what is known as Gresham's law, under which, of two sets of coins circulating side by side, the coins which are overvalued drive out the coins which are undervalued.

James I. of England was the greatest offender in this matter of altering the ratio between the two metals, and the great alteration in the relative value of gold and silver which took place between 1620 and 1650 was largely, if not entirely, due to the meddling with the legal ratio which took place in those years, both in England and on the Continent. Those who wish to study this portion of the question will find some remarks upon it in the great and memorable work called "A Treatise on the Coins of the Realm," of which the first Lord Liverpool was the author. You will find that the raising of the value of the gold coins, as compared with the silver coins, more than once expelled the silver coins from the currency, a conclusive proof that the gold coins were raised about what the market value of gold justified.

Other nations, of course, retaliated and raised the relative value of *their* gold coins above the English ratio, so that the gold was again withdrawn from the English currency, while silver took its place.

After 1660 there was no serious fluctuation in the relative value of the two metals, but at the time of the re-coinage of the silver coins in the reign of William III. the gold coin was overvalued by an order of the Government of that day, and, as was to be expected, the gold coins drove out the silver coins,

and the currency of England became gold, though the legal standard was silver.

### *Adoption of the Gold Standard by England.*

In the beginning of the present century, during the great war with Napoleon, the standard of England was depreciated inconvertible paper, and when, after the close of the war, a return was made to specie payments, the legal standard of England was made gold, mainly on the ground that, by the use of gold instead of silver for over 100 years, the English people had shown their preference for that metal. That the people of England at that time preferred gold coins to silver coins was probably correct, but that preference arose from their having been accustomed to use gold for over 100 years, and their use of gold in the first instance was due to accident, and not to any preference for one metal over the other. The formal adoption by England of the gold standard had no effect at the time on the relative value of the two metals because the majority of nations still adhered to the silver standard, and the system of double legal tender, or bimetallism, prevailed extensively, especially in France, where there has always been a great store of the precious metals.

This state of things lasted till the year 1873, and notwithstanding the great increase in the production of gold, due to the gold discoveries in California and Australia, the disturbance in the relative value of the two metals was comparatively slight.

### *Use of Money as a Standard for Deferred Payments.*

In the earlier portion of this paper I called attention to the difficulties that would arise if there was no medium of exchange of the nature of money. Before dealing with the nature and consequences of the monetary revolution which was begun in 1873, and which is still in progress, I wish to call your attention to another function of the monetary standard. I refer to the use of money as a standard or measure for de-

ferred payments. We are so accustomed to the use of money that we are apt to overlook the fact that in many transactions it is only used as a measure for other things. For example, when a farmer agrees to pay a rent of 100 pounds sterling for a farm, he bases his calculation of the rent he can afford to pay on the belief that, after meeting all outgoings, he will have a certain amount of surplus produce, and that he will get a certain price for that surplus. The payment of rent depends on the existence of a certain amount of surplus produce, but in making his calculation the farmer reduces the produce of his farm to a value expressed in money. If he expects to have, we will say a yearly surplus of 10 head of cattle, which will fetch a price of £20 each, he can afford to pay a rent of £200 yearly.

If, however, it should turn out that the price of cattle falls to £10 each, it will require 20 head of cattle instead of 10 to pay his rent, and the difference may mean ruin to him.

The rent is stated in pounds sterling, which are simply so much gold, but it is really paid from produce, and if the prices of produce fall, which means, in this country, that the same quantity of produce will exchange for a less quantity of gold, the farmer may be ruined.

This function of the monetary standard to which I have just referred is of the very greatest importance in the present day, and it becomes every year of still greater importance.

The great and growing need for a standard of value which is a suitable measure for deferred payments is due to the great and growing complexity of the financial relations between different countries and between different classes of the same community.

The importance of this aspect of the monetary question becomes evident when you consider the vast amount of State debts which exist in the present day; the enormous amount of capital which is lent on debentures or at a fixed rate of interest; the great debts

of municipal and other corporations ; and soforth.

In addition to debts of the character which I have just indicated, there are many payments which are fixed by custom, and which do not readily alter. Such, for example, are railway fares and customary fees.

If there is a general fall in prices, the burden of all debts fixed for any length of time, and of all payments of a nature which may be called customary, and which do not alter from day to day in accordance with the market, becomes heavier, and the increase of burden may be very serious. If prices fall 25 per cent. it is easy to show that the increase of burden, measured in commodities, is  $33\frac{1}{3}$  per cent., or one-third, and consequently every person who lies under a pecuniary obligation which he expects to discharge by the sale of the articles which he produces, must part with one-third more of his produce in order to meet his liability.

If prices fall 50 per cent., the burden becomes exactly twice as great as it was before. The question is not one about which there can be any dispute ; it is a mere matter of calculation that the lower prices fall the greater the burden of debts and of all customary payments. The increase of burden, too, falls primarily and specially on the producer, who is fined for the benefit of what I may call the sleeping partner, the mortgagee and the debenture-holder. But of course, in a complex state of society such as that which exists at the present day, you cannot injure one class of the community, and especially such an important class as that which is engaged in production, without, sooner or later injuring all other classes.

### *Money and Prices.*

In this country the price of an article is the number of pounds sterling which you can get for it, and a pound sterling, when you come to analyse it, is simply a certain weight of gold.

The price of an article is determined on the one



hand by the supply of, and demand for, the article, and on the other hand by the supply of, and demand for, the metal gold.

I do not propose, in the limited time at my disposal, to enter at any length into the question of the manner in which the quantity of standard money affects prices. The quantity theory has been attacked of late, and no doubt it requires various limitations and qualifications before it can be accepted, but I will take it for granted that an increase of coined money, other things being equal, involves some increase in prices, and that a diminution in the quantity of money, other things being equal, involves some fall in prices.

In connection with this matter you will recollect that the precious metals are not used only as money. There is a great demand for them for the purposes of ornament and luxury, and over and above their use for these purposes, there is a great demand for them as a convenient means of storing wealth. You have all heard of the great quantity of the precious metals that is hoarded in India and other Eastern countries, and I dare say many of you are aware of the great accumulation of gold by the Russian Government. All such demands have, of course, an influence on the value of gold.

Those of you who may wish to study the influence of money on prices cannot do better than examine the remarkable rise of prices that followed the discovery of America, and was caused by the influx of gold and silver from that continent. You may also, with advantage, examine the effects of a great issue of inconvertible paper money, such as occurred in the United States of America during the civil war. At any rate, I must ask you, for present purposes, to take it for granted that prices *are* affected by the quantity of the metal used as the standard of value.

### *Monetary Revolution of 1873.*

I have already shown that a general fall in prices involves a very serious increase of the burden of all

debts and customary payments, and that it must have a specially paralysing effect on industry, because the burden falls specially on the producer; the active industrial bee as distinguished from the person who has a fixed money income. I have also pointed out that up to 1873 the world was divided into (1) gold standard countries, (2) silver standard countries, and (3) countries which used both gold and silver coins at a rate declared by authority. I put aside countries having an inconvertible paper standard, as the existence of such countries has no direct bearing on the question I am discussing.

The essential feature of the system which prevailed up to 1873 was the existence of a monetary standard for the whole world which was composed of both gold and silver, and the prevention of any considerable fluctuation in the relative value of the two metals by their use as money in certain countries at a fixed ratio. The proportion of the total population of the world that used silver was greatly in excess of the proportion that used gold only; the nations that used gold only were comparatively few in number.

In his evidence before the Select Committee on the depreciation of silver, in 1876, the late Mr. Walter Bagehot said, "It used to be said, until a few years ago, that England and Portugal were the only countries where gold was the standard of value; and there were certain countries which had a double standard, but there were not very many, and all the rest were silver. Silver is the normal currency of the world. . . ."

Up to 1873 no difficulties of the slightest importance were being experienced anywhere in consequence of the trifling fluctuations which took place in the relative value of gold and silver in the market, and it came to be accepted almost as a law of nature that this remarkable stability of relative value would never disappear. Professor Cairnes, a very eminent economist, placed on record in the year 1872, his opinion that "a serious divergence in the relative value of gold

and silver" was practically out of the question. If he were alive in the present day he would be surprised to hear that silver had fallen about 55 per cent. as compared with gold, this change having occurred in less than twenty-five years.

Most of you, if not all, are probably aware of the way in which this change was brought about. When a uniform currency was being introduced into the various countries of the German Empire, advantage was taken of the opportunity to alter the standard from silver to gold.

France and the other States of the Latin Union, fearing an influx of silver into their currencies, and the former nation not being disposed to assist Germany in finding a market for her silver, closed their mints to the free coinage of silver. Other nations followed suit, imitating what appeared to be the prevailing fashion, and the United States, where the currency was inconvertible and depreciated paper, abandoned the system of double legal tender, a change which had the most serious results when a return was made to specie payments.

The result of the changes which were initiated in 1873 was that the former stability in the relative value of gold and silver totally disappeared, and the tendency was everywhere to discard silver and substitute gold. The United States of America, after a time, attempted to maintain the value of silver relatively to gold by purchasing annually a large quantity of that metal and either coining it or issuing paper money against it. This attempt to maintain the relative value of silver failed, and failed for two reasons. The first reason of its failure was that the production of silver continued to increase; the second, and I believe the main reason, was that gold prices continued to fall, or in other words gold as measured in commodities was steadily increasing in value.

Silver continued to fall and gold to rise, and in June, 1893, the Government of India took the momentous step of closing the Indian Mints to silver.

The step was taken in full belief that the United States would before long put a stop to their purchases of silver, and in point of fact the United States did so a few months later.

*General Ignorance of the Probable Results of the Monetary Change.*

The alteration of the world's standard of value from gold and silver to gold alone was, in the strictest sense of the term, a monetary revolution, and I assert, without hesitation, that at the time when this change was begun the probable consequences were generally unrecognised and unknown.

I will quote two remarks by the late Professor Jevons on this subject—the first made in 1868, the second in 1877. The first remark was as follows: "But it is another matter when we come to look at the subject in a particular point of view. Is there any means of showing that gold would rise in value 25 per cent. in consequence of the demonetization of silver. Might not the currencies of the world still absorb a large quantity of silver, so as nearly to produce the same equality of value as is artificially produced by the law of the year XI."

The law of the year XI., I may explain, was the French law under which the system of double legal tender prevailed in France.

Now you should bear in mind with reference to this remark of Professor Jevons that silver has actually fallen 55 per cent. in reference to gold or, what is the same thing, that gold has risen 121 per cent. as compared with silver, instead of a 25 per cent. rise, in the possibility of which Jevons did not believe.

The second remark to which I wish to call your attention was made in 1877, and was as follows:—"One of the most powerful arguments in favour of the double standard is founded on the idea that there will not be gold enough to meet alone the advancing needs of commerce. Prices, it is said, will fall, and the burden of debts will thus be increased by the

demonetization of silver. But there is no proof, or even probability, that such results will follow."

Here you will observe that Professor Jevons declined to admit as probable a great fall in gold prices following the demonetization of silver. As I shall show hereafter the fall in gold prices has been 40 per cent., and the rise in the value of gold measured in the great staples of commerce is no less than 66 per cent.

Professor Jevons was an economist of great eminence and he had given the most careful consideration to all questions connected with the currency. If he were mistaken in such a matter what chance was there that the great mass of politicians, and even of statesmen, could accurately foresee the probable course of events.

### *Wolowski's Prophecy.*

I have already given you the opinions of Professor Jevons—to the effect that no fall in gold prices, and no considerable fall in the value of silver relatively to gold were to be expected. I will now give you the opinion of one of the very few persons who took the opposite view, and who, as I will show hereafter, took the correct view. The opinion I shall quote is that of Wolowski. His opinion was expressed in 1868, and was given with reference to the proposal that there should be an international currency to be composed of gold coins only.

"The demonetization of silver by any great civilized nation must produce the following results:—

1. The international trade of the world will instantly show signs of decline to the special injury of countries having the largest international trade.
2. The spirit of public enterprise in railroads and other useful undertakings will be checked, and consequently the general progress of civilization will suffer.
3. The decline in prices will compel countries internationally indebted to depart more and more from the principles of free trade towards a policy of protection.
4. The nations

will be divided into groups, the one trading in gold, the other in silver, and this will render commerce between them unsafe and precarious. 5. Throughout the world a decline in prices will follow, injurious alike to owners of real property and the labouring classes, and advantageous only, and unjustly so, to the holders of bonds and similar securities. 6. One of the principal difficulties in this period of general depression will be that people will look for its causes in all possible directions. The advocates of the gold standard will offer all possible groundless and fantastic reasons of a secondary nature only, and the real cause, the demonetization of silver, will be overlooked until the perspicuity of the phenomena and dire necessity shall force thinking men to point it out."

Gentlemen, I call your special attention to this forecast made as far back as 1868, and to the fact that Wolowski was only considering the probable effects of the division of the countries of the world into two groups—the gold using group, and the silver using group; while what we have to reckon with in the present day is the progressive and continuous demonetization of silver in all countries, one after another, in the hope, and, as it seems to me the perfectly vain hope, of ultimately establishing a universal gold standard.

I will now briefly consider whether Wolowski's forecast was correct.

### *Disturbance in Financial and Commercial relations of Gold-using and Silver-using Countries.*

In the first place, has there been any disturbance of the financial and commercial relations between the gold-using and the silver-using countries?

On that point you will probably be prepared to accept my evidence to the effect that the disturbance has been of the most serious character, has been very injurious in its effects, and that at present there is no prospect of its coming to an end. I served for thirty

years in India, and I can say without hesitation that there are few persons who have had a better opportunity of estimating the nature and extent of the disturbance than I have had.

### *Fall in Gold Prices.*

The next, and by far the most important, point is whether there has been a fall in the gold prices? I believe you are all aware that there has been such a fall, though probably few of you are aware of the extent to which it has been carried.

The only method which has been devised for measuring the fall in prices is by taking the average of the prices of all the more important commodities for a series of years. Various authorities have adopted this method for testing the course of prices during the last five-and-twenty years. The commodities of which the average prices have been taken have not in all cases been the same. Some writers have made allowance for the fact that one commodity is produced in greater quantity than another. Other authorities have not taken the question of quantity into account. But whatever series of commodities has been taken, and whether quantity has been allowed for or not, the result has always been the same, namely, a great fall in gold prices.

I am accustomed to use the figures which have been compiled by Mr. Sauerbeck, figures which, I venture to say, have been prepared with the greatest care and the most scrupulous attention to accuracy.

Mr. Sauerbeck has taken the average prices of 45 important commodities, and he shows a very marked fall in prices.

Assuming the average prices of the period 1867 to 1877 to have been 100 the following figures will represent the average prices for subsequent years.

For 1879	the average was.....	83
„ 1880	„ „ „ .....	88
„ 1884	„ „ „ .....	76

For 1885	the average was.....	72
„ 1886	„ „ „ .....	69
„ 1887	„ „ „ .....	68
„ 1888	„ „ „ .....	70
„ 1889	„ „ „ .....	72
„ 1890	„ „ „ .....	72
„ 1891	„ „ „ .....	72
„ 1892	„ „ „ .....	68
„ 1893	„ „ „ .....	68
„ 1894	„ „ „ .....	63

For December, 1894, the average price was only 60·1, and for January, 1885 it was exactly 60. It is worth while considering what this fall in price from 100 to 60 really means. Mr. Sauerbeck's 45 commodities include wheat, barley, oats, maize, potatoes, rice, beef, mutton, bacon, butter, sugar, coffee, tea, iron, copper tin, lead, coals, cotton, flax, hemp, jute, wool, silk .eather, tallow, oil, seeds, indigo, and timber.

These articles, on an average, have fallen 40 per cent. in price, which means, broadly, that every man who produces them has to give 66 per cent. more of the article he produces in order to discharge a debt fixed in gold, than he would have had to give to discharge a debt of the same amount in the period from 1867 to 1877.

A great deal might be said on the question of cheaper production and foreign competition, but these causes appear to be insufficient to account for this gigantic and practically universal fall in prices, and in any case the fact remains that in twenty-five years the burden of all debts fixed in gold, as measured in commodities, has increased by 66 per cent. There are many producers for whom the cost of production, measured in labour and capital, has not decreased in any degree, and for such persons the burden of debts, as measured in commodities, has increased just as much as it has for those producers who are better able to bear an increased burden because they have been able to reduce the cost of production.

The average level of prices depends on two factors



—1st, the standard of value, and, 2nd, the commodities themselves, and I have no hesitation in saying that the best standard of value is that under which the prices of commodities remain nearest to the same average level. Those of you who wish to see the arguments on this point clearly and conclusively stated cannot do better than read what Professor Foxwell has recently said on the subject in an article in the *National Review* for January of the present year.

It is this general fall of prices which fully accounts for the feeling of depression which has prevailed for a good many years, which is in full force at the present day, and of which we cannot foresee the end.

So much for the general effects of the fall in gold prices. I will now call your attention to a particular example of the effects of this fall, and examine the case of those countries which have large foreign gold debts. I believe that every one of these countries is in great financial difficulties. The Australian Colonies, India, the South American Republics, several European States, and even the United States of America, with its wonderful resources and energetic population. All these countries have heavy gold debts, and the burden of these debts, measured in the produce they export, and which is the only means by which they can pay their debts, is 66 per cent. heavier than it would have been 25 years ago.

### *Check to Free Trade.*

We may now consider whether this great fall in prices has had the effect of causing the nations to have recourse to import duties and a policy of protection. You all know how much the United Kingdom has suffered by the protective duties of foreign nations, and every day brings us accounts of agitations on the Continent of Europe for higher and still higher protective duties. I fully admit that you would have persons crying out for protective duties whatever the standard of value was, and whatever the range of prices might be, but I also assert that the great fall in

prices has intensified the outcry for protection, and that it is one of the greatest obstacles in the present day to the progress of free trade. We boast, and with truth, that education and intelligence are increasing every year, yet in the matter of free trade the world is going backwards instead of forward. I find that in March, 1894, Mr. Gladstone wrote as follows on the subject to M. Leon Say. I take the passage as recently quoted in a debate in the House of Commons:—

“It is a matter of sincere concern to me, in retrospect, to measure the ground that has been lost within the last 25 or 30 years with respect to this great subject, both on the Continent of Europe and among the large portion of what is commonly called the Anglo-Saxon race. On this great subject my own country remains a solitary witness to what was once regarded as an established economic truth.”

Such a statement as this from Mr. Gladstone is conclusive on this point, and the falling away from sound doctrine coincides in point of time with the demonetization of silver and the great fall in gold prices. This result may be compared with Wilowski's prediction already quoted:—

“The decline in prices will compel countries internationally indebted to depart more and more from the principles of free trade towards a policy of protection.”

The recent imposition of import duties in India is distinctly traceable to the fall in gold prices, which has made it more difficult for the Government of India to meet its gold obligations.

### *Universal Gold Standard not Possible.*

There are I believe some persons who hold that the final solution of our currency difficulties will be found in the universal adoption of the gold standard. I do not agree with them. Such a solution would, if it were practicable, remove the obstacles to free commercial and financial intercourse between different countries, which are caused by the existence of different

standards of value, but its effect on prices would be to lower them still more.

You have already seen how great has been the fall in prices during the 22 years that the demonetization of silver has been in progress, and that demonetization is still very far from having been extended to the whole world. From a letter recently published by Mr. J. H. Norman, an authority who has given special attention to this subject, I find that the population of the countries which at present maintain an effective gold standard amounts to 254,000,000 of people; that the populations that still make use of the silver standard amount to 400,000,000; that the populations of the countries where the currency is over-valued silver coins amount to 266,000,000; and that the populations that use inconvertible paper amount to 245,000,000.

These figures when considered in conjunction with the great fall in gold prices that has taken place since the demonetization of silver begun in 1873, are to my mind absolutely conclusive as to the impossibility of introducing a universal gold standard.—A great deal has been said of late about the increase in the production of gold: that increase is considerable, and it has not yet reached its maximum. But it is not so great as the contraction of the yearly supply of legal tender money caused by the cessation of the purchase and coinage of silver by the United States.

On the other hand the quantity of gold used in the arts and for ornament, and hoarded or employed as a means of storing wealth, is enormous, increases every year, and will continue to grow in an increasing ratio as silver is still further demonetized. I must also remind you that the great cause of the stimulus to gold production is the low price of commodities. Gold will always be of the same price in a country with a gold standard, and when everything else falls in price gold mining becomes the most profitable of industries.

The exceptional excitement on the Stock Exchange

in connection with the new gold mines is a remarkable illustration of the truth of what I have said. Gold has appreciated as compared with commodities and the business of producing gold is the only industry that is not depressed.

### *Effect on Agriculture.*

You all know that agriculture is depressed in every country with a gold standard, and especially in this country.

That depression has been ascribed to foreign competition, and beyond question foreign competition has very seriously affected agriculture in this country. At the same time I see no reason to doubt that the increased demand for gold due to the demonetization of silver has caused the prices of agricultural produce to fall still more, just as it has lowered the price of every commodity. We cannot shut our eyes to the fact that prices have not fallen to anything like the same extent in countries which maintained the silver standard. The effects of foreign competition cannot be removed except by protection, and, as a free trader, I at any rate would consider the remedy worse than the disease. But while we must accept foreign competition with its drawbacks as well as with its advantages, there is no reason why we should aggravate the disadvantages of falling prices by a short-sighted policy in monetary matters.

Every producer must expect to find fluctuations in the prices of the articles he produces, and the evils of a moderate fall in price can be endured. It is the magnitude of the fall in prices that gives rise to serious difficulty, and when prices are low a fall of price of a certain magnitude causes a much greater increase of burden than the same amount of fall would do when prices were high. For example, let us suppose that a farmer has a rent of £120 yearly to pay, and finds the money by selling twelve head of cattle yearly at £10 each.

If prices fall one-fourth (to £7 10s. per head)

he must sell sixteen head of cattle to make up £120, and the increase of burden is four head of cattle on twelve, or one-third.

But if there is a further fall of £2 10s. per head the price of each animal is only £5 per head, and he must sell twenty-four head in order to pay his rent.

In other words the first fall of £2 10s. per head caused the farmer a loss measured by four head of cattle yearly. The second fall in price of the same amount causes him to lose not four head more but eight head more, and so on. These facts show that when prices are falling from the economic effects of competition it is of the last importance that the fall should not be aggravated by monetary changes.

### *The apparent Scarcity of Gold.*

One word more and I have done. If it be said that there is no evidence of a scarcity of money (in the sense of coin or metal), but rather of a superabundance, I would reply that an appreciation of the standard of value never shows itself except by a fall in prices, and that a depreciation never shows itself except by a rise in prices.

The accumulation of money in the Banks is only the secondary and temporary effect of an appreciation of the standard of value.

Gold accumulates in the Banks because it cannot be profitably employed, and not because there is too much money, and capital cannot be profitably employed (except in gold mining) because prices have fallen. On the subject of the gradual and practically imperceptible manner in which gold affects prices, I cannot do better than quote the words of the late Professor Jevons. Speaking of the rise of prices and depreciation of gold, he says:—

“Nothing is more insidious, slow, and imperceptible. It is insidious because we are accustomed to use the standard as invariable, and to measure the changes of other things by it, and a rise in the price

of any article, when observed, is naturally attributed to a hundred other causes than the true one. It is slow, because the total accumulations of gold in use are but little increased by the additions of any one or of several years. It is imperceptible because the slow rise of prices due to gold depreciation is disturbed by much more sudden and considerable, but temporary, fluctuations which are due to commercial causes, and are by no means a novelty.

“It is impossible, too, for any person to detect the effects of the changes of standard in his own personal affairs. Besides the interference of changes in prices, and profits and activity of trade, which affect most persons, each individual has his own fluctuations of prosperity and adversity. If his income is not variable, at least his expenditure is more or less so.

“There are a hundred items of expenditure, some increased, some diminished, and among the variety of unmeasured circumstances it is impossible for him to feel the very slow and measured charge of 20 or 30 per cent. spread over twenty or thirty years.

“If his receipts are variable and increasing, he enjoys the consciousness of prosperity, and probably attributes it complacently to his own abilities and merits.

“If his income consists of fixed dividends and rents, he receives the same pieces of money as before, and has no thought that they are not what they were. It is when he comes to pay his household bills that he can alone feel the difference. And then the difference appears to rise from the deficient harvest, from the growth of population, from the extortion of tradesmen, from anything rather than the change of a British sovereign fresh from the Mint. Value is the most invisible and impalpable of ghosts, and comes and goes unthought of, while the visible and dense matter remains as it was.”

Gentlemen, Jevons was dealing with a rise in prices of 20 or 30 per cent. spread over 25 or 30 years. To-day we have to deal with a fall in prices, a change

which has much more serious economic effects, and which is not 20 or 30 per cent., but 40 per cent. A rise of price equal to 25 per cent. injures the creditor to the extent of only 20 per cent. A fall of prices to the extent of 40 per cent. increases the burden of the debtor by 66 per cent.

### *Conclusion.*

The monetary problem of to-day, is this:— shall the world's future standard of value be gold and silver, as it has been in the past, or shall it be gold alone? The experience of the last 22 years appears to me to afford an irresistible argument in favour of using both gold and silver as the future standard of value. The question which we should consider is not whether we shall use gold alone as the world's standard of value, but what is the best method by which gold and silver can both be maintained as standard money.

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## *V.—Proceedings of the Statistical and Social Inquiry Society of Ireland.*

### FORTY-EIGHTH SESSION.

#### FIRST MEETING.

[20th November, 1894.]

The Society met in the Leinster Lecture Hall, 35 Molesworth-street. The President delivered his Inaugural Address.

The Report of the Council was read.

#### SECOND MEETING.

[26th February, 1895.]

The Society met in the Leinster Lecture Hall, 35 Molesworth-street. A paper was read by Joseph Maguire Esq., entitled, "Land Transfer and Local Registration of Title."

The Rev. T. Chamneys, W. F. Johnston, the Rev. Henry Osborne, M. A., and T. J. Smith, were elected Members of the Society.