Hence it comes, in its secondary sense, to be synonymous with wealth itself. It may seem, at first sight, that the two senses are identical; but, in truth, the two ideas of wealth and a token representing wealth for purposes of exchange, are entirely different---so much so, that the man who has the most wealth or money in its secondary sense, often perhaps, usually, has little money in its primary sense. A man who is rich enough to employ the services of many others may, perhaps, seldom see money; and so it is with countries. Probably no country is richer than England, and no money-market is more abundantly supplied than that of London ; yet of actual money in its primary sense England uses less than any other civilised country of the same size and importance, having learnt by long experience how to effect exchanges with a smaller quantity of the instrument than other countries : and even England has, probably, still much to learn in this matter. It seems likely that, in future, as wealth (money in its secondary sense) increases, less and less money in its primary sense will be required for the business of the world. We shall have to dwell further, hereafter, upon this phenomenon.

Meanwhile, it is necessary to understand clearly that what we have to do with here is not money in its secondary and unscientific sense of wealth or riches, but money in its primary and scientific sense of a measure of value and an instrument of exchange; and that when we hear of "money being scarce," "the money-market being well or ill supplied," and the like, the meaning is, very seldom indeed, that there is any scarcity or abundance of money, the instrument of exchange, and, almost always, that there is a scarcity or abundance of spare wealth, capital awaiting employment.

We now turn to investigate the attributes of money in its primary and scientific sense, viz., as a measure of value and an instrument of exchange. We have seen that human wants are, for the most part, supplied through human agency; and that civilized society is founded upon a vast ramification of mutual exchanges of objects of desire, under which every man supplies his own wants by supplying the wants of others.

It is only in the very earliest stages of society, when men's wants are of the simplest kind, that this commerce can be effected directly. As human wants multiply and become complex, the difficulty of finding an individual who desires, or is ready to supply, any particular object must become gradually insuperable. Moreover, some men, doubtless, very soon begin to produce more than it is necessary for them to surrender in exchange for the objects required to supply their own contemporary wants, —in other words, to accumulate capital. Such men would exchange their surplus produce for such objects as would either yield them a fresh return (for example, cattle, seedgrain, the exclusive right to fertile land, the services of labourers), or for such objects as would, by reason of their being objects of general desire, be readily exchangeable, at need, for other objects at least equal in value to the surrendered objects.

At first, doubtless, surplus accumulations (capital) were exchanged for (invested in) objects, which combined both these qualifications, and accordingly, cattle are among the earliest objects which are known to have been used as money, the Latin name for which (pecunia) is derived from "pecus" cattle. But it was not till the idea was developed of exchanging for objects chosen for the one quality of being readily exchangeable, at need, for objects of at least equal value, objects the surrender of which was not necessary for the supply of immediate wants, that the germ of the scientific conception of money was introduced into the human mind. This first conception of money has



developed gradually into the money of modern times. The chief distinction between primeval money and more modern money being, that, in ancient days, it rested with each individual to choose the object which should serve to him as money, though doubtless, the common interest led very early indeed to the selection in each country of one such object by common consent. It was not till more modern times that the State, acting for the public weal or convenience, assumed the responsibility of declaring that some particular object should be the money of the community, and serve as the measure of value for the settlement of all claims not expressly defined in terms of some other object, in other words, should be legal tender in payment and on account.

It becomes necessary, here, to narrow the definition of money further than we have yet done. "Money," even in the technical sense of an instrument of exchange, includes, in ordinary parlance, on the one hand, authorized currency or bank notes; on the other, subsidiary coins devised for representing amounts of small value.

In what we have now to say, both these auxiliary kinds of money must be excluded from consideration. They only represent money, and derive their value from being exchangeable, more or less certainly and completely, for money; they are not themselves money in the strict sense in which we must use the term. Neither paper money, however convertible, nor coins subsidiary to the standard money of the country, however scientifically manufactured and regulated, can fulfil the primary function of money proper, viz., to measure value; for they have no sufficient value of their own, and cannot stand alone. All that they can do is to represent money proper.

In virtue of its primary attribute as a measure of value, standard money fulfils two subsidiary functions of great importance,—viz., it serves as an instrument of exchange, and for hoarding or storing value. Paper and subsidiary coin can, more or less imperfectly, fulfil either of these secondary functions of standard money, and are, in fact, mainly designed to fulfil the first of them, viz., to represent standard money in its character as an instrument of exchange, but they cannot, in themselves, measure value.

We proceed to investigate more precisely the nature, functions and conditions of standard money.

We have seen that the value of no object is fixed, and that to speak of a fixed standard of value involves a contradiction in terms; but that there may be some objects whose place in the general scale of value oscillates within narrow limits in different places, to different men, and at different times.

To serve as a standard of value, however imperfectly, an object must have this characteristic.

It must also be durable; it could not, otherwise, possess the main characteristic; and it must be homogeneous, divisible, portable, and capable of receiving and retaining marks of identification.

The only objects, hitherto, supposed to combine all these qualities are gold and silver.

The value even of these substances has indeed varied considerably from time to time, and from place to place, relatively to some extent to each other, and much more to other objects; but hitherto such variations have been, generally, gradual, and the value of no other object is known to have varied less; no other known substance possesses, in an equal degree, all the other qualifications essential in a standard of value.

Accordingly, all civilised nations now use one or other, or both, of these metals as their standards of value.



In order to constitute a metal a legal standard of value, two conditions are absolutely necessary :---

- Ist.—Either provision must be made for its manufacture into coins under public supervision for all comers, or, at least, no obstacle must be interposed in the way of such manufacture. The imposition of any tax* whatever, and—if we are to speak with absolute precision—even the recovery of the actual cost of manufacture, interferes with the standard, giving to the coins or manufactured article a monopoly value in excess of their value as metal.
- 2ndly.-The State must declare duly manufactured coins of the metal to be legal tender in payment or on account of any claim whatever, expressed in money.

It is important to elucidate and establish the first condition, which may not be, at first sight, self-evident.

It depends upon two axioms :

- (1)—That in a sound system of corrency, the whole value of legal tender coins required for the transactions of a country at any given moment, is self-regulating, and can neither be increased nor decreased by any arbitrary device.
- (2)—That a constant process of diminution, from wear and tear and other causes, is going on, so that, if a proper supply of legal tender coin is to be maintained, a corresponding process of recruitment must be constantly taking place.

This second truth appears so far self-evident that it need not be demonstrated. But the first axiom, the free recognition of which lies at the foundation of every sound system of currency, requires some remarks. It is true not only of the standard metallic money of a country, but of its auxiliaries in paper and subsidiary coin, each in its place.

We do not mean to say that the value of either the legal tender coin or of the auxiliary currencies necessary for the transactions of a country are fixed quantities. On the contrary, the value of the currency in use in any country varies continually, with, as we have already seen, a constant tendency to reduction, as experience and skill suggest new methods of effecting exchanges with the use of smaller amounts of currency.

What we do mean is that, on the one hand, no more money can circulate, at any moment than is actually needed for the transactions of the moment, and, on the other, if there be no artificial obstacle in the way of recruiting the currency, just that amount which is actually needed for the transactions of the moment will be constantly supplied, because, if accretion ccase, the stock of money presently becomes insufficient for the transactions of the country, and so acquires an artificial value which continues till equilibrium is restored by the manufacture of more coin. Conversely, if, from the discovery of new methods of effecting exchanges, or an increase in the value of the substance of the coinage, or the diminution of transactions, or any other

* See, on this subject, the evidence given before the Royal Commission on International Coinage, 1868, and specially the opinions of Political Economists on Seignorage collected in Appendix XXII.



causes, the currency becomes redundant, it will yield a profit to melt up coin, and use it as metal antil the equilibrium is restored.

Thus, if the regulation of the currency is left to the unfettered operation of the laws of supply and demand, the State confining itself to providing facilities for the manufacture of the currency under sufficient precautions for its being what it professes to be, the currency will expand and contract just as is necessary for the transactions of the moment; and this is, as already said, as true of the auxiliary parts of a currency as of its main body.

The State should undertake, theu,---

- (1)—To manufacture into coin as much of the standard metal as is presented to it, the manufacture consisting only in its division into portions of a certain weight, and the impression upon each such portion of a certificate guaranteeing its weight and purity as it leaves the mint. The charge for this process ought not to exceed the cost thereof; and, in a perfect system, perhaps, even the cost ought to be borne by the whole community.
- (2)-Directly or indirectly, to provide freely, on demand, in exchange for standard coins, auxiliary currencies as follows :--
 - (a) for use in transactions of larger amounts than can be conveniently effected by the standard coins; paper money representing convenient amounts exchangeable, on demand, for standard coin at the place of issue;
 - (7) for use in smaller transactions than can conveniently be represented by the standard coin; subsidiary coins of some baser material, and therefore of larger size. This coin also should be exchangeable on demand, at convenient places, for standard coin.

These auxiliary currencies in no way interfere with the functions of the standard money, and are not standard money, but only represent standard money and so diminish the quantity of standard money necessary for the transactions of the community, besides facilitating transactions for which the standard money is mechanically an inconvenient instrument.

It has not, I think, been generally recognized* that a sound subsidiary currency made of base metal does not differ in character from a sound paper currency, the soundness in both cases depending upon the convertibility of the auxiliary currency, on demand, at proper centres, into standard money.

If the State interferes with the currency any further than has now been described, it can do nothing but mischief; and, if it do less than is here described, it does not do its full duty, and the currency is not thoroughly efficient. The intervention of the State at all for the supply of the currency is not absolutely necessary from a scientific point of view; but it is practically of the highest importance for the purpose of ensuring good faith in a matter in which good faith is of vital importance.

It will probably be admitted, now, that the moment the State interferes to prevent additions to the standard coinage, or places any obstacle in the way of such accretions, or imposes any tax or seignorage upon it, the metal of which it is composed ceases to be the standard of value in that State. If the conversion of another metal into legal tender money is at the same time

^{*} See, however, Chevalier "On the Probable Depreciation of Gold," Sec. VII, Chap. V.



freely allowed, this metal at once becomes the standard of value. If the coinage of no metal at all into legal tender money is allowed, the State is without any tangible standard of value, properly so called, at all; and if this condition continues long, grave evils, inconvenience, and injustice must result.

The truth of what has now been said is not affected by another fact, often strangely overlooked, but which it is very important to remember, viz., that money, especially standard money, is not used only for exchange transactions; it is very largely, perhaps on the whole more largely, used for a very different purpose, viz., for hoarding or storing value. This use of money differs entirely in principle from its use as an instrument of exchange, and is, no doubt, subject to different laws, if indeed it is regulated by any fixed laws at all. The whole value of money in use as currency at any given moment is, as has been shown, limited to and regulated by, the work which it has to perform, and not susceptible of increase or decrease. But there is nothing to limit the amount that may be hoarded, which, if the currency is in a sound condition, seems to depend upon the relative habits of communities, and, largely, perhaps, upon the confidence, or the contrary, felt in the stability of their institutions and in the freedom secured to individuals.

No doubt, much money is continually passing from the one condition to the other, ceasing to circulate, and settling into hoards, or again being reproduced from hoards and taking its place as currency. No doubt, also, it is difficult to say, in regard to large amounts of money in a country, whether they are in the one category or the other; for instance, the metallic deposit in support of a properly regulated paper currency, or the cash balances of the State or of a bank. Such stores are essential to maintain circulation, and differ entirely in character from the hoards of a miser or of private individuals, who from one motive or another, bury heaps of gold or silver. But, on the other hand, they do not circulate. They are, however, governed by the laws which regulate the total value of the currency at any time, and may therefore be regarded as currency rather than hoards.

Hoarding is often in itself a wasteful practice; the man who hides his lord's talent, or his own, in the earth, and so makes no use of it, injures himself, though he may benefit the whole community. Indeed, very serious consequences would result to mankind in general if the practice of hoarding should cease. No country is absolutely free from this practice; though, in some countries, it prevails to a much larger extent than in others. Where it does prevail largely, it indicates primarily, as we have said, distrust of the stability or permanency of the political system in force, or of the justice secured for individuals. Often, however, it is the fruit of byegone times of oppression, the habit of hoarding, once formed, being difficult of eradication ; and, on the whole, like other analogous practices, e.g., the habit of storing grain, it is useful to the human race.

The striking differences between the total values of standard money used by different nations is probably, chiefly, due to the different degrees in which they hoard. No doubt something is to be attributed to the greater advancement of some nations than others in effecting transactions with as little of the instrument of exchange (currency) as possible. But the main difference is in the hoarding habits of different nations. The value of the currency of France is probably double that of the currency of Great Britain, mainly because the French people, for reasons which might easily be suggested, hoard much more than the British people.



And the East has always been called the sink of the precious metals, not because the transactions of eastern countries require an unlimited amount of currency, but because, for reasons which are obvious enough, the people hitherto have been great hoarders. The total value of the currency required for the transactions of any community, at any given moment, is automatically limited and regulated in the East as in the West; and, indeed, as transactions in Eastern countries are comparatively few and small, the total value of currency required to effect them is, almost certainly, *much less* in proportion, to population than in most Western countries. But the demands for hoarding are large.

We are concerned in this enquiry, primarily, with the boards gathered in standard coin or money; but it is not to be forgotten that among Eastern nations large amounts of value are boarded in jewels. It is not only, or mainly, because Eastern people are fond of adorning their persons that so many of them invest their savings in jewels of silver or gold for their wives and children or themselves, but because they think this method a convenient and safe way of hoarding value. Such jewels are, especially with the poorer classes, always held with the intention that they shall be converted into money at need; and this habit of Eastern nations should not be forgotten or overlooked when any currency question affecting them is under consideration. The conversion of coin into jewels, and jewels into coin, is constantly going on, more or less.

There is a law, known as the Gresham law, which affects, inevitably, all currencies—viz., that bad money drives out good. The meaning of this is obvious; every man who parts with money parts with value, and will, in settling claims against him, part with that which does its work at the least cost to him. If a man can discharge a debt with bad money, he will not pay it with good money. From this law it follows, amongst other things, that when, in any country, the auxiliary paper money, which, as we have seen, ought in a sound currency to be exchangeable at the place of issue, on demand, for legal tender coin, ceases to be so exchangeable, becomes, in ordinary parlance, inconvertible, the legal tender coins disappear from circulation, cease to act, in that country, as instruments of exchange, and are either hoarded or exported as metal.

We have seen that to constitute any substance a standard of value, two conditions are necessary :--

(1)-Provision must be made for its free admission to the currency without taxation and without obstacles of any kind.

(2)--It must be authoritatively declared to be legal tender in payment or on account.

There is nothing to prevent these conditions applying to more than one substance at the same time. Accordingly there have been countries where they have applied to both gold and silver; where both gold and silver were simultaneously legal tender in payment or on account. This is what is called a double standard. But such a double standard never practically operates save for a very short time. However carefully and sagaciously the relative value of gold and silver may be fixed in such a system, their relation, by the fundamental conception of the very idea of value, must, as we have seen, vary. And, therefore, by the operation of the Gresham law, only one of them can be in circulation at one time. If a debtor has, as under such a system he has, the option of paying his creditor in one or other of two substances, he will of course pay in the less valuable of the two; and we therefore see under such a

R



system very quick transitions from one metal to the other or any change in the relative value of the two metals, making such transition advantageous to debtors. As an example, we may refer to the expulsion of silver by gold from France a few years ago.

A double standard never has any lengthened practical existence; the system means nothing more than an option to debtors to pay creditors in the cheaper of the two metals, as compared with their relative value fixed by the law—an option that appears, at first sight, if not unjust, at least inconvenient, as needlessly aggravating the uncertainty of contracts at a point where, above all things, the greatest possible certainty should be secured. The provision, however, thus made for the alternative use of either metal as a standard would have, if it were generally adopted, the great advantage, that it would effectually prevent any undue enhancement of the standard of value, which is most of all to be avoided.

The moment, in such a system, more onerous conditions are attached to the manufacture of ceins from the one metal than to that of coins from the other metal, both remaining legal tender, though there may still remain two standards, that which is weighted ceases to be a simple metallic standard ; and, if the manufacture of one metal into coin is restricted or forbidden altogether, the mere fact of coins of this metal already in existence continuing to be legal tender, cannot make it a standard. The metal which may not be coined ceases to be a standard, is, in fact, demonetised. The coins of such metal already in existence may continue in circulation, but their value will no longer depend upon that of the metal which they contain, but upon that of the other metal, the manufacture of which into coin is freely allowed. The coins of the demonetised metal will in fact pass as metallic notes representing value measured in the metal which alone has the privilege of replacing the constant decrement of the currency.

This important truth depends upon the converse of that general truth elaborated by Mr. Jevons in his "Theory of Political Economy," viz., that the ratio of exchange (what is called in this paper the place in the scale of values) of any object depends upon what he calls its final utility, that is to say, the place in the scale of values of the portion last produced. Let a legal tender currency be composed of any number of substances, if no addition can be made to such currency save in one particular substance, it is the place in the scale of values of this one substance that will, eventually, determine the place in that scale of the whole currency, and all the various substances composing it will become but notes representing this one substance; for no addition can be otherwise made to the currency, and no addition will be made to it at all until its monopoly value rises to such a degree as to make such addition remunerative.

In this argument, it is assumed that fraudulent additions to the existing degraded currencies will be effectually prevented. The risk of such fraudulent additions, and the fact that, though representing value domestically, and at the time, such currencies are without permanent and cosmopolitan value, and therefore worthless either for storing or for exchange with other countries, are grave and sufficient reasons against any toleration of such a condition of the currency except as a temporary expedient, as they are against an inconvertible note currency, which even such authorities as Ricardo and J. S. Mill have thought theoretically defensible under certain restrictions, the chief of them being the absolute limitation of its amount by some automatically working rule.



Further, in a country where large quantities of standard coins of a particular metal, say, for example, silver, are hoarded, it is possible that it might be some time, especially if the balance of trade were adverse, before the mere prohibition of the manufacture of this metal into fresh coin would bring up the value of the existing coin to that of the other metal, the manufacture of which into coins was freely allowed, and from which alone therefore the currency could be permanently recruited.

We have seen-

- (1) that the laws and principles which regulate the hoarding of standard coins are entirely different from those which regulate the equilibrium of a currency ;
- (2) that, by the Gresham law, the cheaper of two legal tender currencies will take possession of the whole field, ousting the dearer.

Supposing therefore that in any country silver is the standard, and that a large quattity of silver standard money is hoarded, then, if, in view to the substitution of gold for silver as the standard of value, the coinage of silver standard money be prohibited, and that of gold only allowed, the first effect must be that all the hoarded silver coins will emerge from their hiding places and become current again, their place being taken by gold either coin or bullion. It is *possible* that so long as the wants of the currency are supplied from such hoards, the influence of the condition under which alone any deficiency could be supplied from without would not be fully felt.

But with this possible reservation it seems quite clear that, unless a metal can be freely manufactured into coin, it is not a standard of value at all; and that the existing coin takes its place in the scale of values not with the metal of which it is made, but with that which alone can be freely manufactured into coin.*

We do not therefore hesitate to affirm that, however influential and experienced the authorities who speak of Germany and Holland as having now a double standard of value, and amongst others the *Economist* does so continually, they are, in this matter, certainly and altogether in error. From the moment that Germany and Holland, respectively, ceased to coin silver, silver ceased to be, in these countries, a standard of value; and the coinage of gold alone being freely authorised, the standard of value in these countries became gold, and gold only. No doubt, they must, for reasons of great, though secondary, importance, withdraw their existing silver standard coinages; but the introduction of the sole gold standard is an'accomplished fact, and it was effected, instantaneously, by the law prohibiting the coinage of silver into standard coins and allowing only that of gold. To speak of Germany and Holland now as having double standards is a mere mischievous blunder, which it is astonishing to find admitted into the reasonings of great authorities.

The case of the Latin Convention is only slightly different. Since 1874, the countries forming this Convention (France, Italy, Belgium, Switzerland, and now Greece) have agreed, yearly to limit the amount of silver which may be manufactured into coins at the mints of each member of the Convention. Whatever amounts of standard coins are wanted in excess of these limits must be manufactured in gold only.

^{*} Of course it is assumed that the conditions upon which recruitment of the coinage is allowed, are not so onerous that men will prefer to go without coin altogether. It is the conditions upon which new metal is not only *admissible* but actually in practice admitted, that determines the value of the whole existing coin.



It is clear that in its principle and ultimate effects, this somewhat extraordinary arrangement in no way differs from the more scientific and complete policy adopted in Germany and Holland of prohibiting the manufacture of silver into standard coins altogether. It is not necessary to repeat the arguments already used in respect to Germany and Holland, in order to prove beyond all doubt that, in the countries of the Latin Convention, as in Germany and Holland, gold is now the *sole* standard of value, and that the silver coins of the Convention are, in truth, nothing else but tokens or metallic notes representing gold.

A large profit attends the issue of every additional silver coin under this system, for it is accepted as equal to a far larger amount of gold than it is really worth.

Upon what principle the valuable privilege of issuing these silver notes has been shared * among the members of the Convention does not appear; it is not easy to imagine that any satisfactory principle can have been found, for undoubtedly, one member of the Convention may have in effect to pay in gold the nominal value of the silver notes issued by another member. In the scramble, Italy is, apparently, sure of the whole profit on all that she coins, and this at the expense of the other members; for Italy has an inconvertible paper currency, so that the silver which she issues will neither (no silver can) remain current in Italy, nor will it be boarded. It must therefore simply pass into the currency of the other members of the Convention.

Nor is there anything to show that the profit arising from the issue of its share of these silver tokens by each member of the Convention is secured for the State and is not left to be given away to favoured individuals, or scrambled for or appropriated by National Banks. Belgium has indeed, at least lately, secured for the State the profit upon her share of the transaction, and France has done the same to some extent if not altogether. Switzerland did not coin her share in 1875,— a very proper course if she alone were concerned; but a doubtful piece of self-denial under the circumstances of the Convention, for the tokens by which the other members profit will circulate in Switzerland. Upon the whole it seems that, like most compromises, this policy of the Latin Convention is unscientific and injurious to the members of the Convention. It is, in fact, as much a debasement of the coinage as any of the practices of old days now so unanimously condemned.

It concerns us more to observe that it in no way alters the fact that, inasmuch as the manufacture of gold into standard coin is free, while that of silver is not free, the sole standard of value in the countries of the Latin Convention is gold; and that it is as much an error to speak of silver as a standard of value in these countries as in Germany or Holland. The silver coins circulating in those countries, though legal tender in payment or on account without limit of amount, are in truth only tokens or notes representing gold and deriving their value from gold.

VI .- OBJECT OF THE EMPLOYMENT OF MONEY.

Let us now investigate the effect upon transactions for the exchange of objects of desire of the institution of money and the authoritative appointment of a standard of value.

^{*} It appears that before Greece was admitted, one-half of the limited amount to be coined was allotted to France, one-third to Italy, one-tenth to Belgium, and one-fifteenth to Switzerland. For 1876 that proportion is maintained for these States, and an apparently arbitrary amount is allotted to Greece over and above.



We must bear in mind throughout this enquiry that, although in order that money shall serve the purposes for whichit was invented, of facilitating the exchange of objects of desire and storing value, it is essential that it should itself be valuable; yet the ultimate object of those who give or receive money, or undertake, at some future time or times, to give or receive money in exchange for objects of desire, is not at all to speculate upon the rise or fall in the value of the metal or other substances of which the money is made. On the contrary a principal intention with which the instrumentality of money is interposed is to eliminate, as far as possible, the element of uncertainty which attaches to the future value of objects of desire in general.

The substance which is to serve as money is chosen, primarily, because the place which it occupies in the scale of values is expected to oscillate over long periods, and throughout the whole world, within narrow limits. The narrower these limits, the more stable the value of any substance, the better fitted, so far, it is to serve as money. It is only through the instrumentality of such a medium that any rational and practical contract can be made for the continued exchange of objects of desire during long periods, or to take effect after long periods. Contracts of this character pervade all the relations of every civilised human society, and affect the interests of almost every member of such a society. They are based upon the expectations of all parties, that the value of the standard, in terms of which they are expressed, will not materially change; that when such a contract comes to be fulfilled, the money in which it is expressed will as nearly as possible represent the same value, be exchangeable for the same objects of desire, as it did when the contract was made.

This is the very essence of the use of money as an instrument of exchange. To whatever extent this condition is not realised, the essential and proper expectation of all parties to the contract is disappointed; and any avoidable action of human authority tending to prevent this condition being realised would be utterly wrong. In this reason chiefly lies the wickedness of any tampering with the value of the coinage now universally reprobated, but, for centuries, thought legitimate.

VII .- CHANGES IN THE VALUE OF STANDARD MONEY.

But is it right for a Government under any circumstances to interfere with the standard of value once fixed and prescribe another standard? If the definition of the object of money which has been just given is right, then it seems clear that the interests of the whole community would not only justify, but require, the interference of the State to prevent the consequences of any sudden and great change in the value of the national standard of value.

Men do not wish to speculate, and do not ordinarily speculate, upon changes of the value of their standard of value; and if there should arise any temptation to do so, it would show that the standard had lost the essential quality of steadfastness. There is, here, a broad distinction between the standard of value and all other objects of desire. When men contract for the exchange of any other object of desire, they take into consideration the probability of any change in its value. Moreover, any such change affects in this way the contracts of more or less numerous individuals only, not those of the whole community. It is scarcely conceivable that it could be right for the State, under any circumstances, to interfere to protect individuals from the consequences of a change in the value of any object of desire excepting the standard of value. But the main reason for the existence of the standard measure of value is its presumed stability. Oscillations of its place in the scale of value, within narrow limits, doubtless occur continually; and the probability thereof is taken into consideration when contracts are made. But if such narrow limits are largely transgressed, then the intention of all parties to contracts are defeated, and the standard itself has ceased to be fit for its purpose.

Let us consider what would happen if there should be a sudden and considerable change in the value of the substance declared to be the standard of value in any country. First, suppose this substance suddenly and largely to rise in value; then there would follow these consequences :---

- (1) All debtors would pay, and all creditors would receive, more value than was intended by the contracts between them.
- (2) All hoarded money (capital held as money awaiting employment) would become more valuable.
- (2) Debts due by foreign countries with a different standard would be unjustly increased.

Even current transactions would not, for some time, escape the influence; eventually, indeed, fresh contracts of all kinds would be adjusted to the new value of the standard, and, provided the stability of such new value were once assured, it might, eventually, answer the purpose as well as the old value. But custom has a very strong influence upon most retail prices, and, unless a change in value of the standard is sudden and great, it may be a long time before the retail prices of many objects of desire respond to it. The prices of articles of universal consumption,—as, for instance, rice in Bengal, or wheat in Upper India, or bread in England—would, doubtless, adjust themselves quickly to the new value of the standard ; but the retail prices of articles of luxury or of a limited consumption, and the wages of labour, would follow suit much more gradually. Meanwhile, the buyers of such things would suffer, and the sellers gain.

If, conversely, the standard of value lose value, the converse phenomena result,—debtors and buyers benefit; creditors, holders of capital ready for use, and sellers of many kinds are injured, and debts due by foreign countries with a different standard are unduly diminished.

In either case, the free exchange of objects of desire, and the supply of human wants, are impeded by the introduction of an element of uncertainty just where the nearest possible approach to certainty is indispensable, and the relations of society are seriously dislocated.

Upon the whole, a considerable change in the value of the standard of value, whether it rise or whether it fall, is an unmixed evil. If it is large enough, it may necessitate the re-adjustment of many of the most intricate relations of human society, and it must, certainly, greatly disturb them.

It has been frequently asserted of late, even by very high authority, that a fall in the value of the standard of value, in a country, must stimulate its exports to countries with another standard. The theory upon which this assertion is based is, that, as it will cost so much less to provide money in the country the value of whose standard of value is fallen, the export of its produce will be profitable. But it seems to be overlooked that the prices of produce in the country whose standard of value is fallen, will certainly adjust themselves, more or less quickly, to the lower value of the standard. The prices of articles of great consumption, the staple articles of export, for instance—indeed, all wholesale prices—follow, very closely, the value of the standard ; so that, though the money of the country whose standard



of value is fallen will cost less of the money of the country whose standard is steady, yet it will buy less produce. So that nothing will be gained. So far, indeed, the effect produced is exactly the same as if the standard of value in the exporting country had remained steadfast, and that of the importing country had risen. In either case, some effect upon trade may be produced temporarily, until prices have adjusted themselves to the new values of the standards, but nothing more; and, as already said, wholesale prices follow values very closely.

The truth is that a mere change in the value of one or both of the standards of values of two interchanging countries will not, after a longer or shorter time, if confidence is felt in the stability of the new value or values, affect the result of the exchange of commodities between the two countries. It should always be remembered that a standard of value is only an instrument for facilitating exchanges of objects of desire. A change of standard cannot ultimately affect the real character of such exchanges, though the inconvenience of such a change may discourage them, and if confidence is not felt in the new standard or standards, such exchanges may become paralysed for want of certainty.

In all these remarks, a change of standard includes any unusual or considerable rise or fall in the value of the (unchanged) substance of the standard, as well as a change of the substance itself.

The truth is, we must repeat, that any sudden and considerable change in the value of the standard of value of a community is an unmitigated evil. It can add nothing to the wealth of the community in which it occurs except what it inequitably abstracts from other communities; and, though it may not directly take much from it, yet indirectly it is likely to impede that exchange of objects of desire with other countries which forms so large an element of prosperity in modern civilisation. Domestically, it causes the transfer of much wealth from one set of possessors to others who have no claim whatever to it, and disturbs all the relations of society.

For the sake, therefore, of the common wealth and of international justice, every community is bound to maintain its standard of value in a stable condition; to take precautions against any considerable change of its place in the scale of values; and, if the standard change its value suddenly and considerably, even to depose it and substitute a better standard.

It is not meant that any Government, however intelligent, would be right to meddle with the standard of value lightly or often. As has been seen, the place of no object in the scale of values can be absolutely fixed and unchangeable ; the accepted condition of a standard is that its place in the scale of values will oscillate, but within narrow but vaguely defined limits. Such variations are no ground for the interference of the Government. Nor would it, probably, be wise, or necessary as a matter of justice, for the Government to interfere, even though the value of the standard should change considerably, if the change be gradual. There is every reason for thinking that, in fact, the values of both gold and silver have thus been gradually diminishing for a very long period, so that they, now, each occupy a much lower place in the scale of values than they did a hundred, or even twentyfive, years ago. To such a gradual change in the standard of value, the relations of society adjust themselves imperceptibly without any violent disturbance ; and interference would have been unwise and unjustifiable, even though the phenomena had been understood, which they probably were not.

It is when the value of the standard of value suddenly changes, or when its change is ascertained to be imminent, that the intervention of the State is



necessary to prevent the dislocation of the relations of society, and of international relations, that must otherwise ensue.

Even then, the greatest caution is necessary lest it prove that the phenomena have been misunderstood; for loss, disrepute, and grave public inconvenience are the penalties of any mistakes. And, in the history of the past twenty-five years, we find ample evidence of the difficulty of interpreting such phenomena aright, and ample warning against hasty conclusions and premature action. Many, perhaps most, of the experts anticipated such a permanent fall in the value of gold as the result of the great discoveries of this metal in California (in 1848) and Australia (in 1851) that they prophesied disastrous economic disturbances, and were ready to counsel the abandonment of gold as a standard of value. One country (Holland) actually did depose gold and adopt silver as its standard as early as 1847, *i. e.*, even before the Californian discoveries, and Belgium followed suit in 1854.

The event has proved that the abandonment in Europe of gold for silver as the standard of value was not required for the reasons supposed; for though, doubtless, gold has fallen in value considerably since 1848,* silver was never more than $3\frac{1}{2}$ per cent. behind gold in the process, and it has not shared in the recovery of gold in value since 1372. One after another the United States of America, and all the more wealthy nations of Europe, have been led, contrary to all the foreboding advice of the Economists, to give up not gold, but silver, as a standard of value.

It has been shewn that the standard of the countries of the Latin Convention is now gold and not silver, and that this fact is not altered by the unscientific compromise under which only a limited amount of silver is coined. Silver coins in these countries in truth represent not their own real value but that of the gold standard. I confess that I find it difficult to follow M. Chevalier's argument, originated at the time when he was advocating the abandonment of gold by France, and still consistently advanced, that the silver franc is the unit of value in France. He may be right as to' the intention of the law of 1803; bat practically, under that law, silver and gold were, both, standards of value in France until the door was closed to the free manufacture of silver coin. Since then gold has been, and now is, the only standard in the countries of the Latin Convention.

The only European countries which still, nominally, use silver as their standard are Russia, Austria, and Spain; I say nominally, for, in all these countries, the actual currency is paper, which is not convertible, on demand, into the silver which it purports to represent. In such case, there is, in truth, no definite standard at all. The value of the paper depends conversely upon the quantity of it issued, though of course it cannot rise above the value of the nominal standard, if, at least, its coinage is freely allowed. Moreover in Russia, the coinage of silver is not free, but is reserved to the State, which only buys silver at its own price. Gold is the only standard of the United States, of Japan, and of Brazil. Thus, the prognostications of the Economists have all been neutralised by the fact that gold in falling in value carried silver with it, but, in receding, has left silver behind. No one seems to have foreseen this.

It does not follow, necessarily, that those who were ready to counsel the deposition of gold and the enthronement of silver as the standard of value of the wealthier European nations were wrong; for had their advice been followed,

^{*} Gold first discovered in California, 19th January 1848.



it is certain that the effect would have been very favourable to the value of silver and very unfavourable to the value of gold; but there is no reason to suppose that any advantage would have followed upon the displacement of one metal by the other; and it must be admitted that, *cæleris paribus*, gold is a more convenient instrument of exchange than silver.

VIII. -- VALUE OF THE PRECIOUS METALS.

Let us now examine what circumstances give to the precious metals that place in the scale of values which fits them for the functions of standards of value.

The conditions that fix the place of any other object in the scale of values fix also that of gold or silver. The value of gold or silver as of any other object, relatively to other objects, *i.e.*, its place in the scale of values, depends upon the degree or pressure of the demand for it up n the supply. Any cause that increases the demand for gold, for instance, or decreases the supply, will make it more valuable and raise it in the scale of values. Any cause which diminishes the demand for gold or increases its supply, will lower its place in the scale of values. It is the same with silver. Such causes, alone, ultimately determine the value of gold or silver or any other object.

It is to be observed, however, that the operation of such causes is not always direct and simple. If an object is perishable, they operate immediately in the most manifest way; as, for instance, if a great quantity of fish are captured at some place where it is impossible to cure them or to convey them to other places, the value will depend only and immediately upon the demand then and there existing for the supply then and there produced. But if an object is imperishable and easily moveable, the prospects of future demand as well as the present demand, the demand in other parts of the world as well as on the spot, and the existing supply already stored as well as the prospects of future supplies or of supplies elsewhere forthcoming, or in existence throughout the world, all combine to fix the value. The elemen's at work are the same in all cases; but their operation may be of any degree of complexity according to the nature of the object.

The nature of gold and silver is such that the elements operate with great complexity; nevertheless, no other thing ultimately fixes the values even of these substances.

We have seen further, that the demand for any object of desire must, usually at least, precede the supply, and that, in fact, it is the demand which probably plays the more important part in fixing the value of an object. If we wish, therefore, to know why an object occupies a particular place in the scale of values, it is, above all things, important to ascertain why there is a demand for it; in other words, for what uses, or to gratify what tastes, it is desired or wanted.

Now the uses of gold and silver are, first, to serve as instruments of exchange; secondly, for storing value; and, thirdly, for various domestic, artistic, and scientific purposes. The quantities required for the third purpose are very small, compared with the quantities produced, and the demand for this purpose alone would not raise the value of gold and silver high in the scale. As touching the question of the value of these metals, this third use of them may be neglected.

The effective demand for gold and silver is for the first and second purposes.



We have seen that there are natural limits to the demand for the first parpose; the quantity of gold and silver used as an instrument of exchange, at any particular moment, fixes itself automatically, and, though improved methods of effecting exchanges may reduce the value required, and a rise in the value of these metals must reduce, and a fall in the value must increase the weight required, the amount needed for this purpose is not open to any other influence.

It would not be possible to ascertain the weight of gold and silver needed for the first important purpose, especially as we have seen that it is difficult, and may sometimes be imposssible, to say of particular hoards, whether they belong to the first use or the second use, whether they are "currency" or hoards. But, considerable as may be the weights of silver and gold required for actual use as instruments of exchange, they are probably not so large as might be supposed, and, however large they may be, they are strictly *limited*. Moreover, all the evidence goes to shew that very small quantities indeed of gold and silver are required to supply the wear and tear of a currency once in efficient order, so small that the effect of the demand for this purpose in contributing to give value to the precious metals or to sustain their value may be practically neglected.

So far as the first use of these metals gives rise to an effective demand, it must be for the purpose either of supplying metallic money to countries not yet fitted out with such an instrument of exchange, or of making up (by additions of bulk) for any loss of value of the metals. Any demand on the latter account must be largely counterbalanced by (1) the improved methods of exchange, the tendency of which is always in the direction of a reduction of the bulk of the metallic currency, and (2) the occasional converse process of the contraction of the weight of such a currency upon an increase of its value.

We have still to speak of the second use of the precious metals, viz., for hoarding value. The weight and value of these metals that may be hoarded does not appear to be subject to any law, or limits; it depends upon principles so different from those which govern their use as instruments of exchange, that it is probably true, in a general way, that there is likely to be most hoarding in the country whose transactions are so undeveloped that it requires the least amount of the precious metals to serve as instruments of exchange.

Still, but for the first use of the precious metals the second use would probably have no existence. They are hoarded and stored, because it is believed that they can, at any time, be put into circulation again and exchanged for other objects of desire. If anything should happen to unfit these metals, or either of them, for the first purpose, they, or it, would be, *ipso facto*, disqualified for the second purpose also.

If it is difficult to form any idea of the weight of gold and silver serving as instruments of exchange, it is obviously impossible to estimate the weight hoarded or stored.

Moreover, very conflicting considerations present themselves to the mind which tries to forecast the future of hoarding. On the one hand, the influence of civilisation is adverse to hoarding, which is already reduced to insignificant proportions in countries where civilisation is advanced, political institutions are enlightened and secure, and the system of currency is sound. The amount of gold and silver hoarded in Great Britain is probably very small. Again, though there appear to be no natural limits to the amount of the precious metals that may be hoarded, there must be, somewhere, a point of



saturation for each country, and so for the whole world, and, with every addition made to the stock of precious metals in the world, there must be a nearer and ever nearer approach to this point of saturation.

On the other hand, the powers of the world to absorb the precious metals manifested during the last quarter of a century are large, and there are no urgent symptoms yet of their exhaustion. Immense amounts might apparently yet be absorbed, in this way, in detail, by the vast populations of India, China, and other Eastern countries.

During the 27 years ending with 1875, that is to say, since the discovery of gold in California, the value of gold and silver produced is estimated at from 867 to 958 millions sterling. The higher estimate is that reached by Mr. Hollingbery after elaborate investigation of the various sources of information. I do not think it too high ; rather the contrary ; and consider an estimate of 900 millions sterling certainly within the mark (a). Thus, speaking in round numbers, the weight of the precious metals in existence in 1848 is believed to have increased, in 27 years, by one-half. There is no reason to think that the metallic currencies of 1848 were generally so insufficient as to impede or embarrass trade.

There has, doubtless, been, since then, a great expansion of trade, owing to the development of human wants and the increase of the population of the world, amounting in some cases almost to the birth of new nations. Again, the rise of prices, or, in other words, the fall in the value of the precious metals, has, no doubt, necessitated the use of larger quantities of these substances as instruments of exchange. On the other hand, there have been, during these years, great improvements in the mechanism of exchange tending to economy in the use of the precious metals.

On the whole, it seems probable that deducting the portion of the 900 millions sterling employed in the arts, which cannot be estimated very highly, a large part of the remainder must really have finally settled down into the hoards previously existing.

That so large an accretion should not have reduced the value of the precious metals more than it has done is surprising, and shows the capacity of the world hitherto for absorbing them. But it is plain that there is no warrant for assuming that, say, 900 millions more could be absorbed in the next 27 years, without a more serious loss of the value of these substances, and consequent dislocation of all the relations of society. We cannot but be much nearer to saturation point in 1876 than we were in 1848.

(a) Estimates of production of gold and silver from 1849 to 1875, both years inclusive, 000's omitted-

	GOLD.	SILVER.	TOTAL.	GOLD‡	SILVER.§	
	£	£	- £	lbs.	lbs.	
Sir H. Hay [*] · · Mr. Griffin† · · Mr. Hollingbery ·	600,435 573,652 643,000	266,190 315,000	866,625 958,000	12,850 12,020 13,473	88,730 105,000	
In existence in 1848¶	600,000	1,200,000	1,800,000	12,572	890,000	

*Appendix 3 to Evidence before Select Committee of the House of Commons on depreciation of silver, 1873. *Appendix 6 to Evidence before Select Committee of the House of Commons on depreciation of silver, 1879. This does not profess to be complete estimato-answer 462. ‡Converted at £3-17-104 the cz. troy. \$Converted at £04. ditto, \$Econverted at 604. ditto, \$Estimate by Newmarch-History of Prices, Vol. VI, page 142.



It appears, then, that the places of the precious metals in the scale of values depend almost entirely upon their use---

(1) as instruments of exchange;

(2) for hoarding value;

and that the second of these uses, though essentially dependent upon the first probably, on the whole, contributes more to their value than the first.

Doubtless if ever the use of gold and silver or of either of them as mechanical representatives of value should be abandoned, their many useful qualities would still ensure to them a respectable place in the scale of values; but, if this place might be expected to be well above that of the commoner metals, it would also, assuredly, be far below the place which, in virtue of their special use, gold and silver now occopy.

Hitherto we have spoken of gold and silver together. They share together the fields of employment which give them value, and, till 1848, it is probable that both together did not more than suffice for the efficient fulfilment of the purposes for which specially they are required.

The value of each of these substances relatively to the other adjusts itself upon the same principles which regulate their values relatively to all other objects. Each takes its place in the scale of values according to the comparative pressure of the demand for it upon the supply.

But so long as the two occupied jointly their main field of employment, their relations were very close; whatever affected the value of the one affected also, immediately, that of the other. Accordingly, till the year 1872, the relative positions of silver and gold in the scale of values varied very little over long periods. There was, indeed a gradual divergence which becomes manifest upon an examination of the facts at distant intervals of time. But subject to this steady but gradual separation, the two rose or fell together. The great discoveries of gold in California in 1848 and in Australia in 1851 reduced the value of silver as well as that of gold, and caused only a slight change in the relative value of the two metals. It is manifest, however, that the stability of the relation between these two substances was due, not to any mysterious bond between them, but to the fact that the pressure of the demand upon the supply of the one continued to bear the same relation to that of the demand upon the supply of the other.

If anything should occur to contract the field of employment of one of the metals and to expand that of the other, their relative value must so far change; and the forces contributing to such change would have cumulative power. Not only would the expulsion of the one metal involve a reduction of the demand for it and an increase of the demand for its competitor, thus acting with double strength, but it would also throw back upon the world's store of the expelled metal the stock heretofore used both as a medium of exchange and for hoarding or storing value, and thus increase the effective supply. The result might, of course, be counteracted by the discovery of some new field for the expelled metal, or by some corresponding reduction of original supply, just as it would be aggravated by a simultaneous increase of original supply.

There is this peculiarity about the position of one of two or more objects which minister to the same wants or desires, that as soon as the supply of all the objects together exceeds the demand arising out of the field for employment common to all, the well-known principle of the selection of the fittest is prone to cause the expulsion therefrom of the least fit object. Thus supposing that, till 1848, gold and silver sufficed for the due supply to the world of



instruments of exchange and hoarding, and that, since then, they have, together, gradually become excessive, the law of natural selection will, if men do not agree to prevent it, slowly at first, and then more and more quickly, operate to the substitution everywhere of the more fit for the less fit instrument, until, if the excess supply continue and is sufficient, the less fit is ousted altogether and the more fit monopolises the whole field.

There cannot be much question which of the two metals, gold and silver, is, *prima facie* the fitter for the important purposes for which they are both employed. We have seen that for a substance to be a standard of value and medium of exchange, it must possess the following qualifications or attributes :

First and essentially stability and universality of value; and, then portability, durability, divisibility, homegeneity, fitness for coinage, etc., etc.

In every one of these characteristics gold is either equal, or more or less superior, to silver. In no one characteristic is silver superior to gold.

It would conduce greatly to the convenience of the human race if a single substance, such as gold, could be enthroned everywhere as the standard measure of value. The inconvenience of the standard of value differing in different nations, of there being no accepted common standard of value, is very great indeed. The consequence is, that there is an element of risk and uncertainty introduced into transactions between nations with different standards that may impede, and sometimes even paralyse, the exchange between them of objects of desire. This evil has not, hitherto, been seriously felt, because, till a century ago, silver was practically the only standard of value; and, since Great Britain* led the way in adopting gold as the standard of value, the relation between silver and gold has, till recently, been really stationary. But if the relation varies largely from time to time, the difficulties in the way of successful commerce between a country with a silver standard and a country with a gold standard are much aggravated. In such a case each transaction is broken up into two separate transactions-one referring to a silver standard, the other to a gold standard ; the want of one common standard for the two halves of the transactions is highly embarrassing, and may end in gross injustice. In fact, nations so circumstanced have to effect their exchanges by a system scarcely more convenient than barter.

IX .- SUPPLY OF GOLD AND SILVER.

It is now time to consider a question which has a most important practical bearing upon the whole of this investigation, viz., whether the existing supplies of gold and silver taken together are too much for the purposes of currency and hearding throughout the world; and, further, whether, if silver were rejected, gold would suffice for these purposes.

It seems practically useless to consider whether silver alone would or would not suffice; for even if it should be found (as possibly it might be found) that silver would be more likely so to suffice than gold, it is, otherwise, so much less efficient for the purpose, and the mind of civilised nations is so made up for gold that it would be waste of time to discuss the claims of silver.

^{*} Great Britain ceased to coin silver for all comers in 1799, from which date, accordingly, gold became the sole standard of value in Great Britain, such standard silver as existed passing only as tokens representing gold. But for a long time before that, silver had been so undervalued that gold had been the only standard of value. Gold was, practically, the only standard from 1717, when the proclamation fixing the value of the Guinea at 21s. was issued.



We have already quoted estimates of the stock and production of the precious metals, and must now quote them again. But before doing so, it is right to remark that such estimates are to be trusted only within very wide margins.

To ascertain the weight of gold and silver actually in the possession of the human race at any date, it would be necessary to know-

- (1) the weight of pure gold and silver won from the bowels of the whole earth since the creation;
- (2) the weight of each metal dissipated by wear and tear or abrasion ;
- (3) the weight of each metal irrecoverably lost by shipwreck and other casualities, or in forgotten hoards;
- (4) the weight used for domestic, artistic, and scientific purposes, in such way as to be irrecoverable.

We do know, within a margin of say 10 per cent., the weight of gold and silver produced in Europe (including Asiatic Russia) and America, Australia, and the European Colonies in Africa since 1848, and within a much wider margin the weight produced in the same countries since the discovery of America in 1492.

We also have some idea of the wear and tear of coins, though our knowledge on the subject amounts to little more than this, that such wear and tear is very slight; for the percentage varies according to (1) the size of the coins, (2) the amount of alloy, (3) the speed of circulation. Obviously the wear and tear of hoarded coins will be *nil*; and the more duty a coin has to do, the greater will be its wear.

Mr. Jevons calculates that a sovereign loses 00035 of its weight in a year.

Mr. Freer Herzog calculates the yearly loss-

Upon a 20-franc	piece at	· · · · · · · · · · · · · · · · · · ·	. '0002
" 10	**		00043
" б	>>	· · · · · · · · · · · · · · · · · · ·	00062

M. Bonnet says the yearly loss by wear and tear on gold coin is generally estimated at '0001. Mr. Jevons quotes experiments upon the British subsidiary silver coins made in 1833, shewing no less an annual loss than-

On half-crowns	1.		$\mathbb{T}_{2n} \setminus \mathbb{T}$	18 - A 10	1 . .		.00125
shillings		•					.00200
six-pences							.00375

Jacob estimates the loss by abrasion and casualities on both gold and silver at 00238; Tooke at 0025.

These various estimates shew how very general and inaccurate is our knowledge even upon this subject.

We have very little knowledge of the production of the precious metals in ancient times or in Asia (outside of Russia) and the interior of Africa, even to the present time, or of the weight used for domestic, artistic, and scientific purposes, except that all the phenomena go to shew that it is inconsiderable; and we know nothing about losses by sea, forgotten hoards, and the like. Altogether, it is not very surprising to find Mr. Walter Bagehot (Editor of the *Economist*) telling the Select Committee (*Question* 1391) that he does not believe' that such calculations are worth the paper they are written on, or that any one knows anything about them.



If an estimate approaching to accuracy is meant, I should very much agree with Mr. Bagehot: but I should not be disposed absolutely to reject the researches of so many authorities as giving a general idea of the stock of gold and silver won and possessed in the world at different times.

With these precautionary remarks, we may estimate the stock of the precious metals in 1848 as follows in millions sterling :---

Gold.	Silver.	Total.
600	1,200	1,800(@)
and in	millions lbs.	Troy-
12.572	890	A State of the

Since then there has been added in millions sterling-

Gold.	Silver.		Total.
600	300		900
or in	millions 1bs.	Troy-	
12.572	97.5		

In other words, the stock of gold has doubled, and that of silver has been increased by one-fourth.

But this estimate of silver is made upon the now obsolete assumption that silver is still worth, as in 1848, 60*d*. an oz. Troy: taking it at 48*d*. an oz., the value of the whole stock would be less than 1,200 millions sterling, and there is no increase of value since 1848, but rather a decrease.

Thus the total stock now may be roughly estimated in millions sterling at-

Gold.	Silver.	Total.
1,200	1,200	2,400
and in	millions lbs.	Troy-
25	500	and the set

At foot [of next page (δ)] are estimates of the annual production of the precious metals at various dates.

I am inclined myself to consider Mr. Hollingbery's estimate of the production in 1875 not much too high. Mr. Giffen estimates the gold production of America in 1875 at only £6,853,000. The New York Banker's Magazine for April 1876 (p. 797) gives it at §47,670,000 == to about £9,800,000. Probably £36,000,000 a year is a reasonable estimate of present production, viz., about £22,000,000 gold and £14,000,000 silver.

(a) The upshot of Mr. Newmarch's elaborate estimate (History of Prices, Vol. VI, p. 142) is as follows :---

And the second second		Gold, millions E	Silver.
In Europe and America		560	800
Exported to Asia .	R. P. C.	52	.378
	TOTAL	612	1,178

But these figures take no count of Asiatic produce, nor, on the other hand, of losses and wear in Asia. The estimate in the text is probably low.

80 J

This is nearly twice the production of 1847 even by Chevalier's probably exaggerated estimate, and more than seven times the average produce of 1809-29 as given by Jacob.

Thus, then, we may roughly assume that the stock of gold won and in human possession is now double what it was in 1848; and, further, that the present yearly addition to this stock is more than double the yearly addition of 1848. The stock of silver in 1848 was in value about double that of gold. Now it is probably less than equal to it.

If we go back to 1803, we shall find the stock as follows :--

In millions	sterling-	
Gold. 400	Silver. 900	Total. 1,300
In millions	lbs. Troy-	
8.383	292-5	
And the ye	arly produce,	
In millions	sterling-	
2,634	7,733	10,367
A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	A second s	and the second second second

The stock of silver and its production at that time bore a higher proportion to that of gold than it has since done; and there is good reason for thinking that, in earlier days, the proportion was higher still. Since 1848, the weight of gold produced has borne a much higher proportion to that of silver than ever before. Lately, there has been a strong reaction, and there seems much ground for expecting that large as is the production of gold compared with former times, that of silver will resume its old preponderance in weight; that it will ever again do so in value is not at present probable.

As already remarked, there is no reason to suppose that trade in 1847, was impeded by a deficient currency. Prices indicate no such condition of affairs. On the contrary, it may doubtless be assumed that of the 500 millions sterling added to the value of the precious metals won and in human possession between 1803 and 1848, a large portion was absorbed in the hoards of the world.

In Appendix V (HH H) will be found tables, which have been described in the principal note, prepared to illustrate prices. It is not easy always to reconcile, in detail, the course of prices exhibited in these tables in London and

				Gold.	isands of £s. Silver.	Total.
Humbold	1492-803			903	2,919	3,822
IIsamooru	Sand and shall be			2,634	7,733	10,367
Jacob*	1809-29			1,598	3,633	5,237
Chevalier*	States and said the manufacture	300		+10,110	8,720	18,830
Average*	1848-75			22,222	11,111	83,333
It's state the second second	1875		15111	19,500	16,100	35,600
Hay*	10 6 10 10 10 10			20,353	16,100	36,500
Giffen* Hollingber	33			25,000	18,000	43,000

Evidence before the Committee chiefly by Mr. Giffen.
† Mr. Giffen gives apparently good reasons for thinking this too much.



Calcutta. But the following general conclusions can hardly, as it seems to me, be avoided :---

- 1. Since 1850 the prices of commodities have risen largely both in Calcutta and in London; in other words, the value of both gold and silver have fallen largely.
- 2. Till 1873 the value of silver fell less than that of gold.
- 3. Since March 1873, prices of commodities both in gold and silver have fallen considerably; in other words, both metals have recovered value, gold very much more largely than silver.
- 4. The recovery of value by gold is especially marked since the beginning of the year 1876.
- 5. But even silver has, as yet, risen rather than fallen in value since last December. That is to say, silver could be exchanged even now for more of most commodities than it would have procured in December last.

As bearing upon the later phenomena, the recovery of the value of gold and silver, we know the following facts-

First as to gold.

France

Germany, the Latin Convention, Holland and Scandinavia, have all, since 1871, adopted gold as their standard of value.

Germany has coined gold in millions sterling as follow :---

In 1872 ,, 1873 to 11th	November	19 • •	•			21 28
1875 . to		1. 			•	8
December 1875 In 1876 .	••••					7 6
						70
e coined in-						
1874				Se units		•96

The gold in the Bank of *France* has increased since 1872 by $27\frac{1}{2}$ millions sterling.

The Netherlands have coined, under a law which came into operation on 1st July 1875, 4.625 millions sterling.

Denmark has imported, since 1871, 2.441 millions sterling and coined 1.478 millions sterling.

Russia has coined £11,896,000 during the same period.

About 8 millions sterling has been imported into India.

Some of these facts overlap each other. But, on the whole, it seems clear that there has been recently a demand for *gold* in excess of the annual production, and that circumstances have favoured a rise in the value of this metal.

As to silver, the known facts would generally lead to the expectation rather of a fall than of a rise in its value.

• There has been widespread demonstrisation of the metal in Europe; the production has increased; and there is a general expectation—we may almost say that there is a probability—of further increase. India and the East

一

have absorbed less than usual. The only known facts telling the other way are comparatively unimportant. The borrowing of five millions sterling in London for India must have favoured the value of silver, and the institution of a subsidiary silver coinage for the fractional paper currency in the United States must have bad the same effect. But the whole amount in the hands of the United States Government in April 1×76 for this purpose was only £2,877,000, and the entire estimated requirement is only £15,500,000. It seems likely, too, that this will prove an over estimate. The French silver token coinage does not much exceed £9,000,000; and France is the only country whose subsidiary coinage is on a proper footing, *i.e.*, legal tender without limit of amount against the issuer (the Government*).

Let us now re-state the questions immediately before us, viz. :--

- (1) Are the existing supplies of gold and silver taken together too large for the purpose of currency and hoarding throughout the world? and
- (2) Would the supply of gold alone suffice for this purpose?

The estimated nominal value of the two together is-

In 1848					1,800 millions sterling.
,, 1876					2,400 ,,
The estimated	value of	gold alone in 18	76 is .	重新 新闻 法	1,200 millions.

The advocates of the bi-metallic system represented by Mr. Ernest Seyd in England, M. Czernuschi in France, and M. Lavalleye in Belgium, argue that the two metals together are not more than enough to supply the currency of the world, and that the public interest requires that all nations should enter into a compact to use both together at a relative value to be arbitrarily fixed at 1 gold = $15\frac{1}{2}$ silver. The opposite party represented, in the forefront, by the French Economists, Chevalier, De Parieu, Bonnet, etc., argue that silver has lost its value, and that there is nothing for it but to adopt gold as the only standard of value. Before stating our own view, let us make the following observations :—

(1) The effect of any contraction or diminution of the supply of the material of money relatively to the demand for money (speaking of money only in the scientific sense as an instrument of exchange†) must be to raise the value of money relatively to other commodities in general,—in other words, to reduce prices.

(2) Vice versa, the effect of any increase or excess of the supply of money must be to reduce the value of money relatively to other commodities,—in other words, to raise prices.

(3) Inasmuch as prices in 1876 are much higher, in other words, the value of the precious metals in 1876 is much lower than they were in 1848, a £ represents in 1876 much less value than it did in 1848. It is impossible, from the nature of the case, to say exactly how much less, but it may not be far from the truth to say that the value of the 2,400 millions sterling of gold and silver in existence in 1876 does not exceed that of the 1,800 millions that

* Law of 25th May 1864, section 5.--" The new silver coins shall be received at the public treasuries without limit of amount, unless by consent they may not be employed for the payment of private debts of more than 20 france."

† It is important here, again, to draw a clear distinction between money as spoken of popularly (capital), and money the instrument of exchange. The scarcity or abundance of capital is a different thing from the scarcity or abundance of money as spoken of in the text.



was in existence in 1848. That is to say, the 2,400 millions sterling of 1876 would not now exchange for more commodities than the 1,800 millions sterling of 1848 would have done then.

(4) Thus the additions made since 1848 to the stock of the precious metals then in human possession have not only sufficed for the wants of the increased population and commerce of the world, but have caused a very considerable fall in the value of the precious metals, or, vice versa, a very considerable rise in the prices of commodities.

(5) It does not appear possible to say that any particular position in the scale of value is the best that a standard of value could possibly occupy, or indeed, that one position is better than another, that, for instance, the scale of prices of 1876 is more convenient and more equitable than that of 1848, or, vice versé. This much only may be said, that it cannot be convenient that the standard of value should occupy a very high place in the scale.

(6) What is indisputable is that any considerable or rapid change in the position of the standard in the scale of values is a serious evil; because it dislocates and disturbs all the economical relations of society. There cannot be a doubt that, in this way, the reduction of the value of gold and silver since 1848 has been an evil which has, in some instances, attained great dimensions. Also that any violent change in the existing value would be a great evil. I cannot follow M. Chevalier in his argument more than once recently put forward, that there is no reason to fear any evil consequences from a largely increased production of silver (or, I presume, by parity of reasoning, of gold). The usefulness of these substances largely depends upon their steadiness of value. Any great change in the rate of production, or any other circumstances tending to diminish this stability, would unfit them for their chief functions as standards of value.

(7) For the world to give up silver as a standard of value and use gold only as standard money, must immensely increase the value of gold, *i. e.*, of money (for gold would, by the hypothesis, be the only money); in other words, prices would, if such a measure were adopted, fall immensely; probably far below even the level of 1848. Such a violent disturbance of the value of money would dislocate all the economic relations of society, and would, even if it only restored the *status quo* of 1848, be a vast evil. The advocates of gold only for money hardly seem to have recognised this. They have partly shielded themselves under the assumption that silver may, though rejected as a standard in Europe, be yet retained in Asia. But the laws of value are as universal, as independent of climate, country, and race, as the laws of gravity. It is quite impossible that money which has lost value in Europe can retain it in Asia, and the rejection of silver in Europe must tend so to unfit it for the functions of a standard in Asia also that it cannot be assumed that it can or will be retained there.

(8) On the other hand if gold and silver were to continue to be both used as money, it seems certain that the value of both must continue to fall as it has fallen since 1848. The bi-metallists do not meet this difficulty. Doubtless, however, the evil of a falling standard of value is not so great as that of a rising standard. There seems, however, little hope, indeed, that the nations will adopt the bi-metallists' suggestion to admit silver to be legal tender as worth g_{T} times an equal weight of gold. At the same time, I believe that there is nothing really unsound in the proposal, and that, indeed, it is the only remedy for the evil.

(9) Mr. Seyd seems to be right in thinking that the recent disturbance of the relative values of gold and silver is due mainly, if not only, to the demonetisation of silver in Europe.

s 2

It appears from the foregoing considerations that the present situation is a dilemma of the utmost difficulty. On the one hand, there appear to be very strong objections to the general rejection of silver and the exclusive adoption of gold for money. The result of such a substitution must be a violent disturbance of the value of money which would be greatly increased, and the prices of all commodities greatly decreased, so that there would be a serious dislocation of all the economic relations of society.

On the other hand, even if all the nations should agree, as the bimetallists would have them do, to continue to use both gold and silver as heretofore, we should have to face the minor evil of a constant and progressive fall in the value of money.

Moreover, unfortunately, no such agreement is possible, for some of the principal nations have already taken their own course, rejecting silver and adopting gold only, and it seems hopeless to expect them to retrace their steps. The difficulty for the rest is thus indefinitely aggravated. For the money of the nations who have adopted gold is raised in value, while that of those who retain silver must apparently fall. The effect is an arbitrary and unjust increase of the value of debts due by nations in the second category to those in first category, and a decrease of the value of all debts due by nations in the first category to those in the second.

On the one hand, there is a severe pressure upon the remaining nations to follow the example of those who have already adopted gold, which pressure must become more and more irresistible as each fresh nation makes the change ; while, on the other hand, the consequences to all alike of the adoption universally of a sole gold standard must be most serious.

We shall show presently that the adoption of a gold standard does not, of necessity, involve the immediate or even early introduction of gold as an instrument of exchange. A gold standard can be substituted for silver, at once, by a simple refusal to coin any more silver as standard money, and a simultaneous undertaking to coin gold for all comers. Such a measure would be imperfect and dangerous, but it would be effectual; and there is little doubt that it is the utmost that any silver standard country can hope for, under any circumstances, at present.

Upon this plan, the amount of gold required for the countries which have still to adopt gold, and, so, the rise in the value of gold consequent upon their adoption of it, would be reduced to a minimum ; but still, it is impossible to suppose that a very serious rise in the value of gold could be avoided ; for, after all devices of this kind are exhausted, it is inconceivable that the 1,200 millions of gold now in existence can do all the work of the 1,800 millions of gold and silver of 1848 without a vast fall in prices, *i.e.*, rise in the value of gold ; the currency might wait ; but the hoarders would not wait. There would be a general impulse to substitute gold for the silver now hoarded, a tendency which is probably already operating widely and may be one considerable cause of the recent increase of the value of gold.

The answers to our two questions seem to be-

(1) The 1,200 millions stering of gold in existence with the current production might alone do duty as the morey of the world; but not without an indefinite increase in its value, in other words, an indefinite fall in prices, and consequent disturbance of all the economic relations of society.

(2) The 2,400 millions sterling of gold and silver together, with the current production, would be too much for the purpose, in the sense that their



joint use would involve a constant, though gradual, fall in the value of money, in other words a constant rise in prices.

(3) If more of the nations, acting independently, reject silver and use gold only, it seems that gold must inevitably rise in value, and silver fall in value; so much so that the continued use of silver as money by any nation at all may be most difficult, perhaps impossible.

(4) But any agreement among the nations of the world upon such a subject, however desirable, is hardly possible.

X .- FUTURE VALUES OF GOLD AND SILVEE.

It is of the first importance for the objects of this enquiry to make some forecast of the future values of gold and silver relatively, as well to each other, as to other commodities.

We have seen (1) that the value of these substances depends chiefly upon their use as standard money; (2) that, subject to a very gradual divergence and to some fluctuations, the relative value of the two metals remained, till about 1873, very steady; (3) that since 1873 there has been a serious, and, latterly, a very rapid, divergence; (4) that, as yet this divergence is caused by rise in the value of gold and not by a fall in the value of silver; (5) that this rise in the value of gold is due to the substitution of gold for silver, as the standard of value by Germany, the Latin Convention, Scandinavia and Holland; (6) that the value of the gold stock of the world has risen from 600 millions sterling in 1848 to 1,200 millions sterling in 1876, and that of the silver stock has remained at 1,200 millions sterling.

The following considerations make it probable that gold will continue to rise :---

(1) Since 1848 there has been a large growth of the population and commerce of the world.

(2) There has also been a large accession to the population using a gold standard exclusively.

(3) The pressure upon the other nations of the world to adopt a gold instead of a silver standard is very great.

(4) The amount produced, though large, is not increasing.

The probabilities seem to be all in favour for the present of an increasing demand for gold.

On the other hand, there is the probability of more and more economy in the use of money for exchange purposes, and less and less resort to hoarding, which, though useful to the community, is for individuals often a barbarous and unintelligent practice. Moreover, the yearly supply far exceeds the amount of abrasion and loss, and also, probably, far outstrips the growth of population; in time it must affect the value of the stock. The prospect, therefore, seems to be that the value of gold will, for some time, perhaps, be fully maintained, and may even largely increase (perhaps we should say, with reference to 1848, recover), and that thereafter, it will very gradually decrease. This is on the assumption that the present rate of production will be kept up. Any largely increased or decreased rate of production would modify the course of events.

The following considerations make it probable that the value of silver must fall :--

(1) Silver has been already dethroned from its position of standard of value throughout a large part of Europe and America.



(2) There are strong reasons for the expectation that the process will continue.

(3) The rate of production is increasing and is likely to increase.

There seems very little doubt that, though the value of silver is not yet fallen, yet fall it must and will.

XI .--- METHOD OF CHANGING THE STANDARD OF VALUE.

We have already considered the circumstances under which it would be right for the State to interfere in order to change the value of the standard of value, viz., if there were any sudden and considerable change in such value, or if there was an imminent prospect of such a change.

To change a silver standard for gold nothing more is necessary than (1) to stop the coinage of silver, and (2) to undertake to coin gold for all comers.

Upon this being done, the silver coin previously existing would pass not for its own proper value as silver, but as representing gold—as notes for gold—and, if absolute security could be obtained against any illicit additions thereto, there would, but for one reason, be no urgent occasion for any further measures. It is the risk of loss to the community from the operations of coiners that would make such a condition of things inadmissible as a permanent arrangement; though, with vigilant precautions, this risk might be borne for a long period. In any case, however, a currency of this kind would have the grave disadvantage of being worthless, or comparatively worthless, outside the country in which it circulates, or for hoarding, and, by the operation of the Gresham law, it would bar out the real standard coin.

The particular value to be given to the new unit, in case of a change of standard, is not of primary importance as regards *future* contracts or economical relations; but, as regards the innumerable existing and past contracts, express and implied, it is of the very first importance that its value should be fixed justly.

All contracts in money are expressed in the unit of value. If the unit of value is increased, it means an addition to the burdens of all debtors; if it is diminished, it means a reduction of the rights of all creditors.

It is a most serious responsibility for the State to take to interfere at all with the standard unit of value; and to take any measures involving a change of its value is justifiable only in a great emergency.

In modern times, changes of standard have usually come about automatically, the Government not being called upon to undertake the responsibility of fixing the rate at which the change should be made. Thus, in France, the law of the so-called double standard eventually produced a gold standard with no violent transition. Under this law, 1 part gold was declared equal to 154 parts silver, and it was left optional with debtors to pay, at this rate, in either metal. We have seen that, under such a system, only one metal is really the standard at one time, and this is the cheaper one. So long as gold was really worth more than 151 times its weight in silver, of course, every debtor, under the option given him by law, elected to pay in silver and silver was the standard. The moment gold became worth less than 151 times its weight in silver, the converse result followed and gold became the standard. Gold was substituted for silver in France with wonderful quickness, and then, as the pendulum began to swing back, and gold became more valuable than 155 times its weight of silver, France prevented the otherwise certain reaction by shutting the door to silver, withdrawing, in effect, from debtors the option of " paying their debts in silver at the rate of 1 part gold = 151 silver.



No sudden disturbance of the economical relations of society accompanied the transition from silver to gold, and the Government was saved the anxious task of saying at what rate the transition should take effect; but it is certain that the change effected was in truth a very great advantage to creditors, and a very great disadvantage to debtors.

However this may be, let us observe :

(1) The intention of the French law of 1803 was not at all to introduce a gold standard but to establish an alternative* standard.

(2) That locking at the history of the relations of gold and silver in the past, which shews a constant but very gradual divergence of the values of the two, it was highly improbable, beforehand, that the law of 1803 would have ended in the expulsion of silver money from France by gold. No one, in fact, could have foreseen the vast gold discoveries of California and Australia which led to this expulsion, and gave to France its gold standard.

(3) That still less would it be possible to construct now a law after the example of the French law of 1803, which could be expected to cause the expulsion from any country of silver money by gold.

If, therefore, the Government of any country now determines to change a silver standard for one of gold, it must accept the responsibility of deciding at what rate the change shall be effected, *i.e.*, what shall be the exact weight of pure gold in the standard unit of value which shall be substituted for the old standard unit of silver. The United States, Germany, Scandinavia, Holland have each in turn had to do this. The rates fixed by each country were as follows :---

	T Gold=	
United States	(1853) 16 Silver	61
Germany	(1871) $15\frac{1}{3}$,	
Holland	(1875) 155 ,,	
Scandinavia	. (1875) 155 ,,	

Of these rates, the only one that, at the moment of transition, fairly represented the relative value of the two metals was that adopted by Germany, and this immediately ceased to do so. The new law in Germany has benefited creditors and injured debtors enormously. The rate adopted by America overvalued gold at the time, causing thus an injury to all creditors and a gain to all debtors. The rates adopted by Holland and Scandinavia, like that of Germany, erred the other way.

It seems clear that, prima facie, the rate to be taken should, ordinarily, be the rate in existence at the moment of transition as likely to be permanently modified by the transition itself, and that a departure from such rate is justifiable only if there have been some sudden and violent change of the value of the old standard; in such case, it might be right to go back a little to some recent and more equitable value.

The same principle would apply if, instead of the substance, the weight only of the unit of value were changed. So much only must be added to the weight as will maintain but not enhance the value of the unit.

XII .- BALANCE OF TRADE.

In Appendix V (H H H) will be found some statistics illustrative of the balance of the foreign trade of India during the ten years ending with 1875-76.

^{*} Chevalier considers that the effect of the law was to introduce a silver standard; and he is doubtless right in theory; but, in practice, the standard introduced was an alternative or composite one.



The accounts of India with foreign countries during the ten years may be exhibited in the following equation compiled from these statistics :---

India, and inland Asia trading through India, in account current with the world, 1866-76 in crores of rupees.

Dr. Cr. Net disbursements from the Home 199# Excess of exports over imports Net debt incurred by the Govern-ment of India in England, in-Treasury of the Government of India (except debt incurred and repaid) £110,000,000 @1s. 10.65d. eluding Guaranteed Railway = Re. 1) 117 Capital 55 Treasure received (Net) . 78 Balance ;- being net amount due in settlement of private transactions . 69 254 254 Contraction of

This account shows that, but for the amount borrowed abroad, the net balance of the account to be remitted to India in the form of treasure during these ten years would have been only 2[±]/₅ crores a year. Including the amount borrowed in India, a considerable part of which probably came from England, the net treasure imported (78 crores) exceeded the net amount borrowed (65 crores) by only 13 crores.

Now (1) the Government of India has determined, so far as in it lies, for the present to incur no more sterling debt; (2) the cost in rupees of the disbursements from the Home Treasury will now be greatly increased, and cannot at present be estimated at better than Re. 1=1s. 8*d*.; and (3) we must expect less of our rupee debt to be in future held by foreigners.

The yearly account may now be expected to stand as follows :----

India, and inland Asia trading through India, in account with the world, in crores of rupees.

Dr.		Cr.
Net disbursements from the Home Treasury £15,000,000 @ 1s. 8d. = Re. 1	Excess of exports over imports Balance against India .	• 20 • 4*
24		24

Not only, therefore, will India not be in a position to claim any treasure, but the account may be expected to be against her by four crores of rupees a year. This adverse balance may be reduced by a diminution of the

^{*} It is probable that this amount, and, consequently the balance, is exaggerated. There is, indeed, little security for the accuracy of the values of either imports or exports returned to Custom Houses, whether in India or elsewhere. But imports are believed to be more closely valued than exports.



six crores in settlement of private transactions; but it will be increased if our rupee securities are transferred to inhabitants of India. Whatever the actual balance may be, it can be liquidated only by an increase of the excess of exports over imports, which increase must be got either by increasing exports, including the precious metals, or decreasing imports, or partly by one process and partly by the other. The prospect is not cheerful.

Unless the Secretary of State borrows again, there is, clearly, at present no room for treasure to come to India in settlement of the accounts of India with the world. If silver is wanted for the recruitment of the coinage, or if silver or gold are required for hoarding or for ornaments, then they must be paid for by a still further increase of the excess of the exports over the imports of other commodities.

But India is well supplied with the precious metals, and might probably indeed disgorge some without great suffering.

The net imports in the twenty-six years from May 1850 to April 1876 were as follows :---

Gold	Crores of 94.60 • • • 176.08	0
	Тотад . 270.68	8

The net coinage of silver during the same period was 163 crores. Making all possible allowances for the amount of coin exported to inland Asia, lost and melted, I cannot doubt that India is, at least, amply supplied with coin.

I offer no remarks upon the character of our trade, except to say that I am afraid that not much comfort would be found in examining the prospects of our two chief exports-viz., opium and cotton.

* It is assumed, in this equation, that the fall in the gold price of a rupee to 1s. 8d. is wholly due to the appreciation of gold; to whatever extent it is due to the depreciation of silver, the excess value of exports would be increased and the balance against India decreased without any increase of the *quantity* of the net exports.



belonging

Native

to

or set in operaafficient nt were "he curf these re

of

received

States

nd adır terriwhich r now k,

250

MINUTE BY THE HONOURABLE STR WILLIAM MUIR, DATED 6TH SEPTEMBER 1876.

The argument from the existence of native currencies has, by desire of His Excellency the Governor General, been omitted from this Resolution.* It appears to me of some importance as bearing materially on the suggestions of the Chamber of Commerce. I propose therefore to notice it in the present paper for the information of my colleagues, and for eventual record with the Resolution.

2. It would, in my opinion, have been advisable to remind the Chamber that the British Government is far from having the entire command of the currency over the whole of India. There are no fewer than sixty mints

* Native mints having ultimated right of coinage.

Hyderabad.	Chotta Oodepore.	Marwar (5 mints).	CONTRACTOR OF CONTRACTOR OF CONTRACTOR
Cochin.	Loonawara.	Jeysulmere.	
Poondoocotta.	Soonth.	Bikaneer.	
Mysore. (?)	Radhunpore.	Kerowlee.	
Puttiala.	Cambay.	Jeypore.	
Nabha.	Indore.	Ulwur.	
Jheend.	Bhopal.	Kishengurh.	
Muleyr Kotla.	Rutlam.	Dholepore.	
Cashmere.	Jowra.	Tonk.	
Kuteh.	Syllana.	Kotah.	
Baroda.	Gwalior (6 mints).	Jhallawar (2 mints).	
Joonaghur.	Meywar (5 mints).	Bhurtpore.	
Baroda.	Gwalior (6 mints).	Jhallawar (2 mints).	inducement
Joonaghur.	Meywar (5 mints).	Bhurtpore.	offered. T
Nowanugger.	Pertabghur.	Boondie.	rencies of
Porebunder	Banswara.	Mandalay.	mints au
Barrea.	Doondgurpore.	Nepal.	course r

in all transactions in their respective territories; and, even in some parts of our own territories, contracts are very generally expressed in these currencies, and they circulate by preference, in partial displacement of the British rupee.

3. Again, a large portion of the staples of our inland and export trade is purchased in independent territory, and the British rupee at present is freely used in such purchases. Now it is plain that if an artificial value were given (as is desired by the Chamber of Commerce) to our rupee, and it became by any such means scarce, over-valued, or unpopular, it would be displaced in all transactions in native territory by the native currencies, which might even (though not of course legal-tender) come still farther into popular use in our own districts. Such a measure would certainly stimulate coinage in the native mints, and bring their money into more active competition with our own. And thus, instead of securing the full effect anticipated by the Chamber in raising the value of our rupee, it might to a very large extent only benefit Native States by placing a premium on their currencies.

4. Our answer to the proposal of the Chamber for stopping the coinage of silver is, I consider, quite complete in itself. Still I think it would have been proper to have added this consideration also. Indeed it appears to me to be a leading consideration which should be borne in mind in any kind of proposal affecting the standard of value, that we have to deal not only with

our own districts, but indirectly also with vast tracts, and with great populations of varying habits and prejudices, over which in monetary matters we have no legal control, but which are closely associated with us by the use of our currency, and we to some extent with them by the use of theirs. The introduction of an unpopular coinage might thus produce competition and results, the effect of which it is impossible to foresee.

XXVIII.

RESOLUTION BY THE GOVERNMENT OF INDIA IN THE FINANCE AND COMMERCE DEPARTMENT, --- NO. 3044, DATED SIMLA, THE 22ND SEPTEMBER 1876.

Read again-

Resolution No. 1967, dated 31st July 1876.

Read-

A letter, dated 17th July 1876, from the Secretary to the Bengal Chamber of Commerce, transmitting, for the consideration of His Excellency the Governor General in Council, the following two Resolutions adopted at a Special General Meeting of the Chamber held on Saturday, the 15th July :---

RESOLUTIONS.

- 1st.—" That the continued depreciation" in the value of silver is a question most seriously affecting the political and financial interests of the country; and that, in view to its very great importance, the Committee be requested to address the Government, in order to obtain such information as they may be able to give, in regard to the policy which they propose to pursue under the circumstances.
- 2nd.—That the Chamber approves of the suggestion of the Committee, that it is expedient, in view of any ultimate measures that the Government may adopt, that Clause 19 of Act XXIII of 1870, making it obligatory on the Mints in India to receive all silver tendered for coinage, and also Section 11, Clause (δ) of the Act III of 1871, making it obligatory on the Currency Department to issue notes against silver bullion sent in, be temporarily suspended, at the discretion of Government; and that, during such suspension or till further notice, it be not lawful to import coined rupees from any foreign port."

Read-

- A further letter from the Secretary to the said Chamber, dated 22nd July, forwarding copy of the proceedings of the Chamber at the Special General Meeting aforesaid.
- In this letter, the Committee of the Chamber, while recognising the difficulty of the position of the Government of India, remarks that "the uncertainty that has hitherto shrouded the action of Government has been attended with serious consequences to merchants and bankers, and will so continue to attend their transactions so long as they are kept in ignorance of the course of action the Government propose to take." The Committee therefore "expresses a hope that His Excellency the Viceroy will, in the interests of commerce and of the country generally, accede the prayer of the 1st Resolution of the Meeting, and make public the intentions of the Government."
- As to the second Resolution, the Committee point out that its object is "not to prohibit coinage altogether; for that would be likely to bring about a collapse of credit; but to place all coinage in the hands of

SL

the Government to be exercised at their discretion." "It appears to the Committee suicidal" for the Secretary of State to allow the competition of bar silver with the rupees which he has to offer to those requiring money in India, and that to suspend the free conversion of silver bullion into legal-tender coin is "not only a wise and reasonable, but a necessary, precaution of the Government of India to take for the preservation of their own currency, and to support the credit of their own loans, as well as to prevent the country from being swamped by silver sent in by foreign nations."

- The Committee argue that the fact that the Government of India is compelled "to put their Mint stamp to all silver" sent to India "has given an artificial and fictitious value to silver, which would cease as soon as the law is suspended. Bar silver would then, gradually, fall to its own intrinsic value; and the extent to which it is depreciated would be soon gauged; whereas now, it is impossible to say how much its value is appreciated by our present 'open coinage system.'"
- "When all Europe is closing its door against the import of silver with the avowed object of having as little of the metal as possible, should the depreciation be found permanent, it seems most impolitic," the Committee think, "to keep ours wide open for the reception of an unlimited quantity costing the country, through our coinage laws far more than its real intrinsic value." The Committee "can see no valid reason against" the immediate adoption by the Government of the second Resolution of the Meeting, and consider that "the objections brought against it have been based either on a misconception of its real scope, or on abstract-principles (ignored by other States); whereas the position of affairs is altogether exceptional, and ordinary rules do not apply." The Committee represent that "the measures recommended in the Resolution are not more stringent than, (in fact scarcely so stringent as), the first financiers in Europe have found it necessary to adopt."
- Lastly, the Committee point out that "there was a third proposition put before the Meeting, recommending the adoption of a gold standard, which, in deference to the feeling aparent among members present, was temporarily withdrawn;" and they refer the Government to the debate at the Meeting upon this proposal.

Read -

- A letter, dated 1st August 1876, received in the Legislative Department from the Secretary, Calcutta Trades' Association, forwarding a Memorial from the Master, Wardens, and Committee of the Association, to His Excellency the Viceroy and Governor General of India in Council.
- In this document the memorialists represent that they have, for many months past, been suffering great loss from the low rate of exchange, which bids fair to paralyse trade. The memorialists join earnestly with the Bengal Chamber of Commerce in urging on the Government the importance of declaring the policy it intends to pursue for the remedy of this evil, and pray that the policy of a temporary suspension of the compulsory coinage of silver may receive the early consideration of Government.



The memorialists further express great satisfaction at the desire manifested by the Government to encourage local manufactures, and suggest a relaxation of the Rules against the purchase of imported stores for the Government, in India.

Read-

The Report by the Select Committee of the Honse of Commons on Depreciation of Silver with the Proceedings of the Committee ordered by the House of Commons to be printed on the 5th July 1876.

OBSERVATIONS.—The Government of India has been for many months past, anxiously engaged in investigating the causes of the present depression of silver relatively to gold, and its effects upon the financial, commercial, and social interests of this Empire.

2. For 40 years before 1873 the price of silver in London was never less than 59*d*., and for 22 years never less than 60*d*., per ounce. From 1872 to 1875 the price fell to nearly 56*d*. Since then it has 'fallen with alarming rapidity; the price of silver having been, at one time quoted at 46*d*. per ounce. There has, indeed, been a subsequent reaction; but although the price of silver lately rose to 14d., it has again declined; nor can any term be, as yet, predicted to the continued oscillation, in the relative value of the precious metals.

3. A fall so sudden, and so prolonged, in the price of the metal forming the legal tender of this Empire could not fail to affect injuriously its monetary transactions with England. The Government of India has to pay, in London, annually, in gold, about fifteen millions sterling. The greater part of this yearly charge is unavoidable, and permanent. The interest, for instance, on the sterling debt of India, and on the capital of the Guaranteed Railway and . Irrigation Companies (amounting altogether to about 7 millions sterling); the pensions and annuities to retired officers of the Government, both civil and military, and their families (about 23 millions sterling) ; that portion of the military expenditure which consists of pay and allowances; and most of the disbursements from the Home Treasury ; - are all fixed by contract or honourable obligation, and cannot be reduced at discretion. Any divergence of the normal relative values of gold and silver must therefore have a most important bearing on the finances of the Indian Empire; and should such divergence be prolonged for any considerable length of time, it would be incumbent on the Government either to raise its Revenue, or to reduce its Expenditure, or to resort to both these expedients, in order to restore financial equilibrium.

4. In common with the Government, its chief civil and military officers, who, being of British birth, are under the necessity of remitting some considerable part of their carnings to their native land, must suffer heavily, their official incomes being fixed in silver, for a given quantity of which they will get a less quantity of gold. Moreover, all persons of the same nationality, who have placed their savings in the securities of the Government of India, or have invested capital in local industries, lie under a similar obligation to transmit a large portion of their profits to Great Britain, and are exposed to the same substantial loss. The Government cannot be indifferent to the interests of these classes. Nor are theirs the only interests affected : the violent fluctuation in the rate of exchange has had a baneful and disturbing



effect upon commerce; while the fall in silver, as compared with gold, has seriously checked and depressed the import trade. It is true that whenever an equilibrium may be reached, the exigencies of commerce will adapt themselves to any new ratio of value between the two metals; but it may be long before a stable adjustment of relative value is again attained, and meanwhile the mercantile world must suffer.

5. Such being the magnitude of the evil, and such the extent and variety of the interests involved, the Bengal Chamber of Commerce and the Trades' Association of Calcutta were, without doubt, fully warranted in addressing the Governor General in Council on the subject, and in urging the adoption of measures which, in their opinion, are calculated to remove, or alleviate, the misfortune. The Governor General in Council deems it due to these Associations, and to the public at large, that, after careful consideration of the proposals thus put forward, the Government should make known the reasons which have convinced it that none of them can at the present moment be adopted without inflicting on the country greater evils than those which they are designed to remedy.

6. The present disturbance in the equilibrium of the precious metals must be due to one of the following causes-

(1) the value of gold being unchanged, the value of silver is fallen; or (2) the value of the silver being unchanged, the value of gold is

- risen;
- or (3) the value of gold is risen and value of silver is fallen;
- or (4) the value of both metals is risen; but the value of gold is risen more than that of silver;

or (5) the value of both metals is fallen; but the value of silver is fallen more than that of gold.

The character of the remedies indicated if the disturbance is found to be due to a rise in the value of gold, will, obviously, differ from what would be suitable in the case of a fall in the value of silver; and to enable the Government to choose the right course among those open to its adoption, it is essential that it should ascertain which of these five possible causes of the disorder is the true cause. Should this be impossible, the Government must either defer action, or, if action cannot be deferred, take that course which, according to its best judgment, will do the least harm to the whole body politic, and produce the least injustice.

7. Now, the proposals of the Bengal Chamber of Commerce and the Calcutta Trades' Association, as well as nearly all the suggestions which have been made in the public journals on this subject, start from the assumption that, of the five possible causes of the present disorder, either the first is certainly the true cause, viz., that the value of silver has fallen, the value of gold remaining unaltered; or that, in any case, the disorder is directly attributable to the altered value of silver, irrespective of any change that may have simultaneously occurred in the value of gold.

8. Accordingly, the Chamber invite the Government to take a measure calculated to enhance indefinitely the value of the rupee, by suspending the long-established legal right of all comers to have silver bullion manufactured, upon uniform conditions, under State supervision, into legal-tender coin, and temporarily substituting a system of coinage at the discretion of the State. It is obvious that the effect of such a measure must eventually be a fall in prices; which, as prices have not hitherto risen, would be an unjustifiable interference with private interests.

SL

9. Silver is, at present, as it has long been, the legal standard of value in India. The first condition necessary for constituting and maintaining any metal a standard of value, is what the Committee designate, with some apparent disapproval, as "the open coinage system." If restriction be put in any country, upon the coinage of a metal, the value of the metal ceases, *if so facto*, to be the standard of value in that country. Thus, if the Government of India, were to adopt the suggestion of the Chamber, silver would no longer be the standard of value in India, but another standard would be substituted, vis., the monopoly value of the existing stock of rupees, tempered by any additions made to it either by the Government, or in an illicit manner. If no such additions were made, the value of the rupee would gradually, but surely, rise; just as the value of any commodity in general use, must rise of its supply be cut off.

10. Under such conditions there can be no doubt that the mint stamp of the Government would give " an artificial " (though not a " fictitious ") value to every disc of silver on which it was impressed, just as it does in the case of any token or subsidiary coin, or as the signature of the representative of Government does to a currency note. But the Government of India is unable to agree with the Chamber that, so long as silver is freely coined, on uniform conditions, for all comers, the mint-stamp gives any artificial or fictitious value to the pieces which are thus converted into rupees; except in so far as the cost of manufacture, including the duty of seignorage, causes their value to differ from that of an equal weight of standard silver. The stamp of the mint certifies to the weight and purity of the silver contained in each disc on which it is impressed, and so saves the labour and cost of weighing and assaying the coin each time it changes hands; but, except by adding to it the cost of the process of coinage, including the duty of seigniorage, it has no effect whatever upon the value of the disc, any more than have the shroffs' marks upon coins, still common in some parts of India.

11. It is essential to a sound system of currency that it be automatic. No man, or body of men, can ascertain whether, at any particular moment, the interests of the community, as a whole, require an increase or diminution of the currency; still less, how much increase or how much decrease is, at any moment, exactly needed. No Government which aspires to keep its currency in a sound condition, would be justified in attempting that impossible task; or in leaving the community, even for a short interval, without a fixed metallic standard of value. Under an "open coinage system," these things regulate themselves without official interference.

12. The Chamber has, apparently, misundersto od the action of the various European States, quoted in support of its Resolution. No European States, so far as the Government of India is aware, except indeed those with inconvertible paper currencies, have, in abandoning a silver standard of value, left themselves without a fixed metallic standard. All those States which have recently abandoned silver as a standard, have simultaneously adopted a gold standard. When Germany ceased to coin silver, she opened her mints to gold. So did the Netherlands. So did the Scandinavian Kingdoms. The case of the countries associated under the name of the Latin Convention is not different in principle: their standard was alternative; either silver or gold, according as gold was worth more or less than 154 times its weight in silver. These countries have, now, suspended the free coinage of silver, and so reverted, for the time being, to a sole gold standard : but none of them, except those whose currency is inconvertible paper, have been for a day without a fixed metallic standard of value.





T

13. It remains for the Governor General in Council to notice the argument urged by the Chamber of Commerce, that the extent to which bar silver is depreciated can only be gauged if the Government of India ceases to coin silver for all comers; and that it is impossible to say how much its value is appreciated by the present "open coinage system."

14. The value of every commodity—of gold and silver as much as of others—depends, on the one band, upon the supply; in the other, upon the demand for the commodity, and that, again, upon the uses made of it. The principal demand for the precious metals is for manufacture into money for use as instruments of exchange and for hoarding. If either gold, or silver, or both, were wholly deprived of this field of employment, it is impossible to say how low the value of either metal, or of both of them, would sink. The Government of India is not aware that any commodity has an "intrinsic value of its own," apart from the demand for its use.

15. The main cause of the recent divergence of the values of gold and silver appears, from the evidence collected on the subject, to be the substitution of gold for silver as the standard of value, and, therefore, as legal-tender money, by several European nations; and there is no reason to doubt that if gold were substituted for silver as the standard of value, and, so, as the material of money, or even if the free coinage of silver on fixed conditions, into legal-tender money were suspended in British India, the effect upon the relative values of the two metals would be very considerable. But no practical object would be served by endeavouring to ascertain what would be the relative values of the two metals under conditions so widely differing from those which govern the present situation.

16. The Governor General in Council observes that the Committee of the Bengal Chamber of Commerce, when asking the Government of India to close Her Majesty's mints to the free coinage of silver into legal-tender money, would have advised the simultaneous adoption of gold as the sole standard of value in India; but that the Chamber was not prepared to adopt the suggestion. Such a recommendation would not have been open to the objections that appear to the Governor General in Council fatal, *in limine*, to the adoption of the Resolution actually advocated by the Chamber, *viz.*, to close the mints, temporarily, to the free coinage of the one metal into legaltender money, without, simultaneously, opening them to the free coinage of the other into legal-tender money.

17. It is, however, the opinion of His Excellency in Council that there is nothing, as yet, in the nature of existing circumstances, notwithstanding the inconveniences and anxieties which they undoubtedly involve, demanding recourse to a measure so costly, and of which all the requisite conditions are, at present, so uncertain.

18. The divergence now noticeable in the values of gold and silver does not necessarily prove a diminution in the value of silver. It may be equally well accounted for by a rise in the value of gold; and, in fact it is probable that, since the commencement of this divergence in November 1872, there has been an increase in the value of gold as well as a decrease in the value of silver. The actual values, measured in silver, of general commodities, whether in India or in England, afford, as yet, no evidence of any recent, sudden, or violent fall in the value of silver; and, if à priori considerations strongly indicate that silver must have fallen, such considerations also make it probable that gold must have risen, in value.



19. Appended* to this Resolution is a series of tables of prices in London and in India, the information contained in which points to two conclusions---

1st.—That gold has risen in value since March 1873, and especially since last December.

2nd.—That it is not shown that silver has fallen in value, *i.e.*, as compared with commodities in general, either in London or in India, during the same period.

These conclusions are open to correction on a wider review of the economical causes which have been at work during the period: but they appear to indicate a rise in the value of gold as at least one of the causes which have disturbed the equilibrium of the two metals. The bearing of both conclusions upon the questions now before the Government of India is important.

20. It appears to the Governor General in Council, from studying the Report of the Select Committee of the House of Commons, and from such independent investigations as he has been able to make, that the recent divergence of the values of gold and silver is attributable to the following causes :--

- (1) the substitution of gold for silver as a standard of value by Germany, the Netherlands, and the Scandinavian Kingdoms; as well as what virtually amounts to the temporary adoption of a sole gold standard in place of their customary alternative standard of sliver and gold, by the Countries of the Latin Convention:
- (2) the increased production of silver in the United States of America:
- (3) the decreased demand for silver in India.

Of these three causes, the first appears to the Government of India to have been, up to the present time, the most efficient.

21. The steady equilibrium so long maintained between gold and silver may, doubtless, be attributed to the fact of the two metals having shared, without material change, the only great field for the employment of either of them. This equilibrium has been disturbed by the recent rapid supersession of silver by gold, as the standard of value, in the richer countries in Europe; a fact calculated, à priori, to raise the value of gold no less than to depress the value of silver.

22. As to the second cause, viz., the recent increased yield of silver in the United States of America, the Governor General in Council observes that, hitherto, this is chiefly due to the productiveness of one lode—the famous Comstock lode in Nevada—the ore of which yields gold and silver in nearly equal values, one-twentieth part of the produce being gold. The contents of the lode, though vast, are yet limited. The largest responsible estimate bitherto made gives the ultimate yield of the entire lode at about £60,000,000, of which the silver portion would be somewhat above £80,000,000. From various causes, but little of the increased produce has hitherto been offered for sale in Europe: and excepting in the way of (a perhaps exaggerated) apprehension as to their future productiveness, the American mines have not probably, as yet, had any important share in reducing the value of silver measured in gold. It is also to be remembered that the cost of production in these rich mines will not rule the market price of silver : the price will be regulated by the expense of production in the poorest mines which the demand for silver keeps in working : the difference will go as profit to the owners, and will not affect the market

* Vide Appendix.



price. If the event should prove that the price of silver is for the future lowered, then in proportion to such fall, the poorer mines will be closed, and the production of silver to that extent diminished.

23. As regards the third cause, viz., the decreased demand for silver in India, the subjoined table shows (in crores of rupees) the net imports of treasure into India, by sea, since the beginning of the century :

		of years.	NET IMPOETS.		AVEBAGE VEABLY IMPORTS:		on per gold to tparts.	BORROWED, INCLUE- ING GUARAN TEED BATEWAY CAFITAL.				
From	To Joomn N	Gold.	Silver.	Total.	Gold.	Silver.	Total,	Proportion cent. of ge total impo	Eng- land.	India.	Total,	
I. 1st May 1600 II 1835 III 1835 IV 1850 IV 1866 V 1866 VI. 1st April 1872	30th April 1835 30th April 1835 1850 1856 1868 31st March 1872 1876	$35 \\ 15 \\ 5 \\ 11 \\ 6 \\ 4$	8-10 5-39 56-82 25-05 7-35	23*94 11*92 118*87 35*93 9*35	*75:11 32:13 17:29 175:31 60:98 16:70		1'59 2'38 10'81 5'99 2'34	2.15* 2.14 3.46 15.97 10.16 4.17	25'49 31'12 32'34 41'08 44'01	2*41 *78 5*27 76*93 46*34 8*59	22.76 11.04 -2.04 20.86 5.15 4.79	25.17 11.82 3.23 97-79 51.40 13.38
	TOTAL .	76			377 92		***	4.97		140'82	62.58	202-88

* These figures are only approximately correct ; their distribution between gold and silver cannot at present be stated.

24. During the third of the periods separated in this table, the Crimean War transferred from Russia to India a substantial demand for oil-seeds and fibres.

During the fourth period, large sums of money were borrowed in England for the repression of the Indian Mutiny, and the American Civil War vastly enhanced the value of the raw cotton of India; this enhancement was not exhausted during the fifth period. The circumstances of these two periods were altogether abnormal.

Even during the sixth period, a considerable amount was borrowed abroad, to relieve the distress arising from the failure of the rains of 1873 in Northern Bengal.

During the whole epoch from 1850 to 1876, there was a very large expenditure of capital, borrowed for the most part, directly or indirectly, in England, on the construction of Railways and Canals in India.

25. It is clear that, throughout the last 26 years, exceptional causes have operated to increase the amount of treasure required to settle the accounts of India with external countries. Under normal circumstances, the yearly demand of India for treasure has never been very considerable: moreover, a large and, till lately, increasing proportion of the treasure imported has always been gold. Doubtless, if the abnormal demand of the 17 years, 1855 to 1872, had been permanently maintained, it would have favourably affected the values of the precious metals; but it is not certain that even such a demand would have greatly raised the value of silver relatively to gold; and its recurrence can only be anticipated if money should again be borrowed largely from abroad, either by the Government or otherwise. Apart, however, from other considerations which suggest the inexpediency of adding to the existing debt of India, the Governor General in Council is of opinion that the uncertainty as to the future relative value of silver and gold renders it highly inexpedient that, for the present, any public loan should be incurred, implying future obligations to be discharged in gold : if money be needed by

T 2