BIMETALLISM AND FREE TRADE.

Henry IV., listening to two of his Ministers who were with equal vehemence maintaining two opposite opinions, broke in with the exclamation, "*Ventre-saint gris!* I believe you are both in the right." This is what the English public seem disposed to say, as it listens to the accounts of the various advantages now of bimetallism, now of monometallism. Unfortunately, we are not in this case in presence of an abstract question which is capable of being settled according to *à priori* formulæ or the deductive method. The statesman lives and acts under the empire of facts as they are and the traditions of the past, and every attempt to break violently with historic continuity would inevitably lead to crises of prolonged confusion and suffering.

From the furthest antiquity downwards, men have always used the two precious metals as monetary standards. The attempt to exclude one of them is therefore an assault upon natural facts revealed and confirmed by history. Nature has specially endowed two metals with the qualities which fit them to be made into money. All the treatises of political economy explain this, without recognising any difference between gold and silver. It will be enough for me to cite what Mr. Jevons has said on this subject in his excellent book on Money :—

> "Of gold and silver especially we may say, with Turgot, that by the nature of things they were constituted the universal money, independently of all conventions and law."

When then you proscribe silver by law, it is a violation of "the nature of things." By some curious reversal of ideas, people have insisted on associating Free Trade with the English monetary system. It is, in fact, the contrary of this which is true. Independently of all convention and law, "gold and silver constitute the universal money." When you force men by law to make use only of gold, you do in truth go counter to the idea of Free Trade.

It is possible for human laws to violate natural laws; but the latter do not fail to avenge themselves by the sufferings that they inflict on men. This is exactly what happened after 1816 when England introduced the gold standard, and after 1873 when Germany tried to imitate England. On two different occasions the gold standard, established under identical circumstances, that is to say, at a moment when the production of gold was falling off, has produced evil of exactly the same kind. This point is so important that I am anxious to establish it clearly.

In 1816 silver was definitively excluded from circulation in England, and the office that had hitherto always been legally filled by that metal was henceforth laid upon gold alone. This was a violation of acquired rights, and a spoliation of the English people. According to the statutes the legal money was the pound of silver of Elizabeth. But an equivalent ratio having been established between gold and silver, all debtors, including taxpayers, had the right of discharging their debts either in gold or in silver. In 1816 this alternative was taken away from them, and they were forced to pay in gold alone; that is to say, in a metal of which the production was so scanty that it constituted an actual rarity, and which was made still scarcer and higher in price by the exclusive privilege that was thus accorded to it. This was a monstrous iniquity. We accuse socialists of wishing to plunder capital for the advantage of labour. Here was socialism of an inverted kind, not to the advantage of equality but of inequality, for labour was plundered in order to enrich capital, and the taxpayer was plundered to favour the fundholder.

The production of gold, which from 1741 to 1750 had risen to 3,400,000 pounds sterling, fell between 1811 and 1820 to 2,440,000 pounds, and in 1821—31 to 1,560,000. To replace paper currency by gold alone, England was obliged to withdraw from the commercial world a sum that relatively speaking was enormous. In the memorandum furnished to Parliament by the Bank directors in 1832 they give 20,000,000 as the amount they were obliged to purchase by the reduced price of commodities. This *prélèvement* was really enormous, for it represented thirteen times the total annual production, and the sixth part of all the gold circulating in the world at that time, which was estimated at 120,000,000 sterling. The result was a very sharp monetary contraction, and a great fall in prices took place in consequence.

The influence of a monetary contraction on prices is a phenomenon which is not yet sufficiently appreciated. Its disturbing effects, however, have been described by Roscher, by Nasse, by Mr. Dana Horton, and in the Report of the Silver Commission of the United States (1876). General Walker, the American delegate at the Monetary Conference of 1878, expressed himself on this subject in the following terms:—

"Yet even more important, in the view of the delegates from the United States, is the probable effect upon the production of wealth, resulting from the diminution of the money-supply of Europe and America already accomplished or in progress, through the gratuitous demonetization of silver. Cutting, as in the first instance it does, to the very quick into the profits of the entrepreneur, or man of business, which profits constitute the sole motive to production under the modern organization of industry, and enhancing, as in its ultimate operation it must, the burden of all debts and fixed charges, public, private, or corporate, which debts and charges are, in effect, the mortgage which the representatives of past production hold upon the production of current industry—a diminution of the money-supply is one of the gravest evils which can menace mankind.

"The mischiefs of a contracting circulation have twice at least in the course of events befallen Europe as the result of the exhaustion of the mines of the precious metals, or the interruption of mining industry by barbarian invasion or civil convulsions. It has remained for this generation and this decade to see these mischiefs brought upon Europe by the deliberate acts of government under advice of political economists.

"Whether the money-supply of Europe and America would be reduced by the completion of the movement initiated in 1871, to the extent of 40, of 30, or of only 20 per cent., the consequences could not but be most disastrous. Suffocation, strangulation, are words hardly too strong to express the agony of the industrial body when embraced in the fatal coils of a contracting money-supply. At a time when the production of the two historical money-metals, jointly, is diminishing, this most unfortunate occasion is taken to throw one of them out of use as money of full value; to remit it to uses of token money, and to banish what of the accumulated stock of three thousand years' production cannot thus be employed, to be hoarded in the East as treasure, or devoted to personal ornament."

In the decade which followed the definitive resumption of cash payments in England in 1821, there was produced in this country first, and afterwards all over the world, a disastrous fall in prices, and afterwards a frightful crisis. It was then that the "Inflationists" of the time clamoured for the reduction of the debt, and that Brougham proposed to reduce the contributions, and even to lower the sovereign from twenty to fourteen shillings. Mill still stopped on his way to combat these ideas. He says truly that such a transaction would have been a robbery; but to change the base of all contracts, and to oblige the nation to pay in gold, arbitrarily enhanced in value by this very act, that too was a robbery in an inverse sense. "The depreciation," says Mill,

"was represented to have averaged thirty or even fifty per cent." He adds afterwards—"The best authorities, among whom it is sufficient to name Mr. Cooke, have, after an elaborate investigation, satisfied themselves that the difference between paper and bullion was not greater than the enhancement in value of gold itself."

The enhancement in value of gold, producing the fall in prices, was so disastrous that an inquiry was ordered by Parliament. In the discussions which followed, Matthias Atwood said in the House of Commons (July 10, 1822) that all the values, moveable as well as immoveable, had gone down by one half.

Some clear-sighted men protested against the spoliation of the people when the Bill of 1816 was definitively voted by the House of Lords. Lord Lauderdale, who energetically resisted it, drew the following protest:—

"Because, in the present moment of our financial distress, and of the sufferings of the people from excessive taxation, the conduct of Government in undertaking a measure which must involve the Treasury in a great expense, and inflict even on the lowest and poorest orders of the impoverished people of this country a grievous burden, appears unaccountable; yet these cannot fail to be consequences of now decrying and throwing out of circulation the coin which Parliament has so long suffered to remain in circulation."

The fall in prices, and consequently the distress of industry, and especially of agriculture, was so great that it provoked a vehement outcry, and even armed risings. Sismondi has depicted the universal crisis between 1820 and 1830 in terms which might serve to describe the crisis between 1873 and 1881 :—

"Un cri de détresse s'élève de toutes les villes manufacturières du vieux monde, et toutes les campagnes du nouveau monde lui répondent. Partout le commerce est frappé d'une même langueur ; partout il rencontre la même impossibilité de vendre. Il y a cinq ans, au moins, que la souffrance a commencé ; loin de se calmer, elle semble s'accroître par la durée. La détresse des manufacturiers est la plus cruelle, parce qu'à la différence des agriculteurs, leur subsistance tout entière dépend des échanges. C'est aussi un symptôme funeste de cette souffrance universelle que ces associations patriotiques que l'on voit se former en Belgique, en Allemagne, pour repousser les marchandises étrangères. Le système (protecteur) qui prévaut aujourd'hui dans l'opinion, c'est la détresse qu'on a partout sous les yeux qui l'a fait adopter."

After speaking of the sufferings of the artisans, Sismondi adds :—

"En même temps les fermiers et les propriétaires se plaignent de leur ruine ; ils demandent à grands cris des lois protectrices, des monopoles ; ils déclarent ne pouvoir soutenir la concurrence étrangère ; et, en effet, beaucoup de fermiers font faillite, beaucoup de propriétaires abandonnent volontairement le quart ou le tiers de leurs fermages. Enfin de fréquents incendies de récoltes et de maisons rurales annoncent l'irritation et la fermentation sourde des journaliers de l'agriculture et l'état précaire de toute la société."

Is not this an exact picture of the rural districts of England at the present time ?

Then as now, as a consequence of the dulness of trade, the rate of interest fell, and France profited by it to lower her debt from five to three, and England from four to three and a half. In the United States the distress was as great as in Europe, and people called for an augmentation of the Customs duties. There was the same demand for the protective system in France. The address of the Chamber of Deputies (Nov. 26, 1822) carries the grievances of the agriculturists to the foot of the throne, and adds : "The growing distress of the departments of the east, the west, and the south, proves that the measures taken too late against the importation of foreign cereals are insufficient." Not suspecting the mysterious and insidious cause, the monetary contraction, all the countries that were in distress ascribed the evil to foreign competition, and called for the exclusion of foreign goods.

In 1873—80 the same crisis; the same effects, the same cause. Germany does in 1873 what England did in 1816. She expels silver, and replaces it by gold, precisely at the moment when the production of gold, as in 1816, had considerably fallen off. To show the disastrous effects produced by this step, and to measure the intensity of the monetary contraction, I need only refer to the admirable accounts published in the *Journal of the Statistical Society* by Mr. Giffen (March, 1879), by Mr. Patterson (March, 1880), by Mr. Arthur Ellis in the *Statist,* and in the annual statement of the *Economist.* According to their calculation, the average of prices fell to the level of what they were in 1850. We can easily understand what losses and perturbations of every kind followed in the wake of this tremendous fall. The various taxes, charges, and obligations of all kinds, and the habits of society, remain the same, whilst to meet them income and profits had been reduced by at least one-third. Nowhere is the agricultural crisis more intense than in England, and nowhere less than in France. In that country the fall in prices was almost imperceptible. Is this because the general monetary contraction is felt less heavily in France, where the metallic circulation amounts to 310 millions sterling, than in England where it only reaches 194 millions? However this may be, the special works devoted in Germany to the elucidation of this point justify the assertion that it was certainly the adoption of this gold standard by that country which produced the fall in silver, by imposing elsewhere the suspension of the coinage of this metal, and which has thus been the original cause of the evil from which the whole world is suffering at the present moment.

The *Economist,* with the foresight that comes of the attentive study of facts, announced the crisis of 1880 with admirable precision in 1869. In its review of the previous year it says:—

"It may safely be affirmed that the present annual supply of £30,000,000 of gold is no more than sufficient to meet the requirements of the expanding commerce of the world, and prevent that pressure of transactions and commodities on the precious metals which means in practice *prices and wages constantly tending toward decline.* The real danger is that the present supply should fall off, and among the greatest and most salutary events that could now occur would be the discovery of rich gold deposits."

Instead of these gold discoveries, so necessary to the expanding commerce of the world, first, the annual production of gold fell off more than the half; and, secondly, the expulsion of silver by Germany increased the pressure on gold. In the review of the financial year 1872 (March, 1873) the *Economist* said:—

"By the present bill the German Government is certainly paying England the compliment of adopting its single gold standard; but the cost of the measure to the London and other money markets cannot but be great. As the annual supply of gold throughout the world is reckoned at little more than £20,000,000, and the annual demand for miscellaneous purposes is very large, it follows that if the German Government perseveres in its policy the strain upon the existing stocks and currency will be most severe; unless the annual production of gold should suddenly increase, the money markets of the world are likely to be perturbed by this bullion scarcity."

Thus, then, according to the *Economist,* the monetary disorder from which the world is at present suffering is caused by the adoption by Germany of the English system of a gold standard, at a time when the production of gold was diminishing. It is enough then that a single State should imitate the example set by England to inflict incalculable mischief on the world. What are we to think of a system that leads to such consequences?

The adoption of a gold standard by England in 1816 was not only a great iniquity in respect of the people of England, and of all debtors, it was a great economic blunder which has made itself felt in all its force from the moment when French bimetallism, which counterbalanced its effects, ceased to work. In reality the English system results in a surrender to incessant variations in value of that silver which is the money of India with its two hundred millions of inhabitants, as well as being the money of the majority of the nations with which England carries on three-quarters of its trade. This inconvenience, which is so grave that we may call it calamitous, was described by Lord Lauderdale in his protest in 1816, and also by Sir Robert Peel in his great speech on the reorganization of the Bank of England in 1844. Explaining the necessity of giving the Bank the privilege of issuing notes against silver, Peel set forth the advantages of bimetallism in this language:—

"The facility of exporting silver in preference to gold, when such export is expedient, is the true remedy against the inconvenience of our standard differing from that of other countries, and unless the circulation department is allowed to issue against silver, that inconvenience might occasionally be severely felt."

Now that silver can no longer be coined at Paris, the Bank can no longer hold silver as an equivalent for its notes, and the gold standard being no longer sustained by bimetallism, makes trade feel all the drawbacks which were so justly anticipated by Lord Lauderdale and Sir Robert Peel.

The first bad effect of this variation in the value of silver reduced to the position of an article of commerce is the loss undergone by India in her remittances to England. The Indian Financial Department estimates the loss at 2,440,000 pounds sterling on an average, and this for eight years already amounts to a very considerable sum. But this loss will go on increasing for two reasons. 1. Because the remittances from India increase. This year they will amount to 17,000,000 sterling instead of 15,000,000. 2. If the Paris Conference does not end satisfactorily, silver cannot fail to lose in value in an unlimited proportion. America will not go on coining dollars which are not an international currency. The Bland Bill will be suspended, and 4,800,000 pounds' worth of silver will be sold annually in London against an equivalent amount of gold. To what price silver will fall nobody can pretend to say.

But these losses, serious as they are for India, on which they inflict a financial situation that is pronounced to be alarming by those who are responsible for it, are nothing by the side of the losses inflicted on English commerce by the perpetual instability of the exchange. This point needs a word of explanation. A bill payable in gold has a certain basis, inasmuch as for an ounce of gold I can always obtain in London £3 17s. 10d. So long as the bimetallic system was in operation at Paris a bill payable in silver had a fixed basis, inasmuch as for a kilo of silver I should obtain at Paris 200 francs, which brought the ounce of silver at London to about 7s. 8d. Now that free mintage is at an end, and that bimetallism no longer exists anywhere, there is no longer a fixed ratio between gold and silver, and consequently the value of the silver-bond is always fluctuating. This is what kills trade. To be convinced of this, it is enough to read the petition of the Liverpool Chamber of Commerce, or a certain pamphlet, *Reasons for the Adoption of a Bimetallic Money System.* To describe the evil, I will borrow a few lines from the three most competent authorities on the subject. Mr. Henry Gibbs, a director of the Bank of England, in his admirable pamphlet, *The Double Standard,* says:—

"What is most to be dreaded, and, if possible, provided against, is a further depreciation in the value of silver. It is that further depreciation, and indeed any abnormal fluctuation which affects for evil the interests of all those in gold-using countries who have commercial dealings with silver-using countries. Such fluctuation, acting on the exchanges, imparts an additionally speculative character to their business; they can make no just estimate of what they have to receive for their goods; the thing that they do receive is for them a commodity, just as wool is, or bark, or silk, or tea. Neither more nor less. So the exchange of cotton goods, one kind of merchandise, for silver, another kind of merchandise, is but barter."—*The Double Standard,* 6, 24, 27.

Commerce, not only with India but with four-fifths of the inhabitants of the globe, is therefore reduced to the elementary condition of barter.

Sir Louis Mallet, the delegate from India at the Paris Conference, expressed himself as follows:—

"For each operation two calculations must be made. First, you must calculate the price of the goods in gold, and then the price in silver; and there is no fixed basis for the value of this latter metal. It is exactly the same thing as if you had to buy cotton with gold in order to be able to buy wheat with this cotton. It is only a kind of barter adapted to a barbarous stage of civilization."

Now listen to the consequences as described in the Memorandum of the Indian Finance Department, 1880. Speaking of the apprehension of fluctuations of the exchange, it says:—

"Not only are such apprehensions often sufficient to paralyse trade, and not only must repeated fluctuations cause serious and unmerited losses to honest traders, but, which is perhaps worse, uncertainty as to the international exchanges introduces an avoidable element of speculation, injurious to sober, prudent, honourable, and therefore permanently profitable commerce."

These fluctuations, said Mr. E. Stanhope in the House of Commons (22nd May, 1879), have the result that commercial transactions assume a character of pure speculation, not to say of gambling.

At present what is it that settles all over the world the rate for the negotiation of bills payable in silver? It is the price of silver at London. And what settles the price of silver quoted at London? Circumstances that are entirely trivial and insignificant, as Mr. H. Barclay shows in his *Letters on Bimetallism* (p. 22):—

"A number of shipments of silver arrive together at a moment when there is no demand. It draws up at once as against a dead wall, until it forces an outlet at a reduced price. A fortnight later there is no stock in the market, and some petty demand is able to raise up the price again 1 or 2 per cent. Meantime all the silver exchanges of the world are affected by these comparatively unimportant transactions. These silver exchanges for England alone represent something like two hundred millions, and double this total for the world. Is it not monstrous that the value of such immense transactions must depend now on some trifling speculations on the silver market of London?"

The consequences of a state of things so abnormal may be measured by figures. So long as the two metals were used, the export trade of England increased in a regular way. From 1836 to 1848 it remained nearly stationary at 53 millions sterling. But the influx of gold gives it an extraordinary stimulus: it rises to 64 millions in 1849, and continues to ascend rapidly from year to year up to 1872, when it reaches 256 millions. As soon as silver is proscribed, the exports decline until 1878, when they fall down to 193 millions. The whole decline is in the exports to the countries which have a silver currency. In fact, towards the gold countries they continue to increase a little, from 52 to 56 millions sterling, or about 9 per cent.; while the exports to the silver countries fall from 203 millions to 133 millions, or 33 per cent.[1]

I think, then, that I have shown from the evidence of indisputable facts, figures, and authorities: (1) That the adoption of a gold standard has caused long, persistent, and calamitous crises, the first after 1816, the second after 1873: (2) that this measure has been, first in England, and next in Germany, an iniquity and a spoliation in respect of the nation and all debtors; (3) that a gold standard is leading the Indian treasury to bankruptcy, or the native taxpayers to misery; (4) that it causes the decline of English commerce by the intolerable instability which it introduces into the exchange with the silver currencies. But these evils, however great they are, still are nothing by the side of those which threaten

(1) All these details are to be found in Mr. Ernest Seyd's *The Decline of Prosperity.*

us, and even touch us already, for the gold standard is the death of Free Trade ; it means the struggle for gold succeeding the harmony of common interests ; it means antagonism between nations, and the conflict of tariffs.

As often as the arbitrary interference of a bad law rises up violently against natural and historic facts, it is inevitable that pernicious consequences should ensue. When Germany undertook in 1873 to expel silver, Wolowski and Seyd foretold that Free Trade would pay the penalty for it. The fall of prices, they said at the time, will lead those States which have payments to make abroad to decree protective duties, in order to obtain a favourable balance which will increase their monetary supply. This is exactly what happened after 1873, as it had happened after 1816. So long as both metals were used, and the influx of gold remained in operation, prices were remunerative, trade was active and successful, and consequently nobody was anywhere afraid of lowering duties. When silver was proscribed and gold became scarce, prices fell, manufacturers and agriculturists began to complain, to blame foreign competition, to insist on raising duties. It is in Germany especially that we best see how monetary contraction, by bringing about a crisis, makes people recur to protective duties. The gold that Germany had won at the price of such great sacrifices was flowing away. How could it be retained? The example of the United States seemed to show the way: by hindering the entrance of foreign goods. Thus, having more to receive than to pay, gold would come back instead of fleeing away. At the present moment people are everywhere insisting on increased duties. England being the centre of the monetary movement, it is especially against her that they are bent on taking action. If Italy succeeds in establishing a gold currency, she will not fail to raise her duties, so that the exchange may not take her gold away from her. States have two means of preserving in the banks the necessary cash reserves: the raising of the rate of discount, or else Customs duties to create a favourable balance. England resorts to the first method alone, and she is right; but the other States ought to raise the rate of discount much more than is necessary in London. Between such a rise as would hit the traders of other countries, and such a rise in the tariff as would hit the trade with other countries, there will be no hesitation. It is protection which will carry the day.

There is another source of peril. Several countries, like Russia and Austria, contract loans of which it is stipulated that the interest is payable in gold, because gold is now the only international metal. As these countries have in their domestic currency nothing but paper and silver, they seek gold from the Customs duties. In proportion as they run into debt they will be driven to increase duties, since that is the only means they have of getting gold. If this metal, which only exists and can only be produced in an insufficient quantity, is to remain the only currency of civilised countries, the struggle for gold will assume a sharper and sharper character. The difficulties about the Treaty of Commerce with France give us a foretaste of this. Is not such a struggle a disgrace to our epoch?

The gold standard condemns those nations of the Continent which circumstances have reduced to the use of paper money to continue its use there. It is now certain that unless silver is restored to the place that it used to hold in the circulation, the Italian Loan, which is designed to abolish the *cours forcés*, will not be able to succeed. The restoration of the metallic circulation on the basis of gold would be then all the more impossible for Austria and Russia. We can understand the anger against the English system, which will become general among all the nations that are made the victims of a system that is false and mischievous.

But, say the English economists, let them be satisfied with silver. Is not such a sentence the condemnation of their theory? How can a monetary system, which is to remain the exclusive privilege of England, be true and conformable to the nature of things? Gold, you say, is the currency of the advanced nations, as silver is that of the backward nations; and at the same time you let it be understood that neither Germany, France, nor Italy ought to dream of adopting a gold standard. How nicely calculated such language is to create harmony between nations, and to prepare a favourable issue for commercial negotiations! Rightly did Michel Chevalier say—"If we consider a certain monetary system as good, we ought to wish that it should be adopted by all States." Mr. Giffen says, on the contrary:—"Still more we ought to deprecate any change in silver-coining countries in the direction of substituting gold for any part of the silver in use. It would be nothing short of calamitous to business if another demand for gold like the recent demands for Germany and the United States were now to spring up."

Thus, according to the present defenders of monometallism, the extension of the system that they declare to be the only one that is conformable to natural laws and scientific truth is nothing short of a calamity, and would produce a perturbation more disastrous than any of those which commercial history records for us. Does it not follow from this, without further discussion, that the gold standard is condemned? If other nations cannot adopt the English monetary system without provoking a commercial crisis, it is a manifest proof that the system is contrary to economic necessities and natural laws. Bimetallism, on the contrary—its adversaries do not deny it—would be all the stronger, and all the more advantageous, in proportion as it came to be adopted by more States. The gold standard leads then to antagonism between nations; bimetallism to unity, fusion, and reconciliation of interests.

Mr. Gibbs, while defending bimetallism in practice by arguments that cannot be answered, says: "I have no doubt myself that, as a matter of theory, a single standard would be the best for the whole world of commerce." This opinion is that of the majority of bimetallists, and for a long time I shared it. I believe now that it is not well founded. Without doubt it appears more simple and more rational to have no more than one measure of values; but human affairs are not simple, and often in our desire to simplify we complicate and only produce disorder. The essential thing in currency is stability of value, because it is the base of prices and contracts. Rude variations are especially mischievous. It is scientifically shown, both by reasoning and by figures, that a currency composed of the two metals is more stable than if it rested upon only one of them. There is first what is called the compensating effect. It scarcely ever happens that gold and silver mines increase their production at the same time. On the contrary, we see that the production of silver compensates for the variations in the production of gold, in such a way that if we add up the production of the two metals together we obtain a much more regular total than by taking either one of them by itself. The compensatory action has been demonstrated by Mr. Jevons with mathematical conclusiveness.

"Nor is this the whole error of the English writers. A little reflection must show that MM. Wolowski and Courcelle-Senenil are quite correct in urging that a *compensatory* or, as I should prefer to call it, *equilibratory* action, goes on under the French currency law, and tends to maintain both silver and gold more steady in value than would otherwise be the case."

According to the Memorandum of the Indian Finance Department there is in the world, in various forms, £1,519,482,000 of gold, and £1,558,398,000 of silver; in all, £3,077,880,000. It is evident that the annual variation in the production of one and the other metal will be one-half less perceptible in a mass of 3 than in one of 1½ milliards. The production of gold rises from 5 millions sterling in 1849, to 29 millions in 1856; that is, it almost sextupled. The production of silver rises from 9 millions in 1862, to 16 millions in 1877; it almost doubled. Consider, on the other hand, the total of the two metals from 1852 to 1876; it remains almost steady between 32 and 35 millions.

Suppose two reservoirs, one yellow, the other white, each holding a cubic mètre of water. I add a cubic metre to the yellow vessel. The contents are doubled. Connect the two vessels by a pipe. The rise of level in the yellow vessel will be one-half less, and the contents of the two vessels thus connected will only have increased by a third. There are other illustrations equally conclusive. A population that lives upon two kinds of cereals at the same time, rice and wheat for instance, will be less exposed to scarcity than if it lived solely either on wheat or rice, because it would scarcely ever happen that both crops should fail at the same time. Suppose that the existing monetary situation continues, where silver is universally proscribed, and, at the same time, what is far from being impossible, the production of gold falls to what seemed to be its normal level, what a frightful contraction in all prices, and what a convulsion in the commercial world! Thus, even from the point of view of theory, Mr. Gibbs is wrong in supposing that a single standard would be the best. It must be the reverse, inasmuch as it would be subjected to all the fluctuations of production, without the compensatory or equilibratory action so well described by Mr. Jevons.

Another error commonly spread abroad by English writers consists in believing that the relative value of the two precious metals is determined by production. We will show, first, that in fact this is not true, and that it is the legal tarification of mints which has fixed their value; and secondly, we will explain why this is so. To begin with, here are the figures which I take from the undoubted authority of M. Soetbeer. In antiquity, gold is abundant enough, and yet a pound of gold is worth rather less than it is now, say 13 or 13½ times a pound of silver. In the Middle Age there is hardly any production of gold at all, and still it loses much of its value, for it is hardly worth more than 10 times its weight in silver. After the discovery of America, at first it is gold which flows in, and yet it increases in value so as to be worth 11 and 11½ times silver, instead of 10 times as in the Middle Age. The production of silver rises from 53 to 75 millions of marks between 1561 and 1600, and for all that the value of silver does not go down. From 1600 to 1700 the production of silver falls from 75 to 60 millions, while that of gold rises from 20 to 25 millions. Gold ought to have gone up, and silver to have gone down; exactly the contrary of this is what took place. During the eighteenth century the production of silver is tripled, and yet its value, which ought to have gone down, goes up, and if it falls from 1785, it is because the ratio of 1 to 15½, which Calonne established in France, increased the legal tarification of gold. During the nineteenth century, a fact more conclusive still, gold is produced in tenfold annual quantity between 1840 and 1860, without any effect on its value. According to the Indian Memorandum, which I have quoted above, there must have been in the world in 1850, 15,557,539 pounds Troy of gold, and 339,828,926 of silver; and in 1878, 29,809,724 of gold, and 480,506,080 of silver. The mass of gold doubled; that of silver remains stationary, and nevertheless gold loses none of its value. These figures prove beyond refutation the error of those who make the relative value of the precious metals depend on production; it is solely the effect of the law, as I have proved elsewhere. The French Minister of 1803, M. Gaudin, has summed all this up in a sentence: "The price of the precious metals in commerce always regulates itself according to the price of gold at the Mint."

But when it is said that it is the law and not production which determines the value of the precious metals, are we not flying in the face of the generally admitted truths of political economy? By no means: we are only applying what is laid down in all the books concerning the "monopoly price." When the production of a commodity is limited, as in the case of diamonds or antique statues, it is the demand which settles the price. The production of gold and silver is limited, and the Mints consume two-thirds of it. It is evident that if four or five great consumers, who take two-thirds or three-fourths of a product, agree to fix the price, then it is that price which will rule the market. If in all the Mints of the world we could obtain for a pound of gold the equivalent of 15½ pounds of silver, and reciprocally, then their equivalent of value would necessarily impose itself upon commerce. What is called the market value is in truth simply Mint value.

It is incessantly repeated that gold takes the place of silver in consequence of the preference given to it, and notwithstanding the law. Thus the *Times* lately published a letter, which was supported by a leading article (May 2, 1881), and which said:—

> "After 1717, the gold guineas took the place of the silver coinage, and continued to circulate at a price in silver higher than the intrinsic or market value of the gold contained in them. They did this without any law fixing their value, and in spite of the law which made silver the legal tender. People preferred gold and kept to them."

There are almost as many mistakes as words. If gold has invaded the circulation and replaced silver, it is not in spite of the law, but according to the law; not according to the preferences of the people, but in spite of them. The writer seems to forget the Gresham law, according to which it is the rebutted coinage which remains, and the desired coinage which is exported. This desired coinage was then silver, as Newton explains in his famous *Report concerning the State of the Silver and Gold Coins* (1717).

> "As often as men are necessitated to send away money for answering debts abroad, there will be a temptation to send away silver rather than gold, because of the profit, which is almost 4 per cent.; and for the same reason, foreigners will choose to send hither their gold rather than their silver."

The proclamations of the King at the same date show us that they regretted extremely the exportation of silver, and in order to retain it they lower by sixpence the value of the guinea. As in England they got for a pound of gold 15½ pounds of silver at a time when on the Continent they only received 14½, it was perfectly natural that silver should leave England. If at the present day the right of coining were free in France and the United States, gold would go to the United States, where it would obtain sixteen times its weight, and silver would go to France, where the tariff price is higher. When in 1717 they lowered the value of the guinea by sixpence, Newton foresaw that the reduction would be insufficient, and in fact during the eighteenth century silver was at a premium in England, and a clandestine trade introduced gold into this kingdom. In the House of Lords, Jan. 18, 1718, Lord Stanhope shows among the reasons for the scarcity of silver, that they deplored "the clandestine trade that had been carried on of exporting silver and importing gold to and from Holland, Germany, and other parts." There only remained in circulation the worse silver pieces. Those which possessed their proper weight were either melted or carried abroad.

The double standard is reproached with being in fact an alternative standard. That is true if you change the ratio between gold and silver in different countries. Thus up to the end of the last century it was found that according to the Gresham law the metal flowed towards the place where it was quoted at its highest. The best example was furnished by the monetary history of the United States. The first monetary law, voted by Congress under the inspiration of Hamilton, settled the ratio of 1 to 15, at a time when France had the ratio of 1 to 15½. Silver being worth more in the United States, goes there to replace the gold which comes to France. After 1834 Congress establishes the ratio of 1 to 16. Silver being now only worth one-sixteenth of the value of gold, emigrates to France, where it is worth fifteen and a half times the value of gold. M. Cernuschi sums up the history of the past perfectly in the words, "*Two* bimetallisms of different ratios cannot work simultaneously on the face of the earth."

Still, French bimetallism was powerful enough to maintain itself alone for seventy years. According to M. Soetbeer it could have withstood the increase in the production of silver, and even the sales of this metal on the part of Germany in 1873, as it had resisted the immense influx of gold after 1850. For seventy years the French law maintained the ratio of 1 to 15½, for M. Seyd has shown by the exact figures that the fluctuations in the price of silver quoted in the London market, varying between 59 and 62 pence, represented only the necessary expenses of the transport of silver between London and Paris. The money-market price was maintained where the true market was, namely at Paris. Nor is it accurate, as Mr. Giffen has contended, to say that France was deprived alternatively of silver and of gold. The unanswerable proof of this is that according to the financial statement made in 1878 they found in the public treasury about 824,789 five-franc pieces, of which 517,700 were of a date anterior to 1851, when the drain of silver began. This drain then did not carry off the third of the silver. Two-thirds remained, and five millions of gold came to be added to them as a result of favourable commercial balances. However this may be, it is evident that the alternations with which bimetallism is reproached have been the result of the difference of the ratio of equivalency established between gold and silver in different countries. The remedy for the inconvenience is indicated by the nature of the cause which produced it. It consists in the general establishment of an identical ratio, and in this consists the international bimetallism at $15\frac{1}{2}$, which is explained and defended by M. Cernuschi. But the writer who first pointed out this remedy is no other than Newton:—

> "If gold in England or silver in East India could be brought down so low as to bear the same proportion to one another in both places, there would be no greater demand for silver than for gold to be exported to India; and if gold were lowered here only so as to have the same proportion to the silver money in England which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any other part of Europe."

The inventor, then, of Bimetallism—that is to say, of the law which presides over the movement of the precious metals—is no less than the immortal genius who discovered the law that presides over the movement of the heavenly bodies. International bimetallism once adopted, the alternation is no longer possible, for whither would anybody find a profit in either the gold or the silver that he wished to export?

But would there be nothing to fear from an enormous increase in the production of gold or silver? It is impossible to imagine a second metallic influx greater or more unforeseen than that which took place after 1850. Yet no confusion followed that; it increased the circulation in France, and favoured the development of business all over the world, as Tooke showed in his *History of Prices*. The repetition of a similar event, which was unable to overthrow bimetallism when established in France alone, would surely have no effect upon international bimetallism.

Bimetallism is unjust, they say, for it permits the debtor to pay in the cheaper metal. If this objection were well founded, is it possible that the French creditors, showing themselves more stupid than other people, would have for seventy years allowed themselves to be duped without uttering a complaint? In our Latin bimetallic Union we have no idea of a cheaper metal. The two metals having exactly the same liberating and acquiring power, how could a difference arise? We pay as in England by bank-notes secured by gold and silver together. The note for a thousand francs has nothing to do with the cheaper or the dearer metal. When the banker settles the account of his clients, does he put to the debit of one of them the dearer, and to the credit of the other the cheaper metal? The thing is absurd.

The only chance for bimetallists, says Mr. Giffen, is the possibility of their scheme being tried; but can any one dream of such a consummation? This is so little of a dream that it only needs a word from England to establish bimetallic union to-morrow. It is Mr. Gibbs who says as much. "If our Government could say, 'England is willing,' no one will doubt that France, with the Latin Union, Austria, and the United States, would at once agree, and it is confidently assumed that Germany would do so also." To these we may add Spain, Holland, and all the Danubian States.

But who will fix the ratio? Will anybody be found to contend that the ratio of 1 to 15½ is the result of a providential arrangement? Providence has never been invoked on the subject. This ratio was established at the end of the last century. France adopted it; it exists in Germany. In England even it is considered the normal balance in all calculations where silver is concerned. From all sides people accept 15½ as a settled point, and so far there is no evidence that we need be afraid of.

There is no need to write a long answer to Mr. Jevons's article in the *Contemporary Review* of May last. The only point that I should like to establish against Mr. Jevons's view is that currency is not what is commonly called merchandise. In its essence it is a common measure of value and a means of payment established by law. As both Aristotle and the jurisconsult, Paulus, have admirably shown, it is valuable by quantity and not by matter. *Materia electa est, eaque materia, formâ publicâ percussa, usum dominiumque non tam ex substantiâ præbet quam ex quantitate.* If this quantity is maintained at the level of the needs of the exchange, paper money being convertible and without intrinsic value, can keep itself at par, as for example in France in 1848 and after 1870. In their exchanges everything reduces itself to barter, goods trucked against goods; and the instrument of their barter may be a word, a promise, or a line of writing in the books of the banker, a bank-note, a metal disc. The advantage of employing metal discs is that they constitute an equivalent of the object exchanged, and that the quantity of it is regulated by nature, and not by the arbitrary decree of the State; but nevertheless does the currency preserve its essential character of legal institution. In so far as it is composed of gold and silver, it participates in a certain measure in the nature of mercantile commodities. But we must add that it is a commodity which in itself, and by the monetary office which is conferred upon it, differs from other commodities in various ways. 1. It has a value fixed by the Mint, which remains invariable. Gold in London is always £3 17s. 10d.

an ounce. The price of commodities fluctuates incessantly, because it is not regulated by law. 2. Commodities produced in excess do not find a buyer. A metal which is capable of being freely coined always finds somebody to take it, for no merchant ever refuses to accept legal currency. 3. The increase of currency can never end in a glut, but only in a rise of price. 4. The abundance of currency corrects itself automatically, first because the increased prices require more for the exchange, and in the second place the activity that is imparted to business absorbs and utilises the excess, as Tooke and Newmarch have shown. 5. The production of the precious metals, being limited by nature, cannot be augmented at pleasure. 6. We utilise ordinary commodities by consuming them, and the precious metals by preserving them. The existing mass, the base of prices, especially when both gold and silver are employed, is so enormous that the annual fluctuations in their production remain without appreciable effect. 7. The Mints being the great consumers of the precious metals, it is the Mint regulations which have always determined their value; history proves it. These differences between currency and mercantile commodities are met with; whoever refuses to take them into account will infallibly go wrong in all his arguments, and will find himself contradicted by the observation of facts.

I am convinced that if the English economists would consent to abandon the abstractions of the deductive method to study history and actual facts, they would perceive that bimetallism is conformable to nature and to the truths that are established by economic science. What this, I think, justifies me in supposing is, that the thorough study of the question has converted to bimetallism the principal and the most scientific economists of Germany, Italy, Holland, and the United States, and the directors of all the great European banks. I doubt whether it is very becoming to apply the epithet of "Lunatics" to these masters of the science and practice of finance. Many monometallists have been converted to bimetallism, and they are not among the least distinguished. I scarcely know a bimetallist who has been converted to monometallism. Are we not warranted in seeing in this new evidence of the power of truth?

What distresses me is the indifferent and contemptuous fashion in which the English economists treat a question on which depends the future of commerce and the prosperity of the world. They do not see that the problem has passed into the acute stage. There is accumulating at this moment over the whole of the continent a fund of silent but intense irritation against the English system, which reduces certain States to paper currency; which has thrown Germany into the path of a monetary reform that cannot be carried out; which threatens the Latin Union with grave difficulties; and which produces everywhere the calamitous phenomenon of a steady and persistent fall of prices. The irresistible consequence of the struggle for gold that we see in progress under our eyes is that all these States will feel a desire to take measures of defence and self-protection. A new continental blockade will be set up against England, not by the will of a tyrant, but by the popular instinct of self-preservation. On the side of America the danger is still greater. Mr. Gibbs has written a sentence that is alarming in its truthfulness: "*The question is being gradually narrowed to a monetary struggle between America and Europe.*" In fact we are already face to face with the question of which Messrs. Goschen, Bagehot, Giffen, and Jevons have never ceased to indicate the danger. Gold is the only international currency, and we can only restore to silver the position which all recognise as indispensable, by the unanimous consent of all the civilised States. If gold continues to be absorbed by America at the same time that its production diminishes, what is to become of commerce and industry, crushed on the one hand by the growing productive powers of America, and on the other by the restrictive measures of all sorts to which distress will lead the States of the Continent?

EMILE DE LAVELEYE.