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Art. I.—*Remarks on the Ethical Philosophy of the Chinese.*

Widely as the Chinese have departed from the meagre outline of a religious system, left them by Confucius, they have generally adhered to his moral teachings. Developed by his followers, received by the suffrages of the whole people, and enforced by the sanctions of the "Three Religions," the principles which he inculcated may be said to have moulded the social life of one-third of the human family. These are no where to be found digested into a scientific form; but diffused through the mingled masses of physics and metaphysics which compose the *Sing-li Ta-tseuen*, or sparkling in the detached apophthegms of "The Sages"; happily for our convenience, we have them brought to a focus, in the chart, a translation of which is given below.

We shall confine ourselves to the task of explaining this important document, as the best method of exhibiting the system in its practical influence; though an independent view would afford freer scope for developing its principles.

This chart is anonymous; but the want of a name detracts nothing from its value. The author has no merit beyond the courage, and in the midst of many trials. The praise of cotemporaries is of short duration; the applause of posterity uncertain; the laurel wreath of the poet fades; but he that believeth on the Son, hath everlasting life."

ART. VI.—*Principles of Political Economy, with some of their applications to Social Philosophy.* By JOHN STUART MILL. In two volumes. Boston: Charles C. Little, and James Brown.

WE preface this article with the title of this great production, not because we design to review it, or to avow our acceptance of its doctrines. From some of them we dissent. We refer to it in this way, because we are indebted to its profound and masterly discussions relative to money and credit, for the suggestion of some important facts and reasonings, in the analysis of these subjects, to which we now introduce our readers.

In proportion as men emerge out of a state of pure barbarism, and make any approaches towards civilization, they spontaneously adopt what is known as "division of labour." That is, instead of attempting to produce all the various commodities they need, each by his own labour, they severally devote themselves to the production of some single, or at most, few articles. Of these, each produces a larger quantity than he needs for his own use, and in some way seeks to exchange the residue for other desired articles, of which others, in his own or other countries, have produced a surplus, which, in its turn, for like reasons, seeks a reciprocal exchange. This process of division of labour goes forward in increasingly minute subdivisions, as civilization advances, until, to form the point of a pin, or the eye of a needle, becomes the exclusive occupation of a life. In this way, of course, the skill and efficiency of labour are immensely increased, and its products multiplied beyond calculation. Out of this plenty and variety of products, so immensely surpassing the few necessaries for bare subsistence, which the savage is able to fabricate and collect in his hut, arise the wealth, power, comfort, luxury, elegance, and refinement, that distinguish civilized nations.

Out of all this division of labour, and in proportion to its extent, arises the necessity of exchanging its products. So trade and commerce are commensurate with the productiveness of human labour, and the advance of civilization. But it is demonstrable, both from the nature of the case, and from history, that this exchange can take place only in a very limited and inconvenient way, without that medium of exchange, which, whether able to define it or not, every child understands, under the name of money. Simple barter is an awkward and cumbrous operation, and involves so many difficulties, that, left to it alone, exchange, and consequently division of labour, with all its benefits, would speedily be arrested. The simplest example will show this. A tailor desires some nails to repair his house, or a hat for his head. How can he make garments that shall be of the precise value of these or other articles he needs? Or if he could, how rarely would he find a person having nails or hats to sell, who would want exactly such garments? As each may readily see for himself, this example is a type of all others.

Hence the rudest nations, who have advanced a step beyond a pure state of nature, have found the necessity of some medium of exchange. Various substances more or less precious have been adopted for this purpose, in the ruder stages of society; but, in proportion to the advance of civilization and intelligence, the nations, with a unanimity scarcely paralleled on any other subject, have recognised the two substances known as gold and silver, or the precious metals, as alone suitable to fulfil this function. The reasons for this, which may be called the universal judgment of our race, are urgent enough to explain it. And yet, when men differ so largely on other subjects, affording no greater room for reasonable debate, this remarkable unanimity of the commercial world on this momentous subject, may be ascribed, in part, to a higher than earthly guidance. For, so far as exchange and commerce among nations are important, they are immensely facilitated by a uniform medium of exchange, and measure of exchangeable value. That substances suitable for such a medium exist, and have so evinced themselves to the mind of the race as to secure a practically universal adoption, is a special manifestation of the divine goodness. Only one step further on the part of man, is necessary to secure the full consummation and benefit of this uniformity in the substances they recognise as money. This is a uniform standard of coinage and nomenclature of coins among all nations. Whenever national pride and isolation so far melt away before the cosmopolitan forces of commerce and Christianity, as to furnish international coins and currency uniform for the whole world, this will greatly lubricate the machinery of trade, and remove much of the friction which still impedes exchanges between the nations.

The reasons why the precious metals constitute the fittest material for a medium of exchange, and measure of relative value, are, First, their great value in proportion to their bulk and weight. Value, in the sense of political economists here intended, implies two things; first, that it be what men deem really important and desirable to possess. Whatever labour anything may have cost, even that spent upon the Great Eastern or the Atlantic cable, to the amount of millions, the product is of no value, except as it is something important and desirable to men. Secondly, that which has value, in our present sense, must also cost labour to acquire it. The amount and difficulty of this labour are the precise measure of the value of its products. Thus pure air and water are in the utmost degree important and desirable to men. Yet they have no value, *i. e.*, economic or exchangeable value, where it costs no labour to obtain them. In cities, where pure water is obtained by costly aqueducts, and on ship-board, where it costs labour to place and keep it, it has its price, and a proportionate exchangeable value. Two elements then enter into exchangeable value—intrinsic utility and desirableness, together with the necessity of labour in order to production or acquisition. These properties combine remarkably in the precious metals, and this, in connection with the most diminutive weight and bulk. Aside from their use as money, they have ever been coveted by men for purposes of art, ornament, comfort, and luxury; and as symbols of social dignity, rank, and power.

This intrinsic utility and desirableness form an indispensable requisite, else they would have no exchangeable value. Bits of marble, shaped and polished in the form of coin, at whatever cost, would not serve for money, because they are of insignificant worth or use to men for any other purpose. Or if they were of use, but were as free to all without labour as the air we breathe, they would not serve for money. It is, moreover, requisite that this value be compressed within small weight and bulk, in order to fulfil another requisite in the medium of exchange, which is, 2. Portability. This requisite is so obviously necessary as to need no elucidation. A substance having the weight and bulk of iron, in a given value, would be impracticable as an ordinary medium of exchange, where civilization has developed any considerable progress in manufactures and commerce. 3. Divisibility into small equal quantities, and their multiples, without considerable labour or loss. In this way the amounts required for exchange may be varied indefinitely, as circumstances require. They may be easily and exactly computed, and the values of all other commodities readily reckoned and denominated in the amount of coin for which they will exchange. This requisite rules out precious stones, which have some of the other most essential properties of money. 4. Durability is another essential property in the substances used for money. That which would easily wear, or waste, or decay, or tarnish, would speedily sink in worth and desirableness, and would thus fail to be a uniform standard of value. This is one of the most important characteristics of money, and belongs eminently to the precious metals. 5. As closely connected with, and necessary to the last, something like uniformity in the actual or relative cost of production, *i. e.*, labour requisite to obtain them, from age to age, is necessary to their uniformity of value. This has been a remarkable property of the precious metals. The two chief exceptions have been the great increase and cheapening of the production of silver, especially consequent on the discovery and working of the Mexican and South American mines; and of gold, after the late discoveries of it in California and Australia. We do not, however, consider that this materially altered their relative, if it did their actual cost of production. By this we mean, that, although the labour requisite to the production of the precious metals was thus lessened, the labour employed in the production of other things, through improved skill, tools, and machinery, had become proportionally efficient. If gold and silver became more abundant and cheap, other products became more abundant and cheap. A dollar in gold will to-day probably exchange for more of the necessaries and comforts of life than fifty years ago. The reverse may be true of some things, but not of the totality of things required in comfortable and wholesome living. We well remember the period, less than forty years since, when, after the expense of raising and curing flax, and working it into thread by the domestic spinning-wheel, more was paid for the simple weaving than the average price of cotton cloth for the same uses, during the last ten years. The precious metals, therefore, possess, as no other known substance does, that last great requisite of a circulating medium, viz., a relative uniformity in the cost of their production.

In order to render them most perfectly available for purposes of exchange, governments have found it necessary to coin them into pieces of a given weight and purity, authenticated by their names, or by equivalent tokens enstamped upon them. This not only saves the trouble of weighing by the parties in each instance of exchange, which, in ordinary small transactions, would be nearly impracticable; it also guards against frauds in the purity and fineness of the metal, and against most of those minute parings from the quantity, which Jews now so often practise upon our smaller coins. In short, government coinage is absolutely necessary, in order to put the precious metals into forms convenient for use in exchange, and duly protected against counterfeits and other frauds.

Thus prepared, the precious metals are money, and will exchange for their value in *any* out of all the purchasable commodities in market, which its holder may desire. We say they will exchange for their value, neither more nor less. We mean that this is their normal operation. So far as, through abnormal causes yet to be specified, they deviate from this standard, they have a constant counter-tendency to gravitate back towards it. By value here, we mean the labour requisite to their production or procurement at the place and time of exchange. And the principle we maintain is, that at such time and place, the law of exchange, to which they conform, or always tend to conform, is, that they will command as much of other saleable products as then and there can be attained with the same amount of labour. Of course, in making out this balance of labour, not mere physical exertion is meant. Those adjuncts, of skill which is often, of machinery which is always, the fruit of labour, of agreeableness and security, for which men are always ready to give an equivalent in labour, are to be counted. This being so, the tendency of money, as of all other things, is to exchange for its equivalent, or what costs its equivalent, of labour. This is susceptible of demonstration *a priori* and *a posteriori.* Whenever the precious metals will exchange generally for what costs more labour, risk, &c., in the production than themselves, then the tendency of labour will be to resort to mining, importing, and coining them, till the equilibrium is restored, and these employments are no more remunerative than others. On the other hand, if gold will not procure in exchange for itself what costs equal labour in production, then the tendency will be, *ceteris paribus*, to leave the mining, importation, and coining of it for other occupations, until they lose their relative superiority. This law is not only deducible from the principles of human nature; it is proved by actual history, and all deviations from it are due to exceptional and transient causes, which are easily explained.

Hence it is clear that, as to value, money is subject to the same laws as all other commodities. Its peculiarity is this. It will command its own value in *any* of all purchasable articles its owner desires. Herein it differs from all other commodities. The holders of these, who wish to exchange them for other commodities, can seldom do it immediately. Those who have the articles they wish to obtain, rarely want what they have to offer. Others, however, who have different commodities, may want them. Hence these several articles will not immediately exchange for what their holders desire. But money will always exchange for, and command, whatever of all articles seeking exchange or sale its holder desires. And, on the other hand, all articles will exchange for so much of money as, at the time of exchange, will procure their equivalent value in other articles. Therefore the different denominations and amounts of money have been aptly likened to so many tickets, entitling their holder to an equivalent amount of all purchasable articles in the market. Herein chiefly does it surpass, in its exchangeable power, other kinds of property.

This brings to view the true sense in which money is a measure of value. Absolutely considered, it is just as much a measure of the value of other things, as they are of it and of each other. And the value of all alike at any given time, special exceptions being disregarded, is measured by the amount of labour, estimated by its quality not less than its quantity, then requisite to produce them. If a dollar measures the value of a yard of cloth, no less does this yard of cloth measure the value of a dollar. But, in a relative sense, money is the measure of the value of other things. It is the common measure in which the values of all other things are computed, in order to determine their value relatively to each other, and the respective amounts in which each will exchange for each. A farmer wishes to sell wheat, and buy sugar. The rates at which they shall exchange for each other are estimated by their respective values in money. If ten pounds of sugar exchange for one bushel of wheat, and the latter be estimated at one dollar per bushel, the former will be reckoned as worth ten cents a pound. In this sense, and no other, is money specially a measure of value.

Hence we see why it is that the property of men is estimated in money, and that men are pronounced worth so much money. It means that they have accumulations of some sort of property, which will procure in exchange for itself that amount of money, or other articles which are exchangeable for, and whose value is represented by, such amount of money. But the phrase is often used, and indeed the word *money* is often used, as if it were the only real property, and other possessions had value only in proportion to their convertibility into money. But then it must not be forgotten, that this very convertibility is owing to their antecedent value. This quality is reciprocal. If they are valuable because they command money, money is valuable only because it will command them, and worthless so far as it is incapable of commanding them. The reason why *money* is so often used as if it were the generic term for all property, is found in the peculiarities already specified: 1. That it has the prerogative of commanding its own value in all commodities seeking sale. 2. That it is, in the sense already explained, the measure of the value of all other kinds of property, and is therefore the standard by which it is estimated, and the symbol by which it is expressed. Hence, as being the representative of property, and the means of commanding whatever other commodities we desire, "money answereth all things."

We have said, that the normal exchangeable value of money is as much of other commodities, as at the time costs an equal amount of labour, direct and indirect, quantity and quality included, to produce them. So far as it deviates from this law, through any disturbing causes, it has a constant tendency to return to it. The principal disturbing causes are a derangement of the equilibrium between supply and demand. If money, through any special cause, be scarce, and unusually difficult to obtain, while at the same time there is a production of carriages beyond the wants of the people for use, causing a glut of them in the market, of course money will command carriages, whose production cost more labour than itself. This may sometimes happen in regard to the relation between money and the great bulk of the commodities in market. It always happens in commercial panics, and generally in domestic and foreign wars. All articles of sale then go at low prices. On the other hand, the reverse state of things may exist; money may be very plenty, or what is equivalent, it may be easily obtained, while other commodities are either scarce in fact, or made so by being, in consequence of the very abundance of money, held for higher prices. Then money, for a time, exchanges for less than the cost of its production in other articles. This usually occurs with regard to more or less commodities and forms of property, in times of inflated credit and extravagant speculation. Then prices rule high. This was true of nearly all commodities, but especially of lands and building sites, as the prime object of the speculative mania in the grand commercial bubble, which preceded and burst in the financial panic of 1837. It was not until the year 1842, that the country touched the bottom of this financial abyss, and began to rise from its depression to the subsequent unparalleled career of prosperity. Then, again, the increased production of the precious metals at the mines. along with a proportionate expansion of credit, may produce an undue inflation of prices, in some or all articles, which is sure to find its reaction towards, and for a while below the normal standard—as the immense production of gold in California and Australia stimulated trade, credit, and consequent speculation, especially in worthless railroad securities and their adjuncts, until the whole "baseless fabric" culminated and fell in the financial crash of 1857.

The amount of precious metals required to discharge the functions of exchange, supposing no substitutes for them in use, and laying out of account all exceptional transient disturbing influences, is determined by the fundamental principle already laid down, which is indeed the fontal principle from which every other doctrine pertaining to this whole subject flows. It is determined by the equality of values between money and what it exchanges for. To this they mutually tend, by a law as irresistible as gravitation. So much of the precious metals, if they are the only medium of exchange, will be requisite, as is needed to sustain this balance. And to this amount, in every country, it must evermore tend. For when the precious metals exchange for more than their equivalent, labour will be attracted to mining them; and when they exchange for less, it will be withdrawn from mining until the equilibrium is restored. But the amount in question does not therefore necessarily bear a fixed ratio to the amount of property in existence, within the limits of its circulation. This is sometimes supposed, but erroneously. And it has been supposed, also, to be a demonstrable deduction from this, that as money increases in quantity in any region in which the amount of property remains the same, prices must rise, and as it diminishes, they must fall. Many plausible arguments, claiming to be demonstrative, have been deduced from these supposed premises, against the emission of paper money by banks and governments, as if, by such issue, they could largely and permanently raise or depress prices, make and unmake commercial panics, together with the business and fortunes of individuals and communities. How far, and under what conditions, this is so, will soon come into discussion. What we wish now to emphasize is this: that it depends entirely on circumstances whether the increase or diminution of the amount of money in a community raises or lowers prices. These circumstances are: 1. The extent to which the property of a community is undergoing the process of exchange. In a purely agricultural community, or a non-commercial town or city, or when trade is stagnant, very little property, comparatively, changes hands. Of course, if there be little exchange, there is needed but little of the medium of exchange. Most of the money actually in such places lies inactive and useless in hoards. Hence, 2. When property is undergoing rapid exchange, the amount of money requisite to effect such exchanges will, *ceteris paribus*, be inversely as the rapidity of its circulation. Take a given thousand dollars. If it be hoarded in a miser's chest, it discharges no service as a medium of exchange, and is, to all useful purposes, or as to effect upon prices, as though it were not. Now, suppose another thousand dollars. It is paid by one to another, who in turn pays it to another, in liquidation of debts, or in purchase of goods. But the last person who obtains it chooses to hoard it, or to keep it on hand for a time to provide for a maturing debt, or to await a more favourable opportunity of investment; until this money is again put in circulation, it is as if it were not, to all who have occasion to use money in exchange. They must seek another thousand in its place. Thus two thousand are needed, when, with a more active circulation, one would have sufficed. Suppose now, as often happens at the first of January, that the same money, passing from hand to hand, discharges twenty debts in succession, in the course of two or three days. The volume of money, therefore, required to be in circulation at any given time, in order to maintain the equilibrium already mentioned, to which it ever tends, is in the direct ratio, not of the absolute amount of property, but of the amount of property bought and sold, and inversely as the rapidity of its circulation. The volume of water required to propel a given machinery, is inversely as the swiftness of its current. This is on the hypothesis of a purely metallic currency, and of the absence of those substitutes for it furnished by various forms of credit. The effect of these will now fall to be considered.

Employment of different forms of Credit as Substitutes for Money.

It is quite obvious that, if property changes hands, not by the actual payment of money, but by the promise to pay it, or on the faith that it will be paid at a future time, this credit so far forth is in lieu of money, and discharges its office as a medium of exchange. So far as such credit serves to effect exchanges without the use of money, so far it lessens the amount of money requisite to effect them. It is no less true, that as civilization, wealth, manufactures, and commerce advance, they involve conditions which extend among men mutual confidence in each other's pecuniary solvency and honesty. So far as such confidence exists, it will lead to sales on credit. Those who have commodities which they wish to sell, and who can forego immediate payment, will sell on credit when they can thus sell more readily and advantageously than for cash at the moment. The buyer in turn may also sell upon credit, and this process may go on through several successive sales before any money is passed, or it may be some months before the last buyer pays, and the money passes back from him through the intermediate sellers to the first; or no money whatever may pass. It often happens that real estate is sold for a note which it is mortgaged to secure, and that it is resold, again and again, carrying with each sale the original mortgage, which may be assumed and carried for an indefinite period by the last purchaser. So far as that portion of the price represented by the mortgage is concerned, no money at all is employed in consummating the successive exchanges. In periods of land speculation, sales and transfers of land, to almost fabulous amounts, are effected without the use of a dollar of money. And this is so, to a large extent, when a speculative mania seizes the public, leading to vast transactions in any given commodity or species of property. In quiet times, when mercantile confidence possesses the public mind, this occurs very largely in transactions not speculative. Credit, in this its simplest, spontaneous form, thus far supplies the place, and largely performs the functions of money. What thus supplies the place and performs the functions of money, will, when inflated and superabundant, produce the most important phenomena caused by a glut of money in the market. It will, within the sphere of its operation, raise prices precisely as would be done by an equal supply of money seeking investment in the same way. This is shown in nearly all cases of speculative excitement and inflation. The land speculations in this country which so raised the bubble that burst in 1837, and those in the West, which helped to swell that which burst twenty years later, were carried on, to the extent of hundreds of millions of dollars, by notes of hand and mortgages. The amount of money used was merely nominal. But these purchases on credit were of the same effect in raising prices as equal purchases with money would have been. This credit came into market as a purchasing power seeking land, and offering the promise of large sums for it, in the expectation that other purchasers would soon appear, offering for it the promise of still larger sums, until at length the bubble burst, from the attempt of some of the parties to realize in cash what had existed only in notes or mortgages. When, after such a process of inflation, produced by successive purchasers buying on credit in the expectation of selling at an advance, until this "kiting" process lifts up the price out of sight of its original starting-point, an apprehension arises of a reactionary decline, then a general desire to realize these promises in cash spreads, the bubble speedily breaks, and the ideal fortunes, which had been speculated into being, vanish in an hour. We wish to signalize this matter. All the phenomena of a commercial crisis or panic, as has been so ably shown by J. Stuart Mill, may be produced by the expansion of simple credit, without any of those forms of it which constitute paper-money, properly so called. Many writers, and indeed vast numbers of people, suppose that all financial inflations and explosions are due to paper-money exclusively, and would be prevented by the abolition or stringent restriction of it. No greater fallacy could be entertained. This is but one, and a subordinate one, too, among the many agencies to which this class of phenomena are due. If there were no paper-money in existence, they would appear with nearly the same frequency and severity as now.

The inflation is produced not chiefly by the particular form of credit embodied in paper-money, but by that pure and simple credit which no legislation on the subject of paper-currency can prevent, and which accomplishes all the essentials of a speculative inflation, before bank-bills, or any other kind of money, are used in connection with it. These are sometimes brought in, as the writer just referred to has well shown, to sustain the inflation a while longer. They may sometimes intensify it a little by prolonging its last stages.

It is, nevertheless, exceedingly doubtful whether they accomplish very much which would not be accomplished without them. Of this, however, more when we come to speak directly of paper-money. It is the desire to obtain the actual cash, in place of the promises of it, which were previously trusted—a desire which grows in extent and urgency as it begins to be seen that the amount of promises current in the community vastly exceeds the ability to pay—that first creates a demand for money greatly beyond the actual supply. Hence stringency, with threatening panic in the money market. Very soon the most solvent, and even wealthy men, who have pecuniary liabilities to meet, become anxious to obtain money in advance of the maturity of their debts, so as to be prepared for every possible emergency. Those to whom money is due, although they can, and in ordinary times would, extend their accommodations in the form of new loans, become timid and distrustful. They know not who is going to stand or fall. They desire to realize what is due them, and dare not trust it out again. Thus it is practically withdrawn from the money market; thus the stringency is increased by the very efforts to escape. They draw the fatal net tighter about them in the very effort to relax it. The panic grows by what it feeds on. Everybody comes to distrust everybody. The strongest houses are suddenly unable to collect their dues, and, therefore, to meet their obligations. The result is a commercial crash, and wide-spread bankruptcy. All these phenomena, it will be observed, may occur, and often have occurred, where paper-money has no existence.

2. Another form in which credit becomes a substitute for money, performing all the functions of exchange in its stead,

is that of bills of exchange. To illustrate this, let us suppose that A., a merchant in New York, has sold to B., a merchant in Chicago, goods to the amount of one thousand dollars; and further, that C., a grain-dealer in Chicago, has sold to D., a trader in New York, wheat of like value. The simple process which would be adopted to liquidate these transactions, without the aid of the commercial contrivance in question, would be as follows: B. would carry a thousand dollars to New York to pay A., and D. would transport a like amount from New York to Chicago to reimburse C. But this labour and risk of transmission is saved by a very simple process. As C., in Chicago, has a thousand dollars due him in New York, while B., in the same city, owes a thousand dollars in New York, the latter purchases of the former his credit in the great metropolis, and transfers it to his creditor for a like amount in that city. Thus the foregoing transactions liquidate each other, without the transmission of a dollar in cash between the two cities. Of course, this may happen with regard to all the products and merchandize interchanged between the two cities. The only money necessary to be transmitted will be what is requisite to balance an occasional excess in the amount sold by one city over what it buys of the other.

Thus far, however, the saving is not in the absolute amount of money employed, but in the cost and risk of its conveyance between distant places. But, in all places between which any considerable commerce is carried on, the work of effecting these exchanges is regularly organized. It becomes a regular department of banking, and banking-houses are established for the special purpose of executing it, by buying and selling bills of exchange—*i. e.*, bills authorizing the holder to whom they are issued, or to whose order he encloses them, to collect either at sight, or within a short specified time, the amount named upon them, of some responsible party in the distant city with which commerce is maintained. Now, what takes place on a smaller scale between the smaller and larger cities of any given country, will go on between that country and foreign countries with which it interchanges commodities. As there is one great centre, in each country, of monetary exchanges, where all unsettled balances ultimately converge for liquidation—as New

York for this country, and Paris for France—so there is one great centre where all the previously unsettled exchanges of the commercial world ultimately centre for the liquidation of balances. This is London. Now, bills of exchange on known and guaranteed houses or banks of high repute for solvency and strength, readily pass, by endorsement, from hand to hand, because it is known they will command the money according to the terms of their face. And if they are on the great centres of exchange, as bills in this country drawn on New York or London, the money is often more valuable at the place where the bill gives command of it, than in the place where it is drawn and held. Thus, a bill in Chicago on New York, or in New York on London, for one thousand dollars, is usually worth that sum, and frequently as much more as will equal the cost and risk of transporting specie to that amount. This being so, these bills of exchange often pass from hand to hand, by endorsement, and freely circulate as money. Not only is this so where they arise out of the legitimate transactions of business; they are sometimes drawn for the very purpose of supplying the place of money, where there is no real exchange of commodities on which they are based; no debts due from or to the place or parties on which they are drawn, which they are the means of cancelling. They are drawn simply because the drawer wants money, or its equivalent, for his own use, or to loan to others. These will perform the function of money, under the circumstances, with more advantage and less cost to himself than any other device; hence he fabricates them and puts them in circulation. In highly commercial places, such bills often largely perform the functions of a circulating medium.

The foregoing analysis of the operation of bills of exchange, supposes that money is required, sooner or later, to pass to the banker who issues them, from the party who procures them for circulation, or from some of his representatives to whom he has passed them. This, however, is far from being necessary, and, in fact, occurs only to a very limited extent. They are mostly paid for by the third and largest substitute for money in the form of credit—we mean bank checks. In all places where business is active enough to generate bills of exchange, it also generates private or public banks of deposit, if not of issue; usually all these. We therefore notice,

3. The use of credit in the form of bank-checks as substitutes for money. One of the convenient devices of civilization is, that the ready money, which all persons in comfortable circumstances, whether for business or living, try to keep at command, may be deposited for safety as well as convenience, with a bank or banker, having ample vaults for its secure custody, and ample means to ensure his ordinary ability to return it when called for. His compensation for this trouble is the use of the money until so called for. Most persons near a bank, having occasion to use any considerable amount of money, are wont to avail themselves of this privilege. The consequence is, that the bank or banks accumulate deposits, varying in amount in proportion to the resources and business of the place where they exist. Often, as in New York city, these deposits in banks largely exceed the amount of their capital. Their managers soon learn how much of these deposits they can safely loan out, and how much they must keep on hand in specie reserves, or funds immediately convertible into specie, in order to meet all demands to which they are ever liable, unless in exceptional emergencies. The portion of the deposits loaned gives the banker his compensation for his trouble, and is a principal source of the profits of banking, in banks not of issue, or of issues merely nominal—such as the great banks of the city of New York. Now this money so deposited is drawn upon by bank-checks; and in active commercial communities, nearly all payments of any considerable amount are made in such checks. The payments made in actual money are mostly those which are too small to justify the trouble of drawing a check. Most of the money used, therefore, performs very much the office of small change. Now the checks so given by the payer are usually deposited by the payee in bank. They are drawn from the balance standing to the credit of the former, and added to that due the latter. The same process goes on with the checks of the latter in payment of his debts; and this may be extended through an indefinite series of debtors and creditors. Here is no actual passing of money. Pieces of paper do the work. They could not do it, however, except through the

faith of their takers, that they are, if desired, immediately convertible into money, and therefore serve every purpose of money. It is obvious, that if all these checks are drawn on and adjusted by one bank, the operation of them would be simply to alter the respective balances due the different depositors, according to the amount taken from and added to each respectively.

The case is not essentially different where there is any number of banks, one of which receives on deposit checks drawn on others, and *vice versa.* Then these banks make daily or less frequent settlements with each other, by exchanging checks and other mutual claims, so that they are severally presented to the respective banks against which they are drawn. The balances due from one bank to another, as the result of these settlements, are paid in cash; and this cash, used in liquidation of inter-bank balances, will be all that is really employed in these transactions, which are often of vast amount. In London, New York, and other principal cities, this is now done through a clearing-house, in which such settlements between all the banks of a given place are daily effected, the balances being paid in cash. In New York city, exchanges are daily made between the banks to the amount of from twelve to twenty millions of dollars. The balances are usually liquidated with two or three hundred thousand dollars of gold—almost the only purpose for which, in quiet times, gold is used as money, except to liquidate occasional balances which accumulate against the city, in favour of foreign countries or other commercial centres in our own. Nor does the full extent to which this substitute for the precious metals may supplant their use yet appear. For the banks of all other cities, except the great metropolis, usually pay their balances by drafts, bills, or checks on that city, where the exchanges of the country are ultimately balanced, as also the balances between this country and foreign nations. Here, therefore, the largest specie reserves of the country tend to accumulate. In the bank vaults of the great metropolis the specie reserves of country banks are largely kept, ready to be drawn upon at pleasure. The balances which they owe other banks are really paid in their checks or drafts on these deposits in New York. Thus we see how small a sum of actual gold, in ordinary times, is required to effect the great exchanges of the country, after checks have done their work. And these checks are forms of credit given by their takers to those who draw them, and to the banks on which they are drawn.

We have not, however, as yet reached the full extent to which checks can go as a medium of exchange. They are not only substitutes for money. They may become powerful instruments for inflating and vitiating the currency, as far as this can be done while specie payments are maintained, and in preparing, so far as any convertible substitute for specie can do, for the suspension of specie payments. In order to accomplish this, suppose that all the banks in the city of New York, after having loaned all their legitimate funds, discount to borrowers ten per cent. additional to all their previous loans, and that this discount is not at once paid to the borrower in money, but remains in the form of a deposit in the bank by him, against which he can draw his checks. These checks will find their way into this, or other banks, which will return them to the original bank against which they are drawn, for payment. But this payment will be met by similar checks on other banks, of a similar kind, which have, in like manner, come into the possession of the former bank. So the credits of these various institutions thus loaned out, furnish each other a reciprocal support, until prices having been inflated, stimulate foreign importations to an excess which requires a large amount of specie above our other exports to balance them. Then, but not till then, or the occurrence from other causes of a drain of specie for export, will this bubble burst, from the necessity of turning these paper credits into hard cash. That this sort of inflation by discounts and checks often goes forward in quiet times, is undeniable. Indeed, it is the only way whereby the banks of New York city, which constitute the controlling banking interest of the country, can promote any factitious inflation of currency and prices; for their circulation rarely equals half the specie in the vaults. The day before the two last bank suspensions it was far less than the specie they had on hand. Thus we have another evidence how small a part of financial inflations and explosions is necessarily due to mere bank-bills, or would be cured by what some suppose to be a sovereign preventive—their suppression, or at least limitation in quantity to the amount of specie kept for their redemption. These checks performing the functions of money are forms of credit always in a threefold way—that is to say, 1. The taker of the check trusts the drawer; 2. The deposit in bank against which the check is drawn, is so much entrusted to that institution; 3. In the case of deposits which are the proceeds of discounts made by the bank to the depositor and drawer, there has been this antecedent credit given to him by the bank.

While checks and bills of exchange are thus made substitutes for money in all the great transactions of commerce, there are certain offices of money which they cannot fulfil. As they rest upon the combined credit of the drawer or endorser, and the bank on which they are drawn, they are of course unavailable for payments where these parties are unknown, or, if known, are distrusted. They are also unavailable for payments by those who keep no bank accounts, a class, however, now comparatively small among those in convenient proximity to banking-houses, who handle considerable sums of money. These nearly all make and receive payments by checks. Still, a large amount of payments remain which cannot be met by checks. Not only so, the innumerable small payments which all have occasion to make, require money, as the trouble of writing checks for such amounts would overbalance all the convenience resulting from them. But, even for such payments, a contrivance has been found and generally adopted, which serves to substitute paper credits for coin, even in small payments, except the fractional parts of the great unit of currency—as the dollar in this country, and the pound-sterling in Great Britain—which are provided for by silver change. This brings to view

The 4th form of credit employed as a substitute for coin, or money proper. This is paper-money, or bank-bills. These are promises to pay the bearer, on presentation at the bank-counter, amounts convenient for the use of those among whom they circulate. They are engraved in a style which renders counterfeiting difficult, and which shows them to be issues of the institutions by whom they purport to be issued. These institutions, being known to be incorporated by public authority, and to possess large means, are trusted, by those in their vicinity to whom their bills are offered, as being able to redeem their promises. The confidence that these promises are immediately convertible into coin for the amount of their face, leads nearly all willingly to accept them in its place. For other reasons they are preferred to coin, such as their greater facility of carriage and concealment. Wherever bank-bills, issued by institutions in good credit, are freely issued, they almost wholly banish from circulation all specie not of a smaller denomination than themselves. This circulation of course, if left to itself, will mostly centre about the neighbourhood of the institutions issuing them. It will not largely enter or remain in regions where the institutions issuing them are unknown, or if they are so distant as to render their convertibility into specie difficult. The exceptions to this are the issues of banks having a national character and authority, and which provide for the redemption of their issues at the points where specie is needed for the liquidation of domestic or foreign balances. Of this character are the bills of the Bank of England, as were those of the old United States Bank. The former have, and the latter had, a free national circulation. The common principle which secures the acceptance of these notes in place of specie, is the conviction that they are convertible into gold at the pleasure of the holder, while they are more convenient for use. On the other hand, the inducement on the part of banks to issue them, is that, while they cost but a trifle, they yield the same interest, when loaned, as actual specie. The whole cost is that of the paper and engraving, together with the small amount of unproductive specie in vault, which experience, as in the case of deposits and checks, shows to be ample for the redemption of such bills as will be ordinarily presented for payment. Not only so, if a bill is lost by its holder, he suffers no more than if he lost so much coin, while the bank gains the full amount of the bill.

There is also an absolute gain to the world of all the gold and silver thus released from service as a medium of exchange. All this amount of the precious metals, or the labour which would be requisite to procure them, is thus liberated, to be employed in enlarging the comforts and luxuries, the intellectual, moral, and spiritual advancement of men. Besides this, the loss arising from the abrasion of coin, and other modes of its destruction, when in actual use, is avoided. The world has so much more of its wealth available, as is thus set free from the service of commerce. Adam Smith's felicitous illustration of this is not yet stale. He compares it to some inexpensive device, by which an air-path for common travel is substituted for roads on terra firma, thus liberating, for agricultural and other purposes promotive of human wealth, the soil now appropriated for travel. In a reverse way, the streets of our great cities not only accommodate travel, but they are honey-combed beneath, and the caverns thus made are utilized for purposes of trade and manufacture.

Of course, the temptation to multiply paper issues, which yield all the profits of coin, to an indefinite extent, is very great. Cupidity will press it to all possible lengths. But to this possibility there are natural limits, which are often still further confirmed by legislative restrictions. The natural limit is immediate convertibility into specie. It is this property which gives the engraved paper of banks the character of money, and renders it more valuable than any other engraved paper. Now bank-bills, deposits, and checks upon deposits, are kept permanently convertible, only by being limited very nearly in quantity to the amount of the precious metals they displace. If they greatly exceed this in the combined elements of quantity and briskness of circulation, an inflation of currency ensues, which proportionally inflates prices above the average standard in the world. This attracts increased imports of foreign goods, which will always seek the highest prices. Hence will arise an excess of imports over exports, which requires to be balanced with money. This money, when sent to foreign nations, must be real money—the precious metals. Consequently, the bills and deposits of banks must be converted into cash by drawing upon the bank reserves for foreign exportation. This increase of money in foreign countries makes money plenty, and raises prices there, while the country drained has its money diminished and prices reduced. This reverses the movement of trade. Exports are resumed, and the precious metals flow back, until the equilibrium is restored. This process is always going on. Prudent bankers usually try to anticipate any unusual drain of specie. They usually strive to avoid it, and to use due precautions, so far as they are able, to ward it off. Hence they strive to keep their liabilities, whether for deposits or issues, so adjusted to their specie reserves that they can be prepared for any ordinary or probable contingency. If they see a prospect of a considerable demand for specie for foreign or domestic use, they contract their loans and discounts, which can only be made by increasing their own liabilities, in bills and deposits, or by diminishing their specie funds. The former they strive to diminish, the latter to increase, in view of any impending pressure upon their resources of coin. This tends to reduce the volume of money in the form of bank bills and deposits substantially to the specie standard, *i. e.*, to the amount of specie which would be in use if such substitutes for money were unknown. To this standard it unalterably tends, by a law as inexorable as gravitation, and, amid all variations, it continually oscillates around this as its true norm. Bank bills may contribute, along with other forms of credit, to those inflations which issue in financial explosions. They are, however, as we have seen, but one, and that a secondary form of that *expansion of credit* which results in these catastrophes, and is their generic cause. They may prolong and aggravate an expansion produced by other forms of credit, on account of their greater facility of passing from hand to hand as money. On the other hand, they are among the first instruments for bringing it to an end by precipitating a panic. Being in the hands of all classes of persons, poor as well as rich, no sooner does any suspicion or apprehension seize the public mind of the possible or probable stoppage of specie payments by any bank, than the poor and ignorant who have these bills in their possession, hurry to the bank counters to insist on their conversion into specie. Thus the "run" upon the banks is fairly inaugurated by the holders of small bills, when their depositors would never have molested them, had not the panic already gone so far that the question is no longer, whether the bank shall suspend the payment of specie, but who shall get what specie it has for their bills and deposits?

We are thus introduced to the consideration of an inconvertible paper currency, its causes and effects. In whatever form, and to whatever extent credit supplies the place of money, the sudden shrinkage or cessation of that credit must produce a wide-spread inability to meet pecuniary engagements. Where book-credits, notes of hand, bills of exchange, checks, and bank-bills, have paid a hundred dollars of indebtedness, or been the medium of exchanging a hundred dollars' worth of commodities, for every two dollars of the precious metals employed for such purposes, then the extinction of a large part of this credit, in any or all of its forms, of course creates a demand for a proportionate amount of specie to fill the vacuum. This, however, under the very prevalence of the credit which has rendered it for the time needless, will have largely gone out of the country, or have been consumed in the arts. Even the modicum that remains in bank-vaults, if drawn out in a panic, is not put into circulation, but locked up in private hoards. Suspension is inevitable when universal distrust has supplanted credit, the great substitute for money, and there is no money to take its place. This must in due time act upon the banks, the great repositories of circulative capital, the representatives and instruments of mercantile credit—given by them to borrowers, and to them by bill-holders and depositors. For so soon as the banks, from any cause, withhold a considerable share of their customary accommodations, in the way of loans to the mercantile community, their customers find increasing difficulty in meeting their obligations to the banks, the amount of circulating medium being proportionally restricted. Thus there is a continual action and reaction, until the failures of merchants first weaken the banks, and then produce a distrust of them, which cannot go far without producing a panic, a "run," a suspension of specie payments, in which all other suspensions tend to culminate.

In short, credit is a state of mind, a belief. Mercantile credit is either a belief in the ability of the party to whom it is extended, to fulfil the obligations into which he enters, or the power of the latter to procure the entrusting of property to himself, on the ground of this faith. Involving a state of mind, it is subject to all those causes of fluctuation which influence the minds and control the beliefs of men. It is therefore as sensitive and volatile as the subtle causes which sway human belief. It is often affected by ignorance, error, and misapprehension. And in regard to the subject in hand, it has this peculiarity—not only that it propagates itself by that sympathetic and epidemic excitement which so largely sways communities of men, but intelligent persons, who see no ground of distrust, are compelled in their actions to follow the lead of the ignorant, who are seized with an unreasoning panic, and thus swell the current, which, having opened a crevasse, deepens and widens it, until it has spread devastation far and near. For, suppose a merchant has perfect confidence in the full solvency of the bank or merchant whom he has trusted, if they could be left unmolested by a groundless panic, and in their ample resources for ultimate solvency in any event; but suppose, at the same time, that he sees them assailed by such a panic, and that, in consequence, they will for a time be unable to meet their engagements; suppose further, that he has obligations maturing which can only be met by his deposits in bank, or by the funds he has loaned to others, and that they, in consequence of the panic, are in danger of immediate inability, however ample their ultimate ability, to meet their dues;—in such circumstances he will be disposed to convert his bank deposits and bills into specie, and to refuse to re-loan to his solvent debtors, what in ordinary times he would not hesitate to trust to them, in order to make sure of the means of meeting his own immediate obligations.

Thus the intelligent and solvent men of society are often drawn, in spite of themselves, into the vortex of a groundless panic, which they cannot prevent, but whose destructive effects upon their own credit they try to parry. And when large numbers are engaged in such an effort to protect themselves, they do but tighten around the whole the toils which each one for himself is trying to escape. *Vice versâ*, intelligent men are often constrained to credit those whom they know to be unworthy of credit, because they know that others will trust them for a time, although they must, in due time, prove bankrupt.

If the public generally will take the bills of an institution which he believes will prove unsound, he will take them for immediate use, because all can use them as money; or he may trust a man for a week, whom he knows to be unsound, because he believes he will not stop payment short of three months.

The remedy for the evils resulting from the impossible attempt suddenly to convert all the credits of the community, first into bankable funds, and then into specie, will vary according to the causes which induce it. So far as it arises from the fear of sound and solvent firms that they shall be unable to provide funds to meet their engagements, and their consequent precautionary efforts to procure them, (and the most serious difficulties of every commercial crisis arise from this source,) the remedy is found in such measures as will dissipate that fear. So long as solvent and prudent men are freed from all alarm, or cause of alarm, little evil and much good arise from destroying the credit of those rash and insolvent traders who are not entitled to credit, and urging them into open bankruptcy. This terminates their power for mischief by stopping the inflation of baseless credit, and the increase of the victims of their fraudulent operations. It is of the greatest moment that this result be reached without one of those financial panics known as a "commercial crisis," which, by destroying all, or nearly all credit, whelms sound and unsound traders or debtors in a common ruin. The evils of such a catastrophe, financial, industrial, social, and moral, are incalculable. How, then, may it be averted?

So far as it arises from the collapse of unduly inflated credit, acting like so much increase and subsequent annihilation of money, to inflate and then depress prices, of course whatever can be done in advance to prevent such inflation, so far serves to ward off the pernicious effects both of it and its sudden contraction. So far as imprudent advances by bankers and banks of the credit which they possess in the community, whether in the form of deposits or bills of circulation, tend to prolong or aggravate the inflation and its consequences, they should be withheld. This is usually done by the sounder class of bankers and money-lenders.

In this way, they may do something to check the continuance and promote the stoppage of overtrading. But, as has been shown by the ablest financial writers, they cannot do very much at this stage. As has already been made to appear, the bubble is really inflated by the operation of credit as a purchasing power. So long as men are willing to sell on credit, an extensive demand for an article by buyers on credit whom they are willing to trust, operates as effectually to raise prices as if they came severally with the specie, or with bank bills convertible into specie, in their hands. Now, nothing is more notorious than that men of exceedingly small means, or even of no means, often do succeed in making purchases on credit of prodigious amounts. This is especially so in a speculative state, when from any cause, even from the prevalence of speculation itself, it is expected that given commodities will reach higher prices. This expectation creates a wide demand, and the increased demand raises the price. The speculator, who is known by some purchase to have got the advantage of this rise of price, thus gains increased credit. With this he purchases more at an advance, in expectation of a still higher advance. A point is at length reached, when the conviction rapidly gains ground that the price has culminated, and must soon fall. This causes a rapid and often precipitate fall, down to, and for a time greatly below, the normal standard. Repeated instances have occurred in times of land and railway speculation, within our personal knowledge, of men worth a mere trifle, or nothing, becoming purchasers of these things to the amount of hundreds of thousands of dollars, without the use of a dollar in specie, bank-bills, deposits, or loans, except as they are trusted by the seller. Credit, in the simple form of book-credit, or promissory notes, has done the whole work. It is mostly when this aerial fabric begins to totter from the commencing fall of prices, always more sudden and precipitate than the previous rise, that the loan market is applied to for means to enable them to hold the article, and avoid the ruinous decline incident to a forced sale of it in a collapsing market. Here, if any where, bank credits in the form of bills or deposits, come into play, in propping up the staggering structure so as to delay, but rarely to prevent, its fall. Doubtless, such delay is evil. The sooner the fall of the "baseless fabric," the better. The final desolation is increased the longer it is delayed. In consequence of the difficulties between Britain and China in 1839, a great advance in the price of teas was anticipated, and several retail dealers in London began to speculate on the prospect, until prices advanced more than one hundred per cent. Instead of the expected stoppage of importations of this luxury, however, unlooked for supplies came in from various quarters, and prices at once began to reel downwards. Of course many of these speculators failed. "Among these one was mentioned, who, having a capital not exceeding £1200, which was locked up in his business, had contrived to buy four thousand chests, value above £80,000, the loss upon which was about £16,000."

"The other example which I have to give, is that of the operation on the corn-market between 1838 and 1842. There was an instance of a person, who, when he entered on his extensive speculations, was, as it appeared by the subsequent examination of his affairs, possessed of a capital not exceeding £5000, but being successful in the outset, and favoured by circumstances in the progress of his operations, he contrived to make purchases to such an extent, that when he stopped payment, his engagements were found to amount to between £500,000 and £600,000. Other instances might be cited of parties without any capital at all, who, by dint of mere credit, were enabled, while the aspects of the market favoured their views, to make purchases to a very great extent. And be it observed that these speculations, involving enormous purchases on little or no capital, were carried on in 1839 and 1840, when the money-market was in its most contracted state; or when, according to modern phraseology, there was the greatest scarcity of money."*

These are but samples of thousands of instances showing the purchasing power of credit in its simplest form, and its efficacy in inflating prices and producing other attendant and consequent phenomena, without the intervention of any money, paper or metallic, or of other bank substitutes therefor; and that, while bank substitutes for money in the form of bills or checks as the avails of bank loans, may for a time perpetuate,

* See Mill's Political Economy, vol. ii. p. 65.

they rarely originate the inflation. They are a stronger kind of credit rushing in to fill, for a time, the vacuum arising from the annihilation of the weaker. Still, undue expansions of bank credits, in whatever form, should be avoided; that so far forth they may mitigate catastrophes which they cannot, to any considerable extent, prevent.

The condition thus produced, in which great numbers of solvent merchants and traders apprehend difficulty in meeting their obligations, and accelerate and aggravate the general ruin by the extraordinary measures which each adopts to protect himself, is frequently the result of other causes than inflated credit and over-trading. It is liable to arise from any causes which induce a large and unusual exportation of the precious metals, unless the vacuum thus produced can be filled by the substitution of some form of credit in its place. As specie is withdrawn from the banks to foreign countries, or to distant parts of their own country, they begin to diminish their loans, and the obligations thence resulting, lest with their diminishing specie reserves they should be unable to meet these obligations as fast as they will return upon them. This growing scarcity of money and credit, renders all sound and prudent houses more anxious to increase their supply of the former in order to preserve the latter, in the worst contingency which such circumstances foreshadow. Thus the very causes which lessen the supply of the loan-market increase the demands upon it. This increasing stringency increases distrust, and renders more inaccessible even the diminished resources upon which demands are thus suddenly increased. This pressure tends to increase until it degenerates into a panic, and threatens the diminished reserves of specie, not only to meet the legitimate wants of commerce, which might be borne, but the demands from bill-holders and depositors, who fear that this is the only expedient for securing themselves against loss. The sequel is as inevitable as familiar.

Among the causes which may induce a sudden and unusual export of the precious metals, besides an undue inflation of credit, may be mentioned—1. A disposition to invest in tempting securities, adventures, or enterprises abroad. The rapid movement of English capital to this country for investment, in periods of high speculative excitement, has, in one instance, if not more, caused an exportation of the precious metals to this country which brought the commercial community of Great Britain to a "crisis." This not only occurred in 1839, in consequence of their implication in American securities and adventures, but to quite a large extent after their immense investments in American railways, which culminated in 1857. A sudden withdrawal of these investments produces a like effect in the country so depleted. 2. A failure of crops may occasion a necessity for large and unusual imports of food or of raw manufacturing materials, which must be paid for in coin; or, in an agricultural country like our own, may lessen the usual exports of produce which pay for our imports, and thus leave an adverse balance to be liquidated by an export of gold and silver. Or the failure of crops abroad which a country is accustomed to import for food or manufacture, may so raise the price as to require extraordinary payments abroad to procure the requisite supply. Thus the failure of the food-crops in Great Britain in the years 1846—7, and the blight on the cotton crop in this country at the same time, caused a drain of the precious metals from that country which produced a financial stringency, that would have forced a suspension of specie payments by the Bank of England, had not that catastrophe been averted by a very simple device, which sets at defiance some very plausible and popular theories of currency. So short crops in this country, leading, in 1836, to the actual importation of European cereals, were not without their influence in aggravating the commercial crises of 1837 and 1857. A third cause of the unwonted efflux of precious metals from a country, may be large foreign expenditures by the government for military or other purposes. This efflux of bullion from Great Britain during the long Napoleonic wars necessitated the suspension of specie payments by the Bank of England, and for some time afterwards. The financial derangement caused by the war of 1812 in this country, produced a like result. And although the present civil war has not, as yet, led to any expenditures abroad which have not been chiefly, if not fully, met by our exports, yet the sudden displacement of the specie of the bank-vaults of the great commercial centres, by government loans from these banks, made in specie, and disbursed through its immense expenditures in distant parts of the country, put these metallic resources, for a time, so far beyond their reach, as to render the temporary suspension of specie payments the only alternative to great financial stringency and commercial distress.

This suggests the answer to the question, What is the antidote to the evils of that prostration of credit, whether produced by a violent reaction to overtrading, or by other causes, such as have been specified, which puts sound and prudent traders in fear of being unable to meet their engagements, and leads or tends to all the deplorable consequences, as already set forth, of such a wide-spread apprehension? The answer is plain. This evil and its consequences can be removed only by removing its cause. Its cause is the excessive and crushing contraction of credit. Let that undue contraction be removed. Let the banks or bankers who control the loan market, either of money or its credit substitutes, boldly resolve and proclaim that those who deserve credit shall have credit, and that really solvent houses shall receive their ordinary accommodations in the form of bank-bills or credits upon which they can draw checks. This of itself, if seasonably adopted, will generally at once relieve, and soon totally remove, the "pressure." It will kill the rising panic. It will restore sound commercial transactions to their wonted channels, and loose the "dead-lock" which holds the resources of the people as unavailable and moveless as if in the clutch of death. This is the only, generally it is the sure, way of averting the catastrophe they seek to escape by an opposite course—the suspension of specie payments—an event seldom consummated among solvent and prudent banks, except by the aid of such a panic as this course dispels. At all events, this event is sure to come of any course which suffers large numbers of sound and prudent merchants to stop payment. And it comes with great aggravations, as compared with any temporary suspension following the other course. For the injury produced by the breaking down of large bodies of sound merchants is incalculable to themselves, the banks, and the people, alike in a financial, social, and moral point of view. This function of banks and bankers in averting financial explosions, or mitigating their worst evils, as they inevitably arise from time to time, has, until recently, been overlooked, not only by the sounder political economists and legislators, but by bankers themselves. But a very few facts, of comparatively recent occurrence in the intensely commercial countries which most largely substitute convertible paper credits for coin, as a medium of exchange, will at once illustrate and verify the induction.

Those familiar with these subjects know that the present charter of the Bank of England was framed with great care for the purpose of affording the convenience and profit of a paper-currency, and, at the same time, preventing the evils of its undue inflation. It is, therefore, allowed at all times to issue, on certain conditions, £17,000,000 or $80,000,000, upon an equal amount of government stocks, it having been found by experience that something like this amount of a paper-currency, in which all the nation perfectly confides, will keep afloat at all times, in addition to the issues of local banks, without returning upon the bank for redemption. A similar amount of specie, in the absence of these or equivalent notes, would doubtless always be in circulation. In order to prevent the expansion of paper-currency beyond the amount of specie that would be current, if the former were unknown, the bank was permitted to issue no further notes of circulation, except on the deposit of gold to an equal amount. And it was required to issue notes to the amount of gold so deposited, to all who should demand them. When these bills were returned for redemption in gold, which would only occur in case of a demand of bullion for export, the bank was forbidden to re-issue them, except in return for an equal deposit of gold. This part of the circulation of the bank was in no manner left to its own option. It must equal and vary with the amount of specie deposited. This system, of course, averts whatever inflation is produced by an excessive issue of bank-notes. But its working is evil in that state of things, when, through exportation of the precious metals, serious stringency seizes the money market, solvent traders become anxious, and a panic is impending. Consequently, when the extraordinary drain of specie from the bank for corn and cotton in 1847, proportion-ably contracted the bank-note circulation, money became so scarce as to appal the strongest houses, and induce all the premonitory symptoms of a panic and a suspension of specie payments. How was all this averted? Simply by an Order in Council suspending the prohibition to issue notes, in excess of the specie deposited for this purpose. This produced confidence in solvent houses that the supply of money would be equal to their necessities. This arrested the panic, and prevented that suspension of specie payments which was otherwise imminent and inevitable. A similar suspension of this restriction, or the assurance that it would be ordered if needful, (we are uncertain which, was attended with similar benefits in 1857—8.

In the financial crisis of 1857 in this country, the New York banks, afraid of the constitutional penalty of forfeiture of charter for the non-payment of specie, made the avoidance of this their chief concern, whatever might become of their customers, including the solvent merchants, whom they had been accustomed to aid with loans. The consequence was, that great numbers of the most substantial houses staggered or fell. The most reliable means of raising money failed. Exchange on London, in ordinary times as easily converted into specie as bank-bills, could not be negotiated at any price, (thus proving that there was no need of draining the banks of specie, and of consequent financial stricture and panic to liquidate foreign indebtedness,) credit was nearly annihilated; a rayless gloom, which has had no parallel in any of the shocks given to public and private credit by our civil convulsions and enormous military expenditures, settled upon all financial circles and agencies, till Wall Street, the monetary heart of the country, stood for days petrified with hopeless bewilderment and horror, blindly awaiting those coming events which, to the eye of all competent observers, then "cast their shadows before."

At length, the more intelligent depositors of the banks, seeing no end to this dead-lock but by the stoppage of specie payments, presented demands for coin large enough to compel suspension. This thunder-burst cleared the lowering financial skies, and purified the murky atmosphere. It was like the vernal thaws which unlock our rivers and canals, and revive our internal commerce though these great arteries, after its long hybernation. Solvent dealers were at once furnished with needful credits. The panic ceased. The specie withdrawn from the banks almost immediately returned to them, and in a short time it was doubled. In a few months they had more than double any reserve they had known for years. Almost immediately after the suspension, the difference between specie and bills in the market was merely nominal. The result showed that the only necessity for suspension lay in a panic created by the unwise restrictions of the banks—a course adopted by them because they themselves were first so far seized by the panic as to refuse credit to those worthy of credit. What then could they expect but that the same measure should be meted unto themselves in return, and bring them down among the mercantile wrecks they had created, and which made the very atmosphere about them "thick with the dust of fallen fortunes"? Had they resolved to do, a month before their enforced stoppage of specie payments, what they then refused to do for fear of that catastrophe, but what they freely did as soon as it occurred, this calamity would itself in all probability have been averted. Even if it had not, its evil effects would have been vastly mitigated. The simple measure which the exigency demanded, was the extending to sound borrowers, who, if thus sustained, would ultimately prove solvent, their wonted accommodations. Such a course, though requiring some courage, is the only safe and prudent one in such an emergency. It cannot possibly lead to any worse consequences than the opposite. The chances are a hundred to one, that it will work results immeasurably better, and either wholly avert what is known as a "financial revulsion," or greatly mitigate its evils.

This was beautifully proved and illustrated in the next important commercial disturbance in this country, in the winter and spring of 1861, caused by the secession developments in the South. The Southern banks suspended specie payments almost as soon as these movements were initiated. The insurgent leaders predicted an immediate "commercial crisis," culminating in bank suspensions, and general bankruptcy at the North. Judging from the past, the grounds for this augury were not slight. The almost entire stoppage of Southern payments to Northern merchants and manufacturers, for which these events furnished either the necessity or the convenient pretext, together with the cessation of Southern purchases, occasioned an immediate loss of probably not less than a hundred millions to the dealers with Northern banks; and this loss, to a great extent, comprising the very means on which they relied to meet their bank indebtedness. This, of course, was enough to cause a great, and threaten a greater, financial upheaving. The usual premonitory symptoms of a "commercial crisis," "bank-run," stoppage of specie payments, and driving solvent firms into bankruptcy, began to appear. What course then did the New York bank managers pursue? They saw that there was no demand for specie for exportation, but that the drift of it from all quarters was towards the great metropolis. They learned wisdom from the past. Instead of each bank endeavouring for itself, as in 1857, by enforcing immediate payment of their dues, and refusing to re-loan the funds so received, to stem the panic inevitably begotten by such a course, they agreed to sustain each other, and all solvent dealers with them. The commencing panic was quieted. None but those whose losses had made them actually insolvent, were suffered to go down. Confidence was established among those who deserved confidence. Specie, so far from being drained away from the bank-vaults, rapidly accumulated in them; and, owing to the large European balance in our favour, in consequence of our immense exportations of corn, and small imports of goods, rose to the unprecedented maximum of fifty millions—and this in the midst of the prodigious expenditures initiated by our civil war! And yet, had the policy of 1857 been followed, it would probably have issued in a similar commercial explosion and devastation.

Early last winter the immense expenditures of the government in distant parts of the country, sustained by loans from the metropolitan banks, rapidly scattered their unprecedented accumulations of specie, the only currency which the government was then authorized to employ in receipts or disbursements. To perform this vast increase of government business with coin, required an amount of it beyond precedent in the channels of business. This drain, however, might possibly have been long borne, had it not been for the effects of the *Trent* imbroglio, and other ominous foreshadowings of hostile European intervention. The nearly universal belief in Britain and France that war with this country was imminent, started a rapid withdrawal of European capital invested here, which also began to reduce the bank reserves. This threatened to continue. The prospect of such interminable complications and conflicts, added to our present struggle, moreover, weakened the credit of the government, alarmed capitalists, and strengthened the general apprehension that the suspension of specie payments could not long be delayed. This growing conviction itself hastened and rendered certain its own realization. The only question was, whether to anticipate it before all specie was drained from the banks, to return foreign capital invested here when we could least afford to spare it, and to form useless private hoards, and before oppressing the mercantile community with a financial stricture; or whether they should bear up till the last extremity, and then succumb to the irresistible pressure, with all the foregoing train of calamities. They adopted the former alternative, wisely and well too, for themselves and the country. The other course, adding all the evils of a commercial panic to the financial and other difficulties of the government, in that darkest hour just preceding the recent series of brilliant victories that have reassured the national heart, would have added another crushing weight to burdens already well nigh insupportable. The difference between paper-money and specie has been slight, except during a transient speculation in the latter, which has fortunately proved disastrous to the speculators. The flow of bullion into the bank vaults has returned, and they have already about twice the amount on which they sustained uninterrupted specie payments for a decade prior to the crisis of 1857.

Although there is every indication that specie payments might again be resumed and maintained, yet such a war as is now upon us gives rise to so many unlooked-for financial anomalies, that it will probably be safer to prolong the suspension during its continuance, keeping the difference between paper and metallic currency slight, than to open the door for panics in the various disturbances that may yet arise. But the true standard is gold and silver. The true paper money is that which is immediately convertible into them. Inconvertibility is a serious evil in itself considered; yet an evil sometimes to be temporarily borne, for the avoidance of still greater and more intolerable evils. Still, specie is evermore the standard, as appears from the fact, that an inconvertible paper currency is counted in the denominations of specie. To this standard it should ever tend and approximate; if sound, it will have an inevitable *nisus* towards it; and any necessary deviation from it should be as slight and transient as possible.

The true function of those then, who have the power to loan their credit, so that, in the form of bank-notes or checks, it shall perform the functions of money, is, we conceive, 1. During a period of buoyant and expanding credit to avoid inflating it, by refusing facilities for speculation, financial "kiting," or for aiding "bold operators" and unsound adventurers; and by keeping an ample supply of coin in proportion to their liabilities. 2. When credit is so collapsed as to produce or threaten distress to prudent and solvent dealers, at once to extend to these their accustomed aid, and stand or fall with them. This latter course will, in most cases, prevent the further development of a commercial panic, and avert the suspension of specie payments. It will avert it, if anything can avert it. If such suspension follows, it will not be in consequence, but in spite of this preventive measure. It will be because nothing could prevent it. But its evils will be greatly mitigated, as has been shown. The effect of indefinite persistence in the attempt to reduce all means of immediate payment to hard specie, after credit substitutes have so long supplied its place in the ratio of fifty to one, and this when even specie itself has by panic been abstracted from the channels and centres of commerce, either to foreign countries, or to inaccessible private hoards, would ruin nearly every person who owed anything, however ample his resources. For property could be turned into coin to pay these debts only at ruinous rates. Suppose such an incubus as pressed down our commercial cities for a month prior to the suspension of the New York banks in

1857 to last a year, and what business or estate encumbered with debt could survive it?

This view is further confirmed by the fact, which has hitherto eluded the notice of all but a few of the profoundest writers on this subject, viz., that this is the only way in which the operation of paper substitutes for coin can be made to correspond to that of a purely metallic currency. That such paper substitutes will ever cease to exist, in some form, in highly civilized and commercial countries that have once enjoyed their use, it is vain to suppose. Undoubtedly the maximum of benefits and the minimum of evils result from their substitution for the precious metals, when they as nearly as possible correspond, in their operations and effects, to the more costly and inconvenient currencies they supplant. What then, in the circumstances we have been considering, is the working of a currency wholly metallic, as shown *a priori* from the nature of the case, and *a posteriori* from experience?

In ordinary times there will be, 1. The coin in actual circulation for the purpose of effecting the actual exchange of commodities. 2. The hoards of specie constantly accumulating in private hoards in the following ways: First, to provide that reserve for the ordinary and extraordinary expenses of living and demands of business, which prudent managers like to keep. Secondly, in those larger amounts which capitalists are fond of accumulating to await opportunities of favourable investment. Thirdly, in that hoarding of silver and gold as the only known means of safely husbanding money which occurs to some extent in all countries; but, on a very large scale, in countries destitute of banks for savings and deposits, and especially in those despotic or ill-governed countries, where private concealment of money is its only protection from private or governmental robbery. In France and the continental countries, where the banking system is but parially organized, the aggregate of such hoards is immense. In the former country, it has been estimated that the quantity of coin in private hoards amounts to some hundreds of millions of dollars—no small proportion of which is among the peasantry, who are far enough from being thought to possess considerable reserved funds. Analogous to this are the private accumulations of coin over the continent. Suppose now that any extraordinary contingency arises, calling for an unusual exportation of the precious metals. How is it met? By withdrawing the coin in ordinary circulation, and producing the inconvenient and oppressive stringency thence arising? No. The unusual demand for money raises the rate of interest enough to tempt out of the hoards what the emergency requires. Thus the foreign export of specie is met, without any sensible diminution of the circulating medium, or any other inconvenience than a temporary rise in the rate of interest, and a decrease of those reserves which a little prudence and economy will readily replenish. In this way, unusual demands for coin for export, occasioned by wars or other disturbances, have often been met on the continent. Witness the great popular loan for the Crimean war, so successfully raised by the French emperor.

Now it is a familiar fact, that in countries having a thoroughly organized and convertible paper-currency system, the ready money which people keep, exists, for the most part, either in the form of bank-notes, or bank-deposits; and that the great hoards of coin are in the bank-vaults—in the supplies which all prudent bankers keep to meet all ordinary and extraordinary demands upon them, short of those caused by the panic of a financial revulsion. If, therefore, in such countries, unusual demands arise for coin to export, or for domestic transfers of it equivalent to foreign export, such as arise in some civil wars; and if the resulting movement be analogous to that under an exclusive metallic currency; then free drafts for the emergency will be made upon the reserved hoards of specie in the banks, *without interfering with the ordinary volume of currency in circulation;* i. e., *without seriously lessening the ordinary means of payment in the community in the form of bank credits, deposits, notes, and checks.**

We thus detect the secret of the disastrous failures of so many of the attempts at currency regulation by the civil power in this country and in Britain, to remedy the evils and accomplish the good for which they were intended. The evils they hoped to avert were the inflation of currency, prices, and

* See Mill, vol. ii., p. 209, *et seq.*

vicious speculative trading, with their consequent evils of ultimate severe contraction and collapse of currency, prices, reasonable credit, and all the disastrous phenomena of a "commercial revulsion." They have sought to accomplish this by trying to bring a paper currency to conform in its workings, as nearly as possible, to the course of a currency exclusively metallic. For this purpose they have sought to prevent the speculative and baseless expansion of credit, with its destructive reactionary effects, by trying to restrict the issues of paper money to what they suppose to be the specie standard, as to volume. This is all good for prosperous times. As far as it goes, it tends in some degree to lessen the inflation of speculative credit. For reasons already shown, however, it does this only very partially, because credit has so many forms, and so many means of expansion, which are sure, at times, to operate and urge the money market towards a reactionary crisis, without the intervention of bank-notes. This is one great fact that has been overlooked by nearly all regulators of the currency, and has therefore been a fruitful source of disappointment as to the result of those schemes.

But while these schemes have proved comparatively unavailing to prevent speculative expansion, many of them have proved extremely efficacious in aggravating all the horrors which result from the bursting of speculative bubbles, or from that large export of specie sometimes rendered necessary by other providential causes. For, in such an emergency, they compress the volume of currency, as we have already seen, vastly below the normal standard which would be at command for legitimate uses, under an exclusively metallic currency. For, instead of *allowing the hoards of specie to meet this demand, without seriously reducing the amount of money in circulation*, they are nearly all so shaped as to require that in proportion as the specie reserves are reduced, either the amount of their circulating notes, or of these and their deposits, all their liabilities, shall be reduced proportionately; *i. e.*, so much available resources for money payments shall be withdrawn from the support of sound business and solvent dealers. In the present charter of the Bank of England, for every pound sterling withdrawn from its vaults, a pound is also withdrawn from circulation. But this operates with vastly greater severity where the proportion of specie to liabilities required to be kept on hand, is in the proportion of one to three, four, five, or ten, as often happens under our American financial legislation. Supposing, as it is fair to do, that in quiet times this requisition is barely complied with, then, when there is a drain of their specie from any cause, for every dollar of coin drawn out, they are obliged to abstract ten dollars of available substitutes for money from the use of the public. Such a sudden tightening of financial cords no people can long endure. They will either snap from their own tension, or be rent by the writhings of their victims. The public will obtain relief by enforcing a speedy suspension of specie payments, if not otherwise. And in the face of such a pressure, all legislative and even constitutional prohibitions, making, as in the case of New York state, the penalty of a stoppage of specie payments by banks to be an immediate loss of their charters, are nullities. They are well adapted to the case of individual banks which fail in quiet times, when bank-notes and deposits generally are convertible into specie, because then such failure proves actual insolvency. But their enforcement in times of universal suspension of specie payments from panic, would be intolerable, and would ruin nearly all solvent persons who had survived the wreck. Hence the courts of New York found ways of expounding the constitutional prohibitions and penalties on this subject, after the suspension of 1857, so as to make them apply only to the former class, of occasional banks stopping the payment of coin in ordinary times, which constitutes a fair presumption of bankruptcy. Even the enforced securing of bill-holders has in more than one instance frustrated itself, aggravated panics, and issued in ruin to the banks and loss to their creditors. The banks in some of the Western states had, in compliance with laws requiring them to secure their circulation by state stocks deposited with the government, made large investments in the Southern state stocks for this purpose. When secession showed its head, in addition to all other financial disturbance caused by it, these stocks depreciated something like one-half. This at once caused distrust of the banks owning them, and of the bills secured by them, and produced prodigious loss and embarrassment on all sides. A somewhat similar history attended a large proportion of the early free banks with secured currency in the state of New York. This evil that state has largely remedied by requiring the deposit of the stocks of New York state, or of the United States. But not a few of them have suffered loss from the unlooked for depreciation of government securities, caused by the unparalleled expenditure which no human mind could have foreseen. When, however, our present commotions are settled, the immense amount of United States securities afloat will probably afford an ample basis for well-secured currency throughout the land. And to the free use of such a currency without abatement, in order to prevent or ease the excessive contraction of credit after its extravagant inflation, or to alleviate the inconvenience arising from the unusual export of bullion, there is no valid objection. But if securities for circulation in the way of public stocks are exacted, they should be as solid and indestructible as our national existence and faith. It is impossible to foresee what may occur to depreciate or destroy any feebler securities, no less to the injury of banks than their creditors. Nothing, however, is a substitute for the judicious and faithful management of these institutions, which shall curtail their operations to the support of none but sound business in speculative periods, and expand them enough to support all such business in times financially critical. It greatly contributes to such management of them, if they are required to make frequent publication of their condition and operations, and if they are annually inspected by a competent and faithful committee of visitors from the state. These simple precautions have, for a long time, secured an administration of the New England banks advantageous to their stockholders, borrowers, depositors, and bill-holders. Of late years, it is rare that the public have lost by them. They were the last to suspend specie payments in 1857, and their issues, with those of East Jersey, are at the lowest discount (merely nominal) which country bank-notes bear in New York city; it ranges at from one to two and a half mills in the dollar.

If a paper currency, however, is unavoidable, it is impossible to reach its full benefits unless we have that which bears a national imprint and credit. The bills of local institutions, however good, have only a local credit and currency which are either legitimate or enduring. A thousand advantages arise from having at command paper money which is equally current and available in every part of the country. The recent act of Congress directing the emission of $150,000,000 of United States treasury notes is the first step in this direction. We do not believe this step will be retraced, unless the system is abused by a further excessive emission of this currency, so great will prove to be its practical benefits. The measure has two principal aspects, in regard to each of which we will say a few words in concluding this article, which has greatly outrun our first intention. These aspects are its relation to currency and to the credit of the government.

As a currency measure, it supplies what in this country has long been a desideratum—paper money having a national credit and circulation. The convenience of this in ordinary times is too obvious to need proof. Its superior portability, security, and ease of concealment, as compared with coin, for those who have occasion to travel to distant parts of the country, or to make payments where banks and banking offices are as yet unorganized, although great, are among the least of the advantages. For transmitting payments of moderate amount by mail it will be an invaluable convenience, saving the cost of drafts, and answering every purpose in the countless cases in which drafts are unavailable or inconvenient. As it will be almost the only money passing between the commercial centres and extremities of the nation, most of the loss now sustained by the discount in our great cities on the bills of distant banks will be avoided. As this currency will be available everywhere, it will especially fill the channels of circulation where there is now a want of a sound bank currency. It will rapidly reduce the circulation of the spurious issues of unsound banks, by which our people have suffered so often and so much.

It is unfortunate that the introduction of such a currency should occur at a time when the universal suspension of specie payments renders it a necessity that it should be for a time inconvertible. But this very circumstance made the necessity for its immediate adoption only the more imperious. The suspension of specie payments, along with the immense war expenditures to be provided for by loans, renders paper which is for the present inconvertible, the only currency which is accessible to the government.

The only alternative for the government was to use its own notes, or those of local banks. How could these avail in the payment of its half million of soldiers, placed in distant parts of the country, where the banks making these issues are unknown and void of credit? For the payment of soldiers and other army expenses, no paper currency would serve but that of the government, or its equivalent. As to specie, although the government might at all times provide enough of it for its ordinary disbursements, it would be impossible, until new accumulations of it are gathered in the loan-markets of the country, to provide enough for its present extraordinary payments. The immense productive energies now devoted to the war, are ordinarily occupied in agriculture, commerce, and manufactures. The payments required to sustain them are not made with coin, but with its credit substitutes. Is the accessible coin of the country now so much more abundant, that an ample supply of it can be commanded for the same amount of payments made by the government? This no considerate person can maintain. There has been some accumulation of specie in payment for our extraordinary exports of corn. But it is neither available or adequate for this purpose, while it is needed for other uses, which we are just about to indicate.

But this currency is not only a convenient instrument for the people and the government, in making payments, and distributing their resources as necessity requires; it is a great addition to the credit and resources of the government, and of the people also, whose interests are bound up in ways innumerable with the financial strength of the government.

All paper money in circulation, as well as common bank-deposits, are loans without interest to the institutions issuing them, or the parties against whom they are held. Whoever holds a bank-note for ten dollars, holds the promise of that bank to pay him ten dollars in coin, on demand. As long as he does not demand it, or keeps the bill, he in reality loans the bank that sum, without interest. Any bank or banker that keeps bills to the amount of one hundred thousand dollars in circulation, enjoys a gratuitous loan to that extent from the public. Is there any good reason why the public itself should not reap the profit of some part of this, its own gratuitous loan, by giving it to the government—especially when it is thus provided with a currency of superior, and, in our own country, universal credit, and from which there is little or no liability to loss? And did not this virtual loan, or rather the anticipation of it—for it is not yet to any extent issued—afford suitable and vast financial relief to the government, in that darkest hour just preceding our recent brilliant victories, when foreign intervention in behalf of an attempted slave-empire, added its fearful weight to the heavy incubus already upon us?

But its beneficent effects were not confined to the mere raising of a loan of a hundred millions from the people, without interest, at a time when its securities were greatly depressed. It prevented a still greater and ruinous depression of those securities, which, had a hundred millions more of them been thrust upon the market six weeks ago, in its then temper, would have forced them down so low as to verify the European prediction, that the United States must give up the contest, from financial exhaustion. This measure, however, bridged over the chasm which lay between the crisis of despondency and the revival of financial and political confidence, by the recent brilliant series of victories. But had government securities sunk as low as would otherwise have been inevitable, it is impossible to calculate the fearful political and military consequences, or the all-pervading financial embarrassment which must have ensued. For all financial interests are now implicated with the fate of these securities.

Besides, had it much longer remained uncertain whether the government contractors would be paid, their embarrassment would have ramified itself indefinitely through the countless interests directly and indirectly involved with them. The non-payment of the creditors of the government would have necessitated the non-payment of their creditors, and so of others in turn in an indefinite series. As so large a portion of the business of the country is occupied in the service of the government, this would have reached all the channels of trade, production, finance, from the families of soldiers to the largest banks. The distress of every kind thus produced would have been incalculable, and not the least in those few bank parlours where the most strenuous endeavours were, doubtless with the best intentions, made to discredit and defeat this issue. It would have caused another stricture of credit, already contracted to the utmost endurable point, if it had not precipitated a full "commercial crisis," when the country was by no means able to bear it.

A fourth advantage of this measure, having to do with its relations both to currency and public credit, lies in its furnishing a proper medium for the payment of government taxes, and the purchase of government stocks. For reasons already shown, coin in sufficient quantities for this purpose is out of reach. The only other resource is the inconvertible paper of local banks, unknown beyond their vicinage, and sometimes of dubious credit even there. This medium of exchange, coming to the creditors of the government, ultimately reaches the capitalists who have loaned to producers the means of trusting the government. These capitalists will naturally desire to re-invest the means thus returned to them; and in what will they so naturally place it as the stocks of the government paying an annual specie income of six per cent? Into such a stock these notes are at all times convertible at par. As they thus return to the government, they will be returned again to the people in its disbursements. This will be an immense aid to the government, in reaching and attracting to its service those resources of the people which it needs for the prompt and efficient suppression of anarchy and insurrection.

A final advantage of this measure is, that it will liberate some of the surplus and inert hoards of gold in the country, to procure in foreign countries those articles, whether for ordinary consumption or the conduct of the war, which we cannot otherwise obtain, while our energies are so severely tasked in this stupendous struggle. To this extent we can command the aid of other countries at points where we most need it. And in this matter it is undeniable, 1. That we had an ample supply of coin for the ordinary wants of commerce before the secession of the Gulf States. 2. A very great addition has since been made to our stock by the usual arrivals from California, and the importations from Europe in payment for our cereals. 3. But a small part of this surplus has as yet been exported, and a large residuum can therefore be spared as well as not. 4. As has already been shown, in times of great emergency, the natural course for nations and individuals is to draw freely upon those reserves which they have made to meet contingencies, and which after the exigency is past, they will speedily replenish by diligence and economy. This is the course of things in countries where the currency is exclusively metallic. In this country the deficit is speedily replaced by the products of our California mines. In all these ways does the measure in question strengthen the credit of the nation, and render its resources more available.

In the absence of the convertible element in this currency, however, its beneficent effects would be seriously jeopardized if it were to be largely increased beyond the present issue. While paper-money is convertible into specie, it cannot be permanently increased very much beyond the amount of coin that would circulate in its place, if the currency were exclusively metallic. This result is ensured by the irreversible laws of trade. An inconvertible paper-currency cannot go very much beyond the same standard, without producing serious derangement. So long as it approximates it, its effects are very nearly the same as if a similar amount of specie or convertible paper performed the same functions in exchanging a like amount of commodities. Experience alone will determine how much of government paper-money will circulate without serious depreciation, and proportionate inflation of prices. No absolute and unchangeable amount can be fixed upon. For it will vary with the amount of other currency in circulation, with the amount of exchanges of property going on, the rapidity of its circulation, and the extent to which bank-checks can supply its place. At present, the suspension of specie payments removing gold from circulation, the large amount of payments to our army and navy requiring to be made in money alone, the great shrinkage in the bank issues, especially at the West, probably open an ample field for the present issues. But there are two chief criteria of the due amount of an inconvertible currency. First, the premium on specie. If this is slight, it shows that the expansion of the currency is inappreciable. Yet even this is, in the presence of disturbing causes, at times, an imperfect criterion. During the long stoppage of specie payments in Great Britain on account of the wars growing out of the French Revolution, specie was at a premium of from five to thirty per cent. But it has been established by competent investigation, that this arose, not in any considerable degree from the inflation of currency beyond its ordinary volume, but from the extraordinary demand for the precious metals to supply the vast military chests on the continent, which gave them a temporary abnormal value. The premium for gold here, as we now write, is between one and two per cent., which shows our currency to be far from any vicious inflation. Yet speculators, a short time ago, bid it up to nearly five per cent., in expectation of a great profit from the sudden excess and rapid depreciation of inconvertible paper. There was no real foundation for such a difference between bullion and notes, as the result has shown. A second test of the excess or deficiency of an inconvertible paper-currency, as compared with the normal standard, is the grade of prices, not of any single article, but of commodities and properties generally. If these are unduly high, they prove an excess of circulating medium. If otherwise, they disprove it. Tried by this test, the rate at which the property and products of the country sell, we are far enough from any inflation of currency.

Still another indication on this subject is found in the amount which the Bank of England (whose notes, for all practical purposes, are equivalent to government issues made a legal tender,) is able at all times to keep in circulation, without the slightest danger of return for redemption, in addition to the issues of all other banks in the kingdom. Says Mr. E. Littell, of Boston, "The total amount of notes never falls below one hundred millions of dollars, but is often above that *low water* mark." It might undoubtedly easily be carried further, but for certain restrictions in the charter itself. But, in that compact and intensely commercial country, checks do a vastly greater work than in our more sparsely populated land. Is it extravagant then to suppose that one hundred and fifty millions will easily circulate in this country, without any hazardous inflation of our currency?

This process, however, cannot be repeated, so as seriously to swell the volume of currency beyond its normal amount when convertible, without the most disastrous consequences. Mere bits of paper, multiplied indefinitely, no matter how secured, or what stamp of government authority or legal tender they bear, become cheap in proportion to their amount, and if multiplied indefinitely, become indefinitely worthless as currency. This is proved *a priori* and *a posteriori*. All attempts at forcing the illimitable circulation of paper at the par of its face, by whatever penalties, have failed. The old continental paper-currency, and the French assignats, are memorable examples; Confederate currency bids fair to be another. The evils of such a depreciation in the measure of value, to both government and people, are beyond estimation.

It is to be regretted, that the exigency required that our temporarily inconvertible government issues should be made a legal tender. This was an overbearing necessity, arising from the persistent determination of some parties to make them unbankable, and therefore unavailable. Such discredit would have paralyzed their beneficent influence. In the same manner, a "run" upon the banks which assailed this currency has more than once compelled them to stop specie payments. The normal principle thus yielded to an overbearing necessity; so their "run" upon the issues of the government compelled it to legitimate a certain amount of inconvertible paper. This no more involves an indefinite increase of such currency, in one instance, than in the other; discretion and integrity are the only safeguards in either case.