566 COTTERILL.

... ..

such as the resistance of the air, friction, &c., which oppose it, and finally destroy it. And they unanimously reject the former mode of accounting for the results, and adopt the latter. Hence we see that though principles are manifestly erroneous, which do not account for results, yet it does not necessarily follow that any principle, or theory, which does account for them, is therefore necessarily true, because in fact it may so happen that several theories may account for the result, and it requires judgment and consideration to decide which is the true one. Now the theories of value we have been discussing, are just like the old theories of motion. They apparently account for results in a great many cases, and therefore they may impose upon an unwary thinker. But they are dangerous and seducing errors, utterly opposed to the fundamental prin-ciples of Natural Philosophy, and to be repudiated and rejected by all those who study Political Economy in the true spirit of Science.

COSTAZ, CLAUDE ANTHELME, who did much service in his day to Economic Science, was born at Champagne, in the department of the Ain. After the 9th Thermidor, he obtained an appointment in the office of the Board of Agriculture, and afterwards that of Commerce, in which he rose to be one of the chiefs. In 1802, he was one of the founders of the Society for the Encouragement of National Industry, and five years afterwards he suggested and obtained the establishment of public lectures in the Conservatoire des Arts et Métiers, which was just founded. He was appointed by Government to draw up the introduction to the account of the Exposition of National Industry, which was held the same year. He also originated the Conscils de Prud'hommes, which have been of so much service in France. In 1812, he was appointed to draw up a large series of statis-tical tables, relating to commerce and manufactures, to be laid before the Corps Legislatif. They exhibited the manufacturing condition of France in 1789, 1800, and 1812. He has published the following works :---

Essai sur l'administration de l'agriculture, du commerce, des manufactures, et des subsistences. Paris, 1818.

Histoire de l'administration en France de l'agriculture, des arts utiles, du commerce, des manufactures, des subsistences, des mines, et des usines. Paris, 1843.

Mémoire sur les moyens qui ont amenè le grand développement que l'industrie Française a pris depuis vingt ans. Paris, 1816.

COSTER. Ouvrier menuisier.

Organisation du travail, Ebénistérie française. Paris, 1851.

COTTERIL.

An examination of the doctrines of Value, as set forth by A. Smith, Ricardo, M. Culloch, &c. London, 1831.

COTTERILL, CHARLES FOSTER.

Agricultural Distress, its Cause and Remedy. London, 1850.

The Civil Freedom of Trade; or the rights and duties of governments in their relation to the natural freedom of private enterprise. London, 1856.

COVE.

Public Granaries and the Cycle of the Seasons in connection with Trade and Agriculture. London, 1856.

COTTON, SIR ROBERT BRUCE a celebrated antiquary, whose collection of manuscripts forms part of the original foundation of the Bribrated antiquary, whose collection of manuscripts forms part of the original foundation of the Bri-tish Musaum, was born at Denton, in Hunting, donahire, 22nd Jannary, 1570. He was educated at Trinity College, Cambridge. He devoted him, self ardeptly to antiquarian study, and collected a vast number of manuscripts, charter, i.e., and documents relating to the history of the country, which were chickly rathered from the libraries of the monasteries broken up by Henry VIII. His collection was of grass use to Cambon, Seldan and other writers of that species, and cotton himself was held in the highest steam by the most anti-nent men in James I is time, as an antority on all points of constitutional law. He was inherited by James I, and wrote several tracks by his order. In 1611, the king was much strailened for mass of the rank of baronet, which was to be sold. The king was delighted with this plan, and Cotton was one of these who bought a barouetcy. He was after-wards employed both by the king and the House of Commons to write several tracts on various wards employed both by the king and the Honso of Commons to write several tracts on various subjects. In 1615 his intimacy with the vile favourite of the king—Carr, Earl of Somerset— caused him to be suspected of being privy to Sir Thomas Overbury's murder. He was kept in countement for five months. A worse misfortune, with a more tragical ending, happened to him in 1629. He was returned to the first Parliament of Charles L and was in favour of a referse of rate Charles I., and was in favour of a redress of grievances, but with all due respect for the king. A tract, in manuscript, was disseminated, bearing the title, "A Project how a Prince may make himself an absolute Tyrant." A great uproar being made about it, it was traced to the Cottonian Library. Sir Robert being quite unconscious of the whole transaction, found on inquiry, that it. got into his library under another name, without his knowledge, and also without his knowledge had been taken from it, and the title altered. Al-though Sir Robert proved his entire innocence of the whole transaction, his library was seques-trated in the most arbitrary manner, and he was forbidden access to it. He took this so much to heart that he died of chagrin, 6th May, 1631. His library was much augmented by his son and grandson, and passed into the possession of the public in 1700. After various journeyings, it was deposited in a house in Little Dean's Yard, where, in 1731, it was much damaged by fire, 111 manuscripts of great importance being destroyed, and 99 more injured. In 1757 it was transferred to the British Museum. An Abstract out of the Records of the Tower,

touching the King's Revenue. London, 1642. Cottoni Posthuma.

A Discourse of Foreign War, with an account of all the taxations upon this kingdom, from the Conquest to the end of the reign of Queen Elizabeth. London, 1690.

COVE. MORGAN.

An Essay on the Revenues of the Church of

Maclesd, 1863

COXE.

England, with an inquiry into the abolition or commutation of tithes. London, 1816.

COVENTRY, GEORGE.

On the Revenues of the Church of England; exhibiting the rise and progress of Ecclesiastical Taxation. London, 1830.

COULON. J. J. B. Docteur en droit. Plan sociale et humanitaire; organisation du travail, et de l'impôt ; secours aux pauvres. Paris, 1848

Nécessité de l'organisation du travail. Paris, 1848.

COURNAT, ANTOINE AUGUSTIN. Recherches sur les principes mathématiques de la Théorie des Richesses. Paris, 1838.

COURT, M. HENRY.

A Review of the Income Tax in its relation to the National Debt, with suggestions for removal of its present inequalities. London, 1853.

Theory and Facts in proof that the Laws for the imposition of Tithes are attended with the most calamitous consequences to the country. London, 1826.

Tithes-Commutation versus Composition. London, 1831.

COURTENAY, THOMAS PEREGRINE. The Right Honourable.

A Letter to Lord Grenville on the Sinking Fund. London, 1828.

A Treatise upon the Poor Laws. London, 1818.

COURTNEY, LEONARD H. Direct Taxation; an Inquiry. London, 1860.

COURTOIS, A.

Etudes sur l'agiotage. Paris, 1852. Des opérations de bourse. Paris, 1856.

COUSIN, VICTOR. This eminent person was born November 22, 1792, at Paris. He has published one work relating to Economics-Justice et Charité. Paris, 1849.

COUSINERY, ESPRIT MARIE.

Essai historique et critique sur les monnaies d'argent de la Ligue Achéenne, accompagnée de recherches sur les monnaies de Corinthe, de Sicyon, et de Carthage. Paris,

COUSINS, DENNIS LOUIS.

Out-door Relief to Able-bodied Paupers. London, 1850.

COWELL, JOHN WELSFORD.

Letters to the Right Hon. F. T. Baring, on the institution of a safe and profitable Paper Currency. London, 1843.

Further Letters on Currency. London, 1858.

COWLEY, J. A View of the British Trade to the Mediterranean. London, 1744.

COXE, TENCH.

A Memoir of February, 1817, upon the subject

of the Cotton Wool cultivation, the Cotton trade, and the Cotton Manufactures of the United States of America. Philadelphia, 1817.

An Addition of December, 1817, to the above.

A View of the United States of America. London. 1795.

CRADOCKE, FRANCIS. Merchant. An Expedient for taking away all Impositions, and for raising a Revenue without Taxes, by creating Banks for the Encouragement of Trade. London, 1660.

CRAIG, JOHN. of Glasgow. Remarks on some fundamental Doctrines in Political Economy. Edinburgh, 1821.

Elements of Political Science. Edinburgh, 1814.

CRAIK, GEORGE LILLIE. a distinguished writer on the English language and literature, was born in Fifeshire, in 1799, the son of a schoolmaster. In 1824 he came to London, and wrote "The Pursuit of Knowledge under Difficulties," for the Society for the Diffusion of Useful Knowledge, besides contributing extensively to " The Penny Cyclopædia." In 1839 he became editor of "The Pictorial History of England." After several other works, he was appointed Professor of History and English Literature in Queen's College, Belfast.

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CRAUFURD, CHARLES. Lieutenant-General.

Reflections upon Circulating Medium, Currency, Prices, Commerce, Exchanges, &c. London, 1817.

CRAUFURD, GEORGE, of Rotterdam.

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An Essay on the actual Resources for re-establishing the Finances of Great Britain. London, 1785

A Letter to the Right Hon. Henry Addington, on the Finances of Great Britain. London, 1802.

CRAWFORD, JOHN, of Paisley, The Philosophy of Wealth. London, 1846.

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A View of the present State and future Prospect of the Free-trade and Colonization of India. London, 1829.

An Inquiry into some of the principal Mono-polies of the East India Company. London, 1830. Chinese Monopoly examined. London, 1830.

Taxes on Knowledge; a financial and historical view of the taxes which impede the education of the people. London, 1836.

CRAWFURD, QUINTIN.

Researches concerning the Laws, Theology, Learning, Commerce, &c. of ancient and modern India. London, 1807.

CREDIT is the name of a certain species of incorporear property, called also a DEBT.

It is the right to demand a certain sum of money from a certain person at a certain time.

CREDIT.

It is therefore the lowest form of an annuity : it is an annuity of one term : it is the right to demand a single payment, an annuity in general is the right to demand a series of payments.

An operation on credit in commerce, is a sale, or an exchange, in which one, or both, of the quantities exchanged is a debt.

The system of credit consists in the creation and sale of debts.

It is divided into two branches,-1st. Commercial Credit, which principally consists in the sale or exchange of commodities for debts ; 2ndly, Banking Credit, which consists in the sale or exchange of money and debts for other debts.

The subject of Credit is the greatest and most abstruse in Political Economy; what the Differen-tial Calculus is in mathematics, what Steam is in mechanics, that is Credit in commerce.

2. Considering the mighty part which Credit plays in modern commerce, and the effects it has had for weal or for woe upon nations, we should naturally have expected that Economists had thoroughly worked out the subject, and were unanimously agreed upon its nature and effects.

So far is this from being the case, that on no subject whatever, if possible, are they more utterly at variance with each other, and what is more surprising still, are they more utterly at variance with themselves.

3. It was out of the discussions on the nature of credit that modern Political Economy took its rise. The terrible catastrophe of the Mississippi scheme in France, which was an attempt to realise "Law's Theory of Money," which was, in fact, the prevailing one of the age, and still has innumerable admirers, set Turgot, then a very young man, speculating upon the nature of money and credit, and gave rise to his subsequent treatises. Turgot did immortal service to Political Economy, and may indeed be said to have laid its corner stone, by explaining the true nature of money, but he entirely failed with that of credit.

In fact, from that day to this, the subject of credit has been an utter perplexity to Economists. To show the absolute necessity for a thorough investigation of the subject, we have only to set before our readers the astounding self-contradictions of Economists of the greatest name on the subject.

4. In the following treatise we shall consider the subject in the following order :---

I. The Fundamental Conceptions upon which the Theory of Credit rests,

II. The Nature of Credit; and the Elements of the Theory of Credit.

III. The Mechanism of the System of Credit. IV. The History of Ideas on the subject, and an examination of the opinions of modern Economists on it.

SECTION I.

OF THE FUNDAMENTAL CONCEPTIONS ON WHICH THE THEORY OF CREDIT RESTS.

5. The following are the Fundamental Conceptions upon which the Theory of Credit rests :--1. That an Economic Element-or an article of

Wealth-is anything whose value may be measured, as Aristotle said; or which has the power of purchasing, as Mr. Mill says.

2. That whatever may be exchanged separately, is separate property-is an Economic Elementor Wealth.

3. That Property is not a Thing, but a Right. 4. That Property, or Rights, may be divided into rights to things in actual existence, and rights to things which have no existence at present, but will only come into existence at a future time

5. That Value is the Exchangeable Relation between any two Economic Quantities, which are each the Value of the other, whatever their nature be, enduring or evanescent, corporeal or incor-poreal, present or future, general or particular.

SECTION IL

THE NATURE OF CREDIT, AND THE FILE. MENTS OF THE THEORY OF CHAMT,

6. Having laid down these Fundamental Con-ceptions, we shall now proceed to investigate the Nature of Credit, and show how it arises.

On the distinction between a Barraward DEBT.

We have now to call our readers' attention to a subject of the greatest importance, and we do so with the greatest solemnity and earnestness, beanse it is the *Pons asinorum* of Political Economy. It is perhaps, at first sight, of a somewhat subtle nature, and could by no possibility occur to any one not conversant with law and commerce. But it is one of those delicate subtleties which occur in all sciences, upon which the most important consequences turn, and it is, in fact, a confusion on this point which is at the root of most of the false theories of currency and credit, which have produced such terrible catastrophes in the world.

7. There are two species of paper documents which are in general use in commerce, which have some superficial resemblances,-that is, they both convey rights to certain things, and are similarly transferable, and are therefore considered by many to be of the same nature, but which are yet fundamentally distinct in their nature, and in this radical distinction is contained the basis of the Theory of Credit.

These species of paper documents are-L. Bills of Lading, Dock Warrants, and all other titles to specific things.

II. Bank Notes, Bills of Exchange, and other forms of credit.

8. In order to shew clearly the fundamental distinction between these two classes of paper documents, we will explain how each arises.

When a man ships goods on board a vessel, he receives from the captain a paper document acknowledging the receipt of the goods, and promising to deliver them to whomsoever shall be the owner of the paper. This document is called a BILL OF LADING.

The shipper of the goods sends the Bill of Lading to the consignee, who, directly he receives it, may negotiate it, i.e. transfer it by indorsement to whomsoever he pleases, in all respects like a Bill of Exchange, and it may pass through any number of hands, and whoever is the owner of it at any time may go and demand the goods from the captain.

Similarly, when goods are deposited in a dock warehouse, the dock master gives a paper docu-

ment of a similar nature to the Bill of Lading, | he pleases, and it has value, because the owner of which is called a Dock Warrant, which is transferable in all respects like a Bill of Lading, or Bill of Exchange, and whoever is the owner of the Dock Warrant, is the owner of the goods but there is no specific money appropriated to it. described in it, and is entitled to demand and receive them from the dock master.

9. Now it is especially to be observed in these two cases, that although the goods are delivered into the temporary custody of the captain or dock master, they have no Property in them. The Property in the goods remains with the shipper, or depositor, and is transferred by him along with the Bill of Lading, or Dock Warrant. The captain, or dock master, is the mere BAILEE, or TRUSTEE of the goods, and not the OWNER. He has no right to convert them to his own use, and if he did so, it would be a robbery, and he would be liable to be punished as a thief. Thus the Bill of Lading and the Dock Warrant form ONE Property with the goods, and cannot be separated from them. The goods travel with the paper document. Thus it may be said in this case, that the paper document represents goods. In this case there is no exchange, and these documents have no value, i.e., they are not exchangeable separately. They are not exchangeable for goods generally, but are titles to certain specific goods, and no others. No one ever spoke of the value of a Bill of Lading, or a Dock Warrant. Such documents are NOT CREDIT, because the owner of them does not simply believe that he can obtain goods in exchange for them, but he hnows that he has become the owner of certain specific goods. Such a transaction is not an Exchange, but a BAILMENT.

10. Let us now take the case of a banker. Suppose a customer brings 100 sovereigns tied up in a bag to his banker, and asks him to take care of them for him, and give them back to him, or any one he may choose to name, on demand. This would confer no Property in the money on the banker. He would have no right to use it for his own purposes. If he gave a receipt for it, promising to deliver it to whomsoever it might be transferred, that receipt and the money would be ONE property. The money and the receipt could not be separated, and the very money would always pass along with the receipt, and it would be in its nature exactly similar to a Bill of Lading, or a Dock Warrant. The banker would be merely the BAILEE or TRUSTEE of the money, and not its OWNER, and if he converted it to his own use, he would be liable by law to very severe punishment.

11. But this is not the ordinary case of a banker and his customer. When the customer pays in money to his account at his banker's, the Property in the money passes absolutely to the banker. He is not the TRUSTEE or the BAILEE of it, but he becomes the Owner of it, and is entitled to use it in any way he pleases for his own purposes. In exchange for this money, he creates a CREDIT in his customer's favor, promising to deliver him an equal amount of money on demand. This transaction is, in fact, an exchange or a sale. The banker buys the money from his customer by selling him the right to demand an equal quantity of money, at any time he pleases. Here, therefore, a NEW Property is created. The cus-

it can exchange it for money, or anything else. It is called Credit, because the owner of it only believes he can obtain money in exchange for it.

The banker is not the trustee of the money. but he becomes the debtor of the customer, and if unfortunately he should happen to fail, his customers are only entitled to have his property divided among them, and must take their chance of having their debts paid in full.

Now we must observe this. By this operation a New Property is called into existence, by the act of the will, or the mutual consent, of both parties. This debt, or obligation, is a species of property which is called CREDIT.

Thus, says Mr. Williams, Law of Personal Property, p. 5, speaking of debts—" Choses in action having now become assignable, become an important kind of personal property." Again, p. 58,-"A legal chose in action constitutes a valuable kind of personal Property.

Again, p. 155,-"In addition to goods and chattles in possession, which have always been personal property, and to DEBTS, which have long been considered so," &c.

12. Hence, we see that CREDIT or DEBT is itself a species of independent property, which may be bought and sold, and is so to the amount of millions of money daily. And there are shops for the express purpose of buying and selling this species of property. As there are shops for dealing in bread, clothes, furniture, &c., so there are shops for the particular purpose of buying and selling debts, and these shops are called BANKS.

And as there are fish markets; and corn markets, and many other sorts of markets, so also there is a market for buying and selling foreign debts, which is called the ROYAL EXCHANGE. Thus banks are nothing but debt shops, and the Royal Exchange is the great debt market of Europe.

13. Now a debt being itself independent, exchangeable property, which is bought and sold to the amount of millions of money daily, and also being the largest species of property employed in the purchase of commodities, is by the very force of the definition given by Aristotle and Mr. Mill,-Wealth!

14. Hence we at once strike at the root of an enormous amount of confusion on the subject; for, as we have shown hereafter, the common notion of credit is, that it is the transfer of capital, whereas we have shown above, that credit is the name of a certain species of property.

In the apparently subtle distinction between Bills of Lading being merely titles to certain specific property, and Bank Notes being merely naked rights which may be exchanged for money. lies the basis of the whole Theory of Credit, with all its enormous consequences.

On Commercial Credit.

15. In order to present the subject in as great a variety of ways as possible, we will consider another case.

Let us suppose that two persons trade with each other, say a wine merchant and a tea-dealer. Then if they want from each other, quantities of tomer may transfer this property to whomsoever | each other's produce equal in value, they can

CREDIT.

16. But let us suppose that the wine merchant does not want so much tea, to the value of 5 lbs. say, as the tea-dealer wants wine. Then there will be an unequal exchange of present wants. The matter, however, may be arranged in two different ways.

CREDIT.

1. Although the wine merchant does not want the tea at present, he will probably want it at some future time. The tea-dealer might, therefore, sever from his stock of tea the quantity due, say 5 lbs., and set it apart as the property of the wine merchant, and agree to keep it for him till he requires it. He might also give him a receipt for it, promising to deliver it to him, or to any one who might be the owner of the paper, on demand. Such a receipt might be transferred from hand to hand any number of times in commerce, and would always carry with it the property in the 5 lbs. of tea. This document would be similar to the Bills of Lading and Dock Warrants described above. It would form but one property with the tea, and this document represents tea. The teadealer has parted with the property in that specific portion of tea, and from being the owner of it, has become merely the bailee or trustee of it. and has lost all power to use it for his own profit.

2. The wine merchant may not wish to have the tea at all, nor anything else at the time. He must have, therefore, a pledge that he shall be enabled to make an exchange, or receive what he wants at some future time. And this pledge may be of two different forms; 1st, the tea-dealer may give him the amount of the debt in money, which will enable him to get what he wants from any one else. Now, we observe that this money is neither meat nor drink, nor anything else useful to man, it is only the means whereby these things can be got. And the wine merchant only takes it because he believes he can exchange it for what he wants at any time. It is, therefore, as has often been observed, a general bill of exchange on the whole commercial community-it is general CREDIT.

It is also to be observed that though it is exchangeable for commodities in general, it does not represent them, as bills of lading represent goods. It is separate and independent exchangeable property over and above commodities. It is of the value of commodities, but does not represent them.

2nd. Instead of giving him money, the teadealer may merely give the wine merchant his promise to pay the tea when demanded. Now, this is manifestly not a general pledge, but only a particular one. The tea-dealer does not part with the property in any portion of the tea. He is still the owner of all his own stock, and may sell and dispose of it all for his own profit if he pleases. But he has created a pledge that he will deliver 5 lbs. of tea whenever he is asked for them. Now the least consideration will shew that this pledge is of the same general nature with the money. The only thing is this, that whereas the money is exchangeable for anything with anybody, and is therefore of general value, this promise to pay tea is only exchangeable for tea with him. It is, therefore, particular value. Moreover, he may fail, and be unable to pay the tea, and therefore the value of the pledge may be precarious. Money, therefore, is of general and permanent value,

CREDIT.

effect an exchange, and there is an end of the this pledge is of particular and precarious value. Now this pledge or right is a new property created. It may be recorded on paper. and transferred or exchanged any number of times in commerce, among persons who believe in the tea-dealer's capacity to pay the tea when required. This document does not represent 51bs.

In the base to are solved to be pay the test when required. This document does not represent 30s, of tea, but is of the Varus of 5 lbs. of test. 17. And this is a good opportunity to point out the enormous mischief the expression Jabrianic Value has worked in Political Economy, for it is this which has arisen about the Theory of Orelits this which has arisen about the Theory of Orelits If is very commonly said by writers even of the greatest name, that money has Intrianic Value, and paper expressions will abow the atter atomicity of this doctrine. Adam Suith himself says that if money would acchange for nothing it would be of no value, which manifestly proves that value does not depend on labor but upon ex-changeability. In fact directly we observe that the value does not depend on labor but upon ex-changeability. In fact directly we charve that the value does not depend on labor but upon ex-changeability. In fact directly we charve that walue does not depend on labor but upon ex-change, it manifestly follows that nothing can have intrinsite value, unless it has the thing H will exchange for inside itself.

18. Now as the value of a thing is the thing for which it will exchange, it manifestly follows that anything has as many values, as things is will exchange for. If a thing will exchange for an infinite number of things, it has an infinite number of values. If it will exchange for only one thing it has only one value.

19. Therefore the value of a promise is the thing promised. If the promise cannot be fulfilled, then the promise has lost its value.

Now the £1, or money, is of the value of 5 lbs. of tea-and an infinity of other things besides. The "promise to pay" the δ lbs, of tea is of the value of δ lbs, of tea—neither more nor less. It is CREDIT because the person who receives it, or gives anything in exchange for it, believes he can exchange it for tea.

20. Now we see at once that this CREDIT. though greatly inferior in security and generality of value, is nevertheless of the same fundamental nature as money, in fact, it is only a lower form of

money. Or rather, we may say that money is only the highest and most general form of Credit, 21. And as money is a separate and indepen-dent exchangeable property, wholly distinct from commodities, so Credit is separate and independent exchangeable property, wholly distinct from money and commodities. Credit is manifestly a substitute for money. And it is manifest that the whole aggregate of commerical debts are merely a substitute for an equal amount of money. 23. Credit, however, is not generally expressed

in the form of a promise to pay goods, it is invariably, in this country at least, expressed in the form of a promise to pay money, and therefore it is of the value of money. The quantity of commercial credit which is created and exchanged in this country is something enormous, and there is no possibility of forming any estimate of its amount, which can bear any reliable approximation to the truth, because the greater portion of it never gets into a form which appears to the public at all, but is locked up in the books of traders.

distinction between Bills of Lading, Dock Warrants, &c., on the one hand, and instruments of Credit on the other.

The former are always simply titles to certain specific Goods, they always go with them, and cannot be separated from them, and therefore they form only ONE property with them. They always arise out of a BAILMENT, and never out of an EXCHANGE, 'and they may justly be said to REPRESENT goods. Moreover they form no addition to the mass of exchangeable property. On the other hand, instruments of Credit of all

sorts are always claims against the PERSON, and are absolutely severed from any connection with any specific goods, which is the very circumstance from which they derive their name. They circulate merely on the belief that they can be exchanged for money. They always arise out of an Exchange, and never out of a BAILMENT. Bills of Lading, &c., always go with goods, &c., Bank Notes, &c., are always exchanged for money, or goods. Bills of Lading, &c., represent goods, but Bank Notes. &c., are of the Value of money. Moreover Credit in all its shapes and forms, is an addition to the mass of other exchangeable property.

24. From this it follows that Bills of Lading can never exceed in quantity, the goods they represent; but instruments of Credit of all sorts immensely exceed in quantity the money in the country-on the lowest calculation, tenfold. The considerations we have arrived at will throw a great light we shall find hereafter, on a question of momentous consequence-the LIMITS of Credit.

25. The considerations we have presented respecting the independent nature of Credit as a species of property, will be manifest to any one who thinks of the ordinary language of commerce. Thus, the assets, or the property of a banker, are always stated at so much, and his liabilities, or debts, or the credit which he is liable to exchange, at so much, thereby treating the property and the debts as manifestly independent quantities. So a bankrupt's assets are said to be so much, and his liabilities, or the credit he has created, to be so much, also independent quantities. It is always usual to speak of the value of a bank note or a bill of exchange. No one ever spoke of the value of a bill of lading, for the very reason that there can be no value without an exchange, and no exchange without value. Almost all commercial crises arise out of the excessive creation of that species of property called Credit; no one ever heard of a commercial crisis being produced by bills of lading or dock warrants.

26. The doctrine that we have stated above. that credit is independent property, will be found in abundance of places, and, in fact, it is so well known to every one who has the simplest knowledge of the first principles of law and commerce, that it may seem scarcely worth dwelling on at so great length. But, unfortunately, while many Economists acknowledge it in some places, in other parts of their works they quite forget it. In fact, it is the incredible confusion between value being what a thing will exchange for, and the labor, or cost, of producing the thing itself, and between Credit being separate exchangeable property transferred by means of Bills, Notes, &c.,

23. Hence we see the radical and fundamental , and its being the transfer of capital, that has thrown the Theory of Credit into such confusion. 27. Some writers, however, while they fully

admit that a debt is property to be added to that of the owner of it, say that it is to be subtracted from the property of the obligor, and therefore upon the whole it is nothing.

As this notion is very common; and, as in fact, it contains the real subtlety of the subject, we shall quote an extract from Mr. Thornton's Work on Paper Credit, in which it is fully stated. He says p. 19 .- "It may conduce to the prevention of error in subsequent discussions, to define in this place, what is meant by commercial capital. This consists, first, in the goods, (part of them in the course of manufacture) which are in the hands of of our manufacturers and dealers, and are in their way to consumption. The amount of these is necessarily larger or smaller in proportion, as the general expenditure is more or less considerable, and in proportion, also, as commodities pass more or less quickly into the hands of the consumer. It further consists in the ships, buildings, machinery and other dead stock maintained for the purpose of carrying on our manufactures and commerce, under which head may be included the gold found necessary for the purposes of commerce, but at all times forming a very small item in this great account. It comprehends also the Debts due to our traders for goods sold and delivered by them on credit; debts finally to be discharged by articles of value given in return.

"Commercial capital, let it then be understood, consists not in paper, and is not augmented by the multiplication of this medium of payment. In one sense, indeed, it may be increased by paper. I mean that the nominal value of the existing goods may be enlarged through a reduction which is caused by paper, in the value of that standard by which all property is estimated. The paper itself forms no part of the estimate.

"This mode of computing the amount of the national capital engaged in commerce is substantially the same with that in which each commercial man estimates the value of his own property. Paper constitutes, it is true, an article on the credit side of the books of some men, but it forms an exactly equal item on the debit side of the books of others. It constitutes, therefore, on the whole, neither a debit nor a credit. The banker who issues £20,000 in notes, and lends in consequence £20,000 to the merchants, on the security of bills accepted by them, states himself in his books to be the debtor to the various holders of his notes, to the extent of the sum in question; and states himself to be the creditor of the acceptors of the bills in his possession to the same amount. His valuation, therefore, of his own property is the same as if neither the bills nor the bank notes had any existence. Again, the merchants in making their estimate of property deduct the bills payable by themselves, which are in the drawer of the banker, and add to their estimate. the notes of the banker, which are in their own drawer; so that the valuation likewise of the capital of the merchants is the same as if the paper had no existence. The use of paper does not, therefore, introduce any principle of delusion into that estimate of property which is made by individuals."

28. The above extract contains the views to

571

stated, and in as brief a compass probably, as it is possible to do so. It is also a remarkable example to shew the extreme caution necessary in stating an Economical question, for however apparently sound it is, it is, nevertheless, one tissue of fallacies, and if it were translated into mechanical language, they would be manifest at once to any one conversant in the smallest degree with Natural Philosophy.

Mr. Thornton's argument is simply this :--Suppose A to have £100 in money, and a three months' bill on B of £50 besides. Suppose B also to have £100, having accepted the Bill for £50, at 3 months.

Then A's property would be stated, thus,-£100 + £50.

B's property would be stated, thus,-£100 - £50.

Now Mr. Thornton's argument is that the + £50, and the - £50 balance each other, the result is 0, which is, according to him, the same thing as saying that neither of these quantities exists.

29. This view may appear to have some plausibility at first sight, but the slightest reflection will shew that it is totally erroneous.

Suppose a landlord lets a farm to a tenant who agrees to pay him a yearly rent. The tenant is under the obligation to pay his rent a year hence, which is just as if he had accepted a bill payable 12 months after date. Now the right to receive that rent is an actually existing right in the landlord, it is his property, which he may sell or transfer to any one else. It is plus to him, and an addition to his other property. The tenant is may be seen in the extracts given below, by Euler bound to pay this rent. He is, therefore, exactly in the same position as the merchant who has accepted a bill, and therefore this rent is minus to him just as the bill is to the merchant. It is quite clear that if the property of a merchant who has accepted a bill for £50 is stated, thus,-£100 - £50.

the property of a farmer who is bound to pay rent must be stated thus,-

Property-Rent.

But no one would ever say that because a farmer has agreed to pay rent a year hence, that is any diminution of his balance at his banker's, or to be subtracted from the present amount of his property. It is quite clear that the future rents stipulated to be paid are meant to be paid out of future profits which are yet to be produced.

30. It is just the same with a merchant who has accepted a bill payable three months hence. He is not in debt at the present time, any more than the farmer. The well-known maxim of law is, that credit unexpired may be pleaded under the general issue, which means that if a man sues another for an obligation not yet due, he may reply simply that he is not in debt at all! It is quite clear, therefore, that in this case, the - cannot by any possibility mean subtraction.

31. This then is the paradox. The right to receive the future rent is an addition to the other existing property of the landlord. In this case + means addition.

But though the tenant is bound to pay the rent, and it is therefore - to him, it is not to be subtracted from his present property, and it is no

which we wish to direct attention, as plausibly | diminution of it. And in this case the sign cannot mean subtraction.

CREDIT.

What then does it mean?

In the first place, we may say that the view we have been considering sins fundamentally against the Philosophy of Science. For it is one of the great fundamental laws of Philosophy that when once the fundamental conception of a science is settled, all questions in the science must be stated so as to be in harmony with the fundamental conception of the science. Now as the fundamental conception of the Science of Political Economy is that it is the Science of Exchanges, it follows that every question in it must be stated as a question of exchange. Now according to Mr. Thornton's mode of stating the question, he makes it a question of addition and subtraction; now addition and subtraction are not exchange, and therefore it is quite clear that that mode of stating the question must be wrong. It is clear that is must be stated in the form of an Exchange.

Moreover, any one versed in Natural Philoso-phy will at once see the nature of the fallacy involved in Mr. Thornton's mode of statement. It is just as if we were to say that because equal and opposite quantities neutralize each other's effect for certain purposes, and the result is 0, that that is the same thing as saying the quantities themselves do not exist. We shall fully illustrate this afterwards.

32. It may be as well, however, here to present to our readers the different conceptions which are held respecting Credit, or Debts. Algebraists long ago remarked that debts were negative quantities. They are called so by Maclaurin, and as and Peacock. So in the article Algebra, in the Encyclopædia Britannica, it says, §3,--"A per-son's property may be considered as a positive quantity, and his debts as a negative quantity," Adam Smith, as may be seen below, counts paper money as cumulative property, over and above gold and silver money. Mr. Mill, as may be seen below, in some places expressly calls bank notes productive capital, and a substitute for money, and separate exchangeable property. But in others, he makes Credit to be the transfer of capital. We have seen above that Mr. Thornton makes it to be a subtraction from property, and Dr. Peacock, in the extract given below, makes it to be property affected with the negative sign.

33. This is a specimen of the admired confusion that reigns throughout all Political Economy. Here are no less than four distinct conceptions of the nature of Credit! Some of these are used quite indiscriminately by writers, without the slightest apparent notion of their inconsistency. We have now, therefore, to determine what is the true conception of Credit, among these conflicting notions.

34. In order to assist us in the investigation of this point, we may see what the analogy of other sciences suggests. There is scarcely any other science in which the negative sign does not appear. In all of these there are negative quantities. Take Analytical Geometry, Mechanics, Optics, Electricity, or whatever science we please, and we observe that in each of these, negative quantities are not transfers of positive ones, or subtractions from positive ones, or positive ones affected with a negative sign, but separate and independent quantities themselves. Hence we may at once anticipate by analogy that negative quantities in Political Economy, are not transfers of positive ones, or subtractions from positive ones, or property affected with the negative sign. But that they are separate and independent quantities themselves.

But if the sign - does not mean subtraction in Political Economy, what does it mean?

And what is the meaning of a NEGATIVE Economic Quantity ?

On the Application of the Theory of Algebraical Signs, and of the Separation of the Signs of Position and Operation to Political Economy.

35. The perplexities of the Theory of Credit which have baffled all the Economists in the world to explain, can only be unraveled by the great modern Algebraical doctrine of the Separation of the Signs of Position and Operation.

As the introduction of this great doctrine into Political Economy is perfectly novel, we shall have to treat of it very fully.

36. It is a remarkable example of the almost universal truth, that practice has always preceded theory, that even the practice of science long pre-ceded the theory of science. Thus, from the days of Diophantus, it was perfectly well known as an empirical rule that in Algebra $- \times -$ gives +. But though that was the rule universally adopted in practice, because no other would lead to right results, algebraists were wholly unable to explain the reason of it. It was wholly unknown to Newton, and when he tried to explain it, the great Euler babbled like a child.

37. The real explanation has only been given within the present century, and is known by the name of the Separation of the Signs of Position and Operation.

Writers who are not versed in Natural Philosophy, have no conception of the signs + and meaning anything but addition and subtraction, whereas every one who knows anything of the subject, knows perfectly well that the symbols +, 0, and -, have an immense variety of meanings in Natural Philosophy, according to the particular circumstances under which they occur. and it is wholly impossible to determine their meaning, until we know the particular state of circumstances, out of which they arise.

38. We have shown (CONTINUITY, LAW OF) that every great science is founded upon some single idea, or conception, or quality, which must be of the most general nature, and that every quantity whatever, in which that quality is found, is an element in that science, no matter what other qualities are found in it.

Now, as Political Economy is the science of exchanges, or of values, it necessarily follows that every quantity whatever, which is capable of being exchanged or valued, must be an economical element, no matter what its nature be, enduring or evanescent, corporeal or incorporeal.

39. But these elements in the various sciences may be endowed with opposite qualities, and when they are so, it is universally the custom in Natural Philosophy to distinguish them by the signs + and -.

They are then called signs of position, or of affection.

The instances of this that might be quoted from the various branches of Natural Philosophy are innumerable, and we will only quote a few to illustrate our meaning, and to furnish analogies to guide us to the solution of the perplexities of Political Economy.

Thus in Algebraical Geometry, in which it is necessary to fix the position of lines, it is usual to take some fixed point called the origin, and then lines drawn in opposite directions from that if the lines drawn to the right of this point are distinguished by the sign +, those drawn to the left are denoted by the sign -. If those drawn up from it are +, those drawn down from it are

So if a line revolving in one direction be +, when it revolves in the other it is -

So if two mechanical forces act in opposite directions, they are distinguished by opposite signs.

So if an accelerating force be denoted by +. a retarding force will be denoted by -. And a retarding force may be called a negative accelerating force, and an accelerating force may be called a negative retarding force.

The engines of a steamer going a-head may be

denoted by +, when going astern by -... A curious instance of this may be cited from steam navigation. Owing to the resistance of the water, the paddles and the screw of a steamer do not, in general, propel the vessel through the water so fast as they would do if there were no resistance. This loss of speed is called the slip. But in the case of the screw, by giving the stern of the vessel a particular shape, the paradoxical result may be produced, that she may actually be made to go faster through the water than she ought to do, if the screw were working in a solid. Thus, in this case, the difference between the theoretical and the actual speed is a gain instead of a loss, and this is called the negative slip.

So also in Parliament the supporters of Government may be called + and its opponents -.

40. Now in many of these cases it may happen that the elements endowed with opposite qualities may balance each other, and the result be 0; but it would manifestly be an error of the greatest magnitude to say that because these elements may, under some circumstances, neutralize each others effects, that is exactly the same thing as saving they don't exist at all.

Suppose that on a division, the numbers for Government were 340, and the numbers against, 300. Now it is clear that on this occasion the strength of the Government is practically 40, because the - 300 neutralize the effect of the + 300. But it would clearly be an enormous error to say that is absolutely just the same thing as if these 600 members did not exist at all. It is perfectly clear that there are 640 Parliamentary units. It is quite clear that to find the total number of Parliamentary units we must add the opposition to the ministerialists, and not subtract them.

41. Now this idea of opposition is applied to a continuous line, or to motion in a continuous line. If any point be taken as 0, then the part of the line on one side may be denoted by +, and the part on the other side by ---.

Thus in a thermometer some fixed point is taken as 0, and degrees above that are called +, and those below -.

Now if the mercury passes from a certain num- | strength may be denoted by 858-300. Now for ber of degrees on either side of 0, to any number of degrees on the other, it is quite clear that in order to find the total number of degrees passed over, the degrees on both sides must be added together.

42. The same idea is applied to TIME in Natural Philosophy, which may be considered as motion in a continuous line. If any point be taken, such as the present moment, or any fixed era, then the time on opposite sides of this point will be denoted by opposite signs. Thus if we call time, whether years, weeks, or days, before this ara +, then time after this point will be -, and express

ed, thus,—7,6,5,4,3,2,1,0,—1,—2,—3,—4,—6,—6,—7,... where we see that the — means simply *futurity*, and nothing else, and is a sign of position.

It is quite clear that if we want to find the number of years between any event which hap-pened some time before this epoch, and another which happened after it, we must add the number of years on both sides of 0.

43. These illustrations, which might be im-mensely extended by examples taken from every branch of Natural Philosophy, are sufficient to exemplify the doctrine that we have endeavoured to explain, that, universally, in Natural Philosophy the negative sign — does not mean negation, or non-existence, but Orrosition, and that negative quantities have as real and independent an existence as positive ones, and are to be enumerated separately and independently, as elements in that science, to find the totality of elements.

44. But, moreover, inverse or opposite operations may be performed on these quantities which are already affected by opposite signs. And these inverse operations are also denoted by the same signs + and -. And the combination of these opposite signs of inverse operations with the signs of opposite qualities affecting these quantities, that is, the combination of the signs of position and operation, give rise to the wellknown Algebraical rules,

| $+ \times + gives -$ | F |
|----------------------|---|
| +×-,, - | |
| -×- " | - |
| - × + | |

These laws, which are universally applicable in Natural Philosophy, are equally applicable to Political Economy, and among other things, are alone capable of giving the solution of the Theory of Credit, which has hitherto been the opprobrium of the science.

It will be found that there are Economical Elements of inverse, or opposite, properties, and therefore following the strictest analogy with physical science, we shall denote them by opposite signs, and also opposite operations may be performed on these opposite quantities bringing into play the well-known Algebraical Rules, which will lead to consequences that may surprise some of our readers.

45. As an example that will furnish us with an important analogy, we will give this one. As any opposite, or inverse operations whatever may be denoted by the signs + and -, to add to, and take away from, are manifestly inverse, and may be denoted by these signs. Now suppose that in the House of Commons, the Government has 358 supporters, and 300 opponents, then the Government

practical purposes the strength of the Governa ment may be called 58, and in so far as regards that, the + 300 and the - 300 neutralize each others' effects. But it would be a most grievons error to say that for all purposes it is just the same thing as if these 600 numbers did not exist same thing as if these 600 numbers did not exists at all. It is clear that to find the total number of members we must add the opposition to the minists terialists, and not subtract them. Moreover, if we add (+) to the ministerialists (+), we increase(+) the government strength. If we take away from (--) its we diminist (--) it. On the other hand, if we add (+) to the opposition (--) that dimins inhes (--) the strength of the Governments has if we take away from (--) the opposition (--) that increases (+) this strength of the Governments. Hence the taking away of opponents(-----) gives an increase (-+) of strength Washall may show the application of these principles to Political Economy. 46. We have defined Property as avery like year Knows, to be a right residing in the neuron. Mose it is quite evident that a person may have in hims

knows, to be a right resulting in the parson. Now, it is quite evident that a person may have in hime self a right to an actually existing thing, the pro-duce of the past, and he may also have the right to receive things which do not actually exist as present, but will only come into existence at some future time. But each of these is Property, or Wealth, and consequently the totality of a man's, wealth is the sum of the two. Now following the wealth is the sum of thatwo. Now following the ordinary custom of Natural Philosophy, if we denote the accumulated products of the past which already exist by the sign +, we may denote the products which will only come into existence at some future time by the sign ----

47. Let us now examine the Theory of the Value of Land, which may be called the grammar of the Theory of Value.

In what does the value of land consist? Suppose we purchase an estate in land for £100,000, where is the value of our money? Does it consist in things which have a present existence? The veriest tyro will answer-Certainly not. Where then is the equivalent for the purchase money ?

Every one knows that the purchaser of the land buys the right to receive the actually existing produce of the land, together with the right to re-ceive its annual profits for ever, say £3,000 a year. Now, as these annual profits only come into existence year by year in future time, we may denote the equivalent of the purchase money

£3,000 - £3,000, &c., ad infinitum,

where the sign - of course denotes futurity.

Now, each one of these future profits has a Present Value, and the purchase money of the land is simply the sum of the Present Values of this series of profits for ever.

Any, or any number of these future profits, may belong to different persons, giving rise to the whole doctrine of estates in remainder, and in reversion. &c.

Now we may say that when a purchaser has paid for the land, it owes him a series of annual payments, as he bought it merely on the belief that he would receive them; and we may call this the credit of the land.

Hence the present value of each of these future

And if we buy the land at 33 years' purchase, it is clear that 32 parts of the value of the land have no actual existence at all, but consist merely in the abstract right to receive them when they come into existence.

48. So also if we buy an established business, we have to buy, not only the premises, and the stock-in-trade on them, but also the right to receive the future profits of the business. This property is called the GOODWILL, and it is clear that it is purely incorporeal property, lying wholly in the future, and therefore negative, according to our notation.

That the goodwill of a business is a valuable species of property, is so well known to every trader, that it seems almost superfluous to mention it. We may quote, however, one instance, which may interest our readers. We are told in Boswell (Vol. IV. p. 86, edit. 1822), that Johnson was appointed by the great brewer, Thrale, one of his executors. In that capacity it became his duty to sell the business. When the sale was going on, "Johnson appeared, bustling about, with an inkhorn and pen in his button-hole, like an exciseman; and on being asked what he really considered to be the value of the property which was to be disposed of, answered, 'We are not here to sell a parcel of boilers and vats, but the POTENTIALITY of growing rich beyond the dreams of avarice." Now this latter phrase was merely a Johnsonian expression for the goodwill. The price realized on this occasion was, we are told elsewhere, £135,000. Now it is clear that this sum was not given for the boilers and the vats only, the material, and the result of *past* labour, but also, and by far the greater part, for the incorporeal potentiality which lay wholly in the future. Now this potentiality could be bought and sold, but it was not material; it could not be handled nor seen, but its value might be measured, and therefore it was a valuable thing-it was Wealth.

49. So the printed copies of a book are the produce of past labour, but the COPYRIGHT is the right to receive the future profits to be made by it. The value of the copyright clearly lies wholly in the future, like that of the goodwill.

50. When a professional man has established a good practice, the right to receive the future profits of it is a valuable property, and is denominated a PRACTICE, which is clearly of an analogous nature to those just described.

51. So the capital of a company is the accumulation of past labor, the SHARES in it are the right to receive the future profits to be made by trading with the capital.

52. Now it is manifest that the right to receive these future profits is cumulative property, over and above the produce of the past, and moreover it is quite separate and independent exchangeable property, distinct from the actual profits received. Thus manifestly the goodwill of a business is property, quite distinct from the profits actually realized; the copyright of a work is property, quite distinct from the profits realized nature has been completely misunderstood, there by the sale of it; the shares in a company are quite separate property from the profits actually made; and generally, any annuity whatever is 57. Having now explained the nature of this

575 CREDIT.

payments for ever, is an actually existing article | separate and independent property from the of property, and by our definition — Wealth. | actual payments.

53. Now Adam Smith, and all Economists since his time, admit that the useful abilities of the people of the country, are part of the wealth of the country. Consequently every merchant in business making an income, is himself an article of wealth, because his talents, industry, &c., may be valued. The money he has earned is the produce of his past industry, and he may trade with it. But he may also trade with the future proceeds of his industry. He may sell the right to a future payment out of the future proceeds of his industry. And when he does trade by selling this right, this property is called CREDIT.

Now, we observe that a merchant's credit is cumulative property, over and above his money, and quite separate from money and commodities of all kinds. And though, no doubt, his credit is based upon confidence, because no one would sell his goods to him in exchange for his promise to pay, unless they believed he would pay his promise, still we must observe that Credit does not mean the confidence, as many writers suppose, nor yet the transfer of the goods, as many more suppose, but an actual transferable right, which is exchangeable property, and is Wealth. 54. Hence we have this great fundamental

doctrine of transcendant importance, and involving the most momentous consequences to the world, that over and above existing money and commodities, the RIGHT to receive future payments of all sorts, is separate and independent property. In other words, that every future payment, of every sort and description, has a PRE-SENT VALUE, quite independent of the payment itself, which is valuable property, or Wealth.

55. This stupendous mass of property receives different names, according to the different sources of payment. When arising out of the land, it has no particular name, but yet it constitutes 32 parts out of 33 of the value of the land ; when the source is a shop or a warehouse, it is called the Goodwill; when the source is books, prints, or works of art, it is called COPYRIGHT; when the source is a mechanical invention, it is called a PATENT: when the source is a professional business, it is called a PRACTICE; when the source is the capital of a trading company, it is called a SHARE; when the source is an ordinary commercial transaction, it is called CREDIT ; when the source is an annual payment, guaranteed by the Government out of the public revenue, it is called the FUNDS.

Besides this there are many other species of annuities of a similar nature, such as tolls, ferries, ground-rents, &c.

56. Hence we see that credit is, in fact, the lowest form of an annuity; it is an annuity of one term ; it is the right to receive a single future payment; the other species of property are the right to receive an indefinite number of them.

What the value of this gigantic mass of property in this country may be, it is utterly impossible to form the most distant conception, but there can be no doubt that at least nine-tenths of the property in this country exists in this form.

And yet, except Credit and the Funds, whose is not a word about it in any English work on Political Economy !!

species of property, we may exhibit the classifi- | cation of property in the following form, which may, perhaps, show it in a somewhat clearer form.

If we denote the products accumulated up to the present time by +, those which will come into existence at a future time may be denoted by -, and of course 0 denotes the present time. Thus :-

| THE PRODUCE OF THE PAST. | PRESENT TIME. | THE PRODUCE OF THE FUTURE. |
|--|------------------|-------------------------------|
| + | 0 | |
| Lands, Houses, &c | | Annual Income for ever. |
| Premises, Stock of Goods in a Shop, &c. | } ; | The Goodwill. |
| The Printed Copies of a Book | | The Copyright. |
| Machines already made | | The Patent. |
| The Money earned by a Professional Man | } | The Practice. |
| The Capital of a Commercial Company | } | The Shares. |
| The Money already earned by a Merchant |] | His Credit. |
| | 6 | Annuities of all sorts, the |

Ground-rents, &c., &c. Now, the whole of this mass of incorporeal pro-

perty is either entirely omitted from works on Political Economy, or its nature misunderstood. But it must manifestly be included in it. And it clearly doubles the extent of the science, or gives it the same extension that Algebra did to the field of Arithmetic, by extending it on both sides of 0 to infinity.

58. The species of Property called Credit being bought and sold to the amount of millions of money daily, it is necessary that there should be some unit of debt, or of credit. And the unit of debt, or of credit, is £100 payable one year hence.

59. Moreover the method of expressing the price of this species of property is peculiar.

When goods are sold for money, the quantity of money given is called the *price*. The less the quantity of money given for any goods, the greater is the value of money respecting those goods. And supposing the quantity of money necessary to purchase any particular amount of those things undergoes a change, the value of money rises as the price falls, and the value of money with respect to those goods falls, as the price rises. Thus the value of money varies inversely as PRICE.

Now the value of money with respect to debts, which are in fact commodities, must follow exactly the same rules, as with respect to other things. The value of money with respect to debts must rise as the price of the debt falls, and the value of money must fall as the price rises. Now as money naturally produces a profit, it is clear that the money, or the price to be given for a debt payable one year hence, must be less than the amount of the debt. The difference between the price of the debt and the amount of the debt is called the DISCOUNT. In buying commercial debts, the amount of the discount is always mentioned, and never the price of the debt. Thus suppose the buyer gives £97 for a debt of £100 payable one year hence, it is usual to say that he discounts it at 3 per cent. When it is said that discount is at 3 per cent. it means no-

twelve months date are selling for £97. Now if the value of money rises with respect to debts, it is clear that the price must fall, which is clearly the same thing as saying that the *discount* must rise. If the price of the unit of debt falls from £97 to £93, the discount rises from £3 to £6, and also the value of money has risen.

Hence the value of money varies inversely

as PRICE, and *directly* as DISCOUNT. 60. These considerations shew that Mr. Mill's

60. These considerations shew that Mr. Mill's consures on the expression value of money, as applied to the rate of discount, are quite unfoinded, He says, Principles of Political Economy, Book III., ch. VIII. "It is unfortunate that in the very ontset of the subject, we have to clear from our path a formid-able ambiguity of language. The value of money is to appearance an expression as precise, at fee from possibility of misunderstanding, as any in Sciences. The value of money is what it will exchange for, the value of money is what it will exchange for, the value of money is what it will exchange for, the value of money is what it will exchange for the value of money is what it will exchange for the purchasing power of money. If prices are low money will buy much of other things, and is of how value. The value of money is inversely as general prices, falling as they rise, and rising as they fall. "Hu anhappily the same phrase is also maployed in the current language of commerce in as

ployed in the current language of commerce in a very different sense. Money, which is so commonly understood as the synonyme of wealth, is more especially the term in use to denote it when borrowing is spoken of. When one person lends to another, as well as when he pays wages or rent to another, what he transfers is not the mere money, but a right to a certain value of the produce of the country, to be selected at pleasure; the lender having first bought this right by giving for it a portion of his capital. What he really lends is so much capital; the money is the mere instrument of transfer. But the capital usually passes from the lender to the receiver through the means of money, or of an order to receive money, and at any rate it is in money that the capital is computed and estimated. Hence, borrowing capital is universally called borrowing money; the loan market is called the money market; those who have their capital disposable for investment on loans, are called the monied class; and the equivalent given for the use of capital, or in other words, interest, is not only called the interest of money, but by a grosser perversion of terms, the value of money. This misapplication of language, assisted by some fallacious appearances, has created a general notion among persons in business, that the value of money, meaning the rate of interest, has an intimate connexion with the value of money in its proper sense, the value or purchasing power of the circulating medium."

From the considerations we have presented, it is quite clear that this censure is unfounded. The language of the commercial classes is quite correct, and no other would be appropriate. When they say that the value of money has risen because discount has risen, it is only another form of saying that the price of debts has fallen.

61. In fact, nearly all the confusion on the subject of credit has arisen, as it so frequently does, especially in Political Economy, from an ambiguity of language. The ordinary charge that Econothing more than that debts of £100 payable at | mists, echoing J. B. Say, bring against those who

say that credit is capital, is that by saying so, his property less his debts, or his obligations. they maintain that the same thing can be in two places at once. They consider credit to be the loan of some material thing called capital, and then they say, how can two persons have the use of this same capital at the same time? Now this confusion purely arises from their | yet both his property and his obligations are inown misconception of the nature of credit, for credit is not the transfer of capital, but the name of a species of property. Moreover the expressions to lend and to borrow are ambiguous. If I lend my friend a book, or a horse, I do not part with the property in the horse, or the book ; there is but one property, and of course I cannot have the use of the horse or the book at the same time that my friend has. The horse or the book cannot be in two places at once.' But in commerce, the words to lend, and to borrow, have quite a different meaning. A commercial loan is in fact a sale. If as above, I lend my friend a horse or a book, he is bound to return me that very horse and that very book. But it is not so in commerce ; in a commercial loan, the property in the money passes absolutely to the borrower, and he gives in exchange for it, the right or property to demand an equal sum of money at some future time, but not the identical sum of money.

The distinction between these two meanings of the word "loan," is well illustrated in Latin. For it has two words corresponding to these two meanings, commodum and mutuum. A commodum is where, like in the case of a horse or a book, the property in the thing lent remains with the lender, and the identical thing is returned. A mutuum is where the property in the thing passes from one to the other, and in exchange for it is given the right to demand an equivalent at some future time. Now, from the word used, it is clear that supporters did not exist at all. It is quite clear it is an exchange. All commercial loans are mutua, and not commoda.

And this abstract right is a new property called credit. Hence every commercial loan is a sale. in which a new property, called a debt, is created by the consent of the parties, and these debts form an article of commerce, like any other commodities.

62. And now, at last, we perceive the true mode of reading the connection between A and B. as expressed above, which Mr. Thornton has so misunderstood. When A holds B's bill for £50, and the property of the one is expressed by $\pm 100 \pm \pm 50$, and that of the other by $\pm 100 - \pm 50$. the +£50 and the -£50 do not cancel one another, as Mr. Thornton supposed, nor do the + And the sentence is to be read thus :- "A has, besides £100 in money, the present (+) right to demand a future (---) payment of £50 from B." And this is manifestly the way in which all

annuities, or present rights to future payments, may be expressed. When the landlord's property is denoted by property + rent, and the farmer's by property - rent, it means that the landlord has a present right to demand a future rent from the farmer. And if every man's property is expressed by +, his obligations are denoted by --, and his property may be stated thus :--

Property-Obligations.

Now, for certain purposes, it may be said, perhaps, that a man is only substantially worth PART VII. VOL. I.

577

But as far as regards Political Economy generally, that would be a very erroneous mode of statement. Because the fact is, that although his obligations may neutralize the effect of an equal amount of his property, so far as he is concerned, dependent exchangeable property, and may circulate independently in commerce, and are therefore each of them, by virtue of the definition, Wealth.

To shew this, we need only refer to the standard case of Credit, that of a Banker. We might say that, practically, a banker was only worth the excess of his assets over his liabilities, and that would be sufficiently correct as far as he is concerned. But for the purposes of Political Economy, it would be extremely wrong, because the banker's assets belong to himself, and he may put them into circulation, and at the same time his obligations may be put into circulation as well. Consequently, here are two classes of economic elements; and as each is capable of being exchanged separately, they must both be included under the economic name of Wealth.

63. To say, therefore, as Mr. Thornton does, and as is the common way of looking at the matter, that because a man's obligations neutralize an equal amount of his property, and he may be considered substantially worth only the excess of his property over his debts, that therefore it is just the same thing as if his obligations and an equal amount of his property did not exist at all, is an error of as great a magnitude as to say that because the strength of the Government is substantially only the excess of their supporters over their opponents, that it is just the same thing as if their opponents and an equal number of their that for other purposes, each of them exists as Parliamentary units.

Hence, when a man has a certain amount of property, and has also given forth a certain amount of obligations, they are to be treated as separate and independent articles of property, but of opposite effects, like the supporters and opponents of a Government.

64. We also see how erroneous Mr. Thornton's views are in other respects. He says that when a banker has discounted £20,000 for the merchants, and issued £20,000 in his notes, that if he writes himself down as creditor for the merchants' acceptances, he writes himself down debtor to an equal amount to the holders of his notes, and therefore upon the whole he is exactly and the — denote addition and subtraction, as he as he was before. In the first place, a banker supposed, but they are in fact symbols of TIME. never issues an amount of notes equal in amount to the bills he discounts, because if he did so, that would mean he charged nothing for discount. He always retains the amount of the discount at the time. And supposing the discount to be 5 per cent., and the bills at 12 months, in exchange for the £20,000 in bills, he would only issue £19,000 in notes; consequently, even according to Mr. Thornton, his property would be increased by this sum of $\pounds 1,000$ by the operation.

But the fact is, Mr. Thornton's view is fundamentally erroneous in other ways. He says that because the banker and the merchant each credit themselves with the same sums, and debit themselves with the same sums, it is therefore exactly the same thing as if these obligations did not exist

at all; and that because the merchant and the | be correctly stated 100-50. Here it is quite banker hold each other's obligations, that therefore they cancel and extinguish one another. This is utterly erroneous. The merchant's bills are valuable property, capable of circulating in commerce, and the banker buys this property by creating another property, namely, his own notes, which are also capable of circulating in commerce. Hence it is not a cancelment of debts, but an exchange of valuable properties, both of which may, and do, circulate in commerce. The debts are not cancelled until the bills are given up to the merchant and the notes given back to the banker. Then, no doubt, each of these properties is extinguished and taken out of circulation. But while they are in existence, they each have circulating power.

65. Hence we see the enormous importance of a very careful attention to the mode of stating the facts in Political Economy. A man's property and his obligations being

then analogous to opposite quantities, we have manifestly the following laws :--

If we add (+) to his property (+), his obligations (—) remaining the same, that is an increase (+) of property.

If we take away (-) from his property (+), that is a diminution (-) of his property.

If we add (+) to his obligations (-), that is in effect a diminution (---) of his property.

But if we take away (-) from his obligations (-), that is in effect an increase (+) of his property.

Hence we obtain this doctrine in commerce, A RELEASE FROM A DEBT IS AN AUG-MENTATION OF CAPITAL.

We shall see afterwards that this doctrine leads to consequences of the most momentous nature in commerce, which may possibly surprise some of our readers.

66. To shew the extreme attention necessary to state an economic problem, we will quote from the works of two very eminent mathematicians.

Euler says (Algebra p. 7.,-Edit. 1797.)-"The manner in which we generally calculate a person's property is an apt illustration of what has just been said. We denote what a man really possesses by positive numbers, using or understanding the sign +, whereas his debts are represented by negative numbers, or by using the sign -. Thus, when it is said of any one that he has 100 crowns, but owes 50, this means that his real possessions amount to 100 - 50, or which is the same thing, +100 - 50, that is say 50.

"As negative numbers may be considered as debts, because positive numbers represent real possessions, we may say that negative numbers are less than nothing. Thus, when a man has nothing in the world, and even owes 50 crowns, it is certain that he has 50 crowns less than nothing; for if any one were to make him a present of 50 crowns to pay his debts, he would still be only at the point nothing, though really richer than before.'

It is quite easy to shew that the first paragraph is not a suitable mode of stating the question in Political Economy. For suppose that a man has 100 crowns and is bound to pay 50 crowns one year hence. It would be manifestly quite inaccurate to say that his property was only (100 - 50) or 50 crowns. And yet his property would

clear the 50 crowns are not to be subtracted from his present property. Now by the Law of Continuity, the same must be true if we diminish the period of payment gradually from one year by small gradations of a day at a time, till we reduce it to 0, or make his debt payable on demand. The fact is that it means he is bound to exchange some of his

property for his obligation at a given time. So in the second paragraph, when he has nothing to pay and owes 50 crowns, he is said to nothing to pay and owes 50 crowns, he is said to have less than nothing. This clearly means that he has not only spent the accumulation of his past industry, but has also spent the anticipated pro-ceeds of the *future*, and the negative sign clearly means futurity. Now let as suppose that having done so, as Euler says, some one marks him a present of 50 crowns to pay his debt, he is clearly for crowns richer than before, but yet his property is now only = 0. This is an example of $+ \times +$ giving +. But there is another method in com-merce of arriving at the same practical result. $- \times -$; and there is another method in com-merce of arriving at the same practical result. Suppose his creditor releases him from his debt, his property would then be = 0, and he would also be 50 crowns better off than before. This clearly shews that the release (--) of a debt (--) is the same thing as an increase (+) of wealth.

The whole subtlety in the case is in distinguishing between one quantity being equal and opposite to another, and therefore neutralising its effects, and taking it way altogether. The opposition in Parliament do not take away, or subtract, an equal number of ministerialists, they only neutralize their effects. To take away from the opposition does not add to the government numbers, it only takes away a quantity which neutralized their effects.

67. Another very eminent writer, Dr. Peacock, Dean of Ely, after saying that property and debts may be symbolized by + and -, says, (Algebra, 1st Edit., p. 77,) "if a denoted property possessed, and -a a debt. $\sqrt{-1}$. a might denote property neither possessed nor owed, such as a mere deposit would be."

Dr. Peacock has explained his ideas at greater length at p. 366, Art. 447, of the same volume. He says—"There are many cases, however, of quantities which cannot be represented, unless symbolically, by lines, which are susceptible of affections denoted by + and -, which are appropriate to their specific nature: thus, if a represented property possessed, - a may represent the same property owed ; under such circumstances, what is the meaning which may be attached to a V = 1 and -a V = 1?

If we consider the succession of quantities $a, a V = 1, a (V = 1)^3, a (V = 1)^3,$

or, a, a V = 1, -a, -a V = 1,

and if the first represents property possessed, and the third property owed, the second can neither represent property possessed nor owed, under the same circumstances or by the same person, inasmuch as in such a case, it would be symbolically represented by a or -a: it may represent, however, property deposited, which admits of similar relations when considered as property possessed and property owed by another person;

under such circumstances, the affectation of $a \mid \text{cial Algebra in which } V - I$ shall be inteldenoting property possessed by A by the sign $\nu' = 1$, would convert it into property possessed by B: and the affectation of a V-1 by V-I, would convert property possessed by B into property owed by A: thirdly, the affectation of -a by V-1 would convert property owed by A into property owed by B: and fourthly, the affectation of $-a \sqrt{-1}$ by $\sqrt{-1}$ would convert property owed by B into property possessed by A: the repetition of the process of affectation by the sign V - I, would reproduce continually the same succession of transfers of property from A to B, and of conversions of property possessed into debt, and of debt into property possessed, which is required to correspond to the succession of the same symbolical results.

"In this case, the interpretation of the sign $\sqrt{-1}$ which we have given, satisfies the symbolical conditions, and also coincides with the interpretation of the meaning of the signs + and -, which is otherwise established: we cannot give it the additional authority of the coincidence of this interpretation with the interpretation of the meanings of the quantities corresponding to a^2 and $-a^2$, for those quantities then inasmuch as in the case under consideration admit of no interpretation."

68. With all deference to so great a writer, we think this view is not correct. In fact, there is no such thing as property owed. The debt itself is an article of property, which must have arisen out of some previous exchange, and what is really meant by saying that a man is in debt is, that he must exchange some of his property to buy this debt. Now the symbol $\sqrt{-1}$ denotes that operation which being twice repeated, changes + into -

Hence, if this symbol is applicable to Political Economy at all, it must denote the operation which, being twice repeated, changes property into a debt. But depositing a thing twice with a man does not change property into a debt. in exchange for some property. And when a Nor does it transfer the property. These are single operations of the will, and, therefore, it appears to us that Political Economy is a science to which the symbol $\sqrt{-1}$ is not applicable.

69. After venturing the criticism contained in the preceding paragraph on the views of Dr. Peacock, we have had the great satisfaction of finding that Professor De Morgan has expressed similar sentiments in the article Algebra in the English Cyclopædia. He says : " It is impossible that a perfect Algebra can be founded on ideas of time, loss and gain, or any in which only two directions can be imagined. Space, from the infinity of directions which it admits, is as yet the only perfect medium of explanation. Time before and time after a certain epoch may be represented by the positive and negative quantity; but what is there in the idea of time to which the

sign $\nu'-1$ can possibly apply? Again, shew us a commercial operation which performed upon a gain, produces a sort of result which can neither be called gain nor loss, but which repeated two or more times upon a gain turns it into a loss and we can immediately see a system of commerligible.'

70. As this point is, in fact, the greatest subtlety in Political Economy, and involves consequences of the most momentous nature, which we dare say our readers little dream of at present. but which are fully explained afterwards, we shall extract what Dr. Peacock has said in the 2nd edition of his Algebra, p. 15.

"We conclude our observations upon this subject with the discussion of one more example of a problem of very extensive application.

"A merchant possesses a pounds and owes bpounds: his substance is therefore a-b, where ais greater than b.

"But since a and b may possess every relation of value, we may replace b by a - c, or by a + c, according as a is greater or less than b; in the first case we get

a - b = a - (a - c) = cand in the second

a-b=a-(a+c)=-cIf c therefore express his substance or property, when solvent. -c will express the amount of his debts when insolvent : and if from the use of + and - as signs of affection, or quality, in this case, we pass to their use as signs of operation,

a + (-c) = a - c and a - (-c) = a + cit will follow, that the addition of a debt (-c) is equivalent to the subtraction of property c of an equal amount, and the subtraction of a debt (-c) is equivalent to the addition of property c of an equal amount, and it consequently appears that the subtraction of a debt, in the language of symbolical algebra, is not its obliteration or removal, but the change of its affection or character, from money or property owed, to money or property possessed." 71. We hope we shall succeed in shewing that

the views expressed in this latter paragraph are not correct.

In the first place we must say that there is no such thing as *property owed*. A debt in commerce is a species of property itself, which was created man is in debt it means that he is bound to buy up, or exchange some part of his property for, this debt. But there is no particular part of his property which he may be said to owe more than another. His property is absolutely his own, and indeed he may spend it all and leave his debts unpaid.

Now as a debt always arises out of an exchange, and must necessarily do so, an addition of debt also arises out of an additional exchange. It is a new property created in exchange for more property. Hence to add and to subtract a debt, is in fact to create and to destroy property. As we shall shew.

A banker receives £100 in money from his customer, and in exchange for that, he creates £100 of debt, which is the property of his customer. His property is then stated

$\pm 100 - \pm 100 = 0$

Now arguing according to the common mode, that means there is no property at all in existence, a conclusion that is manifestly erroneous.

It is perfectly true that, so far as regards the banker himself, he may be said to be no richer KK 2

than he was before, but as regards Political Economy-and it is the master subtlety of the subject-the effects are very different. The banker has now £100 in money, which is his own property, which he may trade with and make a profit out of. And his customer has £100 as well, in the banker's notes, with which he can buy anything he wants, as well as with money. Hence there are two circulating and exchangeable properties instead of one. And though no doubt the banker is always liable to be called on to exchange some of his gold for his liabilities, yet, the very business of banking is based on the probability that he will not be called on to do so to any very appreciable amount at any one time.

Now let us suppose that for some reason or another, the customer or creditor chooses to release the banker, his debtor, from his debt, to the amount of ± 50 say. Then the banker's property would be stated thus

£100 - £50

and therefore the banker would have gained a practical augmentation of his property. But it would not be, as Dr. Peacock says, by converting property owed into property possessed, but by the destruction of the debt.

Just in the same way as a government would gain not a greater numerical amount of supporters but a practical augmentation of strength, by the removal of a number of its opponents.

By cancelling the debt, therefore, the debtor is released from the necessity of a future exchange, which is no doubt to him a practical augmentation of wealth, but yet so far as concerns Political Economy, is a destruction of property.

By this operation his assets remain exactly as they were before, but his liabilities are diminished.

When, as we have shewn below, it entirely depends on these subtle considerations, whether three-fourths of the capital of the Bank of England, and all the Joint Stock Banks in the country, has any real existence at all, our readers will perceive the immense importance of clear ideas on the subject.

72. From the considerations in the preceding paragraphs, we draw these important conclusions : That in Political Economy the signs + and -,

as Signs of Position, symbolize TIME. As signs of Operation, they mean addition and subtraction, or creation and destruction.

73. We have now, we think, fully explained the nature of credit. It is the present right to a future payment. And of course the value of the instrument entirely depends upon the payment being made. For the value of the promise is the payment. If, therefore, the payment cannot be made, the promise has lost its value, and there is a loss of property.

74. The considerations we have presented. furnish us with an answer to a question of the most momentous importance, which has been a great perplexity to many speculators on the subject. It is this: What are the true LIMITS of Credit?

Now as Credit is the right to a future payment, or a future profit, it is manifest that the number of future payments, or profits, are the Limit of Credit; every future payment whatever has its present value, and therefore up to that limit Credit may be created. But it is manifest that Credit cannot properly exceed that limit.

CREDIT.

Hence, we see at once, another most important distinction in the fundamental nature of a Bill of Lading and Dock Warrant, and Bill of Exchange, and other forms of credit. Because the former documents are absolutely restricted to the actual quantity of the goods they represent, and can by no possibility exceed them. But instruments of Credit are founded on the number of Transfers of Property, and every transfer of property gives rise to a creation of Credit. Hence. if there be 20 transfers of the same property, 20 Bills of Exchange may be created. But if the same property pass through as many transfers, the same Bill of Lading goes with it always.

75. Hence, we see at once the fundamental error of John Law's ideas of Credit and money which are very extensively prevalent at the present time. He saw that a merchant's obligations generally exceeded his cash by at least tenfold. He thought that instruments of credit represented money, and then he argued-Why not turn all the property in the country into paper currency, just as money is represented by paper? and such paper he maintained would retain an equality of value with money. But, alas! when these plausible ideas came to be put into practice, they totally failed, and produced the most terrible convulsions. When the French Government issued assignats representing the territory of France, so far from maintaining their value on an equality with silver, they ultimately fell to the 30,000th part of the value of silver (Assignats), and all attempts to found a currency upon such principles, have failed (LAW).

76. But while the same goods can never give rise to more than one Bill of Lading at the same time, which is extinguished by the delivery of the goods, a quantity of money may discharge and extingnish any number of instruments of Credit, by simply paying them in succession, and there is no absolute relation between the quantity of money and the quantity of Credit in a country. All that is required is that when the payment falls due, the obligor has money to discharge it. The quantity of Credit that may be created purely depends on the number of transfers, or the circulation of money.

77. It is entirely from a miscalculation of these transfers that commercial catastrophes arise. Sanguine speculators expect that the price of goods will rise, or that there will be a great demand for them. Upon the strength of the expectation of these future payments, they buy the goods with credit. A greater quantity of goods is thrown on the market, or the demand falls short of what they expected. Hence the number and amount of transfers of money which they counted on, do not take place. Consequently the profits out of which they expected to pay their bills never come, their promises lose their value, and then comes ruin and destruction on all concerned. 78. But as a debt is an independent article of

commerce, like any other commodity, it may be bought and sold for any other quantity whatever, and of course, among other things, for other debts. One grand division of the great system of debt consists in buying debts by creating other debts. and each of these debts is exchangeable property. And hence we see that there is a gigantic mass of valuable property produced merely by the consent of persons, without any labor at all.

79. Having thus established the great doctrine | engaged in bringing them from the mine to the that Credit is a species of property, and having shown that any species of property whatever, may be capital (CAPITAL), it follows of course, that Credit may be used as capital as well as any other species of property.

But how is Credit productive Capital?

We might, perhaps, say that the expression is tautology, because as capital is any economical element used productively, it follows that if it be capital, it must be productive capital.

Passing over this, however, we may now enquire how Credit can be used productively. It is manifest that this entirely turns on the meaning of the words PRODUCTIVE and PRODUCTION.

In the first place, as Credit is a substitute for money, it is clear that it may be used as productive capital, just in the same way as money is, which every one acknowledges may be productive capital.

We have shown (PRODUCTION) that the first French school of Economists confined the meaning of course he could buy nothing and make no of the word production, and productive labour, to the obtaining an increase of quantity. But Adam Smith and Condillac extended it to manufactures and commerce, and they very properly | judgment, he may agree to sell him his goods for say, that money employed in wholesale and | the promise to receive payment three months hence, retail dealing is productive capital.

80. But how is money employed in commerce productive?

To explain this, we have nothing more to do than to look at the genuine meaning in Latin of the word producere. We have fully shewn under PRODUCTION that the primary meaning of producere in Latin, is not to make an increase, but simply to bring out. And it is the technical word used for exposing to sale. Thus Terence, Eunuchus I, ii, 55, says

"pretium sperans illico PRODUCIT : vendit."

"Hoping for a good price, offers her there for sale; sells her

And in the Heauton timorumenos, I., i. 90-"Ancillas, servos, Omnes PRODUXI ac vendidi."

"All the slaves, male and female, I put up for sale, and sold.

So to produce is to draw forth-to cause to come near. To produce, in English, is not confined to making or obtaining, or manufacturing, but to produce a thing is simply to place it where it is wanted. If a witness is told to produce a deed in court, it means that he is to bring it into court and place it there. Now, if a retail dealer can, by means of money, draw forth goods from the shop of the wholesale dealer, and place them in his own shop, he is to all intents and purposes the producer of those goods as far as the customer is concerned. He sells the goods to his customer, and thus draws forth their price from his pocket, and as the price paid by the customer exceeds the price he paid for them, the operation has produced him a profit. Hence the money employed in this way has been productive capital.

81. Coals are wanted in a London drawingroom. The miner produces, or draws them forth. from the mine: the carrier draws them from Newcastle and produces, them in London, and deposits them in the cellar. The footman draws them forth from the cellar, and produces them in CREDIT.

drawing room grate are productive laborers.

Hence we see that these writers are correct in including the labor of transport, or circulation, as one species of production. Hence money is employed productively not only in obtaining, or manufacturing, but also in CIRCULATING commodities.

Now though Credit may be employed as productive capital in any operation that money can, it is chiefly in the great function of circulation. that credit is productively employed in England. though in Scotland, as we shall show below, it has been very extensively employed in other ways.

82. As a simple example of how Credit may be productively employed in retail dealing, we may take this. Suppose a retail dealer buys goods from a wholesale dealer for £100, and sells them for £140 to his customers, he has made a profit of £40, and his money has been employed as productive capital.

If he has no money, and no substitute for money. profits.

But if he has no money, still if the wholesale dealer has confidence in his character and say, by which time he may expect to have sold the goods to his customers for money at a profit, out of which he can pay the wholesale dealer. Now, we must observe that the transaction between the wholesale dealer and the retail dealer is equally a sale, whether the price be paid in money, or by bill. As soon as the transaction is effected the property in the goods has passed away from the wholesale dealer to the retail dealer, as absolutely as if he had received money for them. And while the retail dealer receives the property in the goods, what he gives in exchange for them is the right, or property, to demand payment in money three months after date, a new property called into existence by the mutual consent of the parties. Now the wholesale dealer charges a higher price when paid in credit, than when paid in money, partly because the payment is deferred. and partly because there is a certain risk, that the retail dealer may not be able to pay his bill. The credit price will probably be £110, where the ready money price was £100. Now suppose that the retail dealer sells the goods to his customers for £140 as before, it is clear that the retail dealer's profit will only be £30, when it was £40 in the former case. But we see this, that exactly the same circulation of goods has taken place by means of Credit, as by means of money, and the retail dealer has made a profit where he would not otherwise have been able to make one at all. He is therefore £30 better off at the end of the transaction, when he has paid his bill, than he was before. Hence his Credit has been productively employed for himself and the public in general, just as much as money would have been. Now, says Mr. Senior, "Economists are agreed that whatever gives a profit is capital." Therefore is it not clear that Credit has been capital to him? Is it not clear that Credit has been productive capital in every sense that money could have been?

83. We have exhibited in the last section of this article the astounding self-contradictions of the drawing room. Hence all the series of laborers | J. B. Say, who first invented the absurd notion

that those who maintained that Credit is capital, peu de chose. Mais n'est-ce donc rien que le said that the same thing could be in two places at once, which has been so heedlessly echoed by many writers in this country. A house divided against itself, we are told, cannot stand. What, then, can be the authority of a writer who has put forth such contradictory opinions as we have printed side by side? We are happy to say that the most recent writers in France, on the subject of Credit, have emancipated themselves from this baseless sentence. Thus M. Coquelin says in his work, Du Crédit et des Banques, which contains much that is excellent on the subject, (Coquelin,) at p. 127 .- "Il est donc vrai que le crédit, devangant de beaucoup en cela l'effet si lent de l'accumulation et de l'épargne multiplie presque instantanément les capitaux. Et comment ? par cela seul qu'il augmente pour chacun le pouvoir d'acheter. Au lieu de réserver ce pouvoir à ceux qui ont actuellement la faculté de payer en deniers comptants, il le donne à tous ceux, et le nombre en est grand, qui offrent dans leur position et leur moralité la garantie d'un payement futur. En d'autres termes, il le donne à quiconque est capable d'utiliser les produits par le travail. Par là il augmente d'abord le nombre des consommateurs, et particulièrement de cette classe de consommateurs qui n'achètent les produits que pour les employer à la reproduction."

Again, p. 129.—" D'un autre côté, peut on dire que le crédit par lui même est productif? Il l'est peut-être autant que le commerce, qui lui non plus ne crée, ni ne façonne les produits, bien qu'il y ajoute une valeur par le transport. C'est un mot bien vague et bien élastique que le mot produire, et bien subtile est la limite où son application s'arrête. Déjà l'on est convenu, et avec raison, que le commerce est productif. Ét en effet, quelle différence générique y a-t-il entre le fait de l'homme qui extrait la houille de la mine pour la mettre au jour, et celui de l'homme qui la transporte ou qui distribue au loin ? Ni l'un ni l'autre n'a créé, ou façonné la houille; l'un et l'autre ont contribué également à la rapprocher du consommateur, quoique par des moyens divers. Si le premier est un producteur, le second doit l'être ; si l'on refuse ce titre à celui-ci, on doit aussi le refuser à celui-là, et voilà un produit sans producteur. Le fait est qu'ils ont concouru tous les deux à donner à la houille son utilité propre, en la mettant aux mains des consommateurs, et qu'il y a par conséquent un travail également productif des deux côtés. Or je demande, si l'on ne pourrait pas dire également par induction, que le crédit est productif, lorsqu' évidemment c'est par son influence qui tant de matières brutes, précédemment perdues, ou stériles, sont sorties de leur inertie, comme la houille de la mine, pour convertir en produits fagonnés ou en capitaux actifs?

"Je n'insiste pourtant pas sur les mots, pourvu qu'on m'accorde les effets. Que le crédit soit ou non productif, qu'il multiplie ou non les capitaux, toujours est-il qu'à son défaut la production languit et la multiplication des capitaux s'arrête."

84. And the same writer, criticising the views of J. B. Say, in the Dictionnaire de l'Economie Politique, Art. Crédit, says :- "Le crédit ne multiplie pas les capitaux, répète-t-on avec un sorte de complaisance doctorale, il ne fait que les déplacer. D'où l'on conclut que le crédit est | that Credit is the greatest Capital of all towards

déplacement des capitaux ? Dans la constitution actuelle de l'industrie, telle que la division du travail nous l'a faite, le déplacement des capitanx ou des produits est une énorme affaire : c'est tantôt le point de départ, tantôt le complément nécessaire de l'œuvre de la production. Aussi est-ce faute de réflexion qu'on se fait un argument contre le crédit de cette vérité banale. Le crédit ne fait que déplacer les capitaux, soit : mais le commerce que fait-il autre chose? N'est pas son principal office de déplacer les capitaux ou les produits pour les distribuer entre les producteurs et les consommateurs ? Est-ce à dire qu'il ne soit point utile ? Une route, un chemin de fer, un soit point utile? Une route, in chemin du ter, in canal ne servent égaloment qu'à déplacar les pro-duits. Autant peut on dire de la monnaie qui facilite les échanges, et des échanges mêmes, qui ne tendent pas à d'antre fin. C'est qu'en effet, grâce à la division du travail, le déplacement des capitaux ou des produits est un œuvre immense : c'est presque la moitié de la production même."

85. J. B. Say showed very well that a sale is in fact a demi-exchange. Now Credit resolves an exchange into three parts. The goods are first bought with Credit-that is a complete transaction, there is no further question until the Credit expires. Then the Credit is sold to the buyer of the goods for money, and then money is exchanged away for other goods. And each of these transactions is a complete sale. We shall shew hereafter, however, that in the great majority of cases in modern times, the payment in money is dispensed with altogether, and commercial debts are paid by creating other debts.

86. Adam Smith says the labour of wholesale dealers and retail dealers is productive labour, because it adds to the value of the goods as they pass from one hand to the other. Now this labour simply consists in buying with money, or credit, and the value of the goods is increased in one way just the same as in the other. Where, then, is the difference between money and credit, as productive capital? It is clear there is none at all. Smith says (B. I., ch. x.), "In great towns trade can be extended as stock increases, and the credit of a frugal and thriving man increases much faster than his stock. His trade is extended in proportion to the amount of both, and the sum or amount of his profits is in proportion to the extent of his trade, and his annual accumulation in proportion to the amount of his profits." Here we see that Smith places Credit on exactly the same footing as stock, and if the one is capital, how is the other not? Not only is it true, but a trader may begin without any stock at all, if he have only Credit, and by means of the profits realized by Credit, he may accumulate stock.

87. Even in the very narrow extent to which Credit was developed among the Greeks, Demosthenes says, προς Λεπτίνην, p. 464, 20,-Edit. Reiske,-" δυοίν άγαθοϊν όντοιν πλούτου τε καί του πρός απαντας πιστεύεσθαι, μεϊζόν έστι τό της πίστεως ὑπάρχον ἡμῖν."-"There being two good things, Money and Credit, our more important property is Credit." So in the $\Upsilon \pi \epsilon \rho \, \Phi o \rho \mu i \omega \nu o \varsigma$, p. 958,-" εί δε τοῦτο ἀγνοεῖς, ὅτι πίστις ἀφορμ) τών πασών έστι μεγίστη πρός χρηματισμόν, παν aν aγνoήσειaς."-" If you were ignorant of this, the acquisition of wealth, you would be utterly | Credit, which is a bill for money, must, by a parity ignorant."

88. The only real difficulty in the case arises from the confusion that has been caused by considering Credit to be the transfer of the capital, whereas it is the independent property that circulates as a debt. And this confusion has been greatly produced by the unfounded notion that labor and materiality are necessary to value, or wealth. Directly we observe that it is exchangeability alone which confers value, the whole difficulty of the subject vanishes. Nay, Smith himself, to whom it is generally supposed that the doctrine that labor is necessary to value is due, says, (B. II. C. II. On Metallic and Paper Money,) "Let us suppose that the whole circulating money of some particular country amounted at a particular time to £1,000,000. * * Let us suppose too, that some time thereafter, different banks and bankers issued promissory notes payable to the bearer to the extent of £1,000,000, reserving in their different coffers £200,000 for answering occasional demands. There would remain, therefore, in circulation £800,000 in gold and silver, and £1,000,000 of bank notes, or £1,800,000 of paper and money together." Now we see that Smith treats the paper bank notes as valuable property, exactly on the same footing as the gold. He classes them together as undistinguishable ; and what are these bank notes? Simply Credit; nothing but circulating debts ! Placed exactly on the same footing as gold money! Does not this make debts wealth?

In estimating the currency of the country, every one knows that the gold and silver specie is reckoned, and the quantity of paper currency is added to it. And what is that paper currency? Nothing but Credit, or circulating debts, and it is always reckoned as valuable property. So in our old writers, Bills of Exchange were always called merchandize.

89. So Mr. Justice Byles, in the preface to his Treatise on Bills of Exchange p. xii, says-"It will not, perhaps, be an unreasonable inference that the bills and notes of all kinds, issued and circulated in the United Kingdom, in the space of a single year, amount to many hundred millions, and that this species of PROPERTY is now, in aggregate value, inferior only to the land or funded debt of the kingdom." Here we see that the learned Judge treats the bills and notes as separate, exchangeable, and valuable property on the same footing as land. And as these are only Credit, or rather, merely pieces of paper on which the evidence of the credit or the debt is recorded, it clearly follows that all Credit is valuable property.

If the amount of bills and notes, and other forms of Credit, is not separate and independent valuable property, what is it?

Answer us that, Gentlemen Economists, who laugh at the notion that Credit is Capital.

We may be told that Credit is only a promise to pay, and money is actual payment. But what is money? Are not all Economists agreed that money is merely an order for goods and other things? Mr. Webster said most justly, (BANK-ING IN AMERICA, § 448,) " Credit is to money what money is to articles of merchandize." Now, money, which is a mere bill for merchandize, is valuable property separate from merchandize.

of reasoning, be valuable property separate from money. In truth, the payment of a bill of exchange in money is only the exchange of an instrument of general credit for one of particular credit.

90. Now it is by facilitating exchanges that money becomes productive, it multiplies operations out of which profit arises; the function of Credit is exactly the same, it facilitates exchanges to a very much larger amount than money does, it multiplies operations to a far greater degree than money ever can do, and as it is out of these that profit arises, it of course multiplies profits to many times the extent that money ever can do. Hosts of writers, some of them of the greatest name too, have treated the notion that Credit is productive capital with the greatest ridicule, as is fully shown further on, saying that it does not create products, but only gives greater activity, or circulation, to existing capital. But that is all that money does. Credit cannot make two things out of one. But neither can money. Money cannot create anything, it only imparts activity and circulation. Mr. Mill, whose self-contradictions are fully set forth further on, says that Credit is not productive power, but only purchasing power. But what is money? It is only purchasing power. Adam Smith shewed long ago that purchase, or circula-tion, is one species of production !

So also Mr. McCulloch, in censuring Adam Smith's assertion, that the gold and silver money of the country produces nothing itself, says in a note-" It is a capital error to affirm that the gold and silver used as money, produce nothing, on the contrary, it is quite obvious that by facilitating exchanges, and enabling the division of labour to be carried to a much greater extent than it could be under a system of barter, they are in no ordinary degree productive." Now Credit does exactly the same thing as money, and therefore it is in no ordinary degree productive also.

91. Hence, whatever money can do in the way of production, Credit can do, which is not surprising, considering that money is only one form of Credit. The fact is that Credit is the inverse of money. To trade with money is to trade with the earnings of past industry, to trade with Credit is to trade with the expected proceeds of future industry. Hence, if money is positive. by the ordinary laws of Natural Philosophy, Credit is negative.

92. It is somewhat curious to observe the identity of thought between the early Algebraists and the Economists. The early Algebraists were sorely puzzled by the appearance of negative roots in equations. Being unable to divine their meaning, they called them res, or æstimationes ficta, or fictitious roots, and this name appears so late as Descartes. Cardan was the first to discover their true signification,-that they are simply inverse to the positive ones, but equally real and independent quantities. The very same name is very common for paper credit. Economists very frequently call it fictitious capital. The least reflection will show that the analogy between money and Credit is exactly that between the positive and the negative roots of equations. The one is simply the inverse of the other. The only writer, that we know of, who has truly ex-

583

pressed it is Bastiat, and, alas! we have to touch | please to call it, it is a powerful instrument of him too for inconsistency on this subject. He says, (Harmonies Economiques, Art. Capital, Vol. VI. p. 219. edit. 1855), "Ce qui est plus surprenant encore, c'est que nous pouvons faire l'opération INVERSE, quelque impossible qu'elle semble au prémier coup d'œil. Nous pouvons convertir en instrument de travail, en chemin de fer, en maisons, un capital qui n'est pas encore né, utilisant ainsi des services, qui ne seront rendus qu'au xxº siècle. Il y a des banquiers qui en font l'avance sur la foi que les travailleurs et les voyageurs de la troisième ou quatrième génération pourvoirent au payment; et ces titres sur l'avenir (i.e. instruments of Credit), se transmettent de main en main sans rester jamais IMPRODUCTIFS.

CREDIT.

This is exactly the very doctrine we have been endeavouring to explain. In commerce these titres sur l'avenir, or instruments of Credit, are not drawn upon the third and fourth generation, but they are drawn payable three or four months hence, and are exchangeable property, and made productive capital by circulating merchandize.

93. We shall now quote from several wellknown writers to show that they all maintain the doctrine, that Credit is productive capital. With respect to Adam Smith, in addition to what we have quoted above, we may refer to an examination of his opinions on Credit, in the last division of this treatise. Mr. McCulloch says in his Dictionary of Commerce, Art. Banking,-"Those who issue such notes, coin as it were their credit. They derive the same revenue from the loan of their written promises to pay certain sums, that they would derive from the loan of the sums themselves; and while they thus increase their own income, they at the same time contribute to increase the wealth of the society."

Therefore, Mr. McCulloch clearly asserts that Credit is productive capital.

94. Mr. J. S. Mill says, (Book III. Chap. XXII. § 2.)-"The value saved to the community by thus dispensing with metallic money, is a clear gain to those who provide the substitute. They have the use of twenty millions of circulating medium, which have cost them only the expense of an engraver's plate. If they employ this accession to their fortunes as PRODUCTIVE CAPITAL, the produce of the country is increased, and the community benefited as much as by any other capital of equal amount."

Therefore, Mr. Mill clearly asserts that Credit is productive capital.

95. Mr. Gilbart says, (Logic of Banking, p. 46)-"Bankers also employ their own Credit as capital. They issue notes, promising to pay the bearer a certain sum on demand. As long as the public are willing to take these notes as gold, they produce the same effects. The banker who makes advances to the agriculturist, the manufacturer, or the merchant in his notes, stimulates as much the productive powers of the country, and provides employment for as many laborers, as if by means of the philosopher's stone he had created an equal amount of solid gold. It is this feature of our banking system that has been most frequently assailed. It has been called a system of fictitious credit-a raising the wind-a system of bubbles. Call it what you please, we will not quarrel about names, but by whatever name you CREDIT.

production. If it be a fictitious system, its effects are not fictitious, for it leads to the feeding, the clothing, and the employing of a numerous population. *

"Thus a banker, in three ways, increases the productive power of capital. 1st,-he economises the capital already in a state of employment. 2ndly-by the system of deposits he gives employment to capital that was previously unproductive. 3rdly-by the issue of his own notes ha virtually CREATES CAPITAL by the substitution of CREDIT.'

Thus Mr. Gilbart clearly asserts that Credit is productive capital.

96. In BANKING IN AMERICA, § 421, we have shown that Mr. Hamilton, the Secretary to the Treasury, in his report on banking, clearly showed that banking increases the productive capital of a country. And in the same article, 5 448, Mr. Webster, the great lawyer and statesman, said in the senate,-" Credit is the vital air of the system of modern commerce. It has done more a thousand times, to enrich nations, than all the mines of all the world. * * Credit is to movey what money is to articles of merchandize. * It is very true that commercial credit, and the system of banking as a part of it, does furnish a substitute for capital."

Therefore, Mr. Hamilton and Mr. Webster clearly assert that Credit is capital.

97. M. Gustave du Puynode says, (De la Monnaie, du Crédit, p. 110.)-"Sifécondes qu'aient été les Mines du Mexique et du Pérou, dans lesquelles devait longtemps encore après Columb semble enfouie la fortune de l'univers, il y a cependant une découverte plus précieuse pour l'humanité, et qui a déjà procuré plus de richesses que celles des Amériques : c'est la découverte du Crédit. Monde tout imaginaire, mais vaste comme l'espace, inépuisable comme les ressources de l'esprit.'

This passage plainly asserts that Credit is productive capital.

Hence we fully conclude that

CREDIT 18 PRODUCTIVE CAPITAL. Such are the Elements of the Theory of Credit.

SECTION III.

ON THE MECHANISM OF THE STSTEM OF CREDIT.

98. We have obtained, then, as the fundamental conception of the nature of Credit, that it is the Present Right to a Future Payment, which is property capable of being valued; and therefore wealth, as Aristotle said ; moreover it is exchangeable, and is purchasing power, nay, the greatest purchasing power in modern commerce, and therefore wealth, as Mr. Mill says.

It will be found that this is the great idea upon which the whole system of Credit, in all its varieties, rests. It at once marks out its nature and its limits. And it will be found that all commercial catastrophes have arisen from transgressing these limits.

99. We shall now endeavour to explain to our readers the mechanism of the great system of Credit.

Credit is embodied in two ways : one in a form not adapted for general circulation, or else in for general circulation.

The former consists of the book debts of traders. In these the Credit moves once from the purchaser to the vendor, but being locked up in the books of the traders, never circulates further. The amount of Credit in this form in this country is incalculable, and there is no possible means of forming the most distant conception of its amount.

In the second form Credit is recorded in paper documents, which may circulate more or less generally. These paper documents are of two different forms ;

ORDERS to pay, including Bills of Exchange, Cheques, Bankers' Drafts, Exchequer Bills, &c., &c. PROMISES to pay, including Bank Notes, Promissory Notes, Deposits, &c.

Orders to pay are generally called Bills, and Promises to pay are generally called Notes. As the peculiarities of these different forms of Credit are fully explained under their respective heads, we shall not detain our readers by explaining them here, but shall assume them as known.

100. The system of Credit forms two great divisions. The first is Commercial Credit, in which traders of all sorts buy commodities by creating debts, payable at some time after date. The second is Banking Credit, in which bankers buy money and commercial debts, by creating debts, usually payable on demand.

101. Moreover, the system of Credit may, in another way, be conveniently divided into two parts. Credit, being exchangeable property, like money, may be used either to circulate existing products, or to call them into existence. That is, it may be based either on the simultaneous transfer of a commodity, or it may be created to produce one. It is by no means uncommonly supposed that the former is the only legitimate use of Credit, and that the latter is fraudulent. We shall see, however, that this doctrine is quite unfounded. But the fact is, that certain documents of the second form having been very grossly misused for fraudulent purposes, it has brought the whole system into groundless obloquy. We shall endeavour, in explaining the system of this second form, to point out in what the abuse of it, and the danger really consist.

On the System of Credit based upon Simultaneous Transfers of Commodities.

102. Goods or commodities, in the ordinary course of business, pass through the following hands :- 1st, the foreign importer; 2ndly, the wholesale dealer; 3rdly, the retail dealer; 4thly, the customer or consumer. To the first three of these persons these goods are capital; because they import, manufacture, or buy them, for the sake of selling them with a profit; the fourth buys them for the sake of use or enjoyment. The price the ultimate consumer must pay for them, must evidently be sufficient to reimburse the original expense of production, together with the profits of the three succeeding operations.

103. Now, leaving out of the question at present, how the importer of the goods gains possession of them, which concerns the foreign trade of the country, which we do not touch upon here,if he sells the goods to the wholesale dealer for ready money, he can, of course, immediately import, or produce, a further supply of goods in | always have accompanied them.

paper documents, which are more or less adapted | the room of those he has disposed of. In a similar way the wholesale dealer sells to the retail dealer. and if he were paid in ready money, he might immediately effect further purchases from the merchant to supply the place of the goods he had sold. So also if the retail dealer were always paid in ready money by his customer, he might replace the part of his stock that was sold, and so if everybody had always ready money at command, the stream of circulation, or production,

might go on uninterruptedly, as fast as consumption or demand might allow. 104. This, however, is not the case. Few, or no persons have always ready money at command for what they require. Very few traders can commence with enough ready money to pay

for all their purchases; and if the stream of circulation, or production, were to stop until the customer had paid for the goods in money, it would be vastly diminished. 105. Now let us suppose that the merchant

having confidence in the character of the wholesale dealer, agrees to sell the goods to him, but not to demand money for them till a certain period afterwards. He accordingly parts with the property of the goods to the wholesale dealer. exactly as if he had been paid in money, and receives in return the right to demand payment some time after date. Now the very same circulation of goods has taken place as would have been caused by money. The only difference is, that the actual payment is postponed, and for this the merchant charges a certain price. This debt may be recorded in two ways: it may either be simply recorded in the merchant's books, or else in a Bill of Exchange. But it is quite clear that the property is absolutely the same in whichever form it is, though one form may have more conveniences than the other.

In a similar manner, the wholesale dealer may sell for Credit to the retail dealer, and this debt may be recorded in two forms, like the first, either as a book-debt or in a Bill of Exchange. As in the former case the same circulation, or production, has been caused by Credit, as by money. Lastly, the retail dealer may sell to his customer on Credit, and this debt may also be recorded in two forms, either a book-debt or in a Bill of Exchange. In this latter case the debt is very seldom embodied in a Bill of Exchange, it most frequently rests as a book-debt. But in this case, as well as in the former ones, Credit has had precisely the same effect as money in circulating goods. Hence we see that Credit has had precisely the same effect as money in circulating the goods from the merchant to the consumer. Moreover, we see that the passage of the goods through these various hands has generated a debt at each transfer. Supposing the merchant sold the goods for a debt of £100 to the wholesale dealer, the wholesale dealer would probably sell them for a debt of £140 to the retail dealer, and the retail dealer would sell them to different customers for debts, not less probably in the whole than £200. Hence we see that the successive transfers of the same goods have generated debts to the amount of £440. Thereby exemplifying the distinction we have already pointed out between Credit and Bills of Lading, because, if the goods had passed through 20 hands, the same Bill of Lading would

585

the goods to the wholesale dealer is no doubt valuable property to him, because he knows it will be paid in time. It may, moreover, be exchanged for anything else like any other property, if any one will take it. But it is of no immediate use for what the merchant or manufacturer probably wants at the time, namely, money to buy more goods, or to pay wages, &c. Moreover, though he may be quite satisfied as to the safety of the debt, from his knowledge of his customer, it does not follow that others who don't know him will. Consequently such a debt would not be well adapted for general circulation, and therefore it would be of no use towards further production. In a similar way, the debt for which the wholesale dealer sold the goods to the retail dealer, would not be well adapted for general circulation, and therefore could not conduce further to production. The debts due by customers to retail dealers, seldom do conduce to further production, because they are most frequently merely in the form of bookdebts.

107. Now, the merchant would probably sell to a great number of wholesale dealers whose debts would fall due at different times, and therefore a certain stream of money would always be coming in, to enable him to continue production. Similarly, the wholesale dealer would sell to a great variety of retail dealers, whose debts would fall due at different periods, and so a certain stream of money would always be coming in to enable him to continue production. Similarly, the retail dealer sells to a great variety of customers, a great many of whom pay him ready money at the time of the purchase, as casual buyers, and his customers too, pay him money. by which he can continue to make purchases and keep up the stream of production. And therefore, this would greatly facilitate circulation or production.

108. And this we believe is the extent to which Credit in ancient times went. It did not go beyond book debts, at least as far as we have been able to discover. But all such statements must be made with the greatest reserve, because it is most unsafe to assert anything on merely negative evidence.

109. Credit, so far even as this, would be of great assistance to production, and the vast amount of it generated in this manner would be valuable property to its owners. But it is manifest that it would be of no further immediate use to them. It might therefore be aptly compared to so much dead stock. The next grand improvement would be to make this dead stock negotiable, or exchangeable. And in this, we believe, consists the great difference between modern and ancient Credit. The great modern discovery is to make the debts themselves saleable commodities. To sell them either for ready money, or for other debts of more convenient amount, and immediately exchangeable for money on demand, and therefore equivalent to money.

110. There are two classes of traders whose especial business is to buy these commercial debts, and so to give activity and circulation to this enormous mass of valuable property, and to convert it from dead stock into further productive power. The first class of these traders are called Bill DISCOUNTERS, i. e., buyers of debts; as we

106. Now the debt for which the merchant sold he goods to the wholesale dealer is no doubt valuble property to him, because he knows it will be oid in time It nux moreover, be exchanged for

111. As according to the prejudices of trade, the business of bill discounting is considered inferior to that of banking, and as it is unquestionably a much less powerful instrument of commerce, our remarks will be confined to banking, and we shall explain how it converts that mighty mass of commercial debts from dead stock into productive capital.

112. We need not describe here how bankers receive money from their customers and give them in exchange for it Credit, or the right of transferring the debt payable on demand, for that is fully described under Banz. We have there also described how bankers changed the form of this Credit from a Fromissory Note, given at the time of exchange, and capable of circulating in commerce just like money, into a Credit created in their books, called a Debeur, and to be drawn against by cheques, which are Bills of Exchange payable on demand. We have also shewn there the important consequences which flowed from this apparently unimportant change being the means, in fact, by which the monopoly of the Bank of England was broken in upon, and the London Joint Stock Banks founded.

113. Banks, then, as far as regards our present subject, are shops opened for the purpose of buying these commercial debts. The merchant draws a bill upon the wholesale dealer, who accepts it, and thus becomes the principal debtor on the bill. The merchant then takes the bill for sale, or discount, as it is technically termed, to his banker. It is usual to make bills payable to the drawer, or his order, which is signified by writing his name on the back of the bill. (BILL OF EXCHANGE). The merchant, therefore, writes his name on the back of the bill, and sells it to the banker, and this operation is termed INDORSing the bill. But the indorsement has another effect besides merely assigning over the debt to the banker, for unless specially guarded against, it makes him a surety for the payment of the bill, in case the acceptor does not pay it. The effect, therefore, of the indorsement, is a sale of the debt, and a warranty of its soundness. But this warranty is not an absolute one, but only a limited one; and the conditions are fully explained under INDORSEMENT. The banker, therefore, buys this debt with a limited warranty of soundness, by creating another credit, either as in former times by giving the merchant the amount, less the discount, which some banks are permitted to do now, or else by writing down a similar amount to the credit of his account, which Credit is called a DEFOSIT, and giving the merchant power to draw upon him at pleasure and at demand. Thus we see that the banker has bought one debt, which is valuable property, by creating another debt, which is also valuable property, and is equivalent to ready money to the merchant. And we must particularly observe that this is not a cancelment of debts, as many suppose, but an exchange of valuable property.

114. The merchant has, however, a great many other similar debts, because he has sold to a great many wholesale dealers, and he will probably want to sell these in a similar way to his banker. The merchant will, therefore, indorse each of | them over to his banker, thereby making each of the acceptors the principal debtor to the banker. but at the same time becoming himself responsible if any of them fail to pay his debt. If, therefore, the banker discounts the bills of 20 acceptors, he will have 20 principal debtors, who are each of them bound, under the penalty of commercial ruin, to pay their debts when they are due. The merchant, however, is surety for each of them, and as it may happen that out of so many, some may make default, the banker usually stipulates that the merchant shall leave a certain amount of deposit on his account by way of additional security. If any acceptor then make default, the banker immediately debits the account of his customer with the amount, and gives him back the bill. Thus, to a certain extent, the banker always keeps the means of paying himself in his own hands, besides having his customer's name on the bill, which makes his whole estate liable, and even should his customer fail, he retains the right to have his debt paid out of the estates of both the principal and surety.

115. The wholesale dealer has given his acceptance for the goods, and he sells them to the retail dealer, and takes his acceptance for them. In a similar manner he wishes to sell this debt to his banker, and so convert it into productive capital. A similar transaction takes place as in the former case. The wholesale dealer sells the debt of the retail dealer, and becomes himself surety for its payment to his banker. The banker also buys this debt by creating another debt payable on demand, which is equivalent to ready money.

116. The retail dealer may also draw upon his customers, though this is comparatively rare, because customers are generally beyond the pale of commercial law.

117. By these means we see that the dead stock of commercial debts are converted into productive capital. The merchant and the wholesale dealer, have now the full command of ready money for any purposes they require, and can continue the stream of production without interruption, and as their bills fall due, all they have to do is to give an order on their banker.

118. These are the fewest number of hands that goods in the ordinary course of business pass through, and it is clear that in their passage from the manufacturer to the customer, they will give rise to at least two bills, and sometimes three. They are all regular business bills, they originate from real transactions, and they are what are called real, or value bills, and they are what arise out of the regular and legitimate course of business and are the great staple of what bankers purchase. It is a very prevalent belief among commercial men that business bills are essentially safe, because they are based upon real transactions, and always represent property. But the foregoing considerations will dispel at once a considerable amount of the security supposed to reside in commercial bills on that account, because we have seen that in the most legitimate course of business, there will generally be two bills afloat, originating out of the transfers of any given amount of property, so that in the ordinary way there will be at least twice as many bills afloat as there is property to which they refer.

119. We must refer to the article BANK, for an

587

exposition of the mechanism of banking, shewing how the creation and exchange of debts is made in modern commerce to perform the part of money. We will only observe here that the manufacturer, the wholesale dealer, and the retail dealer may all be customers of the same bank, and if they all have their bills discounted by it, it will purchase a whole series of debts arising out of the transfers of the same property.

120. The above operations are only what arise in the ordinary course of business; it may sometimes happen that property may change hands much more frequently, and at every transfer, a bill may be created. Hence, when the credits are very long, and the transfers numerous, it is easy to imagine any number of bills being created by repeated transfers of the same property. In times of speculation, this is particularly the case. Now all these bills are technically commercial, or real, bills, but it is evidently a delusion to suppose there is any security in them on that account. The fact is, that the whole misconception arises from an error in the meaning of the word "represent." A bill of lading does, as we have said above, *represent* property, and whoever has the bill of lading, actually has so much property. But a Bill of Exchange does not represent goods at all. It represents nothing but debt. not even any specific money. It is created as a substitute for money, to transfer property, but it does not represent it any more than money represents it. This was long ago pointed out by Mr. Thornton in his work quoted above, (p. 30) "In order to justify the supposition that a real bill, as it is called, represents actual property, there ought to be some power in the billholder to prevent the property which the bill represents, from being turned to other purposes than that of paying the bill in question. No such power exists; neither the man who holds the bill, nor the man who discounted it, has any property in the specific goods for which it was given." This is perfectly manifest. It is both contrary to the law and the nature of Bills, that they should be tied down to any specific goods. And it shews that the real security of the bill consists in the general ability of the parties to it to meet their engagements, and not in any specific goods it is supposed to represent, the value of which is vague or illusory, and impossible to be ascertained by any one who holds or discounts it.

121. The distinction between Bills of Lading and Bills of Exchange is of so subtle a nature. but is of such momentous consequence, that we may illustrate it still further. The preceding sections shew that any given amount of property may by repeated transfers give rise to any amount of bills, which are all bona fide, just for the same reason that every transfer would require a quantity of money equal to the property itself to transfer it. Then, even supposing the price remained the same at each transfer, it would require twenty times £20 to circulate property of the value of £20 twenty times. But also £20 by twenty transfers may circulate property to the value of twenty times £20. So also a Bill of Exchange may represent the transfers of many times the amount of property expressed on the face of it. This is the case whenever the bill is indorsed. or passed away for value; and the bill represents as many additional values expressed on the

face of it as there are indorsements. Thus, let | two sorts-debts, or obligations due to them ; and us suppose a real transaction between A and B. A draws upon B. That shews the bill has effected one transfer of property. A then buys something from C. It is clear that C might draw upon A, in a similar way that A drew upon B. But instead of that, A may transfer the Bill on B, by indorsement. It has now effected two transfers of property. In a similar way, C may buy from D, and in payment of the property may indorse over the bill to D. The bill then represents three transfers of property. In a similar way it may pass through an unlimited number of hands, and will denote as many transfers of property. When C indorsed over the bill to D, he merely sold to him the debt which A had previously sold to him. Now that might be done, either by drawing a fresh bill on B. cancelling the first, or simply indorsing over the bill he received from A. Hence we see that every indorsement is equivalent to a fresh drawing. But if he draws a fresh bill on B, it will represent nothing but B's debt to him, whereas, if he indorses over the bill he received, it will represent B's debt to A, A's debt to C, and C's debt to D, and, consequently, it will be much more desirable for D to receive a bill which represents the sum of so many previous transactions, and for the payment of which so many parties are bound to the whole extent of their estates. Some thirty years ago, almost the entire circulating medium of Lancashire consisted of Bills of Exchange, and they sometimes had as many as 150 indorsements upon them before they came to maturity. From this also we see that no true estimate can be formed of the effect of the bills of exchange in circulation, by the returns from the Stamp Office, as has sometimes been attempted to be done, as every fresh indorsement is in effect a new bill. So that the useful effect of a bill of exchange is indicated by the number of indorsements upon it. supposing that every transfer is accompanied by an indorsement, which is not always the case. We see here the fundamental difference between Bills of Lading and Bills of Exchange, because the indorsements on the former denote the number of transfers of the same property; the indorsements on the latter denote the number of transfers of different property. Ten indorsements on a Bill of Lading shew that the same property has been transferred ten times, but ten indorsements on a Bill of Exchange shew that ten times the amount of property has been transferred once.

CREDIT.

122. We have shewn that the prices of all commodities are universally governed by the Law of Supply and Demand at all times (CONTINUITY, LAW OF; PRICES, THEORY OF). If the supply be excessive, nothing can prevent the price from falling to any state of depression, until it becomes absolutely unsaleable. The commodity, therefore, will not pay the cost of its production, and unless those concerned in producing it have independent capital to enable them to hold on until the excessive supply is taken off, and save them from selling when the price is ruinously depressed, or to stand the losses, they will all fail.

123. Almost all men in commerce are under obligations; that is, they accept Bills of Exchange which must be paid at a fixed time, under the penalty of commercial ruin. To meet these

secondly, commodities. To meet their own obligations, they must sell one or other of these kinds. of property. They must either sell their debts to their bankers, or they must sell their commodities in the market. While credit is good-that is, while bankers buy debts freely, they can retain their commodities from the market, and watch their own opportunity of selling at a favourable moment. As their own obligations fall due, they sell to their bankers some of the debts due to them. Thus, if credit were always good, they might go on for ever without the necessity of might go on for ever without the necessity of ever having a single piece of money paid into their account, or having any money at all beyond what is necessary for their petty dally transac-tions. But if credit receives a check, and the banker refuses to buy their debts, they must still meet their own obligations, under penalty of ruin. They are consequently obliged to throw their commodities on the market, and sell them at all hazards, the supply of them become excessive, and inevitably depresent the piece. The dest who and inevitably depresses the price. Traders who have capital enough of their own to meet their engagements without discounting, are able to keep their commodities back from the market, until, the extra supply being exhausted, prices rise again, from the natural operation of the demand. Bankers, we have shewn, always buy the debts of traders by creating debts of their own, which are called their "issues," and when bankers refuse to buy the debts of traders, they are said to " contract their issues." Consequently, a contraction of issues, or of discounts, is generally followed by a fall in prices. And this fall in prices happening coincidently with a contraction of issues, is frequently supposed to be caused directly by the diminished amount of currency compared to commodities, which is to a great extent erroneous, because it is in reality caused by the extra quantity of commodities, which a refusal to discount debts, causes to be thrown upon the market.

124. We see, then, how utterly impossible it is to ascertain the precise effect of the contractionof issues of banks upon prices, because the change is principally produced by the quantity of produce which traders are compelled to sell to meet their engagements, when the negotiability of their debts receives a check, and of course similar circumstances not only compel traders to sell, but prevent others from buying. Consequently, the supply is greatly increased, and the demand greatly diminished. If, however, the holders of one commodity are possessed of much independent capital, and are not compelled to realize to meet their engagements, a contraction of issues would not affect them much. On the other hand. if the holders of another commodity were in general men who depended chiefly on credit, and were compelled to sell at a sacrifice to meet their engagements, a sudden refusal to discount for them would cause an extraordinary quantity of their produce to be thrown upon the market, and cause a ruinous depression of price.

125. It is the sudden failure of confidence and extinction of credit, which produces what is called in commercial language a "pressure on the money market." and which causes money to be "tight." When money is said to be scarce, it does not obligations due by them, they have property of mean that there is a smaller quantity of money

actually in existence than before; there may be more, or there may be less in the country, no one can tell what the amount of money in existence is; but a great amount of credit, which serves as a substitute, and was an equivalent for money, is either destroyed altogether, or is suddenly struck with paralysis as it were, and deprived of its negotiable power, and, therefore practically useless. A vast amount of property is expelled from circulation, and money is suddenly called on to fill the void. When a new field of commercial adventure is found by sagacious discoverers, or a new market is suddenly thrown open by a change in the commercial policy of foreign nations, the first adventurers usually reap enormous profits. As soon as this becomes known, a multitude of other speculators rush into the same field, excited by the profits reaped by the first. Numbers of merchants and traders purchase commodities on credit, that is, they incur obligations which they must discharge at a future day, in the hopes that the returns will come in before the day of payment. But the immense quantity of goods poured in usually gluts the market in a short time, and from the excess of supply, prices tumble down often to nothing, so that the goods become unsaleable, and either no returns at all come in, or such as are quite inadequate to meet the outlay. When this occurs, it is called overtrading, and when this has been extensively practised, it is necessarily and inevitably followed by a great destruction of credit, and a great demand for cash. Thus, credit is destroyed faster than operations can be reduced in proportion. Those traders who have not received the returns they counted upon to meet their engagements, must raise money on any terms, and perhaps sell what property they have, at any sacrifice, to save themselves from ruin. The effect of this will be that money, for which there is an intense demand, will rise greatly in value, that is, discount will rise very high. But as a necessary concomitant of such a state of things, a great quantity of goods will be thrown upon the market, and their price will be enormously depressed. These circumstances will, therefore, produce a very high rate of discount, and ruinously low prices, which must continue until the excessive supply of goods is exhausted, and confidence revived. In such cases as these, traders who have not sufficient capital of their own to meet their engagements. and hold on their goods until prices rise, will infallibly be ruined. Under such circumstances, the rate of discount bears no relation whatever to the rate of profit. The use of ready money to persons who have overtraded, is of infinitely more consequence than the price they have to pay for it. It may be well worth their while to pay 15, or 20, or even 50 per cent. for the use of money for a temporary emergency, which may save them from ruin, and enable them to maintain their position.

126. It is, therefore, not the scarcity of money, but the extinction of confidence, which produces a pressure on the money market : and an examination of all the great commercial crises in this country, will shew that they have always been preceded and produced by a destruction of this credit, which has usually been brought about by extravagant overtrading and wild are sure to happen in such times. But there is speculation, as may be seen under CRISIS, COMMERCIAL.

589

127. The principle that the relation between supply and demand is the sole regulator of value, combined with the action of the credit system. will explain all the phenomena witnessed during a pressure on the money market. The failure of credit in any one branch of business will produce its full effect on the general market rate of interest, because that is regulated by the intensity of the demand for money from whatever quarter it comes. But it will not necessarily follow that the market prices of all commodities will be depressed. The market price for each commodity will be governed entirely by its own peculiar circumstances. If the holders of one commodity have independent capital, and have prudently abstained from overtrading, the price of such a commodity will not suffer much, because the ratio of supply and demand will not be altered to any great extent, but it cannot help sympathising to a certain extent with other commodities. But if the holders of another species of commodity have overtraded, and depended too much on credit, without sufficient means, they will necessarily be obliged to throw a great quantity of their produce on the market to realize, and this excessive supply will depress the price. And this effect will be increased, because such are the very times when persons who have ready money are particularly cautious in buying, partly because they always hope the market will fall still lower, and they hope to buy cheaper when prices have fallen to a minimum, and they will certainly not buy more of any commodity than they can help, which is diminishing in value; and partly because they must keep their ready money to maintain their own position. From these causes, not only is the supply increased, but the demand is diminished, so that the fall is doubly aggravated. Thus, we see at once, that a falling market will always be well supplied, because people who must sell, hasten to do so before the price falls still lower, and buyers hold aloof, waiting as long as they can, to see the lowest. On the other hand, when markets are rising, the case is reversed. The sellers hold aloof, hoping the price will be still higher, and buyers crowd in, hastening to purchase before the price rises more. A market that is desponding and inactive will usually continue so until people are persuaded that things are at the lowest, and are at the turn. It is evident that these considerations and observations apply to home produce, or at least to produce which is already in this country, and which can be thrown on the market immediately. In order to attract foreign produce, the market must rise high for a considerable time, with the appearance of continuing so.

128. Considering that any bill whatever which is drawn against bonâ fide produce is in commerce technically a real bill, it will be seen at once that their supposed security is greatly exaggerated, because any operation, however foolish and absurd, is a good basis for a real bill. In times of rapid changes in price, multitudes of bills will be generated by speculative purchasers. and when the price falls as rapidly as it rose, as it usually does, it is simply occupat extremum scabies. Hence, losses, and very severe ones, too, always at least this certainty with real bills.

When persons have speculated unluckily and | they might be used in the payment of the worklost their fortunes, they are brought to a standstill. When a man has ruined himself by speculation, no banker out of Bedlam would advance him more money to speculate with. Hence, ill-judged speculation must stop a man's mischevous career in a comparatively short space of time, that is, whenever he has lost the value of the goods he has been speculating with. We shall find in the next section, unfortunately, that traders have devised a method to extract funds from bankers the bonds might be reduced, and the debt cleared to speculate with, by which they can go on long after they have lost all they ever had, many times over, and adding loss to loss, until, perhaps, they may bring down their bankers, whom they duped and defrauded, as well as themselves. We have shewn in the next section, that there are symptoms which will often indicate a commercial crisis.

On the Theory of Cash Credits, Open Credits, and Accommodation Bills.

129. The operations on Credit, which we have hitherto been considering, were all based on an anterior operation, or one in which an exchange of commodities was affected by the creation and sale of the Credit, which Credit was afterwards sold or exchanged for another Credit. Such Credit is, therefore, manifestly limited by operations which have been made, and by commercial exchanges. The number of Bills created could by no possibility exceed the number of transfers of commodities, although they might be greatly less, because, as we have seen, a single bill might be used to effect many transfers of property. In all these cases, a debt has been created, which was expected to be paid out of the proceeds of the sale of existing property.

130. But since Credit is, as we have shewn, exchangeable property, and a substitute for money, it is clear that it may be applied as well as money to bring new products into existence. The limits of it in this case will be exactly the same as those in the former case, namely, the power of the proceeds of the work to redeem the Credit.

131. As an example of such a creation or formation of a product, we may take such a case as the following. Suppose the corporation of a town wishes to build a market hall, but has not the ready cash to buy the materials, and pay the builder's and workmen's wages. It may be a matter of certainty, that if the market were once built, the stalls in it would be taken up immediately, and the rents received from them would liquidate the debt incurred in erecting it. But, as the workmen cannot wait until that period, but require immediate cash to purchase necessaries, it is clear that unless there is some method | to observe that it is not the notes, exactly, which of providing ready payment, they cannot be employed. In such a case, they might borrow are the property, but the engagement of the bank to pay the sum on demand, of which the evidence money upon their own bonds, repayable at a future period. Now here we observe that these bonds are the creation of property. They are the right to demand a future payment, and are valuable exchangeable property, which may be | evident that these notes are valuable things, in bought and sold like anything else. In this case, we observe there is an exchange. But the Corporation need not borrow money. They might valuable property may be transferred from hand make their own obligations payable at a future | to hand, like any material substance whatever. date. And if these were made small enough, and It is in all respects as transferable as money were readily received by the dealers in the town, | itself, and, therefore, by the very force of the

men's wages, and perform all the functions of a currency, and be equivalent to money. Each of them is a new right created, and valuable property, which is exchangeable, and, therefore, wealth, by the definition. They would be quite as efficacious in *producing* or forming the market hall as real capital. And the market hall itself would be capital, because it produces a profit. As the stalls were let and rent received for them. off. It is said that many market places have been built by adopting such a plan. This case shews the utter futility of the notion that credit cannot be applied to the formation of products, and here we see it was not based on any anterior operation.

132. But as a more remarkable example of the powers of credit; we will take the Cash Credit system of Scotland.

We have explained under Cash Caspir, the origin of this species of Credit, which we need not repeat here.

Now let us suppose that a rich proprietor should buy an unimproved part of the country, but one capable of being improved, with a considerable amount of idle persons upon it, who did nothing all the year round beyond the small amount of labour necessary to obtain some miserable food. This proprietor seeing the capabilities of the country, takes with him 1,000 sovereigns, and employs them in bringing the land into cultivation, in paying wages, and setting people to work. By these means the country is, in a few years, converted from a barren moor into fields of corn. Would not every one say that these 1000 sovereigns have been employed as Productive Capital ? Of course every one would say so.

133. Now let us suppose that the circumstances and capabilities of the country are precisely the same, but the proprietor has no money. Suppose now a great Edinburgh bank seeing this state of matters, and the great undeveloped resources of the district, opens a branch in it, and sends down a boxful of £1 notes.

It is quite evident that as long as these notes remain in the coffers of the bank, they are nothing at all. They are only so many bits of paper, which convey no rights to any one. But as soon as the bank consents to issue them the case is totally changed. For whoever receives them from the bank, receives the right to demand one pound in gold from the bank, and it is very manifest that this is valuable property. Here, there-fore, is a new property created of which the notes are the evidence. For it may not be superfluous is recorded on the note, and by means of which it is transferred.

134. Now as we define the value of a thing to be the thing for which it will exchange, it is quite fact, are of the value of money, because they can be exchanged for money on demand. And this

definition of wealth, which is anything which has | no part of the cautioner's property is taken out of purchasing power, or is exchangeable, it is wealth. And it is notorious that the quantity of paper currency in a country is always reckoned cumulatively to the gold and silver money. And we have shewn below that every Economist does so.

135. Of course we need scarcely observe that as wealth depends upon the single idea of exchangeability, such things are only wealth within the area in which they can be exchanged. Such a bank note, therefore, is only wealth within the limits of Scotland, within which it has purchasing power. Our readers will therefore perceive clearly the manifest truth, that the creation and issue of Bank Notes is the creation and issue of distinct articles of property.

136. The bank, therefore, perceiving the capabilities of the country, and having confidence in the skill, industry, and honesty of the farmers, or proprietors-which in fact may all be summed up in the word character-and upon receiving collateral security against loss if necessary, creates and issues these notes-valuable property-as loans to the farmers. These notes are employed exactly in the same way that money would have been. The people are set to work, the land is reclaimed and stocked, and in a few years what was a bleak and barren moor; is changed into fertile fields of waving corn.

Now, we ask, who in their senses can deny that these notes have been productive capital, exactly as much as money would have been?

137. Now when the time for repayment comes, it may be made in three ways. We may suppose that more than one bank has established branches in the district. When the farmer therefore has sold his produce in the market, he may receive for it, either money, or the notes of another bank, or notes of the bank which has made him the loan, or any combination of these. He may therefore pay the bank in money, or in the notes of another bank, or in its own notes. Now we have observed that money is positive property, so the notes, or the debt of a bank, are positive property to the holders of them, though negative to the bank itself. By paying the bank therefore in money or in the notes of another bank, that is transferring to them positive property. But paying the bank in its own notes is the release of a debt, or the taking away of negative property.

We observe, therefore, that in commerce, the Payment of Money and the Release of a Debt, are in all eases absolutely equivalent. Which is a practical commercial example of the Algebraical doctrine that $+ \times +$ is in all cases absolutely equivalent to - x -

138. The banks, it is to be observed, always limit their advance to a certain moderate amount. varying from £100 to £1,000 in general, and they always take several sureties in each case, never less than two, and frequently many more, to cover any possible losses that might arise. These cautioners, as they are termed in Scotch law, keep a watchful eye on the proceedings of the customer, and have always the right of inspecting his accounts with the bank, and have the to her than mines of gold and silver. Mines of right of stopping it at any time, if irregular. gold and silver would probably have demoralised Moreover, the banks themselves do not permit the people. But her banking system has tended these credits to degenerate into dead loans. We immensely to call forth every manly virtue; and must also observe that, though security is taken, the express business of these banks was to create

circulation; and therefore his liability is only contingent.

139. The enormous amount of transactions carried on by this kind of accounts may be judged of when it appears from the evidence of the witnesses before the Committee of the House of Commons in 1826, that on a Cash Credit of £1,000, operations to the amount of £50,000 took place in a single week. Its effects therefore were exactly the same as these of £50,000 sovereigns. Others stated, that on a cash credit of £500. operations to the amount of £70,000 took place in a year. One witness stated that during twentyone years, in a moderately sized country hank. operations had taken place to the amount of nearly £90,000,000, and that there never had been but one loss of £200, on one account, and that the whole loss of the bank during that period did not exceed £1.200.

140. These credits are granted to all classes of society, to the poor as freely as to the rich. Young men in the humblest walks of life begin by making a trifle for themselves. This inspires their friends with confidence in their steadiness and judgment, and they become sureties for them on a Cash Credit.

This is in all respects of equal value to them as money, and thus they have the means placed within their reach of rising to any extent that their abilities and industry permit them. Mr. Monteith, M.P., told the committee that he was a manufacturer, employing at that time 4.000 hands, and that except with the merest trifle of capital, lent to him, and which he very soon paid off, he began the world with nothing but a Cash Credit! And this was only one example out of thousands.

141. This shewed the advantage in a personal way. But even that was but a small part of the system. Almost all the great public works of every description were created by means of Cash Credits. One witness stated that the Forth and Clvde Canal was executed by means of a Cash Credit of £40,000, granted by the Royal Bank. And in a similar way, whenever any other public works, such as roads, bridges, &c., were to be done, the first thing was to obtain a large Cash Credit at one of the banks. And it is by these means that Scotland has been raised to the proud position she now enjoys. It is no exaggeration whatever, but a melancholy truth, that at the period of 1688, and the establishment of the Bank of Scotland, that country, partly owing to such a succession of disasters as cannot be paralleled in the history of any other independent nation, and partly owing to its position in the very outskirts of the civilized world, and far removed from the humanizing influence of commerce, divided in fact into two nations, aliens in blood and language. was the most utterly barbarous, savage, and lawless kingdom in Europe. And it is equally undeniable that the two great causes of her rapid rise in civilization and wealth, were her systems of national education and banking. Her system of banking has been infinitely of greater service

incorporeal entities, which were valuable and exchangeable property, and, therefore, by the very force of the definition, wealth; which having served their purpose, after a time were

"Melted into air, into thin air."

But their solid results have by no means faded like the baseless fabric of a vision, leaving not a rack behind. On the contrary, their solid results have been her far-famed agriculture, the manufactures of Glasgow and Paisley, the unrivalled steamships of the Clyde, great public works of all sorts, canals, roads, bridges, and poor young men developed into into princely merchants.

142. All these marvellous results which have raised Scotland from the lowest state of barbarism up to her present proud position in the space of 150 years, are the children of pure CREDIT. It has been nothing whatever but some incorporeal entities called out of NOTHING. for a transitory existence, and then vanishing again into the NOTHING from which they came. And has not this credit been capital? Will any one with these results staring the world in the face, believe that it is maintained by many writers who still are considered as economists, that Credit conduces nothing to the increase of Wealth ! That Credit conduces nothing to production !! That Credit only transfers existing Capital !! And that those who maintain that Credit is productive Capital are such puzzle-headed dolts as to maintain that the same thing can be in two places at once!!! How we have dealt with these writers, may be seen in the next section.

143. Now, we observe, that these Cash Credits, which have produced such marvellous results, are purcly of the nature of what is called accommodation paper in England. They are not based upon any previous operations, nor upon the transfer of commodities already in existence. They are created for the express purpose of creating, or forming future products, which would either have had no existence at all but for them, or at all events it would have been deferred for a very long period, until solid money could have been obtained to produce them. Thus we have an enormous mass of exchangeable property, created by the mere will of the bank and its customers. which produces all the solid effects of gold and silver, and when it has done its work, it vanishes again into nothing, at the will of the same persons, who called it into existence. Hence we see that the mere will of man has created vast masses of wealth out of nothing and then DECREATED them into NoTHING.

144. Here we see one example out of many of the enormous advantages of character. If the applicants were not of good character, the banks would never have granted them these credits. They would never have created this property for them. If the banks themselves were not of great solidity and character, these incorporeal entities would never have obtained the general confidence of the people so as to pass unquestioned throughout the whole country, as equivalent to gold and | lawyers know better than that. Economists, silver. It is nothing but the breath of confidence which gives them this magic power, which vanishes into nothing at the blight of distrust.

comprehension of the subject, is very similar to | turies ago Socrates expressly declared that know-

out of nothing, but by the mere force of their will, | that which long obstructed the progress and reception of the Newtonian doctrine of gravity. It had been handed down as a dogma from the days of the Greek philosophers, that a body could not act where it was not. Instead of reflecting on the facts with unbiassed minds, the opponents of the Newtonian doctrines contended that his doctrines violated the fundamental dogma that a body could not act where it was not, and treated them with ridicule.

146. A very much more specious dogma is. however, at the root of the common inability among uninstructed writers to grasp the true conception of Credit. From the days of Anaxagoras and Epicurus, it has been handed down from age to age, by succeeding generations of physicists That Nothing can come out of Nothing, and That Nothing can go back into Nothing. The fundamental dogma of Lucretius, the hierophant of the Atomic Philosophy is that Nothing can come out of Nothing. i, 151, &c.

NULLAM REM E NIHILO GIGNI DIVINITUS UNQUAM.

NIL igitur fieri de NILo posse fatendum *st.

Moreover, that Nothing can go back into Nothing. i. 216; &c.

Huc accedit, uti quæque in sua Corpora rursum Dissolvat Natura, neque ad Nihilum interimat res.

Nullius exitium patitur Natura videri,

Immortali sunt natura prædita certe; Haud igitur possunt ad Nilum quæque reverti.

Haud igitur redit ad Nihilum res ulla, sed omnes Discidio redeunt in corpora materiai.

Haud igitur penitus percunt quæcunque videntur; Quando alia ex alio reficit Natura nec ullam Rem gigni patitur, nisi morte adjutam alienâ.

And this is the constant refrain of the Lucretian philosophy, That nothing can be produced from nothing, and that nothing can go back into nothing, i, 266.

Nunc age, res quoniam docui non posse creari De Nihilo, neque item genitas ad Nil revocari.

At quoniam supera docui NIL posse creari De Nihilo, neque quod genitu 'st ad Nil revocari, Esse immortali Primordia corpore debent."

And this is the identical doctrine which physicists maintain to the present day. Chemists delight to expatiate to their audience on the indestructibility of all things. How seeming destruction is merely the dissolution of atoms under their present combinations, to reappear in new forms and new combinations in perpetual succession.

147. But Political Economy confounds the best settled doctrines of the sages of eld. It is true that many Economists have declared that man can call nothing into existence, that all wealth comes from the earth. That wealth is but the particles of matter, and that all that man can do is to re-arrange them, and either place them in a new position, and let nature do the rest. But their own doctrines, their own books, their own definitions, confound all such notions. And with scarcely an exception, are agreed that whatever can be exchanged, whatever can be bought and sold, is wealth; that everything by which 145. The real difficulty which impedes a true profit can be made is Capital. Twenty-two con-

LEDGE WAS WEALTH. Aristotle laid down as a (instruments of production, but on the quantity definition that everything whose value could be | and the diffusion of this IMMATEBIAL CAPITAL, measured in money was WEALTH. Adam Smith expressly enumerates the "acquired and useful abilities" of the people as part of the Wealth of a country. He also classes paper money-which is are not much inferior, to our own. Her poverty credit — as valuable property, and therefore has been attributed to the want of material Wealth, making exchangeability the test of Wealth. J. B. Say has done the same. So does Mr. Senior. He says-"Health, strength, and KNOWLEDGE, and the other natural and acquired powers of body and MIND, appear to us to be articles of WEALTH. * * * * In the greater part of the world a man is as purchasable as a horse. In such countries the only difference in more rapidly resemble Connaught. Ireland is value between a slave and a brute consists in the physically poor, because she is morally and inteldegree in which they respectively possess the saleable qualities that we have been considering. If the question whether personal qualities are articles of wealth had been proposed in classical times. it would have appeared too clear for discussion. We have shown under Æschines Socraticus that this very question was proposed in classical times, and personal qualities were decided to be WEALTH.] In Athens every one would have replied that they in fact constituted the whole value of an $\xi_{\mu}\psi_{\nu}\chi_{\nu}$ or $\delta_{\rho\gamma}\alpha_{\nu}\sigma_{\nu}$. The only differences in this respect between a freeman and a slave are, first, that the free man sells himself, and only for a period, and to a certain extent, the slave may be sold by others and absolutely; and, secondly, that the personal qualities of the slave are a portion of the wealth of his master; those of the freeman, so far as they can be made subjects of exchange, are a part of his own wealth. They perish, indeed, by his death, and may be impaired, or destroyed by disease, or rendered valueless by any changes in the customs of the country, which shall destroy the demand for his services ; but subject to these contingencies, they are wealth, and wealth of the most valuable kind. The amount of revenue derived from their exercise in England far exceeds the rental of all the lands in Great Britain."

148. Again, at p. 145. Mr. Senior savs-" Even in our present state of civilization, which, high as it appears by comparison, is far short of what might easily be conceived, or even of what may confidently be expected, the INTELLECTUAL and MORAL CAPITAL of Great Britain far exceeds all her MATERIAL CAPITAL, not only in importance. but even in productiveness. The families that receive mere wages probably do not form a fourth of the community; and the comparatively large amount of the wages even of these, is principally owing to the capital and skill with which their efforts are assisted and directed by the more educated members of the society. Those who receive mere rent, even using that word in its largest sense, are still fewer; and the amount of rent, like that of wages, principally depends on the knowledge by which the gifts of nature are directed and employed. The bulk of the national revenue is profit, and of that profit, the portion which is mere interest on material capital probably does not amount to one third. The rest is the result of PERSONAL CAPITAL, or in other words of education.

"It is not in the accidents of soil, or climate, or on the existing accumulation of the material PART VII. VOL. I.

CREDIT.

that the WEALTH of a country depends. The climate, the soil, and the situation of Ireland have been described as superior, and certainly capital; but were Ireland now to exchange her native population for seven millions of our English North Countrymen, they would quickly create the Capital that is wanted. And were England, north of Trent, to be peopled exclusively by a million of families from the west of. Ireland, Laucashire and Yorkshire would still lectually poor. And while she continues uneducated, while the ignorance and violence of her population render persons and property insecure. and prevent the accumulation and prohibit the introduction of capital, legislative measures, intended solely and directly to relieve her poverty, may not indeed be ineffectual, for they may aggravate the disease, the symptoms of which they were meant to palliate, but undoubtedly will be productive of no permanent benefit. KNOWLEDGE has been called power-it is far more certainly WEALTH. Asia Minor, Syria, Egypt, and the Northern Coast of Africa, were once among the richest, and are now among the most miserable countries in the world, simply because they have fallen into the hands of a people without a suf-ficiency of the *immaterial sources of wealth* to keep up the material ones."

149. Knowledge, therefore, by the very generality of the definition, and the consent of nearly every Economist of note-is Wealth. And where does Knowledge come from? And what is it formed out of? Does it come from the earth? and is it formed out of the materials of the globe? We should fancy that few would maintain that. All that we know is that Knowledge originates in the mind. Knowledge is formed in the mind, but is it formed out of the materials of the mind? And if so, what is the composition of the mind? Does it come from the earth? Are we to have an Atomic theory of Knowledge, or of the Mind? Will some metaphysical Dalton tell us that knowledge, or the human mind, is composed of indestructible primordial Atoms?

> Πολλά τα δεινά, κουδέν άνθρώπου δεινότερον πέλει

But this same knowledge-Whence cometh it? What is it? - Whither goeth it?

We know not-Do our readers?

Natheless it is WEALTH; and therefore it is within the domain of the Economist. It may be bought and sold; it may be valued; it may be accumulated; it may be handed down from age to age, like any material product whatever. The acquisition of knowledge is the acquisition of Wealth ; and the loss of knowledge is the destruction of Wealth. And is the loss or destruction of knowledge the dissolution of indestructible primordial atoms ? Here, then, are vast masses of Wealth, and the question is where it comes from, and what is it composed of? And there are but two solutions of the question. Either knowledge is composed of indestructible atoms, or it is not.

L.L.

ledge is not the Creation of Wealth out of Nothing. But unless we are prepared to admit that-and who is ?- the formation of knowledge must be creation of Wealth out of Nothing. And the loss or destruction of Knowledge must be | and the Stock Exchange. the Decreation, or the return, of Wealth into Nothing!

150. As one example of this out of thousands. we may take a case that was not very long ago before the Scotch Courts. In the beginning of the 17th century, a man named Anderson discovered a way of making pills, which soon became very popular. The secret of making these pills has been handed down from generation to generation, and has been a constant source of Wealth to the owner of it. Very recently, the possessor of it became bankrupt, and his creditors claimed the right of having it given up to them, as part of the bankrupt's property. The pills have been ana-lysed in vain by chemists, and the secret of their composition has never been able to be discovered. Now, here is a manifest case of a trade secret knowledge, being Wealth,-and where did this Wealth come from ? and what is it composed of ? Did it come from the earth ? and is it composed of the materials of the globe? And yet it has been handed down as an heirloom from age to age. Suppose the present possessor of the secret dies without divulging it, there is a manifest loss of Wealth. And what would become of it in such a case? And this is clearly only a particular example out of countless others.

151. Here, therefore, we have enormous masses of what every Economist, with scarcely an exception, admits to be wealth, which shakes the doctrines of the Physical Philosophers. But also, the doctrines of many Economists are equally overthrown, because they say that all wealth comes from the earth. But here we have great masses of wealth which do not come from the earth. Hence it is manifest that there is another source of wealth besides the Earth, namely, the HUMAN MIND.

152. But even this does not exhaust the list of Economic Quantities, though Economists have scarcely noticed any other. When we adopt the definition of Wealth as everything that can be exchanged, or whose value may be measured : we very soon find that there is yet another species of exchangeable quantities, which do not originate in the earth, nor yet in the mind. And here again we may observe that Lucretius is at fault. For he says that there is nothing, besides the void. which is separated from something corporeal 1. 420.

Omnis, ut est, igitur, per se, Natura, duabus Consistit rebus; nam CORPORA sunt, et INANE.

Præterea nihil est, quod possis dicere ab omni Corpore sejunctum, secretumque esse ab INANI.

Et facere et fungi sine CORPORE nulla potest res.

Ergo præter INANE et CORPORA, tertia per se Nulla potest rerum in numero natura relinqui. From these lines it is clear that Lucretius did not live in the days of Public Debts, Bills of Exchange and Bank Notes, Bank Shares, Copyrights and other incorporeal property, or he would have modified this part of his Philosophy.

153. Modern ingenuity has reduced what

If it be so, then of course the formation of know- | Lucretius declared an impossibility into reality. There are enormous masses of exchangeable incorporeal property, for which there are express shops for creating, and there are special markets for trafficking in, namely, the Royal Exchange.

154. Mr. Mill, we have seen, defines Wealth to be anything which has power of purchasing, and he says that productive labour is labour which is productive of wealth. Hence manifestly labour which produces anything which is exchangeable is producing Wealth. In Book m. ch. xii., § 5, he gives a table showing that the Bills created in a single year amounted to £528,498,842, and these, after all, were but a fractional part of the total quantity of credit. In B. III, c. xx., § 2, he expressly calls Bank Notes "Productive Capital," and Smith enumerates paper credit cumulatively to gold and silver mone

155. Now we observe that every one allows Bank Notes, Bills of Exchange, &c., to be sepa-rate independent exchangeable property, and therefore ex vi termini-Wealth. And what are they? Simply Credit-DEBTS. Now where do these Debts come from? Do they come from the materials of the globe? Are they, too, formed of indestructible primordial atoms? When a debt is extinguished is it a mere dissolution of certain material particles to reappear under an-other form? Are they even the products of Labour and the human mind ?

How is a Debt created ? By the mutual consent of two minds. By the mere FIAT of the HUMAN WILL. And how is a debt extinguished? By the mere FIAT of the HUMAN WILL. Now we again ask-we need scarcely repeat that a debt is property-Whence does it come? When two persons have WILLED to create a debt-whence does it come? From the materials of the globe? Does it come even from the mind? No! it is nothing but a valuable product, created out of Absolute NotHING, by the mere Fiat of the human Will. And when it is extinguished, it is a valuable product DECREATED into NOTHING by the mere Fiat of the Human Will.

156. But besides debts, there is an enormous mass of valuable property of a similar nature created by the mere will of the Legislature, such as Copyrights. It is true that the Legislature as copyrights. It is the that the Legislathre cannot make a Copyright a valuable thing; but it can prevent it from being destroyed. Now we ask—Are not the Copyrights held by a publisher part of his fixed Capital? Part of his Wealth? Just as much as so much land? Whence come they? From the materials of the Globe? or even from the Human Mind? It is quite clear that Copyrights are the pure creation of the Will of the Legislature.

Suppose that the Legislature were to abolish Copyrights, would not that be an actual annihilation of Wealth, and not merely the Dissolution of material atoms?

157. What again are the Funds? Nothing but valuable Rights created by the Will of the Legislature. Suppose Parliament were to abolish the Funds. Would not that be the annihilation of a vast amount of property ?

Precisely the same considerations apply to vast amounts of property of a similar nature. Such as policies of insurance, leases, and annuities of

all sorts. They are all property created by the | anything whatever whose value may be measured. mere Fiat of the Human Will. And who can form the most distant conception of the value of all the Incorporeal property of this nature in Great Britain ? In the species of private credit alone, which is the subject of this article, it is probably not far short of the value of the land of the country.

158. We may remark that Plutarch, long ago, saw that the business of Banking overturned the doctrines of the Physical Philosophers; for after describing the method of Discount, which was practised by the Athenian bankers (DIScount) he says, - "είτα των φυσικών δήπου καταγελωσι, λεγόντων μηδέν έκ τοῦ μη όντος νενέσθαι.'

"Then, forsooth, they may laugh to scorn the doc-trines of the Physical philosophers who say that nothing can come out of nothing."

159. Moreover, this property, thus created by the wills of two persons, is of so stubborn a nature, that it cannot in general be decreated. except by the same power that called it into existence. We have seen some of its beneficial effects : but, on the other hand, when misused, its power is so terrible, like that of some volcanic agent, that it has blown societies to pieces. Too much of it is very frequently created in commerce, and it is necessary for public policy that some of it should sometimes be destroyed. In order to do this, there are Courts of Law instituted whose express purpose is to decreate this species of property. These are the Courts of Bankruptcy. Their especial purpose is to annihilate this species of property.

Hence we have shops for the express purpose of creating this species of property, which are BANKS. We have a public market for the express purpose of dealing in it, which is the ROYAL EXCHANGE; and we have Courts of Law for the express purpose of destroying it, when it cannot be done by the parties themselves, and these are the COURTS OF BANKRUPTCY.

160. Hence we see that taking the Definition of Wealth in its widest generality, as everything whose value may be measured, there are Economic Quantities of three distinct species. 1st. The products of the Earth, comprising all material substances; 2ndly, The products of the Mind, comprising all knowledge of different kinds; and 3rdly, The products of the Will, comprising all incorporeal property, such as credit, the funds, and all annuities of every description. In each of these there may be Property. And all of these various species of Products may be, and are, daily exchanged for one another, or amongst themselves. and therefore manifestly they must all be included in the Science of Exchanges.

We thus see that instead of there being only one source of Wealth, as so many Economists have said, that there are, in fact, three sources in which Wealth originates, the EARTH-the HUMAN MIND-and the HUMAN WILL.

None of these products, however, are absolutely Wealth in themselves. But men wanting and desiring to have them, and being willing to give something in exchange for them, give them Value, and constitute them Wealth.

161. Suppose, then, we make £ the general symbol for an Economic Quantity-that is to say and representing these various species of Quantities indifferently under the general symbol, we may say that there are in any country, quantities of this sort :--

CREDIT.

| £528,497,620 £427,956,238 |
|------------------------------|
| £807,347,281 |
| £24,572,674 |
| &c. &c. &c. |
| ke ke ke |

Then we affirm by virtue of the principle of the Continuity of Science, and by the great Algebraical doctrine of the Permanence of Equivalent Forms, that whatever can be proved to be true Economically of any one of this series of Quantities must be true of them all. Moreover, that the fundamental conceptions of Economic Science must be of such a wide and general nature that they must grasp all these Quantities, of whatsoever nature they may be. Moreover, that all the fundamental axioms of the Science must be of that wide and general nature so as to grasp all the phenomena under one general expression.

162. As an example of the doctrine stated in the preceding paragraph, we may give this. No one looking at the series of Economic Quantities placed above, could tell of what species they were. Some may be land, some corn, some minerals, some ships, some money, some debts, some commercial shares, or copyrights, &c. Now what we say is this, that there can be but ONE cause of Value for them all. This at once annihilates the false distinctions between the causes of the Value of different species, which have been made by Economists. We see at once that Demand is the sole cause of Value of all Economic Quantities (VALUE.)

163. A banker's assets are composed partly of money, and partly of other securities of different kinds, such as debts. His liabilities, or Deposits. are exclusively Debts. Now, if we placed before our readers a banker's deposits and assets, thus-£10,000 £10,000

who could tell which were the deposits and which were the assets? And of the assets, who could tell what part was money, and what part debts? We see that the debts which are his assets, as well as his deposits, are entered under exactly the same general symbol, £. It follows, therefore, that they are all equally Economic Quantities. and must be subject to the same general laws.

We thus see that there are Economic Quantities of very different species, and a knowledge of Law and Commerce is absolutely indispensable in order to enable us to discern what Economic Quantities are. And then, by the very nature of Natural Philosophy, the fundamental concep-tions must grasp all these Quantities of diverse forms and natures.

164. Having thus obtained these independent Economic Quantities, the purpose of the science is to discover the laws which regulate the variations of their Exchangeable Relations. And we say that they must be governed by the grand general Theory of Variable Quantities in general. For if not, the whole of Mathematical Science is shaken to its foundations.

165. It may be as well, perhaps, to explain our argument at somewhat greater length to our readers. Mathematical Science has under its dominion-1st. The Theory of pure number; т.т. 2

2ndly. The Theory of Dependent Quantities; 3rdly. The Theory of Independent Quantities. The Theory of pure number is named ARITH-METIC. Now the very basis of all Mathematical certainty is this, that the combinations of numbers shall be true under all circumstances, and when applied to all cases. Thus we say that in abstract numbers $3 \times 3 = 9$. And this must be true in all cases whatever. If we could imagine some branch of science in which $3 \times 3 = 11$, the science of Arithmetic would be shaken to its foundations.

The very same reasoning is applicable to the general theory of dependent Quantities. Like as in the case of pure number, there is a grand general Theory of Dependent Quantities, which must be applicable to all cases, and to all particular sciences whatever. And this is the reason why the various physical sciences, so widely different in their nature, are all brought within the grasp of the Differential Calculus. What can be more diverse in their natures than Astronomy, Optics, Sound, The Tides, Electricity, &c., &c.? And yet they are all brought within the grasp of Differential Equations, because they are only so many particular cases of Dependent Quantities.

If, then, we find a new order of Variable, or Dependent, Quantities, we are able to affirm that they must be subject to the grand general Theory of Variable Quantities in general. For if they were not, it would shake the whole of mathematical reasoning to its foundations, just in the same way as if we could imagine a science which broke loose from the general laws of number.

Now, in Political Economy we have to deal partly with a new order of Quantities altogether. and partly with a new relation, or quality, of Quantities, with which we are already familiar. The new Quantities are, of course, knowledge, &c., and Incorporeal Property, and the new quality is exchangeability.

Nevertheless, the object of the Science being to discover the Laws which regulate the Variable Exchangeable Relations of these Quantities, we say that they must be only a particular case of Variable Quantities in general. And therefore they must be subject to the same general laws as govern the variable relations of Physical Quantities.

Now the fundamental principle of all Physical Inductive Science is that there is only one general Theory, which accounts for all the phenomena. There is no Physical Science whatever, which any one ever thought could by any possi-bility be based on a multitude of conflicting fundamental theories.

Now it is against this fundamental principle of Natural Philosophy, that the whole of the Ricardian School of Political Economy sins. For that school enumerates a number of distinct classes of cases of Value, and it lays down a distinct fundamental Theory of Value for each. Now this is manifestly to shake all mathematical reasoning to its foundations, for it is as much as to say that here is a Science of Variable Quantities, which is not subject to the general Mathematical Theory of Variable Quantities.

This then is the ground of our condemnation of the Ricardian System of Economics. How very differently Condillac treated the subject we have shown. (Condillac.)

166. We earnestly hope that our readers do not think we are indulging in mere metaphysical logomachy. Very far from it. The considerationa we have presented are indispensably necessary to examine the fundamental nature of the enormously greater proportion of existing property. The ideas we have presented may be new to some readers, but they are simply indisputable principles of Law and Commerce. They are absolutely indispensable to understand the great subjects of Credit and Currency, which have produced such tremendous effects on the well being of nations.

167. We may observe that the whole system of Cash Credits, which we have been describing. shows, among many other things, the utter fallacy of what is called the CUBRENCY PRINCIPLE, which asserts that no good can be done by increasing the quantity of money in a country, as well as that the issues of banks should be absolutely restricted to the quantity of money there would be, if they did not exist. We have seen that the whole of the magnificent works which were carried on by means of Credit created an excess of the money actually, and which displaced no money whatever. The very same phenomenon was exhibited in England during the same period. It was soon after 1770 (BANKING IN ENGLAND, § 106) that the prodigious development of her industrial energies began, and to carry out these gigantic works multitudes of country Banks started up on all sides, and filled the country with their rotten notes. Bad as this currency, however, was, it was by means of it that these great works were done, and they could never have been done without it. It was the fatal monopoly of the Bank of England which prevented powerful Banks being formed, and permitted these mushroom shopkeepers to start up and turn Bankers.

On Open Credits.

168. We have seen that Cash Credits are always created to forward a future operation, and are never founded on a past one. There is always, however, collateral security taken, so as to protect the Bank against loss. In the keen spirit of competition, however, a hazardous system has sprung up of granting these credits without collateral security. This system is a good deal practised abroad, we believe, and is called *Crédit à Decou*vert, and in this country Open Credits. It is manifestly far more hazardous than Cash Credits, or common discounting, because there are always two names at least in such cases. We believe that the Joint Stock Banks, which failed a few years ago, indulged to a great extent in this dangerous system.

On Accommodation Bills.

169. We now come to a species of Credit. which will demand great attention, because it is the curse and the plague spot of Commerce, and it has been the great cause of those frightful commercial crises, which seem periodically to recur, and yet though there can be no doubt that it is in many cases essentially fraudulent, yet it is of so subtle a nature as to defy all powers of Legislation to cope with it-at least according to the still unreversed doctrines of Westminster Hall.

170. We have shown by the exposition of the system of Cash Credits, that there is nothing

essentially dangerous or fraudulent in a Credit Bill, an operation may be performed, and, if sucbeing created for the purpose of promoting future operations. On the contrary, such Credits have been one of the most powerful weapons ever devised by the ingenuity of man to promote the prosperity of the country. A certain species of this Credit, however, having been grossly misused for fraudulent purposes, and having produced great calamities, we must now examine wherein the danger and the fraud of this particular form of Credit lie.

171. When a Bill of Exchange is given in exchange for goods actually purchased at the time, it is called a Real Bill, and it is supposed by many writers, and even by many commercial men, that there is something essentially safe in it. because, as the goods have been received for it. it is supposed they are always there to provide for the payment of it. And that only so much | are all of this nature. They were created with-Credit is created, as there are goods to redeem it. Thus, in the article Credit, in the Encyclopædia Britannica, it is said,-" Every sum of Credit. therefore, must be founded on a transfer of a corresponding sum of Capital, and the whole amount vicious in the one system rather than in the of Credit existing, at any time, can never exceed that of the lent Capital.'

When we see such gross, dense, crassa ignorantia in a publication of the character and pretensions of the Encyclopædia Britannica, what are we to expect from the general public?

172. Leaving out of consideration at present the cases where Credit is created without the transfer of any Capital at all, it is manifest, from the description of the system of Credit already given, that it is utterly erroneous to say that the quantity of Credit cannot exceed the quantity of Capital lent. A Bill of Exchange, it it is true, only arises out of a transfer of goods, but then a fresh bill is created at each transfer. In the ordinary course of business, there will always be in general at least twice the amount of Bills to what there are goods. But if twenty transfers took place, twenty bills would be created. If goods to the amount of £100 were transferred twenty times, supposing even that the price of the goods did not change, which it most assuredly would, there would be Credit created to the amount of £2,000. And it would only be the last holder of the goods, who would have them, and be enabled to devote the proceeds to the payment of the last Bill only. The remaining nineteen Bills must manifestly depend upon other sources for payment.

173. The security, therefore, which is supposed to reside in Real Bills, on account of their being founded on the transfer of goods, is shewn to be to a great extent imaginary. Let us suppose, however, that A sees that a profitable operation may be done. The Bank will not, as traders do. make him an advance on his own name alone. It must have at least two names. A therefore goes to B, and gets him to join him as security to the Bank, on engaging to find the funds to meet the bill when due. A then draws a bill on B. who accepts it to accommodate A, as it is called, and such a Bill is called an Accommodation Bill

The Bill thus created without any consideration, as is termed in legal language, or in common language, without any transfer of goods, may be taken to a Banker to be discounted, like any other cessful, the bill may be paid with the proceeds.

174. Stated, therefore, in this way, there is nothing more objectionable in such an Accommodation Bill than in any ordinary Real Bill. The security is just the same in one case as in the other. In the one case goods have been purchased. which will pay the bill, in the other case goods are to be purchased, whose proceeds are to pay the bill. In fact, we may say that all commercial credit is of this nature, because a credit is created to purchase the goods whose proceeds are to pay it.

175. There is therefore clearly nothing in the nature of this species of paper worse than in the other, and when carefully used, nothing more dangerous. Cash Credits, which have been one of the safest and most profitable parts of Scotch Banking, and have done so much for the country, out any anterior operation, for the express purpose of stimulating future operations out of which the Credit was to be redeemed. There is therefore not anything more criminal, atrocious, and other. Or if there be, the criminality and atrocity must lie in the difference between have been and is to be.

176. Nevertheless, as it is indubitably certain that most of these terrible commercial crises which have so frequently convulsed the nation, have sprung out of this species of paper, it does merit a very considerable portion of the obloquy and vituperation heaped upon it. It is therefore now our duty to investigate the method in which it is applied, and to point out wherein its true danger ling

177. The security supposed to reside in Real Bills as such, is, as we have seen, exaggerated. But there is at least this in them, that as they only arise out of the real transfers of property, their number must be limited by the nature of things. However bad and worthless they may be individually, they cannot be multiplied beyond a certain extent. There is therefore a limit to the calamities they cause. But we shall show that with Accommodation Bills the limits of disaster are immensely and indefinitely extended. frequently involving in utter ruin all who are brought within their vortex.

178. We shall now endeavour to explain to our readers wherein the difference between real and accommodation papers consists, and wherein the true danger lies.

Let us suppose that a manufacturer or wholesale dealer has sold goods to ten customers, and received ten bona fide trade bills for them. He then discounts these ten bills with his banker. The ten acceptors to the bills having received value for them, they are the principal debtors to the Bank, and are bound to meet them at maturity, under the penalty of commercial ruin. The Bank, however, has not only their names on the bills, but also that of its own customer. as security. It moreover generally keeps a certain balance of its customer in its own hands, proportional to the amount of the limit of discount allowed. Now even under the best circumstances, an acceptor may fail to meet his bill. The Bank then immediately debits its customer's account with the amount of the bill, and gives it him back. If there should not be enough, the customer is

14 .

called upon to pay up the difference. If the | remedy to be adopted. Moreover, it never perworst comes to the worst, and its customer fails. the Bank can pursue its legal remedy against the estates of both the parties to the bill, without in any way affecting the position of the remaining nine acceptors, who, of course, are still bound to meet their own bills. Even supposing, however, it is only the acceptor who fails to meet his bill, the Bank would not probably take a second bill upon him, nor would a dealer sell his goods again to him after giving him the annovance of having to take up his bill.

CREDIT.

179. In the case of accommodation paper, there are very material differences. To the eve of the banker there is no visible difference between real and accommodation bills. They are, nevertheless, very different, and it is in these differences that the danger consists.

In accommodation paper, the person for whose accommodation the drawing, indorsing, or accepting is done, is bound to provide the funds to meet the bill, or to indemnify the person who gives his name. In the most usual form of accommodation paper, that of an acceptance, the acceptor is a mere surety, the drawer is the real principal debtor.

Now suppose, as before, that A gets ten of his friends to accommodate him with their names. and discounts these bills at his bankers, it is A's duty to provide funds to meet every one of these bills at maturity. There is in fact only one real principal debtor, and ten sureties. Now, these ten accommodation acceptors are probably ignorant of each other's proceedings. They only give their names on the express understanding that they are not to be called upon to meet the bill. And accordingly they make no provision to do so. If any one of them is called upon to meet his bill, he immediately has a legal remedy against the drawer. In the case of real bills, then, the bank would have ten persons, who, would each take care to be in a position to meet his own engagement; in the case of accommodation paper, there is only one person to meet the engagements of ten. Furthermore, if one of ten real acceptors fails in his engagement, the bank can safely press the drawer; but if the drawer of the accommodation bill fails to meet one of the ten acceptances, and the bank suddenly discovers that it is an accommodation bill, and they are under large advances to the drawer, they dare not for their own safety press the acceptor, because he will of course have immediate recourse against his debtor, and the whole fabric will probably tumble down like a house of cards. Hence the chances of disaster are much greater when there is only one person to meet so many engagements, than when there are so many, each bound to meet his own.

180. We see, then, that the real danger to a bank in being led into discounting accommodation paper is, that the position of principal and surety is reversed. They are deceived as to who the real debtor is, and who the real principal is, being precisely the reverse to what they appear to be, which makes a very great difference in the security to the holder of the bills. To advance money by way of cash credit, or by loan with security, is quite a different affair; because the bank then knows exactly what it is doing, and as may be speculating in trade and losing money

mits the advance to exceed a certain definite limit, but it never can tell to what length it may be inveigled into discounting accommodation paper, until some commercial reverse happens, when it may discover that its customer has been carrying on some great speculative operation. with capital borrowed from it alone.

181. Such appears to us to be the true explanation of the real danger of accommodation paper. and which was given in our *Theory and Practice* of Banking, Vol. I. 243, and we may say that its correctness has received the sanction of the high authority of Mr. Commissioner Holroyd, who quoted it in his judgment in the case of the great leather frauds, Lawrence, Mortimer, and Schrader, as appears in the Standard, March 7, 1861. To exhibit to our readers how this nefarious

system is carried on, is will be advisable to give an outline of this celebrated case.

In the first place, in order to explain how such things are possible, we may perhaps call attention to a delusion which is very prevalent among uninformed writers, namely, that Bills of Ex-change are paid in money. It is true that Bills of Exchange must always be expressed to be payable in money, but, as the reader may see under the article BANK, very few bills are really ever paid in money. When a customer has a banking account, the banker discounts his bills by writing down the amount to his credit, and this credit is called a DEPOSIT. The customer always pays his bills by drawing upon this credit, and when it gets low, the usual practice is for him to discount a fresh batch of bills. Thus, in ordinary times, the previous debts are always paid by creating new debts. No doubt, if the banker refuses to discount, the customer must meet his bills in money, but then no trader ever expects to do so. If his character be good, he counts upon discounts with his banker almost as a matter of right, and therefore to call upon him to meet his bills in money may oblige him to sell goods, &c., at a great sacrifice, or may cause his ruin.

182. However, it is always supposed that the bills discounted are good ones, that is, they could be paid in money if required. Thus though in common practice very few bills are really paid in money, it is manifest that the whole stability of the Bank depends upon the last bills discounted being good ones.

183. Now let us suppose that for some time a customer brings good bills to the Bank, and acquires a good character, and thus throws the banker off his guard. Meeting some temporary embarrassment, perhaps, he is in difficulty to meet his bills. In order to get over this difficulty, perhaps, he goes to some man of straw. and perhaps for some trifling consideration gets him to accept a bill, without having any property to meet it. He then takes this fraudulent bill to his banker. Thrown off his guard, perhaps, by his previous regularity, the unsuspicious banker buys this bill, and gives him a deposit for it. This deposit goes to pay the former bills. In the mean time the rotten bill is falling due and must be met. The acceptor has manifestly no means to meet it, and the only way to do so is to create some more of these rotten bills. Now the drawer soon as anything occurs amiss it knows the every day. But his bills must be met, and there is no other way of doing so but by constantly creating fresh rotten bills to meet the former ones. By this means, the customer may extract indefinite sums of money from his banker, and give him in return so many pieces of paper! Now, when times are prosperous and discounts are low this system may go on for many years. But at last a commercial crisis comes. The money market becomes "tight." Bankers not only raise the rate of discount, but they refuse to discount so freely as formerly, they contract their issues. All these rotten bills are in the Bank and must be met. But if the bankers refuse to discount they must be met with money. But all the property which the conspirators ever had may have been lost twenty times over, and consequently when the crisis comes they have nothing to convert into money! Then comes the crash! Directly the banker refuses to pay his customer's bills by means of his own money, he wakes to the pleasant discovery that he has been dancing upon nothing ! and finds that he has been paying all his customers' bills for many years with his own money !

184. This is the rationale of accommodation paper; and here we see how entirely it differs from real paper. Because with real paper, and bona fide customers, though losses may come, still directly the loss occurs, there is an end of it. But with accommodation paper the prospect of a loss is the very cause of a greater one being made, and so perpetually in an ever widening circle, till at last the canker may eat into his assets to any amount almost. It is also clear that if a man having got a good character may sometimes do so much mischief to a single banker, the capacity for mischief is vastly increased, if from a high position, and old standing, he is able to discount with several banks. For he is then able to diminish greatly the chances of detection.

185. In the case above mentioned, Laurence. Mortimer, and Co. were of very high position, and of old standing in the commercial world. They were leather and hide factors, and the house was of above fifty years' standing. They bought hides on commission for tanners, and sold leather, and had leather consigned to them for sale. The hides were paid for by the tanners' acceptances of the factor's drafts at four months. In the course of business, they got connected with a considerable number of houses which were in a state of insolvency. To support these houses, and to extend their own operations, they entered into an enormous system of accommodation paper. They were in the habit of advancing money to their customers at five per cent., and then discounting these bills at their bankers at three per cent., thus making two per cent. by the transaction. When their customers often lost the money, their bills were renewed, or new ones created of arbitrary amounts to conceal the loss. The house had an agency in Liverpool, which pursued exactly the same course. They set up people ostensibly in business for the purpose of drawing on them. And these "dummies" drew upon the house. and these cross acceptances were afloat to a large amount. This will be sufficient to give an idea of this complicated network of cross transactions between the house and its satellites. In the mean time, heavy losses were sustained in their trade transactions, which were in fact extracted out of the bankers by the fraudulent concoction of bills | bills manufactured by the Liverpool shipowners

among the losers. The high standing of the house enabled them to entangle no less than twenty-nine banks and discount houses in their meshes. At the time of the stoppage, the London houses had liabilities of £820,000, of which £620.000 consisted of these fraudulent bills. The Liverpool houses had fiabilities of £158,750, out of which £130,000 were fraudulent. Such is one

farious system. 186. A still more terrible example is the case of the Western Bank of Scotland, which is fully detailed under BANKING IN SCOTLAND, § 310-328, which was in great part caused by the fraudulent proceedings of four houses. The cases there detailed, show to what a gigantic length these proceedings were carried. The Macdonalds had bills discounted to the amount of £408,716, drawn upon 124 acceptors, of whom at least 70 were men of straw, who made it a regular trade to accept bills for a small commission! In fact, they kept an agent in London for the express purpose of procuring accommodation acceptances.

example of the mischief worked by this ne-

187. From these accommodation bills to forged bills there is but one step. It is but a thin line of division between drawing upon a man who is notoriously utterly unable to pay, and drawing upon a person who does not exist at all, or forging an acceptance. In practical morality and in its practical effects there is none. Traders sometimes do not even take the trouble to get a beggar to write his name on their bills, but they invent one. The case of traders dealing with a number of small country connections affords facilities for such practices. They begin by establishing a good character for their bills. Their business gradually increases. Their connections gradually extend all over the kingdom. The banker, satisfied with the regularity of the account, cannot take the trouble of sending down to inquire as to the acceptor of every bill. The circle gradually enlarges, until some fine morning the whole affair blows up. The ingenuity sometimes exercised by traders in carrying out such a system is absolutely marvellous.

188. It is in times of speculation in great commodities that accommodation paper is particularly rife. In a great failure of the harvest when large importations are required, and it is expected that prices will rise very high, every corn merchant wants to be able to purchase as much as possible. But if no sales have taken place there can be no real trade bills. They therefore proceed to manufacture them in order to extract funds from bankers to speculate with. No banker in his senses would actually advance money for them to speculate with, with his eyes open. Nevertheless, they must have the funds from the bankers, and this they do by means of cross acceptances, which they go and discount with their bankers. They then, perhaps, buy a certain amount of corn or any other goods, and many bankers will discount their bills, with the collateral security of the bill of lading. And this they may repeat many times over, till the quantity of Credit created is something astonishing. In the Crimean war there was a great demand for shipping, and there was an enormous amount of accommodation

and discounted all over the kingdom. The results in consequence of any request from that other he becomes a creditor, not on the face of the bill, but

189. The insurmountable objection, therefore, to this species of paper, is the dangerous and boundless facility it affords for raising money for speculative purposes. And there is much reason to fear that this pernicious system prevails to a much greater extent than is generally supposed. The legislature has imposed bounds upon the issues of notes by banks, but there is much greater reason that some attempt should be made to curb the extravagant magnitude to which this detestable practice has been developed. The Bank of England is strictly forbidden to issue a single £5 note of accommodation paper, and is it to be tolerated that any set of adventurers may set afloat many hundred thousand pounds worth of their accommodation paper?

190. To deal, however, legislatively, with fictitious paper is the most perplexing commercial problem of the day. The difficulty consists in determining what is really an accommodation bill. An accommodation bill is defined to be a bill to which the acceptor, drawer, or indorser, as the case may be, has put his name, without consideration, for the purpose of benefiting, or accommodating some other party, who is to provide for the bill when due. But the whole difficulty turns upon the consideration. The consideration may be of many sorts, and does not by any means denote a sale of goods at the time. Moreover, a bill may be an accommodation bill at its creation. but if any consideration be given during the period of its currency, it ceases to be an accommodation bill.

191. Moreover, the consideration may be of many sorts. If A draws a bill upon B who accepts it for A's accommodation for the express purpose of enabling him to go to a Bank and get money for it, that is a pure accommodation bill, and manifestly fraudulent. But if B draws an exactly similar bill at the same time on A, and A accepts it for the accommodation of B, then neither of the bills are accommodation bills.

To an unlearned reader, this may seem monstrous doctrine. It is, nevertheless, firmly established law. In the case of Rolfe v. Caslon (2 H. Blackstone, p. 571), A and B being desirous to accommodate each other, each drew a bill upon the other, and accepted one in return, the two bills being precisely alike, in the date, sum of money, and times of payment. Neither party having any effects of the other in his hand. The court were clearly of opinion that the two bills were mutual engagements, constituting on each part a debt, the one being a consideration of the other. This doctrine was repeated and confirmed in the case of Cowley v. Dunlop (7 T. R. 565), in which Grose, J., said the instant the bills were exchanged, each was indebted to the other, in the sum which was the amount of their respective acceptances, for the counter acceptances were a good consideration to found a debt upon either side respectively. In the case of a single accommodation acceptance, said the learned judge, there is no debt to the acceptor; the debt accrues only by payment of the money. The acceptor, quà acceptor, can never be a creditor; his acceptance imports the admission of a debt from him to another, and when he has paid an acceptor, if he paid for any other person

In consequence of any request from that other he becomes a creditor, not on the face of the bill, but by a contract collateral to the bill. When two persons exchange acceptances, each becomes the debtor of the other upon his accepted bills. But when a man accepts without consideration he is never a creditor of the person for whom he accepts till he pays; from that payment arises the debt; but when the acceptance was exchanged, the debt arises from these acceptances. This doctrine was repeated and confirmed in the cases of *Rose* v. Sims (1 B. & Ad. 521), and Buckler v. Bultimatt (3 East. 72), when it was adopted by the whole Court of King's Bench.

192. This doctrine shews how utterly hopeless it is to deal legislatively with accommodation paper. At least they must be very poor rogues indeed who cannot manufacture any amount of real bonâ fide bills they please. Two ragamufins, who neither possess one sixpence in the world, have only to get a quire of paper—if they can pay for it. One engages to pay £1,000 to the order of the other. That would be an accommodation bill. But the second then engages are no longer accommodation bills! But given for a consideration. If two such bills are good, then two thousand, or any larger number, are equally good. We suspect that Bankers would look askance at such paper. But Westminster Hall declares them all to be good bonâ fide bills, given for a good consideration.

193. That such is the well settled doctrine of Westminster Hall is beyond dispute. And perhaps it may ill become us to offer any suggestions on what has received the sanction of the Courts for so long a time. Nevertheless at the hazard of being thought presumptuous, we may make a few remarks. When we search for the foundation of the doctrine, we find it to be this .- That by giving their cross acceptances the parties become indebted to each other. That by these cross acceptances mutual debts are created. But is this doctrine quite impeccable? It is admitted that when B accepts a pure accommodation bill for A, no debt is created. It is nothing whatever but a piece of waste paper between the parties. Of course a similar bill upon A would be an absolute nothing as well. Now the question is this .- It being admitted that these two bills separately are absolute nothings, how can it be that when created together they spring into existence as Debts? A debt being as we know valuable property. It is a doctrine very hard to understand.

194. In a real bill the drawer may of course sue the acceptor. But in an accommodation bill he cannot. Suppose A draws a pure accommodation bill on B, for £100 at three months. Then of course he cannot sue him on it. But suppose one month after the first bill, B draws a bill of £100 at six months on A, without any consideration whatever but his previous acceptance. Then according to the doctrine stated above, the first bill which we may suppose never to have quitted the drawer's possession, immediately becomes a real bill, and A may sue B if his acceptance be unpaid. Did such a case as this ever occur? And could A recover under such circumstances? And yet that is the consequence that must necessarily follow, if it be true that mutual

accommodation acceptances constitute mutual practice which, without its sanction, would appear to any plain person to be a gross fraud; and it

195. We venture with the greatest deference to think that a fallacy lurks at the bottom of the doctrine. An accommodation acceptance in the hands of the drawer is simply *nil*. Directly he passes it away, it becomes in effect, the joint promissory note of the two parties. The acceptor cannot incur a liability without the drawer at the same time incurring an equal one. To suppose that one joint promissory note of two parties should be a consideration, for a second promissory note of the same parties seems a very strange idea. When a man is already a coöbligant as drawer on a bill, to suppose he can make that bill a good consideration for becoming coöbligant as acceptor on another bill with the same person, seems a most unaccountable doctrine. To suppose that a man can make a liability he has already incurred, a consideration for incurring another seems most extraordinary.

196. A consideration in commerce means something external. It is a security for incurring a debt. If I buy another man's debt, that is a consideration or security for creating one of my own. If the Government has created a debt, as the public funds, or Exchequer bills, that may be a good consideration, or security, for the Bank of England to create notes in exchange. So a banker creates a debt, either by notes, or a deposit, in exchange for the bills of his customer. In these cases there is an exchange of independent securities. Neither party are coöbligants, or liable with the other. But how can a liability a man has already incurred be a consideration or security for incurring a second one? Suppose a bank issues £10,000 in notes. Is the previous issue to be a security for issuing a second amount? If this be a good consideration or security, then indeed the philosopher's stone is at last discovered ! There is no need to cross half the globe in search of an El Dorado. All the treasures of California and Australia are dust in the balance compared to this. Only let two men provide themselves with a slip of paper, and shut themselves up in a room, and in the twinkling of an eye they can make themselves richer than ever Solomon was.

197. If it were possible for each party to incur a liability on account of the other, separately, and without himself being also bound, it might alter the case. But in accommodation paper, neither party incurs an obligation without the other being also equally liable. A second bill is, therefore, nothing more than a dilatation of the first bubble; and to suppose that it can be a consideration—a security for the first bubble—to swell it to twice its previous dimensions, is contrary to the usual experience of bubbles.

198. We have felt bound to lay these observations before our readers. As we have already warned them that they are contrary to the established doctrine of Westminster Hall, they must, of course, be held to be fallacious; at least, the probabilities of their being so are very great indeed. But it may, perhaps, exercise the ingenuity of our readers to point out their fallacy. At all events, what we have said, right or wrong, may serve to fix the attention of our readers upon the doctrine under discussion; because, however it may be rogarded, it is one of the extremest subtlety. It is one which sanctions a 601

practice which, without its sanction, would appear to any plain person to be a gross fraud; and it is this practice which has caused incalculable disasters in commerce, and, while it is held to be good, entirely precludes the possibility of dealing legislatively with so great a curse.

On the Transformation of Temporary Credit into Permanent Capital.

199. We have already seen that in commerce the *Release of a Debt* is in all cases whatever absolutely equivalent to the *Payment of Money*; in strict accordance with the Algebraical doctrine that — \times — is in all cases whatever absolutely equivalent to + \times +. Thus, as Diophantus said 1,400 years ago:— $\Lambda \epsilon i \psi_{45} \epsilon i \pi \lambda \epsilon i \psi_{47} \pi_{70} \lambda_{47} \lambda_{47} aradelica \pi ovei <math>i \pi a \rho \xi_{47}$.

Defect multiplied into defect gives existence which, in Commercial Algebra, means simply this, that the RELEASE of a DEBT is AUGMENTATION of CAPITAL.

We shall now give some examples of this, which will probably startle some of our readers.

200. When it is published to the world that the Bank of England has a paid up capital of $\pounds 14,000,000$, and that the various joint stock banks of London have paid-up capitals of this magnitude—

| London and Westminster | £1,000,000 |
|------------------------|------------|
| Union Bank | 720,000 |
| Joint Stock Bank | 600,000 |
| London and County Bank | 600,000 |

Does not the whole world, except those very few who are conversant with the mechanism of banking, believe that the Bank of England, and the joint stock banks, have these sums of capital paid up in hard MONEY?

201. What will they say when they learn that this idea is pure moonshine / These banks never had anything like that sum paid up in actual money at all. Of course it is utterly impossible to tell how much was ever paid in money, but this we are quite safe in saying, that not the third part of these sums was ever paid up in money. At least two-thirds, probably more, of these gigautic sums of paid up capital are nothing more than the Banks' own CREDIT turned into CAPITAL!

202. In order to see how this was done, the reader has only to turn to BANKING IN ENGLAND, § 81, 82, where the mode of increasing the capital of the Bank in 1697 is described. The Bank was founded by means of the payment in money of £1,200,000. It afterwards, in the course of business, issued notes to a considerable amount. Now, these notes were DEBTS, or NEGATIVE QUANTITIES, as we have seen before. The Bank, therefore, by issuing these notes, had put itself into a negative position. After it stopped payment, these notes fell to a heavy discount. In 1697, it was determined to increase the capital of the Bank, and this was done by receiving £800,000 of Exchequer tallies, and £200,000 of its own Depreciated Notes. These depreciated notes were received at their full value as cash. And thus we see at once that at the first Augmentation of Capital £200,000 consisted of its own Depreciated Notes-or CREDIT.

203. An exactly similar proceeding is described in BANKING IN SCOTLAND, § 288. In 1727, the Bank of Scotland increased its capital. The call

was paid up partly in the Bank's own notes. An | his favor. And that Debt released then becomes outcry was made against this, but the directors justly answered, "But the objectors do not at all consider this point. For the payments are many of them made in specie, and bank notes are justly reckoned the same as specie, when paid in on a call of stock, because when paid in, it LESSENS THE DEMAND on the Bank."

CREDIT.

Here we see that the Directors clearly understood that the Release of a Debt is in all respects equivalent to the Payment of Money. The banks had issued their own notes, on the discount of bills, or on the receipt of money. For whatever reason they were issued, they were debts, or negative quantities, and the bank was in debt, or in a negative position, in regard to the holders of them. When the call was made, the subscribers might either pay in money, which would have been $+ \times +$, or in the bank's own notes; that is, they released it from a debt due by it to them, which was $- \times -$. And we see plainly that the two operations were absolutely equivalent. At every further increase of capital, the very same operation would be repeated, payment in money and in the bank's own notes would always be treated as exactly equivalent; and hence we see that at every fresh increase of capital a certain quantity of the bank's own Temporary Credit would be turned into Permanent Capital.

204. Thus we see that for 1,400 years Algebraists had adopted the empirical rule that $- \times -$ gives +, and the real explanation has only been given within very recent times indeed. For 150 years merchants have been acting on the principle that the Release of a Debt is in all respects equivalent to the Payment of Money: and, in fact, owing to the immense development of credit, or debts, or negative quantities, in modern commerce, the immense majority of payments are made in this way. And it is left to the year 1862 to show that this latter operation is only one example of the great general Algebraical law!

205. Such are the methods by which the Capital of a Joint Stock Bank, which issues notes. may be increased. It might be thought, perhaps, that it is only Banks which issue notes that can thus turn their Credit into Capital. But that is a complete error. We have seen in the article BANK, that the very essence of Banking consists in making advances by creating debts, either in the form of bank-notes, or in credits, named DEPOSITS. Thus all the Joint Stock Banks of London, other than the Bank of England, do business exclusively by creating Deposits. Now might be made payable in anything the parties suppose a customer of one of these Banks has a Balance, or Deposit, on his account. The Bank determines to increase its Capital, and the customer wishes to take part of the Stock. He may either pay in money, or he may give the Bank a Cheque on his account. This is exactly the same thing as paying the Bank in its own notes. It is the Release of a Debt. Supposing he has not enough on his account to pay for the stock he wishes to purchase, he may bring the bank bills to discount. The Bank discounts these bills, or buys these debts, by creating another debt, in the shape of a Credit, or Deposit, on the customer's account, which is a Negative Quantity, exactly equivalent to a Bank Note. The customer then gives the Bank a cheque on his account, that is, he releases it from the debt it has just created in

CREDIT. AUGMENTATION of CAPITAL. That is, as before, $- \times - gives +$.

206. It is true that this method cannot be adopted to so great an extent by the public when the Bank does not issue notes. Because the general public would not have any claims against the Bank, but only its own customers, and those who might happen to have cheques given to them by them. But this is the way in which the Capital of all Joint Stock Banks is increased, and it may go on to any extent without any payment in money.

207. In a precisely similar way, when great public loans are contracted for, a very large portion of them is always created by means of Credit. The customers of a bank wish to subscribe to a loan. They bring it a batch of bills to discount. They draw cheques against the deposits created on the discount of these bills. These cheques may be paid into the credit of the great contractors at their bankers, and transferred an indefinite number of times without ever being required to be discharged in money, they may, in fact, be discharged by being cancelled against other Credits.

On the Extinction of Credit.

208. In the preceding sections we have examined the various operations out of which credit is generated, and the transcendent functions it performs in production-it being, in fact, the grand productive, or circulating power of modern times. We have now to consider the various modes in which it is extinguished. Because it is by its very nature, and as appears by its very name, transitory, and is created always with the express purpose of being destroyed. It is when it cannot be destroyed that it produces such dire effects. It is UNEXTINGUISHED CREDIT which produces those terrible monetary cataclysms, which shake nations to their foundations. scattering ruin and misery among societies. The inability of credit shops to extinguish the credit they have created, commonly called the failures of banks, are, perhaps, among the most terrible social calamities of modern times.

209. We have seen that in commerce bills are created by the transfers of commodities, a fresh one being created at each transfer. And this debt becomes itself a transferable commodity, and is capable of circulating an indefinite number of times, like money. This debt, or promise to pay, pleased-coin, wine, oil, &c., &c.-and in some countries is so. But in this country, instruments of credit are always expressed to be payable in money. But we have already seen that a debt is only a lower form of money, and hence there are four different ways in which credit may be extinguished.

1. By Payment in Money.

2. By Exchanging one Debt for another.

3. By the Creation of fresh Debt to discharge the old.

4. Where parties are mutually indebted to each other, each being Creditor of, and each Debtor to, the other, they may make a Mutual Release of Debts. The different proportions in which these various methods are employed to extinguish credit, have

very great effect in determining what quantity

a country.

210. Before the establishment of banks, credit could only in general be extinguished by payment in money. But of course the same quantity of money would extinguish an infinite series of bills; in fact, it is always by the circulation of money that bills are extinguished. Bills are always generated by the circulation of commodities, and always extinguished by the circulation of money. Each manufacturer, or merchant, would sell to a number of wholesale dealers, who would each buy from a number of manufacturers or merchants. They would then each sell to a number of retail dealers, who would each sell to a number of customers, or consumers. Many of these customers would pay in ready money, or at least they must all do so ultimately, so that the retail dealers would always have a constant stream of ready money coming in to discharge their bills, as they fell due in succession.

Now, as each wholesale dealer sells to a number of retail dealers, who would always have a stream of ready money coming in to pay their bills, each wholesale dealer would always have a stream of ready money coming in from many sources, to enable him to discharge his various bills to the merchants and manufacturers. In a similar manner, the merchants and manufacturers would always have a stream of money coming in from a multitude of sources to discharge their bills to foreigners and producers of raw materials. But of course each of them would spend a certain portion of their profits as revenue, that is, they would be customers of the retail dealers. And consequently, by these means, the identical pieces of money would perform a perpetual circulation among the various classes of society. Each person collecting a multitude of little sums into one reservoir, as it were, and then discharging the aggregate so collected into a multitude of other channels. And so on ad infinitum.

211. Now, the least consideration will show that the quantity of money being exactly the same, its circulation may be extremely languid, moderately rapid, or extremely rapid. And as in commerce, assumed to be sound, profits arise out of exchanges, it is clear that within certain limits the greater the profits will be, according as the circulation of money is more rapid. Moreover, we see this, that the quantity of credit generated does not depend simply on the quantity of money, but on its quantity multiplied into the velocity of its circulation.

212. We thus see how the fundamental distinction between bills of lading and bills of exchange is illustrated, which is at the root of the currency question. The bill of lading is not generated by the transfer of the Property of the goods, but only by a transfer of Possession; and when the possession is given up, the bill of lading is cancelled. Thus the bill of lading is only extinguished by the delivery of the very goods it represents. But bills of exchange are generated by the transfer of the property of goods, and are absolutely severed from them, and circulate independently in commerce, and are exchangeable for money at a given time. Bills of Lading can never exceed in quantity the goods they represent; instruments of Credit cannot exceed the Quantity of the Circulation of Money. Be the

of specie is required to carry on the commerce of | circulation of goods fast or slow, the quantity of bills of lading cannot vary, but the quantity of credit varies with the circulation of money, so that if the circulation be increased tenfold, credit may always be, and is almost necessarily increased tenfold.

213. The preceding considerations show that Credit is limited by the Circulation of Money. It is clear, therefore, that if some substitute for money be invented, or if by improved methods a less quantity of Money can do the same duty as a greater quantity, the limits of Credit may be proportionably extended. And new methods of extinguishing credit would come into existence. This is done to an enormous extent by the institution of Banks. We have fully described under the articles BANK and CLEARING HOUSE how debts are extinguished by the creation of new debts, and partly by the exchange, or cancelment, of debts by the Bankers inter se. The extension of business by the means of erecting a vast superstructure of credit upon a basis of bullion is something almost incredible. It is probably quite safe to say that not five per cent. of commercial transactions are ever settled in money. Such is the proportion of Debts, or Negative Quantities, to Money in Commerce.

On the Limits of Credit.

214. In the preceding sections we have endeavoured to lay before our readers an exposition. of the actual mechanism of the system of Credit, and shew its powerful effects as a productive agent. Credit, in fact, is to money what steam is to water. And like that power, while its use within proper limits is one of the most beneficent inventions ever devised by the ingenuity of man, its misuse by unskilful hands leads to the most fearful calamities. It is chiefly the abuse of Credit by which that over-production is brought about, which causes those terrible catastrophes called Commercial Crises. It is, therefore, essential to ascertain its limits.

215. The true limits of Credit may be seen from the etymology of the word. Because all Credit is a Promise to pay something in Future. And that "something," whatever it be, is the VALUE of the promise. That something need not necessarily be money. It is perfectly possible that it should be anything else. The practice of interest, or usury, was in force before the invention of money. It might be a promise to do something. As an example of this we may take a postage stamp, which is a promise by the State to carry a letter. And this service is the value of the stamp. Now it is quite clear, and to shew it we have only to appeal to every one's experience, that a postage stamp is a valuable thing. It passes currently as small change. Now, people take postage stamps as equivalent to pence, because they often wish to send letters by the post. The recent regulations that stamps shall be convertible into money at any post office, makes them in all respects part of the currency of the country. They are, in fact, 1d. notes.

216. Now, the only real difficulty in the case, is to observe that the naked "promise to pay" is independent exchangeable property, quite distinct from the thing itself, and it may circulate in commerce just the same as the thing itself. This may surprise some readers at first, but to shew its

603

truth they need only appeal to their own daily | forms, as we have seen already, being absolutely experience, where they see Bank Notes, Cheques, and Bills of Exchange, circulating to the extent of hundreds of millions, and performing all the functions of money. We shall see below that J. B. Say, whose doctrines of Credit we shall examine in the next section, fully acknowledges that an instrument of Credit has an actual value. and may perform the duties of money.

CREDIT.

217. But, of course, it is quite manifest that the VALUE of the promise is the THING itself, and consequently if the thing itself fails the promise has lost its value. This consideration, therefore, at once indicates the limit of Credit. Assuming Credit to be, what it is in its best known form in this country, the promise to pay money, it is quite clear that every future payment has a present value. Consequently, whenever the possession of money at any time is actually certain, the Right to receive it is an exchangeable Property, which may be bought and sold.

218. Commercial Credit, however, does not rest upon so solid a basis as the certainty of being in possession of money, for then it would be as safe as money itself, and losses would be unknown. It is based upon the expectation of receiving money at a certain time. A trader buys goods, and gives his promise to pay money, upon the reasonable expectation that he will be able to sell them for money before the bill becomes due; or, at least, that he shall be in the possession of money before that time. That is, he *produces*, or brings and offers them for sale, in the hope that they will be consumed, or bought. If he brings forward for sale more of any species of goods than is suitable to the circumstances of the time, so that they cannot be sold at all, or if they are obliged to be sold at a lower price than they cost, that is over production. He must then pay his bills out of any other funds at his disposal, or sell other property to meet them, and if he cannot do so he is ruined.

219. In times of great speculation and great fluctuations of prices, there is an exceeding danger of over production by means of Credit, especially by that abuse of it called Accommodation Paper, which we have described. A new channel of trade is opened, perhaps, and the first to take advantage of it make great profits. Multitudes of others, hearing of these great profits, rush in, all dealing on credit. The market is overstocked, and prices tumble down, and the credit created to carry on these operations cannot be redeemed. Not only are the speculators in many cases ruined, but also frequently the banks which created credit by discounting these bills.

220. The institution of Banks and Bankers. who create currency by means of their Credit, either in the form of notes or deposits, gives a great extension to the limits of Credit. But, nevertheless, the principle of the limit remains the same. The increased quantity of currency they can issue by means of their Credit, enables them to lower the rate of discount. These banking debts take the place of money, and serve the purposes of money for all internal transactions. When a banker has created these debts by buying commercial debts, those who are indebted to the banker must obtain a sufficiency of money, or of other bankers' notes, or of the banker's own notes, to discharge their debt. And if this be done the Credit has been sound; payment in all these currency.

equivalent. Hence we see that Credit is never excessive, no matter what its absolute quantity be, so long as it always returns into itself.

221. A banker, of course, can only maintain his credit by being always supposed to be able to cash any reasonable amount of his liabilities on demand. In order to do this he must always maintain a certain proportion between his liabilities and his cash. If, therefore, an excessive number of debts be pressed on him for sale, the same result must follow as when an over-abundant supply of any other article is offered for sale in the market. They must fall in value, that is, the rate of discount must be raised. By this means, if done in due time, over-production may often be arrested, because the difference of 1 per cent. in the rate of discount is sufficient to curb a considerable amount of enterprise. If that is not sufficient still more stringent measures must be adopted until it is effectual. But the method is infallible; by raising the rate of discount sufficiently, nearly all production might be brought to a standstill. It is the neglect of this precautionary measure during an excessive generation of Credit, which drives bullion out of the country, that has led to several Commercial Crises. But this part of the subject is fully treated of under CRISIS, COMMERCIAL, and Ex-CHANGES. FOREIGN.

SUCH IS THE GRAND THEORY OF CREDIT.

SECTION IV.

On the History of Ideas on the subject of Credit. and an Examination of the Opinions of Modern Economists on it.

222. In the preceding sections we have given an exposition of the Scientific Theory and the Mechanism of the system of Credit, which will be found to overthrow many of the current notions on the subject. It is one of such gigantic importance that we must now examine the opinions of several eminent writers, and see how far they agree with, and in what respects they differ from, the views in the preceding sections, and more particularly how far they differ from themselves.

223. We have shewn in § 87, that in ancient times Demostheres clearly asserted that Credit is Capital. We are not aware that in modern times the subject excited much attention till the 17th century, when several writers, seeing the immense benefit which the Dutch derived from their bills of debt, wished to introduce them into England, but the inflexible rule of the common law that choses in action could not be transferred, presented for a long time an insurmountable obstacle to such a plan. Soon after the restoration, however, the extension of commerce attracted a great deal of attention to the subject of Credit, and multitudes of pamphlets were published advocating the institution of public banks. The notes which were issued by the private bankers of London showed the utility and the convenience of the invention. At last, after several attempts, the Bank of England was founded in 1694, with the express intention, as was very clearly stated by its founders, of increasing the quantity of the

224. All these projects, however, were for the purpose of augmenting Credit, that is, paper currency convertible into specie, and therefore of the value of specie. But many projectors, not satisfied with the increase of the currency caused by Credit, began to devise schemes for creating paper money, that is, paper notes not convertible into specie, a thing of a totally different nature, though often confounded with it. Among these were Chamberlen, Asgill, Briscoe, and others, who wished to found an inconvertible paper money, based upon land. The most famous, however, of the advocates of this plan was John Law, and as it was in fact out of the discussions raised by the terrible catastrophe of the Mississippi scheme, that Modern Political Economy may almost be said to have arisen, we may confine our attention chiefly to him.

225. Most persons have no other conception of John Law than as the deviser of a scheme which produced a great financial catastrophe, somewhat similar to the South Sea bubble. The latter wasa pure swindle and fraud; and, as both schemes produced a great catastrophe, about the same and class the projectors of both enterprises under a common name.

226. This, however, is a very grievous error indeed. Law was neither a swindler nor a rogue. Even his enemies and those persons who were opposed to his system, bear ample testimony to his personal integrity and sincerity, and even after the collapse of the system, the higher ranks of the country treated him with the greatest respect. The fact is that his writings are divided into two distinct classes-those upon Banking and Paper Credit, and those upon Paper Money. His writings on Banking and Paper Credit, were originally written in French and presented to the Regent Orléans, and were never, that we know of, translated into English. His treatise on Paper Money was originally published in English, at Edinburgh, in 1705.

227. Nothing can be better and sounder than his writings on Banking and Paper Credit. They were by far the best exposition of the subject that the best that exist to the present day. But the theory of paper money which he adopted is a totally distinct thing, and has no connection with his doctrines of Credit. It would be out of place to examine his theory of money here. That is fully done under CURRENCY and LAW. But we may observe that his career was, like his writings, | ture et les manufactures." divided into two distinct operations. We have seen under BANKING IN FRANCE, that so long as he confined his operations to legitimate banking, nothing could be more successful. There was scarcely ever such a marvellous restoration of prosperity in so short a space of time as by the institution of Law's Bank. And well would it have been for him and the country if he had stopped there. It was only when he put into practice his theory of paper money that the mischief was produced. But this does not prove that he was a rogue; it only shews that his theory of money was erroneous. It is, nevertheless, one that has innumerable admirers at the present day, and to shew its fallacy requires a thorough knowledge of the most fundamental subtleties of Political Economy.

605 CREDIT.

228. We have been obliged to say this much here as a preface to quoting anything from Law regarding Credit, which must be carefully distinguished, as we have said above, from his doctrines on Money. His writings on Banking and Credit are contained in ten Mémoires sur les Banques, fifteen Lettres sur les Banques addressed to the Regent Orléans, and some letters on the system, all in French, published in the first volume of Guillaumin's Collection of Modern Economists.

We shall now shew that Law maintained that Credit was equivalent to an increase of money. In the first Mémoire, p. 521 of the volume just mentioned, Law says:---- 'Les Crédits sont néces-saires et utiles ; ils font les mêmes effets et le même bien dans le commerce, comme si la quantité de la monnaie était augmentée." He points out the advantage England derived from the institution of Credit during the war with France, and being in great difficulty from want of money -"s'est avisée d'introduire des Crédits, qui ont suppléé aux espèces, et soutenu ses manufactures, et son commerce qui, sans ce secours, auraient été period, most persons jumble up the two events, ruinées par de si longues guerres qui ont causé un grand transport d'espèces, et sous lesquelles l'Angleterre aurait succombé sans les Crédits dont elle s'est bien servie. Les Crédits ont non seulement suppléé aux espèces qui étaient transportées, mais ont servi au delà, et ont augmenté ses manufactures et son commerce, même pendant la guerre." He then says :--- "La Banque est un espèce de Crédit," and speaking of the Bank of England-" mais le bien que la banque fait en augmentant le quantité de la monnaie." He shews, too, that its shares being negotiable, in many cases served the purpose of money. At p. 545, he says :- " La Banque d'Angleterre, outre ces commodités qu'elle donne aux négociants pour faciliter les payments, produit une plus forte circulation, et fait le même effet que si la monnaie d'Angleterre était considérablement augmentée, comme je l'ai déjà remarqué." And at p. 554 :- "Donc, l'introduction d'un Crédit, dans le commerce augmentait la quantité de la monnaie réellement, et faisant le même had then been published, in fact they are some of effet que si elle était augmentée, par une plus forte • circulation que ce Crédit procure, doit diminuer le prix ou intérêt de l'argent." At p. 560 :---"La circulation des billets de la banque dans les provinces ferait le même effet qui si la quantité des espèces était considérablement augmentée, et par là, soutiendrait et augmenterait l'agricul-

Law also saw, of course, that these notes, &c., were of the value of money, because they were exchangeable for money-" ces billets étant supposés au moins aussi bien que l'argent puisqu' on les peut convertir en espèces à volonté.

In the first Lettre sur les Banques, he says,-'Si l'Espagne avait cédé les Indes aux Anglais, cette nation n'aurait pas tant profité de ce commerce qu'elle a profité de son crédit.

"Avant le mort de Charles II, roi d'Espagne, le commerce des Indes a fourni aux Anglais environ 25 millions par année en matières d'argent ; de cela une partie était consommée, une partie payait une balance due alors à la France, une partie était transportée par la Compagnie des Indes Orientales; il n'en restait qu'environ 8 millions; ainsi, pour augmenter la 606

monnaie d'Angleterre de 400 millions, il aurait, and the "lender" receives in return the right, or fallu 50 années d'un commerce bien réglé et sans interruption. en donnant le produit et manufactures du pays en échange de ces matières.

"Par l'introduction du crédit, l'Angleterre a augmenté sa monnaie au-delà de cette somme, sans avoir donné en échange aucune valeur en marchandise, car le crédit qui circule dans la ville de Londres seule, monte à plus que les espèces monnavées de la France et de l'Angleterre. Ainsi il ne doit pas paraître extraordinaire que la monnaie soit si abondante à Londres, les espèces ne faisant pas la cinquième partie de ce que le crédit fait.

"Le revenue de cette augmentation de la monnaie produit annuellement plus que double de ce que le commerce des Indes aurait produit. par une augmentation de l'industrie et des manufactures de ce royaume, qui ont été portées si loin qu'elles fournissent la plus grande partie de l'Europe.

229. These extracts are sufficient to show that Law knew and maintained that credit was separate and independent exchangeable property, which was cumulative property over and above specie and commodities. He never falls into that extraordinary confusion of idea of believing that Credit is the transfer of Capital. He sees, as we have said above, that Credit is to be added to the mass of other exchangeable property (§ 23). So also Melon, a contemporary writer, in his Essai Politique sur le Commerce, in the same volume, already mentioned, p. 757, commenting on the political arithmetic of Sir W. Petty, says-"Au calcul des hommes il faut ajouter le calcul de ce qu'ils valent par leur travail.

"Au calcul des valeurs numéraires, il faut ajouter le crédit courant du négociant, et son crédit possible."

230. That astounding confusion of ideas which prevails through so many modern writers that Credit is the transfer of something began with Turgot. When he was at College, and only 22 years old, he began to reflect on Law's system. and addressed a letter on the subject to the Abbé de Cicé, Sur le papier suppléé à la monnaie. . (Œuvres de Turgot. Vol. I., p. 94. Edit. Guillaumin.) This letter contains an expression which has been the key note of a fallacy which has been sedulously propagated from that day to this, by a long series of writers both in France and in England. He says :- En un mot tout Crédit est un emprunt, et a un rapport es-sentiel à son remboursement." Here we see the first statement of that gross confusion of ideas on the subject of Credit, which is so prevalent. Preceding writers had always seen that Credit was a species of exchangeable property, which served the purpose of money. But Turgot makes Credit to be an operation. To say that Credit is a loan is as gross a misconception of the nature of the thing as to say that a guinea is the transfer of a book! Moreover, the word loan is ambiguous. We have fully explained the nature of this ambiguity in § 61, where we have shewn that in English there is but one word for the two Latin ones mutuum and commodum, in the distinction between which lies one of the greatest subtleties in Political Economy. An operation on Credit is always an exchange, where the property of the thing "lent" always passes to the "borrower,"

property, to demand back an equivalent to the thing "lent" at a future time. Turgot rightly enough says that every Credit implies a future repayment. That is true; Credit means the Right to a future Payment. And it is precisely because this Right is exchangeable for something at a future period that it has value. And it may be bought and sold like any other species of property. We shall see afterwards that J. B. Say, whose doctrines we shall have to examine, fully acknowledges this.

The Opinion of Adam Smith on the Nature of Credit.

231. The controversies about Credit, of which the germ is contained in the extract from Turgot, which we have given above, did not commence till after Adam Smith's time. He, therefore, did not discuss them. Though his doctrines on the powers of Credit are self-contradictory, as we have shewn under CUBRENCY PRINCIPLE, he is perfectly consistent with himself as to the nature of Credit. He uniformly considers Credit to be independent exchangeable property, and we shall now show that he classes it under CAPITAL.

232. In the first place, we have shewn under CAPITAL, that Smith, in a passage which has been most unaccountably overlooked by nearly every writer, expressly enumerates the useful and acquired abilities of the inhabitants of a country as part of its wealth, or fixed Capital. Now as a man's Credit depends purely upon the belief in his character and abilities, it is manifestly according to the very definition, Capital to him, by means of which he can make a profit. Thus Smith says, Book 1, c. x .--- " In great towns trade can be extended as stock increases, and the CREDIT of a frugal and thriving man increases much faster than his stock. His trade is extended in proportion to the amount of BOTH. and the sum or amount of his profits is in proportion to the extent of his trade, and his annual accumulation in proportion to the amount of his profits." Hence we see that Smith places Credit on exactly the same footing as stock, and as he makes a profit by it in the same way as by Stock. it is clearly capital to him as well as his Stock. 233. But we shall now shew that Smith expressly includes Credit under the term Capital, and says that it produces exactly the same effects

as money. Under the term fixed Capital he includes the abilities of the people upon which Credit depends. Under the term floating Capital he includes four sorts. The first of these he says is, "The money by means of which all the other three are circulated and distributed to their proper consumers."

In B. 2, c. ii., he says, "Money, therefore, the great wheel of circulation, the great instrument of commerce, like all other instruments of trade, though it makes a part, and a very valuable part, of the Capital, &c."

Thus we see that Smith expressly includes the wheel of circulation, or according to a name it has received since his 'day, the "circulating medium," as part of the Capital of the country.

He then says that every saving in the expence of collecting and supporting that part of the circulating capital, which consists of money, is an increase of the neat revenue of the country.

He says then, "The substitution of paper in | tain and employ an additional number of industhe room of gold and silver money, replaces a very expensive instrument of commerce with one very much less costly, and sometimes equally convenient. Circulation comes to be carried on on by a new wheel, which it costs less both to erect and to maintain than the old one.

"There are several different sorts of paper money, but the circulating notes of banks and bankers are the species which is best known, and which seem best adapted for this purpose."

Thus we see that Smith expressly includes all forms of paper credit under the term money, or circulating power, which he has already said is Capital.

After saying that if people have confidence in a banker, his notes come to have the same currency as gold and silver; because people believe that money can always be had for them, he says, "When a particular banker lends among his customers his own promissory notes to the extent, we shall suppose, of £100,000. As these notes serve all the purposes of money, his debtors pay him the same interest as if he had lent them so much money. This interest is the source of his gain. Though some of these notes are continually coming coming back on him for payment, part of them continue to circulate for months and years together. Though he has generally in circulation, therefore, notes to the extent of £100,000, twenty thousand in gold and silver may frequently be a sufficient provision for answering occasional demands. By this operation, therefore, £20,000 in gold and silver perform all the functions which £100,000 could otherwise have performed. The same exchanges may be made, the same quantity of consumable goods may be circulated and distributed to their proper consumers, by means of his promissory notes to the value of £100,000, as by an equal value of gold and silver money.'

Thus we see that Smith says that a banker may derive exactly the same profit from the use of his Credit that he would from actual money, and therefore it is Capital to him. And he shews that it has exactly the same effects on the country as so much money, and therefore it is equally Capital to the country.

He also supposes a case in which the circulating money of a country should be £1,000,000 at any time. Different banks and bankers issued paper to an equal amount, reserving £200,000 to meet the demand for specie. "There would remain, therefore, in circulation £800,000 in gold and silver and £1,000,000 of bank-notes, or £1,800,000 of and z hoody of bank how y we see that Smith classes Paper Credit as independent exchangeable property, just on the same footing as gold and silver. He then says that such an emission of paper will release a quantity of the circulating money, and enable it to be exported to purchase foreign goods, and to be invested in foreign trade, and he says .-- "Whatever profit they make will be an addition to the neat revenue of their own country. It is like a new fund business being now transacted with paper, and the gold and silver being converted into a fund for this new trade." He says also that it may be applied to purchase an additional stock of materials, tools, and provisions, in order to main-

CREDIT.

trious people, who reproduce with a profit the value of their annual consumption.

"When paper is substituted in the room of gold and silver money, the quantity of the materials, tools, and maintenance which the whole circulating capital can supply, may be increased by the whole value of gold and silver, which used to be employed in purchasing them.

"When, therefore, by the substitution of paper the gold and silver, necessary for circulation, is reduced to, perhaps, a fifth part of the former quantity, if the value only of the greater part of the other four-fifths be added to the funds which are destined for the maintenance of industry, it must make a very considerable addition to the quantity of their industry, and consequently to the value of the annual produce of land and labour.

234. In speaking of bankers he says :-- "It is chiefly by discounting Bills of Exchange, that is, by advancing money upon them before they are due, that the great part of banks and bankers issue their promissory notes. * * The banker who advances to the merchants, whose bill he discounts, not gold and silver, but his own promissory notes, has the advantage of being able to discount to a greater amount, by the whole value of his promissory notes, which he finds by experience are commonly in circulation. He is thereby enabled to make his clear gain of interest on so much a larger sum.

"The banks, when their customers apply to them for money, generally advance it to them in their own promissory notes. These the merchants pay away to the manufacturers for goods, the manufacturers to the farmers for materials and provisions, the farmers to their landlords for rent, the landlords repay them to the merchants for the conveniences and luxuries with which they supply them, and the merchants again return them to the bank in order to balance their cash accounts. or to replace what they may have borrowed from them; and thus almost the whole money business of the country is transacted by means of them."

235. Thus Smith clearly places Paper Credit on exactly the same footing as Money. He shewed that traders made a profit by their credit, and in the last-mentioned passages he shews how bankers make a profit by their credit, and how in process of time the greater part of the circulation of the country is carried on by Credit. In B. II., c. IV., he says :-- " The stock which is lent at interest is always considered as a CAPITAL by the lender." Then a little after-"Almost all loans of stock, therefore, or, as it is commonly expressed. of money which can be lent at interest in any country, is not regulated by the value of the money, whether paper or coin, &c."

236. Thus Smith expressly classes Paper Credit under the term Capital, and therefore it must be productive. It has puzzled many persons, however, to conceive how Credit can be Productive. created for carrying on a new trade, domestic | This, of course, manifestly turns on the meaning of Productive. We have fully shewn under PRO-DUCTION the extension of meaning which Smith gave to productive labour, beyond that in which it was used by the French Economists. He says that there are four ways in which Capital may

be employed productively (B. II., c. v.)-1st, in | and yet in a note to this very passage he savs procuring rude produce; 2ndly, in manufacturing it; 3rdly, in transporting it from place to place; 4thly, in dividing it into small parcels to suit the convenience of customers. Hence we see that he says Capital may be productively employed in buying and selling. Now, of course, it will be at once seen that Credit is employed in buying and selling. Smith says that the labour of wholesale and retail dealers is productive because it adds to the value of the commodities they deal in. But persons can buy and sell with Credit equally well as with money. Hence, their labour is just as much productive in the one case as in the other. And here we see at last the root of the difficulty which many persons have in conceiving that Credit is productive capital, because they evidently mean by production an increase of quantity. But the fact is that circulation is one species of production, and hence the circulating power is Capital. Now the circulating medium, as every one knows, is Money and Credit. As Smith says (B III., c. 1.)—" The great commerce of every civilized society is that carried on between the inhabitants of the town and those of the country. It consists in the exchange of rude for manufactured produce, either immediately, or by the intervention of money, or of some sort of paper which represents money.'

CREDIT.

The extracts which we have laid before our readers are quite sufficient to shew that Adam Smith never committed the extraordinary error of supposing that Credit is the transfer of Capital. as is so common at present. It is quite evident that he always knew that Credit is independent, exchangeable property, and that it is PRO-DUCTIVE CAPITAL.

On the Opinion of Jean Baptiste Say respecting the Nature of Credit.

237. We now have to examine the opinions of J. B. Say respecting Credit, as it is he who, following up the erroneous notion of Turgot, invented the phrase which so many unthinking writers have echoed from that day to this, that those who consider Credit to be Capital, maintain | à des contrats de rentes, à des effets de commerce, that the same thing can be in two places at once ! | il est évident que c'est parce qu'ils renferment un

238. Credit, as we have shewn in the preceding sections of this treatise, is a species of incorporeal property, and was always well understood to be so, until Turgot originated the erroneous notion that it was a loan, or the transfer of something. The question of Credit, therefore, involves that of the admission of incorporeal property into Political Economy.

239. It is very commonly stated that J. B. Say was the first Economist to introduce immaterial products into Political Economy. We have already shewn that this is erroneous. We have, besides, shewn under CAPITAL, that Say has put forth the most self-contradictory opinions on the subject. We have shewn that in one place he says that immaterial products are not capital, and that the talents and abilities of the people are not part of the wealth of the country; and that in another place he says that they are to be counted as wealth. That in one place he maintains that all transferable capital is composed of material products, having an intrinsic value, and that it is not possible to amass and transmit to another person any but values incorporated in material objects,

that there are capitals not incorporated in any material things, such as the clientelle of a notary, or of a commercial enterprise. And in the same volume he enumerates other capitals not incorporated in material objects, such as copyright, the goodwill of a business, which he says may be bought and sold.

240. Economists seem to be the chartered libertines of science. Of all the sciences it seems to be the only one in which writers are permitted to utter the most contradictory opinions, and yet to be considered as authorities. We have seen Say's self-contradiction on the subject of Capital ; we shall now find that he is equally self-contradictory on the subject of Credit.

In the first place he has fallen into that confusion of idea about value, which has ruined so much of modern economics. He repeatedly speaks of INTRINSIC Value, and of Value being something inherent and innate in a matter, and yet he says, Traité d'Economie Politique, p 57-La valeur que les hommes attachent aux choses.

* Toujours est il vrai que si les hommes attachent de la valeur à une chose, &c.;" and in a note to this passage he says-"Ce n'est pas ici le lieu d'examiner si la valeur que les hommes attachent à une chose est proportionnée ou non à son utilité réelle. La juste appréciation des choses dépend du jugement, des lumières, des habitudes, des préjugés de ceux qui les apprécient. Une saine morale, des notions précises sur leurs véritables intérêts, conduisent les hommes à une juste appréciation des vrais biens." Now what can be more self-contradictory than the notion that value is something inherent in the substances themselves, and then to say that it entirely depends on the judgment, the knowledge, the habits, and the prejudices of men?

241. Having thus shewn his self-contradictions on the conception of Value, we shall now come to his conception of Credit. In B. I., c. 1., of his Traité, after speaking of things of value, such as the earth, metals, money, corn, stuffs, &c., he says :- " Si l'on donne aussi le nom de richesses engagement pris de livrer des choses qui ont une valeur par elles mêmes."

And in his Cours Complet d' Economie Politique, Part I., ch. 1, Vol. I., p. 67, he says :-- "La possession exclusive qui, au milieu d'une nombreuse réunion d'hommes, distingue nettement la propriété d'une autre personne, fait que dans l'usage commun, cette sorte de biens est la seule à laquelle on donne le nom de RICHESSE. * * C'est là que viennent se ranger non-seulement les choses capables de satisfaire directement les besoins de l'homme, tel que l'ont fait la nature et la société, mais les choses qui ne peuvent les satisfaire qu' indirectement en fournissant des moyens de se procurer ce qui sert immédiatement, comme l'argent, les TITRES DE CREANCES, les contrats de rente. &c."

Thus we see that Say expressly enumerates DEBTS, OF CREDIT, AS WEALTH.

242. Moreover, in B. I., ch. 30, of the Traité, he says :- Une billet à ordre, une lettre de change, sont des obligations contractées de payer, ou de faire payer, une somme soit dans un autre temps, soit dans un autre lieu.

"Le droit attaché à ce mandat (quoique sa valeur ne soit pas exigible à l'instant et au lieu où l'on est), lui donne néanmoins une VALEUR ACTUELLE, plus ou moins forte. Ainsi un effet de commerce de cent francs, payable à Paris dans deux mois, se négociera, ou, si l'on veut, se vendra pour le prix de 99 francs; une lettre de change de pareille somme, payable à Marseille au bout du même espace de temps, vaudra actuellement à Paris peut-être 98 francs.

" Dès-lors qu'une lettre de change ou un billet, en vertu de leur valeur future, ont une VALEUR ACTUELLE, ils peuvent être employés en guise de monnaie dans toute espèce d'achats, aussi la plupart des grandes transactions du commerce, se règlent elles avec des lettres de change."

Thus we see in this passage that Say maintains exactly the same doctrine as we have set forth in the preceding sections, that an instrument of Credit is a present right to a future payment, and that it is separate and independent exchangeable property, That is, that CREDIT, or DEBTS. are WEALTH.

243. We may also quote another passage from his Cours (Part III., Division III., ch. 27, p. 461, Vol. I.) :- "Il y a néanmoins une observation importante à faire relativement aux signes représentatifs des monnaies. C'est qu'ils sont capables de rendre un service exactement pareil au service que peuvent rendre les monnaies qu'ils représentent. Si quelqu'un souscrivait un engagement par lequel il s'obligerait à livrer, à une époque désignée, un manteau fait de telle ou telle façon, cette promesse, quoiqu'elle fût en quelque sorte un signe, un gage de la possession du manteau, ne saurait en tenir lieu; car une feuille de papier ne garantit pas du froid, comme fait un manteau; tandis que les signes qui représentent la monnaie, peuvent la remplacer complètement, et rendre tous les services que l'on peut attendre d'elle. En effet, les qualités qui font qu'un sac d'argent nous sert dans nos échanges, peuvent toutes se trouver dans une billet. Ces qualités, vous vous le rappelez, consistent :

"D'abord dans la VALEUR qu'il a. On peut donner à un billet exactement la même valeur qu'à une somme d'argent, en donnant au porteur le droit de toucher la somme, de manière à lui ôter | same value as money itself, and may be emtoute inquiétude sur ce remboursement; c'est ainsi qu'un billet de banque peut circuler dix ans en conservant une valeur de mille francs sans qu'il soit remboursé, seulement parce qu'on est convaincu qu'il le sera du moment que le porteur le voudra.

"Vous voyez, Messieurs, que toutes les qualités utiles de la monnaie peuvent se retrouver dans un signe représentatif, qui n'a aucune valeur par lui-même, et tire de la monnaie même, toute celle que l'on veut bien lui accorder."

Hence we see that these passages assert as clearly and explicitly as it is possible that language can do, that Credit may be in all respects equivalent to money, and therefore that it may be CAPITAL, just as money may.

244. Having thus laid before our readers these explicit declarations of Say, that Credit is Wealth. we will now place before them the passage which has been the foundation of such an immense amount of misconception. He says, Traité, B II., c. 8 :--"On s'imagine quelquefois que le Crédit multiplie | birds. Neither, however, can an immaterial PART VII, VOL. I.

les capitaux. Cette erreur qui se trouve fréquemment reproduite dans une foule d'ouvrages, dont quelques unes sont mêmes écrits ex professo sur l'économie politique, suppose une ignorance absolue de la nature et des fonctions des capitaux. Un capital est toujours une valeur très-réelle, et fixée dans une matière; car les produits immatériels ne sont pas susceptibles d'accumulation. Or un produit matériel ne saurait être en deux endroits à la fois, et servir à deux personnes en même temps. Les constructions, les machines, les provisions, les marchandises qui composent mon capital, peuvent en totalité être des valeurs que j'ai empruntées; dans ce cas, j'exerce une industrie avec un capital qui ne m'appartient pas, et que je loue; mais, à coup sûr, ce capital que j'emploie n'est pas employé par un autre. Celui qui me le prête s'est interdit le pouvoir de le faire travailler ailleurs. Cent personnes peuvent mériter la

même confiance que moi ; mais ce Crédit, cette confiance méritée ne multiplie pas la somme des capitaux disponibles; elle fait seulement qu'on garde moins de capitaux sans les faire valoir."

He also says in his Cours (Part I., c. 9)-"Le manufacturier qui achète à Crédit des matières premières, emprunte à son vendeur la valeur de ces marchandises pour tout le temps où ce dernier lui fait Crédit; et cette valeur qu'on lui prête, lui est fournie en marchandises qui sont des valeurs matérielles.

"Or, si l'on ne peut prêter et emprunter une portion de Capital qu'en objets effectifs et matériels, que devient cette maxime que le Crédit multiplie les capitaux? Mon Crédit peut bien capitaliste a mise en réserve; mais s'il me la prête, il faut qu'il demeure privé; il ne peut pas en même temps la préter à une autre personne; la même valeur ne saurait servir deux fois en même temps; l'entrepreneur qui emploi cette valeur, qui la consomme pour accomplir son opération productive, empêche qu'aucun autre entrepreneur puisse l'employer dans la sienne."

245. We have now to remark upon the extraordinary self-contradictions of Say. He tells us expressly that instruments of Credit have an actual value in respect of their future payment, and that they may be made to have precisely the ployed in purchases in all respects exactly in the same manner that money may. Now this, of course, by implication, admits that they may be Capital, because money is only used as Capital, by being employed in buying and selling.

246. Having laid this down as clearly as can be, we have now to see how Say proceeds to contradict himself. He says, in the passages last quoted, that Capital is always a very real value fixed in a matter ! Why he himself has told us that there is incorporeal Capital not fixed in any matter whatever, such as Copyright, the goodwill of a business, &c., &c. He then says that immaterial products are not capable of accumulation! What! Cannot a man be possessed of £100,000 of Funded Property ? And of the Copyrights of Books, &c., and of a number of Bills of Exchange? He then says that a material product cannot be in two places at once. But who said it could-except Sir Boyle Roche, the famous Hibernian, - and even he limited this power to

609

Exchange, &c .- or Credit-may be, and are exchanged for other things just as money is. Hence this sentence expressly implies that Credit may be productive Capital just as much as money.

250. Thus we see that Mr. Mill has already by implication admitted that Credit may be Capital. And this doctrine we shall find he still more explicitly states when he speaks of Credit itself. Chap xi., B. III., is headed, "Of Credit, as a substitute for money." Now we observe that if one thing is to be a substitute for another, it must be of the same general nature. Not so high, or excellent in degree, perhaps, but still it must be of the same kind. Things of totally different natures cannot be substituted for each other. Thus, for instance, if a man cannot get xxx ale he may have to put up with swipes as a substitute. But a pair of shoes could never be a substitute for a glass of ale. If, therefore, Credit is to be a substitute for money, it must be of the same general nature as money. Now money, as every one knows, is separate and independent exchangeable property, and consequently Credit must be so also. Money, if used in a certain way, is Capital : Credit must also be capable of being used as Capital as well. If money, therefore, is capable of being productive Capital. Credit must be so likewise.

251. Passing over the beginning of this chapter. to which we shall revert, Mr. Mill says in § 3,-"For Credit, though it is not productive power, is purchasing power." Now here is a striking contradiction already to what he had said before. For in B. I., as we have already shewn, he says that anything which has power of purchase is Wealth. Here he admits that Credit is purchasing power, and therefore, by his own shewing, if it is purchasing power, it is Wealth; and if it is Wealth, it may, by his own admission, be productive Capital.

252. In § 5, he says, that a form "in which credit is employed as a substitute for currency is that of promissory notes." In § 6, he says, another mode "of making credit answer the purposes of money, by which, when carried far enough, money may be very completely superseded, consists in making payments by cheques." Here we see that he expressly calls the Promissory Note and the Cheque, the Credit.

253. In the next chapter, xii., we shall see that he expressly allows that these instruments of Credit are independent exchangeable property, and valuable things. He says, § 1-"An order, or note of hand, or bill payable at sight, for an ounce of gold, while the credit is unimpaired, is worth neither more not less than the gold itself; " and, " But we have now found that there are other things, such as bank notes, bills of exchange, and cheques, which circulate as money, and perform ALL the functions of it." Now here is an explicit declaration that Credit performs ALL the functions of money, and therefore as one of the functions of money is to be productive Capital, it follows that Credit may also be productive Capital.

254. In § 2 of the same chapter, he says, that a man "may make purchases with money which he only expects to have, or even only pretends to expect. He may obtain goods in return for his acceptance payable at a future time, or on his substitutes for money, take the place of the prenote of hand, or on a simple book credit, that is, on a mere promise to pay. All these purchases | munity by thus dispensing with metallic money. have exactly the same effect on price, as if they is a clear gain to those who provide the substitute.

is composed of all the money in his possession. and due to him, AND OF ALL HIS CREDIT." "He creates a demand for the article to the full amount of his money AND CREDIT taken together, and raises the price proportionably to both." In § 3. he says-" The inclination of the mercantile public to increase their demand for commodities by making use of all or much of their credit as a purchasing power." In § 4-" The banker's credit with the public at large, coined into notes, as bullion is coined into pieces of money to make it portable and divisible, is so much purchasing nower SUPERADDED, in the hands of every successive holder, to that which he may derive from his own credit. * * Credit, in short, has exactly the same purchasing power with money : and as money tells upon prices not simply in proportion to its amount, but to its amount multiplied by the number of times it changes hands, so also does credit : and credit transferable from hand to hand is in that proportion more potent than credit which only performs one purchase.'

CREDIT.

255. In § 5. he says-"Since, then, credit in the form of bank notes is a more potent instrument for raising prices than book credits-* * If we consider the proportion which the utmost increase of bank notes in a period of speculation bears. I do not say to the whole mass of credit in the country, but to the bills of exchange alone, the average amount of bills in existence at any one time is supposed considerably to exceed a hundred millions sterling. The Bank Note circulation of Great Britain and Ireland is less than thirty-five millions, and the increase in speculative periods at most two or three." And as a note to this passage, Mr. Mill gives a table of the bills supposed to be created in several years, the last of which is 1839, when the bills supposed to be created amounted to £528,493,842. In ch. xiii, he says -" After experience had shewn that pieces of paper of no intrinsic value, by merely bearing upon them the written profession of being equivalent to a certain number of francs, dollars, or pounds, could be made to circulate as such, and to produce all the benefit to the issuers which could have been produced by the coins which they purported to represent-

256. Now, from these extracts from Mr. Mill's work, our readers will clearly perceive that he expressly asserts, as positively as it is possible that language can do, that Credit is independent, exchangeable property like any other. That it same manner as money, and may produce all the effects of money. Now, as this Credit is nothing but circulating debts, it follows clearly from Mr. Mill's own admission, that DEBTS are WEALTH. All this is in exact accordance with the doctrines laid down in the preceding sections of this treatise.

257. In B. III., chap. xxii, he is equally explicit-"The same effects which would thus arise from the discovery of a treasure accompany the process by which bank notes, or any of the other cious metals."-" The value saved to the com-

CREDIT.

aware of : so that it makes not much difference as to its capacity of being in two places at once, whether the product is material or immaterial. He says that the material merchandise lent cannot serve two persons at once. No one said it could; but that has nothing to do with the question. Because it is not the merchandize which is the Credit, but the Debt created in exchange for the merchandize, which is a valuable property in itself, and may either be used to buy other articles, and therefore is productive Capital. or else it may be discounted by a banker, and the proceeds used in the same manner.

247. But Say himself calls these instruments of Credit, Capital. In his Cours (Partie III., ch. xviii.) he says :- " Tout particulier peut souscrire un billet ordinaire, et le donner en paiement d'une marchandise, pourvu que le vendeur consente à le recevoir comme si c'était de l'argent. Ce vendeur à son tour, s'il est acheteur d'une autre marchandise, peut donner le même billet en paiement. Le second acquéreur peut le passer à un troisième dans le même but. Voilà un engagement qui circule ; il sert à qui veut vendre : il sert à qui veut acheter ; il remplit l'office d'une somme de monnaie.

"La valeur d'une signe dépend de la valeur de de la chose signifiée ; mais pour que cette valeur soit précisément aussi grande que celle de la chose dont elle est la gage, il faut non-seulement que le paiement du billet soit indubitable, mais qu'il puisse être exigé à l'instant.

"Si les billets de confiance peuvent remplacer complètement la monnaie métallique, il est évident qu'une banque de circulation augmente véritablement la somme des richesses nationales ; car dans ce cas la richesse métallique devenant superflue comme agent de circulation, et conservant néanmoins une valeur propre. devient une | Mill has said, and to see whether he is more convaleur disponible, et peut servir à d'autres usages. Mais comment s'opère cette substitution ? Quelles en sont les bornes? Quelles classes de la société font leur profit de l'intérêt des nouveaux fonds ajoutés aux capitaux de la nation?

"A mesure qu'une banque met ses billets dans la circulation et que le public consent à les recevoir sur le même pied que la monnaie métallique, le nombre des unités monétaires augmente. Les personnes qui font la spéculation d'envoyer des monnaies métalliques dans l'étranger, après les y avoir vendues, ou les avoir employées à des achats de marchandises, ont soin de se faire adresser l'équivalent de leurs achats. Ce sont là des richesses réelles des valeurs ajoutées à nos capitaux, des valeurs sur lesquelles peut s'exercer notre industrie, et que notre industrie rétablit à mesure qu'elle les consomme, pour fournir des avances à une production nouvelle. Nous avons des capitaux de plus, et la valeur capitale qui servait auparavant aux besoins de notre circulation, n'est pas moindre, puisqu'elle est remplacée chez nous par un signe représentatif qui en tient lieu parfaitement.

"Il ne faut pas pourtant pas qu'on s'imagine que la valeur retirée de la somme des monnaies et ajoutée à la somme des capitaux-marchandises, égale la somme des billets en émission. Ceux-ci ne représentent la monnaie qu'autant qu'on est toujours en mesure de les payer à bureau ouvert; et pour cela, la banque est obligée de garder dans | perfectly well known that Bank Notes, Bills of

CREDIT.

product be in two places at once, that we are | ses coffres, et par conséquent de retirer de la circulation une somme quelconque de numéraire. Si, par supposition, elle met dans la circulation pour cent millions de billets, elle retirera pentêtre 40 millions d'espèces, qu'elle mettra en réserve peur faire face aux remboursemens qui pourraient lui être éventuellement demandés. Or, si elle ajoute à la quantité de monnaie en circulation, 100 millions, et si elle en retire 40 de la circulation, c'est comme si elle en aioutait seulement 60.

"Nous devons à present désirer de savoir quelle classe de la société jouit de l'usage de ce NOUVEAU CAPITAL

Say then goes on to explain how this new capital is employed, and who reaps the profit of it.

Thus, J. B. Say, who is supposed to be the Economist par excellence, who has proved that those writers who maintain that Credit is Capital. are such poor muddle-headed creatures as to think that the same thing can be in two places at once, himself expressly declares that CREDIT IS CAPITAL!!!

On the Opinion of Mr. J. S. Mill on the subject of Credit.

248. Turgot, we have seen above, was the writer who started the erroneous notion that Credit was the transfer of something, and J. B. Say extended this error by saying that credit could not multiply capital, because the same thing could not be in two places at once. These two sentences have been repeated by a multitude of unthinking writers in France and England. from that day to this. The number of writers who have reiterated these absurdities is so great that we cannot afford room to examine them all. We have only room to examine what Mr. J. S. sistent with himself than Say.

We have shown under WEALTH, and MILL, J. S., the unsteady conception which Mr. Mill has of the definition of WEALTH. At p. 8, Vol. I., he says-" Everything forms, therefore, a part of Wealth, which has a power of purchasing." And-" Money being the instrument of an important public and private purpose, is rightly regarded as Wealth; but everything else which serves any human purpose, and which nature does not afford gratuitously, is Wealth also." Here, therefore, are propositions of the widest generality, which assert that whatever can be bought and sold, no matter what its nature be, is Wealth. Consequently if Bank Notes, Bills of Exchange, &c .- or Credit-can be bought and sold, they are Wealth, by the very force of the definition.

249. Let us now turn to Mr. Mill's definition of Capital. He tells us, B. I., c. iv., that money may be productive capital by being exchanged for other things, and that ANYTHING which is susceptible of being exchanged for other things is capable of contributing to production in the same degree. That is to say, without inquiring here what is meant by production, he says that money may be productive capital by being used in a certain way, and that anything which may be used in a similar way may be productive Capital as much as money. Now it is

medium, which have cost them only the expense of an engraver's plate. If they employ this ac-cession to their fortunes as PRODUCTIVE CAPITAL, the produce of the country is increased and the community benefited as much as by any other CAPITAL of equal amount. * * When paper currency is supplied, as in our own country, by bankers and banking companies, the amount is almost wholly turned into PRODUC-TIVE CAPITAL. * * A banker's profession being that of a money lender, his issue of NOTES is a simple extension of his ordinary occupation. He lends the amount to farmers, manufacturers, or dealers, who employ it in their several businesses. So employed, it yields, like any other CAPITAL, wages of labor, and profits of stock. The profit is shared between the banker, who receives interest, and a succession of borrowers, mostly for short periods, who, after paying the interest, gain a profit in addition, or a convenience equivalent to profit. The CAPITAL itself in the long run becomes entirely wages, and when replaced by the sale of the produce becomes wages again; thus affording a perpetual fund of the value of 20 millions for the maintenance of productive labor, and increasing the annual produce of the country by all that can be produced through means of a CAPITAL of that value."

258. Thus our readers will perceive from the former extracts that we laid before them, that Mr. Mill expressly stated that Credit was independent exchangeable property, whether embodied in the forms of Notes, Bills, Bank debts, or any other form, which was capable of performing all the functions of money, and therefore by implication capable of being employed as capital. But in the last preceding extracts he expressly calls bank notes-which are Credit-PRODUCTIVE CAPITAL.

259. We think we have shewn our readers as clearly as it can be done, that Mr. Mill asserts that Credit is Capital. And yet will they believe that he not only denies that Credit is Capital, but sneers at the imbecility of those who think it is !

In B. III., chap. xix which we have already quoted from, the heading of the chapter is, as we said, "Of Credit, as a substitute for money," which clearly affirms that Credit is exchangeable property like money; he says, -"The functions of Credit have been a subject of as much misunderstanding, and as much confusion of ideas, as any single topic in Political Economy.

"As a specimen of the confused notions entertained respecting the nature of Credit, we may advert to the exaggerated language so often used respecting its national importance. Credit has a great, but not as many people seem to suppose, a magical power ; it cannot make something out of nothing [Who said it could?] How often is an extension of Credit talked of as equivalent to a creation of Capital or as if Credit actually were capital !!! [Why! Who has said more distinctly than Mr. Mill himself that Credit is Capital? The very object of the whole of the preceding extracts is to shew that Credit is Capital!] It seems strange that there should be any need to point out that credit being only the permission to use the capital of another person!! the means of production cannot be increased by it, but only transferred. If the borrower's means anything more than the transfer of Capital. It is

They have the use of 20 millions of circulating | of production, and of employing labor are increased by the credit given him, the lender's are as much diminished. The same sum cannot be used as capital both by the owner, and also by the person to whom it is lent, it cannot supply its full value as wages, tools, and materials, to two sets of laborers at once. It is true that the Capital which A has borrowed from B, and makes use of in his business, still forms part of the wealth of B for other purposes; he can enter into engagements in reliance on it, and can even borrow, when needful, an equivalent sum on the security of it; so that to a superficial eye it might seem as if both B and A had the use of it at once. But the smallest consideration will shew that when B has parted with his capital to A, the use of it as capital rests with A alone, and that B has no other service from it than in so far as his ultimate claim upon it serves him to obtain another capital from a third person C. All capital (not his own) of which any person has really the use, is and must be, so much substracted from some one else.

"But though Credit is never anything more than a TRANSFER of Capital from hand to hand." 260. Our readers cannot fail to see the astonishing confusion of ideas on the subject of Credit in the above extracts. In the first set Mr. Mill sees clearly that Credit is the Promise to pay, which he over and over again says is independent exchangeable property, of the value of money, which may be used in all respects like money and perform all its functions. And therefore it may be Capital as well as money.

Mr. Mill says that the Capital (i. e., the goods) which A has sold on credit to B, are so much subtracted from his property, and cannot be used by him as well as by B. But he wholly forgets that in exchange for those goods, A receives B's "promise to pay," which is a debt, and in fact is the credit. And this debt is exchangeable property, with which he can either purchase new goods to replace those he has sold to B, or he can sell it to his banker, and receive a bank credit, with which he can purchase fresh goods, just the same as he could with money.

In the second extract Mr. Mill has changed his conception of Credit from being a Promise to pay, or a Debt, to its being the Transfer of Capital !!

Now we ask-Is a Bank Note the transfer of a commodity? Is a guinea the sale of a book? Is a piece of independent property the transfer of something else? Is a table the *transfer* of a chair? Is an independent quantity of any sort whatever an operation?

Mr. Mill informs us that Credit cannot make something out of nothing. Who said it could? Can a guinea make something out of nothing? It is not Credit that makes something out of nothing; but it is Credit itself which is a valuable property, which is created out of nothing by the consent of the wills of persons, and which by the reiterated acknowledgments of Say and Mill is capable of performing all the functions of money. Now money becomes Capital by their own admission, by being exchanged for other things, or by circulating other things. Credit may be Capital in precisely the same way.

261. Moreover, we see how completely Mr. Mill is in error when he says that Credit is never wholly untrue that Credit is always created in | autres définitions qui ont souvent conduit à des exchange for commodities. As we have shewn under BANK, all profitable banking business consists in buying debts by creating other debts. That is, Credit is created to purchase Credit.

After this exposition our readers will perhaps think that Mr. Mill is not exactly the person to sneer at others for their confused notions about Credit, though his own work is a striking example of the misunderstanding and confusion of ideas which he says prevails upon the subject. And many may wonder, perhaps, at a logician, who is unable to perceive the difference between an independent quantity and a sale of goods.

262. Having thus demonstrated the confusion of ideas of J. B. Say and Mr. Mill on the subject of Credit, it is scarcely worth while to quote from other writers who have fallen into exactly the same confusion. We have seen in § 92, 93, 94, that Bastiat, Mr. M'Culloch, and Mr. Gilbart have all declared Credit to be productive capital. But in other places these writers have all denied that Credit is Capital. Bastiat, in his Ce qu'on voit, et ce qu'on ne voit pas; § ix., Crédit; Mr. M'Cul-loch in his Commercial Dictionary, Art. Credit; and Mr. Gilbart in his Logic of Banking, p. 278, all deny that Credit is Capital, the two former going in the same fallacy as that of Say and Mr. Mill conceiving Credit to be an operation.

On the Opinion of M. Cieszkowski on the Nature of Credit.

263. We have now to notice a conception of Credit which was, we believe, started by Count Cieszkowski in his treatise, Du Crédit et de la Circulation (CIESZKOWSKI), which is founded on a misconception of the distinct nature of Bills of Lading, Dock Warrants and Bank Notes, Bills of Exchange, and, which is fully explained in § 4 of this article. Count Cieszkowski, seeing that Bills of Lading and Bills of Exchange both circulate in commerce by indorsement, has drawn the false conclusion that they are both of the same nature, and defines credit to be the transformation of fixed capital into circulating capital.

264. The fallacy of this doctrine is so instantly apparent to any one having the slightest knowledge of law and commerce, that it would be scarcely worth while to notice it, only that it has obtained acceptance, in a moment of oblivion, from otherwise excellent Economists, and is thus calculated to lead to serious consequences; for it is, in fact, no other than a revival of Lawism Thus M. Joseph Garnier, in his Elémens de l'Economie Politique, c. xix., treating of Credit. says, that there are three definitions of it. First, that Credit is the power of borrowing; secondly, that it is an anticipation of the future. Both of these definitions he rejects, and then he quotes as a third definition, "Le Crédit est la transformation des capitaux fixés et ENGAGES en capitaux circulants ou DEGAGES.

"C'est la définition que propose M. Cieszkowski dans son remarquable livre sur la circulation et le crédit, que l'on comprendra bien en se reportant à la division qu'Adam Smith a faite des capitaux, et qui nous semble heureusement formulée. Elle traduit bien le rôle des institutions du crédit ; elle comprend, complète et rectifie les notions que laissent dans l'esprit les deux 613

conséquences fausses et dangereuses."

265. After quoting some passages from MM. Cieszkowski and Chevalier, regarding the effects of Credit, M. Garnier proceeds-" Mais il s'en faut qu'en constatant les avantages et les effets du crédit on se soit toujours tenu en dehors de l'illusion. De ce que le crédit met en circulation des valeurs fixées, engagées; de ce qu'il fait passer entre les mains des travailleurs, qui les rendent productifs des capitaux restant oisifs et infructueux entre les mains de leurs possesseurs, on a été conduit à cette proposition féconde en abus, si on la prend au pied de la lettre que le crédit multiplie les capitaux. Il y a bien une chose que le crédit multiplie, c'est l'action, c'est la force, c'est la fécondité du capital, qui d'abord engagé ou oisif, prend les caractères et les fonctions du capital circulant; devient, dans ce dernier cas, positif de neutre qu'il était, et, dans le premier cas, acquiert une action de plus, l'action du capital roulant qu'il cumule avec celle du capital engagé. Mais cette transformation en améliorant l'instrument, n'en a fait ni deux ou trois instruments ; en un mot, elle n'a multiplié le capital. Quand un emprunteur jouit de ce qu'il n'avait pas le prêteur en est privé; quand un escompte est effectué, il n'y a que les rôles qui sont changés; celui qui avait l'effet de commerce l'a donné contre des espèces ; celui qui avait des espèces les a données contre des espèces; celui qui avait des espèces les a données contre l'effet. Il peut se faire que celui-ci tire un meilleur parti de l'effet, et celuilà un meilleur parti des espèces; mais en définitive, il n'y a rien là qui ressemble à la multiplication dans le sens littéral du mot.

"En disant que le crédit multiplie les capitaux, on fait d'abord une figure de rhétorique. Cette figure est ensuite prise au pied de la lettre, et on est conduit à penser qu'en créant des signes de valeurs, des engagements, des papiers de commerce, on crée aussi les valeurs réelles correspondantes, au lieu de voir que ces dernières ne sont detenues en échange que par une véritable tromperie, on pense qu'en engageant un avenir incertain on crée un capital futur, au lieu de voir que ce capital n'est encore qu'une espérance ou une illusion."

266. We see in this passage the repetition of a phrase originated by J. B. Say. He exclaims against the fallacy that credit multiplies capital. But no one says that credit multiplies capital. Credit itself is capital. Every one allows that money may be capital. No one says that money multiplies capital. All that is said is, that money being used in a certain way is capital. Money is used to promote circulation in commerce : credit is used precisely in the same way. M. Garnier himself admits that credit multiplies movement. That is all that money does. Besides, M. Garnier himself, while protesting against the doctrine that credit multiplies capital, goes as near saying so as it is possible to do. For speaking of banks of issue he says "Les banques de dépôt ne pouvaient opérer que sur une masse de certificats ou de billets égale au montant des valeurs déposées, tandis que les banques de circulation peuvent émettre de billets pour une valeur double, triple, et quadruple, &c., du montant espèces qui composent leur encaisse. Ainsi une banque de circulation bénéficie les escomptes sur les billets et les léttres

de change du commerce comme si elle avait un (things in commerce just like money, and is, in fact, capital triple et quadruple." Thus we see that M. Garnier says that the power of issuing notes, which are Credit, is just the same as if the banker's capital were tripled or quadrupled. Surely that is very like saying that Credit multiplies capital, at all events, it is a clear acknowledgment that Credit is Capital.

267. M. Garnier then describes the Docks and Dock Warrants, which are transferable by endorsement, and he says-" Par ce procédé, simple et fécond, les marchandises sont échangées avec la même facilité que les effets de commerce; un capital immense est mobilisé, en même temps que les frais de manutention, d'administration et de commerce sont réduits pour la plus grande commodité des négociants et au grand avantage du consommateur.

"On voit que le warrant est aux marchandises déposées dans les docks ce que les certificats de dépôt furent, dans l'originée, aux monnaies confis aux Banques de dépôt."

Here we have the root of this specious fallacy. The Bank certificates issued by the early Banks of Deposit were similar to Dock Warrants in this respect, that they were not multiplied beyond the amount of the bullion deposited. But they differed in this that they were not specifically appropriated to any particular quantity of bullion. This distinction, which would not be of much practical importance so long as the method of doing business by the early Banks of Deposit was adhered to, becomes of vital importance when Banks began to discount bills by their own notes, or granting credits, and is in fact at the root of the currency question. The fundamental difference between Dock Warehouses and Banks is that in the former, the goods deposited do not belong to the Warehouseman, and he cannot make a profit by using them. The money deposited by a banker belongs to him, and he may trade with it and make a profit of it. Hence the promise to pay, or, his debt, is independent of any particular sum of money, and by the principle we laid down at the commencement of this article, that everything which circulates separately is separate property, and an Economic Quantity, both the money deposited with the banker and his promise to pay it may circulate independently as separate property. The fundamental distinction between the two classes of paper documents is, that Dock Warrants are always bound to, and mere titles to certain goods; instruments of Credit are always severed from money.

The only real difficulty which embarrasses writers, not familiar with Law and Commerce, is in conceiving and holding fast the conception that a debt is an article of property. When M. Garnier says that people are apt to think that when they create engagements or promises to pay they are creating the real corresponding values, we can only say that they must be very loose thinkers indeed who think that. We do not suppose that many would think, when they gave their promise to pay, that they were thereby creating the money to pay it with. The whole doctrine of Credit being Capital is contained in this, that any independent, exchangable quantity whatever may be used as Capital. Credit or a debt, &c., is exchangeable property, and, in fact, under different forms of Bank Notes, Bills, Book debts, is exchanged for other CERDIT.

a substitute for money, and hence it may be used as Capital as well as money.

On the Opinion of some Algebraists respecting the nature of Credit, or Debts.

268. Having thus shewn the contradictory notions of some Economists on the subject of Credit. we may as well examine what some very distinguished mathematicians have said about debts, or Credit. We have seen that, among others, Maclaurin, Euler, Peacock, and De Morgan, all admit debts, or Credit, to be Negative Quantities. The only real difficulty consists in giving the proper interpretation to the Negative sign. Euler and Peacock, in the extracts given above, treat it as a sign of subtraction. But if these distinguished writers had reflected on the general analogy of Physical Science, they would at once have seen that Negative Quantities in Natural Philosophy are not subtractions from positive ones, but Independent Quantities additional to them.

269. Mr. Justice Byles long ago said that the species of Property consisting of Credit was next in magnitude to the land and the funds. Since he said this, Credit has enormously increased, and may be safely asserted to exceed the funds greatly at present. Suppose that, in order to be within the bounds of the extremest moderation, we place the quantity of Credit existing at the present moment in Great Britain at £1,000,000,000 ;-what is this to be subtracted from, we ask? It is quite clear it is not to be subtracted from any thing at all, but is independent property additional other property.

270. But even Dr. Peacock is not consistent with himself in his notion of Debts. Because he says, in the extract given above, that a Debt is Property owed, and that the release of a Debt is the change of the sign of affection of Property owed into property possessed. Now, this is manifestly a different conception of a Debt than its being a subtraction from property. But it is equally incorrect. A debt is not an affection of the Property of the Debtor, but a Right residing in the person of the Creditor. The release of a Debt is the destruction of this Right by the consent of the parties. Thus we see that Dr. Peacock is again in error; for he says that the subtraction of a Debt, in the language of symbolical Algebra, is not its obliteration or removal, but the change of its affection or character from money, or property owed to money or property possessed. Now, we see at once the misconception here. The debt is not the money or the goods, but the Right to demand them, and the abolition of the Debt is the abolition or the destruction of the Right, which is the destruction of Property.

271. Thus we see that out of these conflicting notions-

Credit is not the TRANSFER of anything : that it is not an OPERATION.

Credit is NOT a SUBTRACTION from other property.

Credit is NOT a title to any specific goods. Credit is NOT Money or Goods owed. There remains, therefore, only the last conception, that Credit is a mass of property ADDI-TIONAL to other property, as every writer on the

subject has acknowledged, when treating of the | England during the last century. It is, among instruments of Credit themselves. Thus, even Mr. Mill says, that a man's purchasing power consists of his money and all his Credit, and he speaks of the "mass of Credit" in the country. This mass of Credit, or Debts, however, though additional property to all other, is negative property by the admission of all Algebraists. The only question is, what property can be additional and negative, or INVERSE, to money. And there can be but one answer. Money represents the proceeds of a man's past industry, and therefore the only thing that can be additional and inverse, or negative to that, is the proceeds of his future industry. A man's power of making future profits is, of course, additional to the profits he has already made. And hence we see that the interpretation of the Negative Sign, as symbolizing FUTURITY, is the only one that satisfies the conditions of the case. And as soon as this interpretation is adopted, the whole subject falls into harmony and order, all difficulties vanish like the mists before the morning sun, and Political Economy is brought under the well understood laws of Natural Philosophy.

Conclusion.

272. We have now developed the Theory of the Negative Sign, and of Negative Quantities in Political Economy. We see that the interpretation of the Negative Sign, not as SUBTRACTION, but as FUTURITY, has at once doubled the extent of the science, and shewn how vast masses of property which have never yet been included in any English work are to be classed. And yet the immensely greater proportion of existing property is of this form !

We have seen, too, that what the Algebraists we have mentioned, and hosts of others have merely noticed with a passing remark as Negative Quantities, contain, in fact, one of the most marvellous results of human ingenuity. For that little idea-apparently so simple-of making a Debt transferable, is entitled to rank in its practical effects with the most splendid discoveries of the human mind, and it has produced consequences to the world not one whit inferior to those of the steam engine. The simple doctrine that every future payment has a PRESENT VALUE. which is independent exchangeable property, and may be bought and sold like money itself, has increased the effective force of money tenfold, without diminishing its value. In the eloquent and not exaggerated language of Mr. Webster (BANK-ING IN AMERICA, § 448) :- "Credit is the vital air of modern commerce. It has done more, a thousand times, to enrich nations than all the mines of all the world. It has excited labour, stimulated manufactures, pushed commerce over every sea, and brought every nation, every kingdom, and every small tribe among the races of men to be known to all the rest; it has raised armies, equipped navies, and triumphing over the gross power of mere numbers, it has established national superiority on the foundations of intelligence, wealth, and well-directed industry.' It is to Scotland that is due the unquestionable merit of first having developed the full powers of legitimate credit, and it is this subtle agent which has raised her to her present position. It is Credit which produced those mighty works in

615 CREDIT

other things, the want of Credit which kent Ireland so poor and barbarous for so long : it is in the establishment of solid Credit there in comparatively recent times, that she will henceforth find her greatest means of progress and improvement. It is a solid system of Credit which is wanted to develope the resources of rejuvenescent Italy, and it is, above all, solid Credit that is wanted to bring out the boundless resources of India

The exposition of the Theory of Credit, given in the preceding sections, shews how utterly futile it is for merely literary men to write books on Political Economy, and how absurd it is to suppose that definitions are of no consequence. Who can wonder that the subject has been thrown into such confusion, when such contradictory conceptions are held of the very nature of the thing itself?

To explain the Theory of Credit requires the most careful settlement of every single term and definition in Political Economy, a thorough acquaintance with the history and the law of Credit. (one of the most abstruse branches of law.) and a thorough familiarity with the mechanism of Commerce. Even this is insufficient to unravel its perplexities, which have only finally yielded to one of the most recent and most refined discoveries in Algebra! And thus we see how wonderfully verified is the prescience of Bacon, who so earnestly preached that Natural Philosophy is the only sound basis of exact knowledge.

ANALYSIS OF THE ARTICLE.

§ 1. Definition of Credit.

§ 2-3. Perplexities of Modern Economists about Credit.

§ 4. Order of the Treatise.

SECT. I.

§ 5. Fundamental Conceptions of the Theory of Credit.

SECT. II.

THE NATURE OF CREDIT AND THE ELEMENTS OF THE THEORY OF CREDIT.

§ 6-10. On the distinction between a Bailment and a Debt.

- § 11-13. A debt is separate and independent exchangeable Property, for which there are shops and markets.
- § 14. Confusion between Credit being Property, and an Operation.
- § 15, 16. On commercial Credit.
- § 17. Error of Expression, Intrinsic Value.
- § 18. Anything has as many values as things it will exchange for.
- § 19. The Value of a promise is the THING promised.
- § 20-22. Credit is a lower form of money, and is a substitute for it.
- § 23. Fundamental difference between Bills of Exchange and Bills of Lading. Bills of Lading REPRESENT goods, but Bills of Exchange are of the VALUE of money.
- § 24. The limits of Credit.

616 CREDIT.

- § 25, 26. The above doctrines apparent from the | § 83, 84. Recent French writers have come to this ordinary language of Commerce. opinion.
- § 27-29. Examination of Mr. Thornton's opinion § 85. Credit usually resolves an exchange into on Credit.
- § 30. Paradox of the Negative Sign.
- § 31. The Negative Sign cannot mean subtraction. § 32. Mathematicians acknowledge that debts are Negative Quantities.
- § 33. Confusion about the Conception of Credit.
- § 34. From the analogy of other sciences it may be expected that Negative Economic Quantities are Independent Quantities.
- On the application of the Theory of Algebraical Signs, and of the Separation of the Signs of Position and Operation to Political Economy.
- § 35-45. Explanation of the application of the Positive and Negative Signs.
- § 46. Property is a Right residing in the person. There may be property in the past, and in the future.
- 47. Theory of the Value of Land.
- 48. The Goodwill of a business.
- 49. Copyright. 50. A Practice.
- 51. Shares in a Commercial Company.
- § 52. All these are cumulative property, and separate from the actual payment.
- § 53. Smith and most other Economists admit that abilities are Wealth.
- § 53-55. The Right to receive a future payment is separate and independent Property. And every future payment from whatever source arising has a PRESENT VALUE, receiving different names, according to the source whence it arises, which is independent exchangeable property. § 56. Credit is an annuity of one term.
- 57. Classification of Property.
- § 58. The unit of Credit is £100 payable one year hence.
- § 59. Peculiar method of expressing the price of this species of Property. The value of Money varies inversely as Price, and directly as Discount.
- § 60. Erroneous censures of Mr. Mill on the expression Value of Money.
- § 61. Origin of the confusion ; double meaning of the word Loan.
- 62-64. Correction of Mr. Thornton's errors.
- 65. A RELEASE from a DEBT is an AUGMENTA-TION of CAPITAL.
- § 66. Examination of Euler's views regarding Debts.
- § 67-71. Examination of Dr. Peacock's views regarding Debts, or Negative Quantities.
- § 72. In Political Economy the signs + and as signs of Position symbolize TIME. As signs of Operation they mean addition
- and subtraction, or creation and destruction. § 73. Credit is the Right to a future payment.
- 74. This shews the limits of Credit.
- § 75. This shews the error of Law's Theory of money.
- § 76. The Quantity of Credit depends on the Circulation of Money.
- § 77. Cause of commercial catastrophes.
- § 78. Debts may be bought and sold for other debts. § 79. Credit may be Capital as well as any other
- property.
- § 80-83, How Credit is PRODUCTIVE

- three parts. § 86. Smith places Credit on the same footing as
- Stock. § 87. Demosthenes said that Credit is Capital.
- 88. Smith classes Credit on the same footing as
- Money. 89. Mr. Justice Byles says that instruments of
- Credit are Property. \$ 90. Credit and Money are productive by facili-
- tating exchanges. § 91. Credit can do whatever Money can in Production.
- § 92. Similarity of expressions used by the early Algebraists and Economists.
- 93. Mr. M'Culloch declares that Credit is Capital. § 94. Mr. J. S. Mill declares that Credit is pro-
- ductive Capital. § 95. Mr. Gilbart asserts that Credit is produc-
- tive Capital. § 96. Mr. Hamilton and Mr. Webster assert that
- Credit is productive Capital. § 97. M. Gustave du Puynode asserts that Credit
- is productive Capital. Conclusion_CREDIT IS PRODUC-
- TIVE CAPITAL.

SECT. III.

- ON THE MECHANISM OF THE SYSTEM OF CREDIT.
- § 98. Credit is the Present Right to a future payment.
- § 99. Credit is embodied in two forms, PROMISES to pay, and ORDERS to pay.
- § 100. Credit forms two divisions, Commercial Credit and Banking Credit.
- § 101. Credit may be used like money, to circulate an existing product, or to call them into existence.
- On the system of Credit based upon Simultaneous Transfers of Commodities.
- § 102-128. Exposition of the ordinary system of Commercial Credit.
- On the Theory of Cash Credits, Open Credits. and Accommodation Bills.
- § 129-144. Exposition of the system of Cash Credits in Scotland.
- § 145. A priori dogma which hindered the reception of the Newtonian doctrine of gravity. § 146. A similar cause makes the difficulty in many
- persons in apprehending the Theory of Credit. —That Nothing can come from Nothing.
- 147. Examination of this dogma.
- § 148. Knowledge is admitted by Economists to be Wealth.
- § 149. Where does it come from ? and What is it composed of ?
- § 150. Example of this.
- 151. The Human Mind is a source of Wealth.
- § 152, 153. Another species of Wealth-Incor-
- poreal Property. § 154. Debts are independent exchangeable Pro-
- § 155. Debts are created by the Human Will.
- § 156, 157. Other species of Incorporeal Property. § 158. Plutarch saw that the business of Banking overthrew the doctrines of Physical Philosophers.

CREDIT.

§ 159. Special Courts of Law for decreating debts. | § 212. This illustrates the distinction between Bills § 160. There are three sources in which Wealth originates-The EARTH-the HUMAN MIND § 213. Credit extinguished by the institution of -and the HUMAN WILL. § 161. Economic Conceptions must grasp all species of Economic Quantities: and Economic Axioms must grasp all Economic Phenomena. § 214, 215. The true limits of Credit indicated by

617

CREDIT.

On the Limits of Credit.

the etymology of the word. § 216, 217. The difficulty in the case. § 218-220. The limits of Commercial Credit.

SECT. IV.

ON THE HISTORY OF IDEAS ON THE SUBJECT OF

OPINIONS OF MODERN ECONOMISTS ON IT.

222, 223. Origin of Credit in modern times.

the failure of the Mississippi scheme.

§ 224. Modern Political Economy sprung out of

§ 225-227. Law's Theory of Paper Credit to be

228, 229. Extracts from Law, shewing that he

§ 230. Turgot originated the erroneous notion that

231-236. The opinion of Adam Smith on the Nature of Credit, shewing that he always

The opinion of J. B. Say on Credit.

§ 239. Self-contradiction of Say on the subject of

§ 240. Say's self-contradiction on the subject of

§ 241-243. Say expressly classes Debts as Wealth.

§ 244-246. His contradictory conceptions of

§ 247. Say expressly calls instruments of Credit

The opinion of Mr. J. S. Mill on the subject of

Credit

§ 248. Mr. Mill's definition of Wealth includes

§ 249. His definition of Capital includes instru-

§ 250-258. Further extracts from Mr. Mill, shew-

§ 259. Self-contradiction of Mr. Mill. He ridi-

§ 260, 261. Mr. Mill's confusion of ideas on

§ 262. Other writers have fallen into the same

On the opinion of M. Cieszkowski on the Nature

of Credit.

On the opinion of some Algebraists respecting the

Nature of Credit, or Debts.

§ 268-270. On the opinions of Euler, Peacock,

and other Algebraists, on Credit.

§ 271. What Credit is not, and what it is.

§ 263-267. Error of M. Cieszkowski's opinion.

cules the notion that Credit is Capital.

ing that he expressly calls Credit Productive

distinguished from his Theory of Paper

knew that Credit was equivalent to an augmen-

CREDIT, AND AN EXAMINATION OF THE

§ 221. How to limit Banking Credit.

of Exchange and Bills of Lading.

Banks.

Money.

of Turgot.

Capital.

Value.

Credit.

Capital.

Capital.

Credit.

confusion.

§ 272. Conclusion.

instruments of Credit.

ments of Credit.

tation of money.

Credit is an operation.

treated it as Productive Capital.

- § 162, 163. Examples of this.
- § 164. The laws which govern the variable relations of Economic Quantities, must be in harmony with the general Theory of Variable Quanti-
- ties in general. § 165. For if not, all Mathematical reasoning is
- shaken to its foundations.
- § 166. The preceding considerations necessary to understand the Theory of Credit and Cur-
- § 167. Cash Credits shew the fallacy of the Currency principle. § 168. On open Credits.

On Accommodation Bills.

- § 169, 170. On the nature of Accommodation Bills. § 171, 172. Errors of common opinion regarding
- Credit.
- § 173. Common estimate of the security of real bills exaggerated. § 174, 175. Difference between a Real and an Ac-
- commodation Bill. The one founded on a past transaction, the other on a future one.
- § 176-180. Investigation of the true danger of Accommodation Bills.
- § 181. This explanation quoted by Mr. Commissioner Holroyd, in the case of Lawrence. § 237, 238. Say followed up the erroneous notions Mortimer, and Schrader.
- 182-185. Explanation of this case.
- 186. Case of the Western Bank of Scotland.
- \$ 187. Forged Bills.
- § 188. Accommodation paper very rife in times of speculation. § 189. True objection to Accommodation Paper.

ment of Money.

their own notes

commercial crises.

institution of Banks.

of the circulation of Money

extinguished.

- § 190. Cause of the perplexity in dealing legislatively with Accommodation Paper.
- § 191. Doctrine in the cases of Rolfe v. Caslon, &c.
- § 192-198. Comments on this doctrine. On the Transformation of Temporary Credit

into Permanent Capital.

§ 199. Examples of the Doctrine that the Release

§ 200-203. Increase of the Capital of the Banks

§ 204. Which is an example that $- \times -$ is

§ 205, 206. All Joint Stock Banks increase their

On the Extinction of Credit.

§ 208. Unextinguished Credit is the cause of all

§ 209. Various methods by which Credit may be

§ 210. How Credit was extinguished before the

§ 211. The quantity of Credit generated depends

upon the quantity multiplied into the velocity

always equivalent to $+ \times +$.

§ 207. Public loans contracted by Credit.

Capital by similar means.

of a Debt is always equivalent to the Pay-

of England and Scotland by payments of