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Institute of Bankers in Scotland

LECTURES
ON
CREDIT AND BANKING

H. D. MACLEOD.
CREDIT AND BANKING
Institute of Bankers in Scotland

LECTURES

ON

CREDIT AND BANKING

DELIVERED AT THE REQUEST OF

The Council of the Institute of Bankers in Scotland

BY

HENRY DUNNING MACLEOD, M.A.

OF TRINITY COLLEGE, CAMBRIDGE, AND THE INNER TEMPLE, BARRISTER-AT-LAW;
SELECTED BY THE ROYAL COMMISSIONERS FOR THE DIGEST OF THE LAW TO PREPARE
THE DIGEST OF THE LAW OF BILLS OF EXCHANGE, BANK NOTES, ETC.
LECTURER ON POLITICAL ECONOMY IN THE UNIVERSITY OF CAMBRIDGE

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LONDON:
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JAMES SIMPSON FLEMING, Esq.,

CASHIER AND GENERAL MANAGER OF THE ROYAL BANK OF SCOTLAND

PRESIDENT OF THE COUNCIL OF THE INSTITUTE OF BANKERS IN SCOTLAND

AND TO THE OTHER MEMBERS OF THE COUNCIL

GENTLEMEN,

I have great pleasure in laying before you the Lectures on Credit and Banking which I have delivered in Edinburgh and Aberdeen, at your request, in the present session.

The most eminent and advanced Economists in the world are now satisfied that Ancient authors were right in holding Exchangeability, or the Capability of being bought and sold, to be the sole essence and principle of Wealth: and that anything whatever which can be bought and sold is Wealth, whatever its nature may be: and that, consequently, the Science of Wealth, or Economics, is the Science of Exchanges, or of Commerce, in its widest extent and in all its forms and varieties.

The business of Banking, as we understand it, was first practised in Europe by the Romans. The complete Theory of Credit was developed and brought to absolute perfection by the Roman Lawyers, and is contained in the Pandects of Justinian,
and has been the Mercantile Law of Europe for 1,800 years: it is exhibited in all the great Continental Jurists: but it has not hitherto found its way into any work on Political Economy.

Every Mercantile Lawyer is well acquainted with the Theoretical principles of Credit: but very few ever see their practical application in the business of Banking: while young men enter into the business of Banking, and may, no doubt, acquire great practical skill in their profession, but they never acquire a knowledge of the scientific principles on which their business is based.

The object of the present course of Lectures is to explain the general nature of the Science of Economics, or of Commerce, and of Banking as a department of it: to popularise the great Juridical and Mathematical Principles of Credit: and to shew their practical application in the business of Banking.

Not only have the most eminent Economists in Europe and America declared their adhesion to the system of Economics developed in my works, but several Mathematicians of the highest eminence have expressed their entire approval of the method in which I have applied the Principles of Mathematics to the phenomena of Economics: as, indeed, they could not fail to do, when the facts were rightly understood.

I must express my extreme gratification at the interest and attention which these Lectures received from my audiences in Edinburgh and Aberdeen: and the extraordinary and unexpected excellence of the papers sent in by the Candidates who presented themselves for Examination. A very large proportion of them shewed that they had thoroughly grasped the abstruse and subtle Principles of Mercantile Law and Algebra upon which the Theory of Credit is based: and their papers were models of excellence both in matter and style.
The Theory of Credit and Banking is now reduced to the strictest scientific demonstration: and I cannot but hope that the Council will aid in diffusing a knowledge of it among the younger members of their profession.

It was the former pride of Banking to be associated with Learning. It was the great Bankers of Florence who were the great restorers of learning in modern times. It was their pride and their glory to lavish their treasures in searching every corner of Europe for the lost works of antiquity.

Along the banks where smiling Arno sweeps
Was modern Luxury of Commerce born,
And buried Learning rose redeemed to a new morn

And if it was so glorious a thing in the fifteenth century for the Bankers of Florence to restore learning on the banks of Arno, it will be an equally glorious thing in the nineteenth century for the Bankers of Scotland to celebrate the union of Learning and Commerce on the shores of Forth and Dee.

I am,

Gentlemen,

Your most obedient servant,

HENRY DUNNING MACLEOD
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ON CREDIT AND BANKING

LECTURE I

ON THE GENERAL SCIENCE OF ECONOMICS, AND
ON BANKING AS A DEPARTMENT OF IT

MR. PRESIDENT AND GENTLEMEN,

When I appear before you to address you on the subject of Credit and Banking, some of you perhaps may think of the pedagogue who lectured Hannibal on the duties of a Commander-in-Chief. And if I had the temerity to offer to you, Mr. President, and the other magnates of the profession, instruction on the art of managing a Bank, I should no doubt be justly amenable to such a censure. But I need hardly say that such is not in any way the purpose of the present course. The practical management of a Bank and the general theory of Credit and Banking are perfectly separate and distinct. The successful management of a Bank depends chiefly on the accurate knowledge of the mercantile character of individuals, which can only be obtained by constant local vigilance, and the circumstances of the various branches of trade at any given time: but Credit and Banking form a department of the great science of Political Economy, or Economics, which is absolutely universal and has been the same in all ages and countries

The first thing to be done, however, is to come to a clear and distinct understanding as to what the science of Political Economy or Economics is. We have heard a great deal lately about the Laws of Political Economy: but how many persons have a distinct idea of what Political Economy is, and what the Laws of Political Economy are? It is that Political Economy is
now undergoing one of those transitions which have taken place in every science: and in order to make the subject intelligible I must begin by giving you an outline of this transition, and explaining to you clearly what the most modern Economists mean by the science of Economics.

Revolution and Transformations have taken place in all the Great Sciences.

Every one of the great sciences in the course of its history has undergone a complete transformation from the mode in which it was conceived by its founders; and there is also a stage at which it becomes necessary to introduce more powerful and refined methods of investigation, more comprehensive forms of expression, and more minute and exact observation.

Sydney Smith has expressed the case in his usual lively way—"Nothing will do in the pursuit of knowledge but the blackest ingratitude—the moment we have got up the ladder we must kick it down—as soon as we have passed over the bridge we must let it rot—when we have got upon the shoulders of the ancients we must look over their heads. The man who forgets the friends of his childhood is base: but he who clings to the props of his childhood in literature [and Science] must be content to remain as ignorant as he was when a child. His business is to forget, to disown, to deny, and to think himself above everything which has been of use to him in time past: and to cultivate exclusively that from which he expects future advantage."

This exactly expresses the case with the science of Political Economy, or Economics as it may be more aptly called, at the present day. Up to the present time there have been two great schools of Economists, each of whom has done great, glorious, and immortal services to mankind. But making ample acknowledgment of the priceless services done by these two preceding schools of Economists, the fact is that the Political Economy of Adam Smith, Ricardo, and Mill is now exhausted—it is a caput mortuum from which no further good can be extracted: it is wholly incapable of grasping the great Economic problems which demand solution at the present day, namely, CREDIT, BANKING, and the FOREIGN EXCHANGES. In fact this school of Economists have abandoned all these questions in hopeless despair.
Character of former Economic Contests

Highly as we may esteem the great Economists of this and other countries it is essential to remember the character of Economic contests up to the present time. They have been almost wholly destructive. The first Economists found the public mind and the administration infected with an immense mass of rooted prejudices, errors, and abuses. Their first efforts were therefore directed to sweep these away—to beat down and abolish false doctrines of various kinds, to extirpate bad and mischievous laws interfering with the natural order of things: to abolish legislative interference with wages, with prices, and the commercial intercourse of nations: to establish, in fact, freedom of Commerce or Exchanges: and so far as this Economists of all schools are agreed

The Time has now come for a Positive Science of Economics

But while Economists of all schools are agreed on what was the destructive portion of their science, when we come to the Constructive or Positive Science this agreement is at an end. Nothing can be more astonishing or lamentable than the differences of doctrine, and the antagonism of Economists on almost every point in the Science, so as to create a widely spread impression that there is no such intelligible Science at all as Economics: an impression which I hope I shall remove from your minds by the considerations I shall lay before you.

Many indeed suppose that the establishment of Free Trade is the whole end and aim of Political Economy: but nothing can be more erroneous. The destruction of protection was only the first fruits of the struggle of the infant Science, like Hercules strangling the serpents in his cradle, and not its consummation. In fact it only clears the ground and removes obstructions from the creation of the positive science. During the heat and the turmoil and the dust of the battle to establish a great practical principle, there is no time to attend to the niceties of language, and the exact expressions of science. But now that the great victory is won, and men are able to sit down in a calm inquiring spirit, the time has come for complete, deliberate, and systematic re-survey of the whole.
No one is more sensible than I am of the immortal services rendered by the two preceding schools of Economists—that of Turgot, Quesnay, and their followers—and that of Smith and his followers—and I should never wish in the slightest degree to extenuate or diminish the glorious triumphs achieved by them. But in all sciences there is progress: and it is the constant fortune of scientific systems to be succeeded and superseded by those of a superior order. Every science is greater than any of its cultivators. Astronomy is greater than Hipparchus, than Ptolemy, than Copernicus, than Kepler—greater even than Newton himself. So Economics is greater than Turgot, than Quesnay, than Smith, than Mill. To every one who has done good service let us pay rational respect, but not abject idolatry. No one, however eminent, is now permitted to be a despot in science, and chain up the human mind, and arrest the progress of thought. As Ptolemy said—“He who studies Philosophy must be a freeman in mind,” and making the most ample acknowledgments for the services rendered by the preceding schools of Economists, scientific truth compels me to say that their systems are now exhausted and are inapplicable to great Economic problems of the present day, and those which chiefly concern you, namely **Credit, Banking, and the Foreign Exchanges.** To understand these subjects properly we must adopt a far wider and more comprehensive system of Economics than has hitherto prevailed: one which I am happy to say is now gaining the ascendancy throughout the world. As a matter of fact, the most eminent and advanced Economists in Europe and America have declared their adhesion to this enlarged and expanded system of Economics which I have been advocating for 25 years; which has given the solution of those questions of Credit and Banking which entirely baffled the preceding schools of Economists: and by the acknowledgment of all practical men of business, has finally set at rest that terrible Currency Question which has agitated and convulsed this country for three quarters of a century.

**Object of the Present Course of Lectures**

The object of the present course of Lectures is—

1. To explain the nature of that enlarged and expanded system of Political Economy, now usually termed Economics, which embraces Credit and Banking.
2. To explain, in as popular a manner as the nature of the subject admits of, the great Juridical principles of Credit
3. To show their practical application in the mechanism of the business of Banking
4. To declare the public right of issuing notes and other instruments of Credit, as now finally determined by the Supreme Courts of Law
5. To explain the Right of Foreign Banks to open Branches in England

*Bacon and other Philosophers have declared that Political Economy is a Physical Science.*

And now that I am going to bring before you one of those revolutions which have taken place in all sciences, I trust that you will bear with me while I make a few preliminary remarks which will greatly conduce to explain to you the nature of the case.

It is sometimes said that Bacon was the father of all modern physical philosophy: that he first shewed the way by which all modern sciences were created. This is to a certain extent true, but it is very far indeed from expressing the distinctive merits of the Baconian Philosophy. The inductive spirit was not the creation of Bacon, but it was the product of the European mind of the 16th century. Galileo and other physical philosophers created Physical Sciences wholly independent of Bacon. But the distinctive merit of Bacon has never yet been sufficiently appreciated. He did not create any special physical science: and it is just possible that the Physical Sciences might have been just as far advanced at the present time if he had never written a line. But Bacon did something far higher than creating any single science: he created the Science of creating sciences. He formed in his stupendous mind the everlasting canons of Inductive Logic by which all alleged sciences must be tested. He pointed out the methods by which the Physical Sciences must first be created: and then he had the marvellous prescience to perceive that the same principles of reasoning by which the Physical Sciences were to be created must be applied to the creation of the Moral and Political Sciences. That is the matchless and undivided glory of Bacon. Before there was a single Physical Science in existence he laid down the everlasting canons by which all Physical Sciences must be created, and then he had the miraculous sagacity to perceive
that in the Natural Sciences are to be found the types and standards of reasoning which are to guide us in the creation of Moral and Political Science. He inculcated the study of Physical Science, it is true, for its own sake, but not for its own sake only, but as the foundation of Moral Science. It is his transcendent merit to have been the first to perceive and to proclaim with the voice of a trumpet the great doctrine of the Continuity of the Sciences. He calls Natural Philosophy the great nursing mother of all the sciences, and complains bitterly of the damage they all sustained by being separated from her. And the progress of science has exactly verified the prescience of Bacon. The Inductive spirit was the product of the European mind in the 16th century; and it was first applied to the creation of the Physical Sciences; and Political Economy was the product of the European mind in the 18th century. For Political Economy is nothing but the attempt to apply to the phenomena of Society the same spirit of exact reasoning as had been applied to the phenomena of the material world. In the very short time at my disposal I can but touch very briefly on this point; I can only say that since Bacon innumerable writers have maintained the same doctrine; but I can only cite a few sentences from Mill

He says—"The backward state of the Moral Sciences can only be remedied by applying to them the methods of Physical Science duly extended and generalised"

In another place he says,—"This truth is exemplified by the history of the various branches of knowledge which have successively in the ascending order of their complication assumed the character of sciences, and will doubtless receive fresh confirmation from those of which the scientific constitution is yet to come, and which are still abandoned to the uncertainties of vague and popular discussion. Although several other sciences have emerged from this state at a comparatively recent date, none now remain in it except those which relate to man himself, the most complex and most difficult subject of study on which the human mind can be engaged. If on matters so much the more important with which the human intellect can occupy itself a more general agreement is ever to exist among thinkers—if what has been pronounced the proper study of mankind is not destined to remain the only subject of which philosophy cannot succeed in rescuing from empiricism—the same pro-
cesses through which the laws of many simple phenomena have by general acknowledgment been placed beyond dispute must be consciously and deliberately applied to these more difficult inquiries. If there be some subjects on which the results obtained have finally received the unanimous assent of all who have attended to the proofs, and others on which mankind have not yet been equally successful: on which the most sagacious minds have occupied themselves from the earliest date, and have never succeeded in establishing any considerable body of truth so as to be beyond denial or doubt, it is by generalising the methods successfully followed in the former inquiries (that is in the various physical inquiries) and adapting them to the latter that we may hope to remove this blot on the face of science.”

Thus you will see that in these passages Mill exactly agrees with Bacon, and asserts that Political Economy, or Economics, which is a Moral Science, is to be constructed on exactly the same principles and by the same course of reasoning that Physical Sciences are

Application of these remarks—Nature of a Physical Science

I propose now to show you the application of these remarks; and to explain what is meant by saying that Economics is a Physical Science.

A Physical Science is a body of phenomena, or facts, all relating to a Single Central Idea or Quality: and the business of the science is to discover the Laws of these phenomena; that is, to discover the causes which produce certain effects. But it is essentially requisite that these effects should be capable of Numerical Measurement. And the object of the science is to determine and express in exact language the causes which produce changes in the numerical relations of these effects.

As for example, the Science of Mechanics is the Science of Force; and the object of the science is to determine the numerical effects produced by Force. So each of the other physical sciences, such as Optics, Heat, Electricity, &c., relates to the phenomena or facts concerning some single central idea or Quality.

But there is one fundamental principle relating to all these sciences to which I must especially direct your attention, as it will be found to be of the utmost importance in the science with
which we are concerned this evening. It is this—the special Idea or Quality which is the basis of the science may appear in substances of the most unlike natures, and which agree in no other respect than in the possession of that Quality. But all these substances, or natures, however unlike or dissimilar they may be in other respects, so long as they agree in possessing that single Quality on which the Science is based, must be counted as elements or constituents in the Science.

As for example: Mechanics is the science of Force. And a Force is defined to be "Anything which causes or tends to cause a change in a body's rest or motion."

Now that word Anything is of a very wide nature: and there are many distinct kinds of things which exert Force. Some Forces are material, such as men and animals; other Forces are incorporeal and invisible and intangible, such as gravity, electricity, &c., other Forces are explosive, such as gunpowder, dynamite, &c. There are the Forces of the wind, steam, &c. Again some Forces act continuously and perpetually, like gravitation: other Forces produce their full effect in a single impulse, as a blow. But all these various things are mechanical Forces, because they all possess the common Quality of producing changes in the rest or motion of bodies. And yet they have no other Quality in common. What can be more different than man and the force of gravitation? or gunpowder, or dynamite? And yet all these distinct kinds of things are included under the common name of Force.

**Economics as a Physical Science**

Now it is universally agreed that Political Economy, or Economics, is the Science which treats about things in so far as they are Wealth, and is the body of phenomena or facts relating to that Single Quality which constitutes them Wealth. If then Economics is a Physical Science, and to be constructed after the manner of a Physical Science, we must first search for that Quality of things which constitutes them Wealth. And when we have determined what that single Quality is, we must search for and discover how many distinct kinds of things there are which possess that single Quality: and then they must all be classed and included under the term Wealth, no matter how dissimilar they may be in other respects: and even though they
may have no other Quality in common than that single one which constitutes them Wealth. Nay more, arguing from the analogy of Physical Science we should naturally expect that there would be several distinct orders of Quantities which possess the attribute which is the essence of Wealth, just as diverse in their natures as man and gravitation. And just as the principles of Natural Philosophy compel us to class man and gravitation equally as Forces: so the principles of Natural Philosophy compel us to class Quantities as diverse in their natures equally as Wealth.

We have now to determine what that single Quality is which constitutes things Wealth: and I hope that in inviting your attention to this word you will not think that I am going to amuse you with vain logomachy or curious speculation. On the contrary, this word is the basis of a great Science: and there is none probably which has so seriously influenced the history of the world and the welfare of nations according to the meaning given to it at various periods.

For many centuries the legislation of every country in Europe was moulded by the meaning given to the word Wealth. The eminent French Economist, J. B. Say, says that during the two centuries preceding his time fifty years were spent in wars directly originating out of the meaning given to this word. Speaking of the Mercantile System which prevailed so long, another Economist, Storch, says, "It is no exaggeration to say that there are few political errors which have produced more mischief than the mercantile system. . . . . It has made each nation regard the welfare of its neighbours as incompatible with its own: hence their reciprocal desire of injuring and impoverishing one another: and hence that spirit of commercial rivalry which has been the immediate or remote cause of the greater number of modern wars. . . . In short, where it has been the least injurious it has retarded the progress of national prosperity: everywhere else it has deluged the earth with blood: and has depopulated and ruined some of those countries whose power and opulence it was supposed it would carry to the highest pitch."

So Whately says—"It were well if the ambiguities of this word had done no more than puzzle philosophers. . . . . It has for centuries done more, and perhaps for centuries to come will do more to retard the progress of Europe than all other causes put together."
These extracts, which are nothing but the literal truth, show you the importance and the gravity of the inquiry into which we are about to enter. I hope that we may do something this evening to remove this reproach: and that the words I am going to say may not vanish from your minds as if they were written in sand on the seashore: but rather be as if they were written with an iron pen, and graven on the rock for ever!

Definition of Wealth

We have now then to search for that single quality which constitutes things Wealth; and then we must search for all the distinct kinds of Quantities which possess that Quality; and which therefore satisfy the definition of Wealth; and are therefore to be included under the title of Wealth, however diverse otherwise they may be in form.

Now Aristotle, the Greek Philosopher, says—

Χρήματα δὲ λέγομεν πάντα δημον ἡ αὑτού ομοίωματι μετρεῖται.

"And we call Wealth all things whose Value can be measured in money"—that is everything which can be bought and sold or exchanged. And all ancient writers, without exception, held that Exchangeability, or the capability of being bought and sold, is the sole essence and principle of Wealth. Thus the eminent Roman Jurist, Ulpian, says—

"Ea enim Res est quæ emi et venire potest."

"For that is Wealth which can be bought and sold."

Now here we have a perfectly good definition, or General Conception, which satisfies the rule I have laid down: and is therefore fitted to form the basis of a great Science. It is a conception as wide and general as the mechanical definition of Force. And that single sentence of Aristotle is the germ out of which the whole Science of Economics is to be evolved, just as the huge oak-tree is developed out of the tiny acorn!

Having then adopted Exchangeability, or the capability of being bought and sold, as the sole essence and principle of Wealth, we have next to discover how many distinct orders of Quantities there are which satisfy this definition.

Now, first, there are Material Things, such as lands, houses, cattle, money, jewelry, &c., which can be bought and sold. Every one now-a-days admits these things to be Wealth: and therefore I need say nothing more about them here.
There are however other things, or Orders of Quantities, which can be bought and sold; and in modern times there has been a vast amount of controversy as to whether they should be admitted to be Wealth or not; and it is to these kinds of Quantities that I shall now direct your attention.

An ancient Dialogue, named the Eryxias, to shew that Labour is Wealth

There is a very remarkable work of antiquity which is the earliest regular treatise that I am aware of, on an economical question. It is a dialogue called the Eryxias, or on the Meaning of Wealth. This dialogue is to the following purport. The Syracusans had sent an embassy to Athens; and the Athenians had sent a return embassy to Syracuse. As the Ambassadors were entering Athens on their return, they met Socrates and a party of his friends, with whom they entered into conversation. One of them said he had seen the richest man in all Sicily. Socrates immediately started a discussion on the nature of wealth. Eryxias said that he thought on the subject as everyone else did: and that to be wealthy meant to have much money. Socrates asked him what kind of money he meant, and he described several different kinds of money. He said that at Carthage they used as money leather discs in which something was sewn up, but no one knew what it was; and he who possessed the greatest quantity of this money at Carthage was the richest person there; but at Athens he would be no richer than if he had so many pebbles from the hill. At Lacedæmon they used iron as money, and that useless iron; he who possessed a great quantity of this at Sparta would be wealthy, but anywhere else it would be worth nothing. In Æthiopia, again, they used carved pebbles, which were of no use anywhere else. Among the nomade Scythians a house was not wealth, because no one wanted a house, but greatly preferred a good sheepskin cloak. He then asked why some things were Wealth, and other things were not Wealth? Why were some things Wealth in some places and not in others? Socrates showed that whether a thing is Wealth or not, depends entirely upon Human Wants and Desires. That things are χρήματα, or Wealth, where they are χρήσιμα, that is, where they are wanted and demanded.
Thus we see that though many persons might be puzzled at the meaning of Wealth, there is no possibility of mistake when we refer to the Greek, because χρήματα, which is the usual word for Wealth, comes from χρεόμαι, to want or demand: consequently the word χρήματα, or Wealth, means simply anything whatever which is wanted and demanded, no matter what its nature may be.

Thus you see that it is human wants and desires which alone constitute anything Wealth. Anything whatever which people want and demand and are willing to pay for is Wealth, whatever its nature may be: and anything which no one wants or demands is not Wealth.

Socrates showed that gold and silver are only Wealth so far as they can obtain for us what we want and demand: and that if we can use anything else to obtain what we want and demand in the same way as gold and silver, such things are Wealth just for the same reason that gold and silver are.

Socrates then instanced professors and persons who gained their living by giving instruction in the various sciences. He said that persons got what they wanted in exchange for this instruction, just as they did for gold and silver: and consequently that the Sciences are Wealth (αἱ ἐπιστήμαι χρήματα ὑπάρχοντα): and that those who are masters of such sciences are so much the richer (πλουσιότεροι).

Now, in instancing the sciences as Wealth, that of course is a general term for Labour: because Labour in Economics is any exertion of human ability or energy, which is wanted, demanded and paid for. Thus the author of this dialogue expressly classes Labour under the term Wealth. And this exactly agrees with Aristotle's definition that everything is Wealth whose Value can be measured in money: because if you want a person to do any Labour or Service for you, and you pay him for such Labour or Service, its Value is measured in money as exactly as if it were a material chattel. Suppose that you give 50 guineas for a horse, and also give 50 guineas for the opinion of an eminent Counsel; the value of the opinion is measured in money as exactly as the value of the horse. And therefore they are both equally Wealth. And in fact all modern Economists treat Labour as a commodity which can be bought and sold, and is subject to exactly the same Laws of Value as any material chattel.
This dialogue clearly enforces a doctrine which is of the greatest importance in Economics—namely, that there is nothing which is in its own nature and absolutely Wealth. Whether a thing is Wealth or not depends solely upon human Wants and Desires. That is, Exchangeability is the sole essence and principle of Wealth. Things are Wealth only in those places and at those times where and when they are Exchangeable: that is where and when they are Wanted and Demanded: and consequently they cease to be Wealth, when they cease to be exchangeable, that is when and where they cease to be wanted and demanded. Therefore the very same thing may be Wealth in some places and not in others; and at some times and not at others.

We have thus already found two distinct kind of things which can be bought and sold, or whose Value can be measured in money (1) Material things which can be seen and handled, such as Money, cattle, corn, &c., and (2) things which can neither be handled nor seen, but which can yet be bought and sold: and though these two kinds of things have nothing in common except the capability of being bought and sold, they are each comprehended under the term Wealth.

Now in including Labour under the term Wealth, that is merely saying that Personal Qualities are Wealth; because Labour of all sorts is only the exercise of Personal Qualities. And all Economists since Smith expressly include Personal Qualities under the title of Wealth: because persons can make an income by their employment. J. B. Say, the French Economist, designated them as Immaterial Wealth, because they are Wealth, but not embodied in matter.

**General Rule of Roman Law that Rights are Wealth**

But there is yet another Order of Quantities quite distinct from the two preceding ones, which can be bought and sold, or exchanged, and whose Value can, therefore, be Measured in Money; and it is to this class of Quantities that I would request your earnest attention, because it is the one which chiefly concerns the Members of this Institute: and it is the one which modern Economists have the greatest difficulty in understanding.
Suppose that I pay a sum of Money into my account at my banker's, what becomes of that money? It becomes the absolute property of the banker, to deal with it in any way he pleases. I transfer the property in the Money to the banker. But I do not make him a present of the money. I get something in exchange for it. And what is that something? In exchange for the Money the banker gives me a Credit in his books, which is a **Right of Action** to demand an equivalent sum of Money from him at any time I please. Furthermore, the banker agrees that I shall have the right to transfer this Right of Action, in the form of a Bank Note or Cheque, to any one else I please; and the person to whom I transfer it may transfer it to anyone else he pleases; and so this Right of Action may pass through any number of hands, and effect any number of exchanges, exactly like an equal sum of Money.

Now this **Right of Action** is termed a Credit; because any person who may choose to receive it in exchange for goods or services knows well enough that it is not the Right to any specific sum of money: but it is only an abstract Right to demand a sum of money from the banker, and he only takes it in the confidence or belief that he can get money for it if he requires it.

It will be convenient to state here that this Right of Action is also in Law and common usage termed a Debt; and that the words Credit and Debt are used perfectly indiscriminately to mean the Creditor's Right of Action to demand a sum of money from his Debtor: the reason for this will be explained in a subsequent lecture. And this Right of Action, Credit or Debt, is the price the banker pays for the money.

Similarly when a merchant sells goods "on Credit," as it is technically termed, to a trader, he cedes the property in the goods to the trader, exactly as if he had sold them for Money. And in exchange for the goods he receives a Right of Action to demand their price in money, three months perhaps, after date. And if this Right of Action is recorded on paper in the form of a Bill of Exchange it may be exchanged against other goods, and circulate in commerce exactly like an equal sum of money, until it is paid off and extinguished: and this **Right of Action** is also termed a Credit or a Debt: and it is the price the trader pays for the goods.

Again, suppose the Government has need of a sum of money.
for some public purpose, it "borrows" Money, as it is termed, from private persons. That Money becomes the actual property of the Government, which it expends as it pleases, and in exchange for it the Government gives to the "lenders" of the money the Right to demand a series of payments either for ever or for a limited series of years. These Rights are the Price which the Government pays for the Money. In popular language they are termed the Funds: and the owners of them may sell them to any one else they please. They are saleable Commodities.

Again, suppose a person wishes to subscribe to the Capital of a Commercial Company. He pays the money to the Company. The money becomes the absolute property of the Company as a whole, and not of any individual member of it. But in exchange for the Money the subscriber receives the Right to share in the profits to be made by the Company in the proportion in which he has subscribed to the Capital. These Rights are termed Shares, and are also saleable Commodities, which may be bought and sold like any material chattels.

So also when a trader has established a successful business, he has of course the Right to receive the future Profits to be made by the business. This Right to receive the future profits is a Property quite separate and distinct from and additional to the house or shop and actual goods in them. It is the product of labour, care, and thought, as much as any material chattel, and is part of the trader’s assets, and is termed the **Goodwill** of the business.

An instance of this may interest you. Boswell tells us that Thrale, the great brewer, appointed Johnson 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 buttonhole like an exciseman, and on being asked what he considered the Value of the Property to be disposed of, he answered, "We are not here to sell a parcel of vats and boilers, but the **Potentiality** of growing rich beyond the dreams of avarice." The sum realized was, we are told, £180,000; and the latter phrase was merely Johnsonese for the goodwill of the business.

When the great banking house of Jones, the business to the London and Westminster Bank, sold their papers that the sum paid for the goodwill was £500,000. And

Lloyd & Co.
in a similar way every place of business in the country has a goodwill of greater or less amount, which is a valuable commodity and an asset of the trader's, just as much as the stock of goods in the shop.

So when an author has published a successful work, the Right to multiply and sell copies of the work is a valuable Right, quite separate from the printed copies of the work, and this Right is termed Copyright; and it may be bought and sold like any material chattel. And Copyright includes not only the Right to print and sell material books, but also to dramatic and musical representations, and popular songs. It was said in the papers that the Copyright of the popular song, "Slap, bang! here we are again," sold for £2,000.

And so there are a vast variety of other Abstract Rights, such as Patents, Trade Secrets, a Professional Practice, and many others, which it would take you too long to enumerate, as on the present occasion I only wish to draw your attention to a distinct class of Exchangeable Quantities, and not to enumerate all the varieties of it.

Now all these Abstract Rights of various sorts can be bought and sold or exchanged. They can neither be seen nor handled; but they may be bought and sold; and their Value is measured in Money as exactly as if they were material chattels. Therefore they satisfy Aristotle's definition of wealth. They possess that Quality which we have agreed is the sole essence and principle of wealth; and therefore by the fundamental principle of Natural Philosophy they must all be classed under the term Wealth.

Now in the Pandects of Justinian, which you are doubtless aware is the great Code or Digest of Roman Law, and is the basis of all the existing Law on the Continent, and to a great extent that of Scotland, and whose doctrines on Credit have been recently adopted by Statute as the Law of England, it is laid down as a fundamental General Rule—

**Pecuniae nomines non solum numerata Pecunia, sed omnes Res tam soli quam mobiles, et tam Corpora quam Jura continentur**

Under the term Wealth not only ready money, but all things, both immovable and movable, corporeal and Rights are included.

So Ulpian, one of the most famous jurists, says:—

"Nomina eorum qui sub conditio vel in diem debent et emere..."
et vendere solemus. *Ha enim Res est quæ emi et venire potest*”

We are accustomed to buy and sell Debts payable at a certain event and on a certain day. For that is Wealth which can be bought and sold

So also—*Æque Bonis adnumerabitur eliam si quid est in Actionibus*

“Rights of Action are properly included under the term Goods”

Also “Rel appellatione et Causee et Jura continentur”

Under the term Property both Rights of Action and Rights are included

It is so important to understand clearly that a mere Abstract Right of Action, wholly severed from any specific money, is itself a vendible commodity, that I will venture to read one more passage—

Sir Patrick Colquhoun, in his Summary of Roman Law, says:—“The first requisite of the consensual contract of *emptio et venditio* is a Merx or object to be transferred from the buyer to the seller: and the first great requirement is that it should be *in commercio*—that is, capable of being freely bought and sold. Supposing such to be the case, it matters not whether it is an immovable or a movable, corporeal or incorporeal, existent or non-existent, certain or uncertain, the property of the vendor or another; thus a horse or a Right of Action, &c.

Thus it is clearly seen that Abstract Rights of various sorts, including Rights of Action, which are called Credit or Debts in Law, Commerce and Economics, are expressly included under the terms Pecunia (Wealth), Res (Property), Bona (Goods), and Merx (Merchandise), in Roman Law

For nearly 500 years after Constantine removed the seat of Government from Rome to Constantinople, the language of the Court was Latin, but the people were Greek: consequently, though Latin was the official language, it was unintelligible to the mass of the people. The great Code of Roman Law, termed the Pandects, was published in Latin in 580 A.D., but all the pleadings in the Courts were carried on in Greek. The Pandects soon fell into desuetude. The Latin Institutes of Justinian did not hold their ground in the

*Curriculum of legal education for*
more than ten years. They were superseded by Greek treatises, translations, and compilations. At last, in the tenth century, all the Pandects, Institutes, and legislation of Justinian were set aside as obsolete. A new, or revised Code or Digest, was published in Greek, termed the Basilica, which thenceforth became the Law of the Eastern Empire, and has since remained the Common Law of all the Greek population in the East, and is the Common Law of the modern kingdom of Greece.

And in the Basilica the Roman Definition of Wealth is retained

τὸ ὄνομα τῶν χρημάτων οἱ μόνον τὰ χρήματα, ἀλλὰ πάντα τὰ κινητά καὶ ἀκινητά, καὶ τὰ σωματικά καὶ τὰ Δικαία δηλοῦται

Under the terms χρήματα or Wealth, Rights are included

Also — τῇ τοῦ Πράγματος προσγορία καὶ Αἰτία καὶ Δίκαια περιέχεται

Under the term Chattels both Rights of Action and Rights are included

In Greek Law these Rights are also included under the terms Αγαθά (Goods), Περιουσία (Estate), and Ἀφορμή (Capital)

Thus I have shown you that all ancient Jurists include abstract Rights, such as Rights of Action, under the term Wealth, Goods and Chattels, Property and Merchandise. But the subject is of such great importance, and is so little understood by lay writers, that I must say a few more words on it.

It is exactly the same in every system of Jurisprudence. Thus Blackstone says—

"For it is to be understood that in our Law Chattels (or Goods and Chattels) is a term used to express any Property which having regard either to its subject matter or the quantity of interest therein is not freehold.

"Property or Chattels Personal may be either in possession or else in action. . . . . Property in Action [i.e., Rights of Action, such as Credits or Debts], is where a man has not the enjoyment either actual or constructive of the thing in question, but merely the Right to receive it by a suit or action at law."

Thus all such Property as Debts, Bank Notes, Bills of Exchange, the Funds, Shares in Commercial Companies, Copyrights, Patents, and other Rights are termed "Goods and Chattels" in English Law just as much as any material chattels.
As the business of Banking essentially consists in buying and selling Debts, it may be as well to familiarise the minds of banking students somewhat more with the idea that Debts are Goods and Chattels.

Thus an old text writer says:—"All kinds of emblements, sown and growing, grass cut, all money, plate, gold, silver, jewels, utensils, household stuff, Debts, wood cut, wares in a shop, tools and instruments of work, wares, merchandise, carts, ploughs, coaches, saddles and the like: all kinds of cattle, as horses, oxen, kine, &c., &c., are to be included as Chattels.

All Right of Action to any Personal Action is a Chattel.

So in a well-known case, Parker, L.C.B., said:—"But Goods and Chattels include Debts . . . Things in action are considered as Goods and Chattels.

And Lord Chancellor Hardwicke said:—"Choses in Action [i.e., Debts] are properly within the description Goods and Chattels."

I need not multiply quotations: in fact, those which I have already given are chiefly for the benefit of lay readers: because it is one of the most elementary principles of Mercantile Law, clearly explained and enforced by all jurists, that a simple abstract Right of Action or Credit or Debt, is included under the terms Goods and Chattels, Merchandise, or a Vendible Commodity. And that a Right of Action can be bought and sold, or exchanged, exactly like any material chattel. And when this conception is clearly grasped, the whole difficulty which is sometimes supposed to envelope the business of Banking, vanishes; because the business of Banking consists in Creating, Buying and Selling, or Transferring, and Extinguishing that species of Goods and Chattels, Merchandise or Commodities, termed Debts.

It is thus seen that the ancients possessed the true scientific instinct. They fixed upon a Single General Quality as the sole essence and principle of Wealth—namely, Exchangeability—or the capability of being bought and sold. They then searched for and discovered all the different orders of Quantities which can be bought and sold, or exchanged, or whose Value can be measured in Money, and they expressly classed them under the
terms Wealth, Merchandise, and Goods and Chattels. They found that there are three, and only three, distinct orders of Quantities which can be bought and sold—namely (1), Material Commodities; (2), Labour; and (3), Abstract Rights. And reflection will show that there is nothing which can be bought and sold which is not of one of these three forms. And all commerce in its widest extent, and in all its forms and varieties, consists in the Exchanges of these three orders of Quantities; and as the Science of Wealth is the Science of the facts or phenomena relating to that Quality of things which constitutes them Wealth; and as it is agreed that Exchangeability is the sole Quality which constitutes things Wealth, it necessarily follows that the Science of Wealth can be nothing else than the Science of Exchanges, or of Commerce: or the Science which treats of the Laws which govern the varying relations of these diverse Quantities.

**Economics, or Commerce, consists of Six distinct kinds of Exchange**

The Science is now what is technically termed *complete*: that is, we know as a positive fact that we have discovered all the different kinds of Quantities it deals with. We know as a positive fact that there are no other orders of Exchangeable Quantities besides those already mentioned.

And there being *Three* orders of Exchangeable Quantities they can be exchanged in *Six* different ways—

1. A Material thing can be exchanged for a Material thing—as when gold money is exchanged for land, houses, corn, cattle, timber, &c.

2. A Material thing can be exchanged for Labour—as when wages are paid in gold money

3. A Material can be exchanged for Rights—as when gold money is exchanged for Bills of Exchange, the Funds, Copyright, &c.

4. One kind of Labour can be exchanged for another kind of Labour—as when persons agree to perform services for each other.

5. Labour can be exchanged for a Right—as when wages are paid in Bank Notes, Cheques, &c.
6. One Right can be exchanged for another Right—as when a banker buys a Bill of Exchange, which is one Right of action, by giving his customer a Credit on his books for it, which is another Right of action.

These six species of Exchange constitute Commerce in its widest extent, and in all its forms and varieties; and are the subject matter of the Science of Economics.

And the Science is called Economics because οἰκος in Greek means Property of every description: it is the term in Attic Law for a man's whole substance or estate, and includes not only lands, houses, cattle, money, &c., but also such property as Debts, Bank Notes, Bills of Exchange, Copyrights, Shares in Commercial Companies, the Funds, &c. Νόμος (nómoς) means a Law: consequently Economics is the Science which treats of all the Exchanges of different kinds of Property.

And of the General Science of Economics or Commerce, comprising six distinct species of Exchanges, the business of Banking consists of those numbered (3) and (6): for Banking consists exclusively in the Exchange of Money for Credit, and of Credit for Credit.

**Economics is a Physical Science**

And any person whatever possessed of the slightest feeling for Mathematical and Physical Science can at once perceive that we have here a great Mathematical and Physical Science. Because we have seen that a Physical Science is a body of facts or phenomena all based upon a single central idea or Quality; and the object of the Science is to determine the Laws which govern the Numerical Relations of the Quantities it deals with.

Now here we have a distinct body of phenomena, or facts, all based upon a single central idea, Exchangeability—and therefore it is fitted to form a great demonstrative Science of the same rank as Mechanics or Optics, or any other Physical Science. Another great body of particular facts is won from the vague, floating, and uncertain mass of knowledge, and circumscribed by a definition; and formed into a great Inductive Science, whose investigations must be governed by the same general principles of Inductive Logic as all other sciences are; and yet it will be found to contribute its own quota to Inductive Logic: bearing a general
similarity to its sister sciences, and yet with peculiarities of its own.

We have seen that there are three distinct orders of Exchangeable Quantities, and six distinct kinds of exchanges: and the object of the science is to discover the Laws of the phenomena of these exchanges: that is, the changes in the numerical relations of these Exchangeable Quantities. We have thus a new order of Variable Quantities: and by the general principles of Natural Philosophy the laws which govern the variable relations of Economic Quantities must be strictly in conformity with the Laws which govern the relations of Variable Quantities in general. The same general principles of reasoning which govern the varying relations of the stars in their courses must govern the varying relations of Economic Quantities. Hence we have a body of phenomena susceptible of the strictest mathematical treatment, which I shall designate as the great Science of Analytical Economics.

*Economic Science is the most complicated branch of Human Knowledge*

And it must be understood that Economic Science is the profoundest and most complicated branch of human knowledge, and requires a greater variety of knowledge than any other.

(1.) It deals with Property of every description and in all its forms; consequently a profound knowledge of the Laws of Property, and especially of Mercantile Law, is absolutely indispensable to enable a person to perceive and recognise the existence of the various Quantities with which the Science deals.

(2.) It deals with all the Exchanges of Property; and consequently a thorough and profound knowledge of Commerce in all its branches is necessary to enable us to understand the great Mechanism of Exchanges.

(3.) A profound knowledge of Mathematics and Physical Science, and of the methods and principles by which the various Physical Sciences have been constructed, is necessary to enable a person to express the Laws which govern the varying relations of Economic Quantities in strict harmony and analogy with the Laws of the other Physical Sciences.

At the present stage of Economics it is not possible to turn a
sentence on it without a knowledge of the profoundest and subtest principles of Mercantile Law; of the mechanism of commerce, and of the Laws of Mathematics and Natural Philosophy. Among other things I may mention that the perplexities and subtleties of the Theory of Credit can only be unravelled by principles of Algebra which have only been clearly understood by Mathematicians themselves within the last fifty years. In fact Economics could not possibly have been erected into a great Inductive Science until Mathematicians had perfected the general Theory of Variable Quantities, and the Theory of Algebraical Signs.

Economics is the noblest and the grandest creation of the human intellect. It is the crown and the glory of the Baconian Philosophy. No one can thoroughly realise the awful sublimity of the genius of Bacon until he studies Economics; because it is the literal realisation of his matchless discovery that the same principles of Mathematical and Physical Science which govern the phenomena of nature equally govern the practical business of life.

"Time’s noblest offspring is its last."

Economics is now clearly seen to be a Physical Science: but it is also a Moral Science: because it is based upon the mores, the wants, desires, and demands of men. We find that the same general Laws of Exchange hold good among all nations, among the rudest and the most civilised in all ages and countries. The principles of Commerce are absolutely uniform throughout the world. The same causes are invariably followed by the same effects: and that is the reason why Economics may be raised to the rank of an exact science: a permanent and universal science of the same nature as the Physical ones: because it is based upon principles of human nature which are as permanent and universal as those of physical substances upon which the Physical Sciences are based. And therefore it is a Physical Moral Science, and the only Moral Science which is capable of being raised to the rank of an exact science.

Conclusion

It does not enter into the purpose of these lectures to give a history of the rise and progress of Economical ideas in modern times, but only to give an account of that system to which the
latest and the most eminent and advanced Economists have declared their adhesion. I will only say that the expression by which the science of Political Economy is usually designated—namely, the "Production, Distribution and Consumption of Wealth," or some variation of it, was expressly defined and explained by the persons who originated it, to mean the Commerce of the Exchange of the **Material** products of the earth, and those only. The first school of Economists in modern times expressly excluded Labour and Rights from the term Wealth. But since then two successive schools of Economists have enlarged and expanded the science, until at last it has attained the generality and simplicity to which ancient writers had brought it. For the latest and most advanced Economists now acknowledge and adopt Aristotle's definition of Wealth as the true one. They are now agreed that Exchangeability is the sole essence and principle of Wealth; and consequently that everything whatever which is Exchangeable, or which even can be bought and sold, must be included under the technical term of Wealth, whatever its nature may be; and as a necessary consequence, that the Science of Economics is simply the scientific **Principles and Mechanism of Commerce in its widest extent and in all its forms and varieties.**
LECTURE II

ON PROPERTY — VALUE — MONEY AND CREDIT — CAPITAL

On the meaning of the word Property

In the preceding Lecture I have shewn you that there are three
distinct classes of Exchangeable Quantities (1) Material Things;
(2) Labour or Services; (3) Abstract Rights; and that all
Commerce consists in the Exchanges of these Three orders of
Quantities

But we want a General Term to comprehend all these distinct
orders of Quantities; and this general term we shall find in the
word Property: and when we understand the true meaning of
the word Property, it will throw a blaze of light over the
whole science of Economics: and clear up all difficulties to which
the word Wealth has given rise: in fact, the meaning of the word
Property is the key to all Economics

Most persons when they hear the word Property think of
some material thing, such as Lands, Houses, Money, Corn,
Cattle, &c. But that is not the true and original meaning of the
word Property

Property in its true and original meaning is not any material
substance, but the Absolute Right or Ownership in
something

Like most other words in this subject we can only ascertain its
true meaning by going back to the Latin

In ancient Rome all the possessions of a family belonged to the
family as a whole; but the head of the family, or the Dominus,
alone exercised all Right over them. Hence this Right was
called *Dominium*: and *Dominium* is always used in Roman Law to mean absolute **Ownership**

In process of time, however, this extreme rigour of Roman Law was relaxed; and in some cases individual members of the family were allowed to acquire rights over possessions independently of the head of the family and its other members: and this **Right** was termed **Proprietas**. This word **Proprietas**, therefore, in Roman law invariably meant the absolute and exclusive **Right** which a person had to anything, independently of any one else. The word **Proprietas** was never used in Roman Law to mean a material substance, but only the absolute **Right** to it.

So also in English the word **Property** was always originally used to mean a **Right** and not a **Thing**. Thus grand old Wycliffe says:—“They will have **Property** of ghostly goods where no **Property** may be: and leave **Property** in worldly goods where Christian men may have **Property**”

Bacon invariably uses the word **Property** to mean a **Right** and not a **Thing**. He says one of the uses of the **Law** “is to dispose of the **Property** of their goods and chattels.” He explains the various methods by which “**Property** in goods and chattels may be acquired,” and so in many other passages.

**Property**, then, in its true and original sense means solely **Right**, **Title**, **Interest**, **Ownership**: and consequently to call material things, such as lands, houses, money, cattle, &c., **Property**, is as erroneous as to call them **Right**, **Title**, **Interest**, or **Ownership**. Neither Bacon, nor, so far as I am aware, does any writer of his period, ever call material things **Property**: such a use of the word is quite a modern corruption, and I cannot say when it began.

Every jurist knows that the true meaning of the word **Property** is a **Right**. Thus Erskine, one of the most eminent institutional writers of Scotland, says:—“The sovereign or real **Right** is that of **Property**, which is the **Right** of using and disposing a subject as our own, except in so far as we are restrained by law or practice.”

And this meaning of the word **Property** has been recognised by Economists as well as by jurists. Thus one of the most eminent of the Economists says:—“**Property** is nothing but the **Right** to enjoy.” “It is seen that there is but one **Right** of **Property**:
that is a Right in a person, but which changes its name according to the nature of the object to which it is applied”

Thus Landed Property means Rights to land; house Property means Rights to houses; Funded Property means Rights to payments from the nation; Literary Property means Rights to the profits from works of literature, and so on.

**On Right of Property and Right of Possession**

But though all Property is a Right, all Rights are not Property. There is an essential distinction between the mere Right of Possession and the Right of Property.

Thus, where a man lends another his horse, or a book, or a picture: or delivers goods to him as a common carrier to be conveyed from one place to another: or deposits goods or valuables with him as a warehouseman for the mere purpose of being kept safely; and also in many other cases, such a person has the Right of Possession of the goods, and could bring an action against any one who wrongfully deprives him of their possession. But he has no Right to use the goods in any way except in the way, and for the specific purpose, for which they are delivered to him. He has therefore only a specific Right to them, but not the absolute ownership in them to deal with them in any way he pleases.

The word Property means absolute, entire, and exclusive ownership: it comprehends the Right of possessing, the Right of using the thing in any way the Proprietor pleases; the Right of appropriating any fruit or profit from it; the Right of alienating it or destroying it; and the Right of reclaiming it if found in the wrongful possession of any one else.

The word Property, or Dominion, therefore does not mean a single Right, but an aggregate or bundle of Rights: it comprehends the Totality of Rights which can be exercised over anything.

**On the Distinction between Rights to Things (Jura in rem) and Rights against Persons (Jura in personam).**

Having thus clearly explained to you that the word Property means a Right and not a Material Thing, the next point to be
observed is that Property or Rights are divided into two totally
distinct classes.

1. A person may have the Property or Right to some specific
material, chattel, such as land, houses, money, jewelry, corn,
cattle, timber, &c., &c., without being related to any one else.
This kind of Property or right is called in Roman Law a *Jus in*
*rem*, or a Right to a Thing. And when a person has such a sole
and exclusive Right in any chattel, he may sell or transfer the
Right or Property in it to any one else he pleases. Such a Right,
is termed a Real or Corporeal Right or Property, because it is
the Right or Property in some specific substance.

2. But a person may also have the Right to compel another
person to pay him something or to do him some service. As for
instance when a person has the Right to demand a sum of money
from some one else at a fixed time. When such a relation exists be-
tween two persons, the one who has the Right to demand the sum
of money is termed the Creditor, and the person whose Duty is to
pay it is termed the Debtor, and the relation or bond between the
two persons is termed a Contract or Obligation. In such a
case the Creditor has only the abstract Right of action against the
Person of the Debtor to compel him to pay a sum of money;
but he has no Right to any particular sum of money in the
Debtor's possession; and in fact the Right of the Creditor
against the Debtor exists whether the Debtor has any money
or not.

Such a Right as this is termed a Right against a Person,
or a *Jus in personam*, and it may be called a **Personal
Right**, because it is a mere abstract Right against a person,
but it is wholly severed from any specific material chattel.
It is also called a Roman and English Law **Incorporeal
Property**.

In my preceding lecture I have already shown you that there
are many other kinds of Incorporeal Property, which I need not
enumerate again here.

But both these classes of Rights or Property can be bought and
sold or exchanged. The Value of each class of Right can be equally
measured in Money, and therefore they are termed Pecunia, Bona,
Res, Merx, in Roman Law; τοικός, χρήματα, ἀγαθά, ἀφορμή in
Greek Law; Goods and Chattels, Merchandise, or Vendible Com-
modities in English Law; and therefore **Wealth** in Economics.
On the Meaning of Persona in Roman Law.

I have just said that one class of Rights consists of Rights against Persons. It will be very useful to understand clearly the meaning of *Persona* in Roman Law.

The word *Persona* means any single Person or any society of Persons who can enjoy and exercise Rights. In a partnership each individual member is a *persona*, and also the partnership itself is a *Persona*, quite separate and distinct from its individual members. Each member of the partnership can have dealings with, and buy and sell with it as a separate individual.

So a Joint Stock Company is a *Persona*, and the individual members trade with it as a distinct Person. A shareholder in a Joint Stock Bank banks with the bank as a separate person.

So the State is a *Persona*, separate and distinct from each citizen, and private persons lend money to the State, and receive or exchange for it Rights to demand a series of annual payments.

The parson of a parish is the *Persona* or person who has the right to receive certain dues for performing religious services.

Thus a *Persona* may be defined to be a centre of Rights. Many individual men may make up one *Persona*, and also a single individual may be several *Personae*. A man may be executor of one person, guardian of another, trustee of another; in each of these he is a separate *Persona* or character, with a distinct set of Rights and Duties; and he may traffic and buy and sell with himself in these separate *Personae* or characters. Hence all exchanges take place between separate *Personae*, and all exchanges are of Rights against Rights.

*Economics is the Science which treats of the Exchanges of Rights.*

Several eminent Jurists have observed that Jurisprudence is the Science of Rights. It consists in ascertaining, defining and protecting Rights. Ortolan observes that Jurisprudence has nothing to do with the *Things* themselves, but only with the Rights to them; and Lord MacKenzie says:—*"Natural Philosophy*
considers according to their physical properties Law regards them as the objects of Rights.

And as Jurisprudence treats exclusively about Rights, Economics is the Science which treats exclusively about the Exchanges of Rights, and not the Exchanges of Things.

Thus, when we exchange so much Money for so much Corn we exchange the Property or the Absolute Right to so much Money against the Property or the Absolute Right to so much Corn; and so on in all cases of Exchange: they consist exclusively in the Exchanges of Rights.

And as there are Three orders of Rights it follows that they can be exchanged in Six different ways.

1. The Right or Property in a Material Thing can be exchanged against the Right or Property in another Material Thing—as when the Right to so much Gold is exchanged against the Right to so much Corn.

2. The Right to a Material Thing may be exchanged against the Right to demand so much Labour or Service.

3. The Right to a Material Thing may be exchanged against the Right to have something paid or done at a future time—as a right to so much Gold may be exchanged against a Right to demand a sum at a future time.

4. The Right to one species of service may be exchanged against the Right to another species of service.

5. The Right to a certain amount of Labour may be exchanged against the right to demand money—as when Labour is paid for by a Bank Note, Cheque, or Bill of Exchange.

6. One Right of action may be exchanged against another Right of action—as when a Banker buys one Right of action, such as a Bill of Exchange given in exchange for it is Credit on his books, which is another Right of action.

There are many kinds of Corporeal Property, and many kinds of Incorporeal Property, but the only kind of Corporeal Property we are concerned with in the present course, is Money; that is the Property or absolute ownership in certain pieces of coin: and the only species of Incorporeal Property is the Right to demand a sum of Money: and this Right to demand a sum of money is termed a Credit or a Debt.

And the business of Banking consists exclusively in the exchanges of the Right or Property in Money for the Right to
demand Money; and also in the exchanges of one kind of a Right
to demand money for another kind of Right to demand money

On Value

Having now explained the nature of, and enumerated all the
different species of Quantities Economics deal with, the next
point, is to consider the Laws of their relations, and this is termed
the Theory of Value. And this indeed comprehends the whole
science of Economics. But on the present occasion I do not
intend to investigate the whole of this extensive subject. It is
however, indispensable to consider some portions of it

The complete Theory of Value comprehends (1) the Definition
of Value, (2) the Origin or Cause of Value, and (3) the General
Law of Value, or the great General Law which governs the
exchangeable relations of all the different kinds of Economic
Quantities. At present it is only necessary to say something on
the Definition of Value, and on the Cause or Origin of Value

What then is Value? The answer to this is obvious. Value
in its original and true sense is a Desire of the Mind: it means
Esteem or Estimation. As Gloster says in Lear: “In the
division of the kingdom it appears not which of the Dukes he
Values most”

So Trollus says, in Troilus and Cressida:

“For what is sought but as 't is Valued?”

So Henry Esmond says: “There is some particular prize we all
of us Value, and that every man of spirit will venture his life
for.”

So J. B. Say says: “Value is a Moral Quality”

And the same meaning occurs in countless hosts of other
instances, too numerous to mention

But such Value is not an Economic phenomenon: Economics
is the science of Exchanges; and consequently to bring Value
into Economics it must be manifested in some tangible form. A
person must manifest his Desire, Demand, or Value for
something else by giving something in exchange for it to acquire
possession of it

But as one person cannot gain possession of what another person
possesses without giving him something in exchange for it which heDesires, Demands, and Values, it is evident that for an Exchange to take place, it Requires the Concurrence of two Minds.

It is not sufficient that the Demand or Value should exist on one side only. If one person desires to obtain possession of what another person possesses it is not sufficient to constitute a phenomenon of Value, or an Exchange, that he alone should desire it. He must offer in exchange for it something which that other person Desires or Demands. If a person brought a cargo of wine among a nation of teetotallers, no one would Desire or Demand the wine; among such a people it would have no Value: so among a nation of non-smokers tobacco would have no Value: among a nation of vegetarians beef and mutton would have no Value. However much a person might wish to sell his product, if no one would buy it, it would have no Value. For an Exchange or a phenomenon of Value to take place, there must be the Reciprocal Desire or Demand of Two persons, each for the product of the other.

When however two persons each Desire or Demand to obtain the product of the other: and when they agree to exchange their respective products: each Product may be considered as the Desire of its owner to obtain possession of the product of the other. The two products therefore, reciprocally measure the Desire of their possessors to obtain the product of the other. And when these persons have agreed upon the Quantities of their products which are to be exchanged, the two products are said to be of Equal Value. Each product is the Value or the Demand for the other: and this is the only kind of Value with which Economics is concerned.

Hence it is perfectly obvious that in every Exchange or phenomenon of Value there must necessarily be two Demands and two Quantities. And also that the true Origin or Cause of Value is Reciprocal Demand.

Thus let A and B be any two Economic Quantities which are exchanged at any instant: then we may say—

A valet B
or A is of the Value of B
or A = B
Then B is termed the Value of A in terms of B: and A is the Value of B in terms of A.

Thus Aristotle says—ν' δ' ἀξιά λέγεται πρὸς τὰ ἐκτὸς ἄγαθα.

Now the term Value is used in reference to external things.

So it is said in Roman Law—

*Res tanti Valet quanti Vendit potest*: The Value of a thing is what it can be sold for.

The Greek word for Value, ἀξια, is derived from ἀγαθος, one of whose meanings is to weigh, or be of the weight of. Hence ἀξια always meant equality, *Weight for Weight*: as when two Quantities are put into a balance, and are of equal weight.

Thus Morocco says in the *Merchant of Venice*:

"Pause, Morocco,
And Weigh thy Value with an even hand."

So le Trosne, one of the most eminent of the first school of modern Economists says that Value is a new quality which products acquire when men live in society.

"Products acquire in the social state which arises from the community of men among each other, a new Quality. This Quality is Value, which makes products become Wealth.

"Value consists in the Relation of Exchange, which takes place between such and such a product: between such a Quantity of one product, and such a Quantity of another."

We have then this Definition. The Value of any Economic Quantity is any other Economic Quantity for which it can be exchanged.

Hence Value is a Ratio or an Equation: and like Distance or an Equation, it necessarily requires two objects.

The value of a thing is always something external to itself. It is absolutely impossible to say that any Quantity has Value, without implying that it can be exchanged for something else: and of course everything that can be exchanged for it is its Value in that commodity. Hence any Economic Quantity has as many Values as Quantities it can be exchanged for, and if it can be exchanged for nothing it has no Value.

Hence a single object cannot have value: a single object cannot be Distant, and cannot be Equal. If any object is said to be Distant or Equal we must ask: Distant from what? or Equal
to what? So if any quantity is said to have Value we must ask: *Value in what?* And as it is absurd to speak of Absolute or Intrinsic Distance, or absolute or intrinsic Equality, so it is equally absurd to speak of Absolute or Intrinsic Value.

But any Quantity may have Value in terms of the others. Suppose A is ten guineas, then with that money you can buy so many material things, so much corn, or clothes, or a watch, or any other, or so much instruction or amusement: or you may buy a Debt with it, such as a Bill of Exchange, or the Funds, or a Copyright, or any other Incorporeal Right. Each of these species of property is of the value of ten guineas, and therefore each of them is of equal value to the others.

The Value of the Money in the pockets of the public is the various products and services it can command: the value of the goods in the merchants and traders' warehouses is the Money in the pockets of the public.

The Value of a workman's Wages is the Wages he can earn: the value of a Professor's lectures is the fees paid by his students. The value of the Labour of the Advocate, the Physician, or the Engineer, is the income he earns.

The Value of an Incorporeal Right is the *Thing Promised* which may be demanded.

The Value of a £5 note is five sovereigns: the Value of a Postage Stamp is the carriage of a letter: the Value of a Railway Ticket is the journey: the Value of a Promise or pledge to cut a man's hair is the cutting of the hair: the Value of an Order to see the play is the seeing the play. The Value of an Order for bread, milk, wine, tea, &c., is the bread, the milk, the wine, the tea.

*On the Origin or Cause of Value*

Having thus shewn you that Value in its original sense means a Desire of the Mind, but that such a Desire does not enter into Economics until it takes the active form of an Exchange of two Quantities, and that each of the Quantities so exchanged is the Value of the other, I must next say a few words on the origin or Cause of Value. I need not say that this is of the greatest importance, and is at the root of all Economics, and all theories of Wealth.
Now when we are searching for the Origin or Cause of Value, we are not to consider anything which is sometimes associated with Value, and sometimes not; but we are to search for that Single Cause which is uniformly associated with Value in all cases, and without any exception. We must first make a catalogue of all the kinds of things which have Value, and then search for that **Single General Cause** which is common to all these different Quantities; which, when it is present, Value is present: which, when it decreases, Value decreases; and which, when it is absent, Value is absent.

Now Aristotle and all ancient writers unanimously shew that **Demand** is the Origin and Cause of Value: and considering that they held **Exchangeability** to be the sole essence and principle of Wealth, it could not be otherwise. Because if a thing is to be Exchangeable there must be a Demand for it. Aristotle over and over again points out that ἄξονα or Demand is the Cause of all Value. You will remember that the ancient writer whose dialogue I quoted in my preceding lecture, expressly pointed out that it is Demand which is the sole Cause which constitutes a thing Wealth: that anything, whatever its nature may be, is Wealth so long as it is Demanded and paid for: and that a thing ceased to be Wealth when it ceased to be Demanded. He pointed out that the local Money of different places was only Wealth when it had the Power of Purchasing: and was not Wealth in other places, where it had no Power of Purchasing.

In fact I pointed out to you that the true meaning of the word ἄξονα, which is one of the most common terms in Greek for Wealth, means simply "**Anything that is Wanted and Demanded**": and that when anything is not wanted and demanded it is not Wealth.

The very same doctrine is laid down in Roman Law. It is there said that anything is Wealth which can be bought and sold, or which is Exchangeable: and for that reason, they class mere Abstract Rights, not associated with any material substance, under the term **Pecunia, Wealth**, because they can be bought and sold.

It was exactly the same with the most eminent of the early Economists of modern times. Boisguillebert, the morning star of modern Economists, says that Demand is the principle of all Wealth. So the first school of Economists, the Physiocrates of France, made Wealth to consist exclusively of those things which
are brought into Commerce and exchanged. They defined Value to be the ratio of Exchange of any two Quantities.

The Italian Economists are very clear and consistent in shewing that human Wants and Desires are the Cause of all Value. Genovesi points out that all the Italian words for Value are words of relation, and not absolute, and that they are not applied to Intrinsic Qualities. Nothing has Value when there are no men: men, however, do not give Value to things in services, unless they want them. Hence our Wants are the first source of the Value of all things, and Price is the power to satisfy our wants: and after clearly enforcing this, he says, *Value is the Child of Demand*.

So Beccaria says—"Value is a substance which measures the estimation in which men hold things".

So another of the most distinguished Italian Economists, Verri, shews that it is the wants of men which give rise to commerce, and as their Ideas and Wants increase, so does Commerce increase. Desire or Demand, incites man to commerce; Commerce requires Demand and abundance: desire for the merchandise sought, and abundance to give in exchange for it. They then require something to ascertain the Equality between what they give, and what they receive. Value is a word which denotes the Estimation which men make of a thing.

Condillac, the head of the most modern school of Economists, is also very clear and explicit on this point. He says—"This esteem is what is called Value." "Since the Value of things is founded on the Want of them, or the Demand, it is natural that a Want more strongly felt gives things a greater Value, and a Want less felt gives them less Value."

All this is so obvious that it might seem superfluous to dwell upon it: but unfortunately English Economics has been overrun and infested with another doctrine. Locke, as far as I am aware, originated the notion that all Value is founded upon Labour. In a long and eloquent passage, which I regret is far too long to read to you, he maintains that the Value of everything is just the Quantity of Labour which has been spent on producing it. He maintains that the Value of all Land and of all its products is due entirely to Labour. To which the obvious answer is that if there were no people to demand the products of the land they could have no Value.

It is often supposed that Smith was the first to demonstrate
that Labour is the cause of all Value and of all Wealth; and certainly in the beginning of his work he seems to make all Wealth the produce of "Land and Labour," but those who follow him in maintaining this doctrine have quite overlooked the fact that in a subsequent part of his work he says that if a guinea, which is undoubtedly the produce of Land and Labour, would exchange for nothing, it would have no Value: so that after all he comes back to Exchangeability as the true essence of Value and Wealth. And in the latter part of his work he expressly classes Bank Notes and Bills of Exchange under the term Circulating Capital. Now Bank Notes and Bills of Exchange are merely Rights of Action recorded on paper. And how are Rights of Action the produce of "Land and Labour?" It is quite clear that they owe their Value simply to their being exchangeable.

Ricardo maintained that all Value is due to Labour: and that where there is no Labour there can be no Value. McCulloch, who is the devotee of Ricardo, says: "An object which may be appropriated or adapted to our use without any voluntary Labour on our part may be of the highest utility, but as it is the free gift of nature it is quite impossible it can have the smallest Value. "In its natural state matter is very rarely possessed of any immediate or direct utility, and is always destitute of Value. It is only through the Labour expended on its appropriation, and in filling and preparing it for being used, that matter acquires Exchangeable Value, and becomes Wealth."

Thus you see that in this passage McCulloch distinctly asserts that all Value is due to Labour, but in another passage the very same McCulloch says "Demand may therefore be considered as the ultimate Source or Origin of both Exchangeable and Real Value: for the desire of individuals to possess themselves of articles, or rather the Demand for them originating in that desire, is the sole cause of their being produced or appropriated".

I need not quote any more writers, because it is not my purpose to controvert particular writers, but to point out fallacies which are deeply rooted in the public mind. Now, it is an undoubted fact that it is very commonly supposed that Labour is the sole source of Wealth and Value; but I have shewn that the very writers to whom this doctrine is chiefly due have contradicted themselves: and while in one part of their work they maintain that Labour is the cause of all Value, in another part they admit that Demand is the real cause of all Value.
Now, it is utterly impossible to stir a single step on this subject until this contradiction is cleared up, and we determine whether Labour or Exchangeability, i.e., Demand, is the Cause of Value.

I must now take a few examples. The simple land upon which a great city is built has enormous Value. Land in the centre of London frequently sells at the rate of £1,000,000 an acre. Where is the Labour there?

As we recede from the centre the Value of Land diminishes: at Charing Cross it is much less than in the City; and at Kensington much less than at Charing Cross. Moreover, Land in the same locality has very different Values: a frontage in a main thoroughfare like Regent Street, Fleet Street, Cheapside or Cornhill is of much greater Value than an equal space of ground in a back street.

How are these differences of Value due to differences of Labour, when, as we have seen, there has been no Labour at all bestowed on the Land?

As the tide of population, fashion and wealth flows towards a locality the ground on it rises rapidly in Value: when the tide of population, fashion and wealth deserts a place, the ground falls rapidly in Value. How are these changes in the Value of Land due to variations in Labour?

The ground in the centre of London, Paris, Berlin, Vienna, and other cities has enormous Value. There are other places now desolate and lonely which were once the sites of great cities. When the chariots and the horsemen were pouring forth in multitudes from the hundred-gated Thebes the land in it assuredly had great Value. So with Memphis, Nineveh, Babylon, and numberless other places. Where is their Value now? Yet the ground remains exactly the same as ever it was. If London, Paris, Berlin, and Vienna should become as Babylon and Nineveh are to-day, where would the Value of the land be? When the future Belzoni or Layard comes from New Zealand to sketch the ruins of St. Paul's from a broken arch of London Bridge, will the ground near what was once the Royal Exchange sell for £70 the square foot.

To take a few other instances. It is quite common in the Midland Counties of England for a fine oak tree to sell for £60 or £100 as it stands in the ground. How is its Value due to Human Labour?
So cattle, herds, and flocks of all sorts. They increase and multiply by the agency of nature. How is their Value due to Human Labour?

Some time ago a large whale was stranded on the shore of the Firth of Forth: it was sold, as it lay on the beach, for £70. No human being touched it: how was its Value due to Human Labour?

Some time ago, when it was the fashion of European ladies to pile huge masses of hair, termed Chignons, upon their heads, in imitation of their swarthy sisters of Central Africa, it was quite common for a girl's fine head of hair to sell for £5: Was the Value of the girl's hair due to Labour?

Now I have only selected a very few examples out of countless multitudes which your own experience will suggest to you to shew the entire fallacy of the doctrine that all Value is due to Labour.

Now, by the fundamental Laws of Philosophy if it could be shewn that there was a single case of Value not due to Labour that would be sufficient to overthrow the doctrine that all Value is due to Labour, or that Labour is necessary to Value. But instead of a single instance, there are multitudes—in fact, not to detain you too long, I have no hesitation in asserting that not 20 per cent. of valuable things have any Labour associated with them at all.

Now the bearing of this on our present subject is obvious. Suppose that I were the fortunate possessor of a £1,000 note of the Royal Bank, or of the Commercial Bank: have those notes no value? Are they the product of Land and Labour? If it is laid down as an absolute doctrine that all Value proceeds from Labour, how could the notes of these or any other Bank have any value? And yet I think that your President, and that my highly esteemed friend, Mr. Kincaid Mackenzie, if I were to go about saying that the Notes of the Royal Bank and the Commercial Bank had no value, would look at me as black as thunder. Mill himself says that an Order or a Note of Hand, so long as the Credit of the issuer is sound, is of the same Value as Gold.

The fact is, that so long as ideas of Value are mixed up with and founded on Labour, the subject is plunged into inextricable difficulties and contradictions. But as soon as we clearly adopt
Exchangeability as the sole test of value all difficulties and obscurities are cleared up and dispersed like a fog before the morning sun. A Bank Note or a Bill of Exchange has Value because it is exchangeable and will be paid in gold. And Money itself has Value only because it is exchangeable. In the dialogue I quoted in my first lecture the writer pointed out clearly that Money might be Wealth in some places and not in others; that it was only Wealth in those places in which it was exchangeable.

On the Error of the Expression Intrinsic Value

I must now say something about an expression which has been the source of enormous confusion in Economics; and which has especially obscured the Theory of Credit: and no progress can be made in the science until it is entirely exterminated.

All ancient writers clearly understood that the Value of a thing is something external to itself; and I have never found in them any trace of such a confusion of ideas as Intrinsic Value.

It is not easy to say when this unfortunate expression arose. But it came into use in this way. When people thought of Value they looked at some Quality of the thing as its Value. They then began to speak of Intrinsic Value. So long ago as 1696 an able writer, Barbon, pointed out the confusion which had arisen from mistaking the absolute Qualities of a thing for the Quantity of things it would exchange for.

But, unfortunately, Smith is the principal author of the confusion on the subject in modern times. He begins by defining the Value of a thing to be something else it will exchange for, and therefore something External to itself: and then he suddenly changes his ideas of Value to the Quantity of Labour expended upon obtaining the thing itself. Thus the Quantity of Labour necessary to produce anything came to be considered Value: and Value came to be called Intrinsic. This unhappy phrase, Intrinsic Value, meets us at every turn in Economics: and yet the slightest reflection will show that to define Value to be something External to a thing, and then to be constantly speaking of Intrinsic Value, are self-contradictory and inconsistent ideas.

Thus over and over again it is repeated in Economical treatises that Money has Intrinsic Value: but that a Bank Note is only the Representative of Value.
Money, no doubt, is the produce of Labour: but Smith himself says that if Money would exchange for nothing it would have no Value: so that after all he comes back to Exchangeability as the real essence of Value. How, then, can the Value of Money be Intrinsic? How can anything have Intrinsic Value unless it has the things it will exchange for inside itself? Money will exchange for lands, houses, corn, carriages, &c., &c., and each of these is a Value of the Money: but which of these is its Intrinsic Value?

Money remains exactly the same wherever it may be placed: a hogshead full of sovereigns would have immense Value in the middle of London: but if a man had them in the midst of the ocean, or on a desert island, where would their value be?

I have just shewn that the key to the solution of the whole difficulty lies in adopting Exchangeability and not Labour as the real essence and principle of Value: and that Money and Bank Notes have Value for exactly the same reason and no other.

The expression, Intrinsic Value, is so common that persons are apt to overlook its incongruity of ideas. It is, however, a plain contradiction in terms. It is to confound an Internal Quality with an External Relation. If we use words of similar import, whose meaning has not been so corrupted, its absurdity will be apparent at once. Thus, who ever heard of Intrinsic Distance? or of an Intrinsic Ratio? These expressions are manifestly absurd: but they are in no way more absurd than Intrinsic Value. If we speak of the Intrinsic Value of Money we may just as well speak of the Intrinsic Distance of Edinburgh Castle: or the Intrinsic Ratio of five. To say that Money has Intrinsic Value because it is material and the produce of Labour, is just as absurd as to say that a wooden yard measure is Intrinsic Distance, and that the space between two points a yard apart is Representative of Distance.

On Money and Credit

Having now explained the nature of Economic Quantities, and slightly touched upon the Laws of their relations, I now come to the consideration of those Economic Quantities which bankers exclusively deal in—namely, Money and Credit; and I must now explain their nature and uses.
We have abundant evidence that in the early ages of the world there was no such thing as Money. When persons traded they exchanged the products directly with each other.

Thus we have in the *Iliad*

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"From Lemnos' isle a numerous fleet had come,
Freighted with wine.
All the other Greeks
Hastened to purchase, some with brass, and some
With gleaming iron: some with hides,
Cattle, and slaves"
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This exchange of products against products is called Barter: and the inconvenience of this mode of trading is palpable. What haggling and bargaining it would require to determine how much leather should be given for how much wine! how many oxen or how many slaves! Some ingenious person would then discover that it would greatly facilitate traffic if the things to be exchanged could be referred to some common measure of Value. There are several passages in the *Iliad* and *Odyssey* which show that even while traffic had not advanced beyond barter, such a standard of reference was used. We find that various things were estimated as being worth so many oxen. Thus, in one place Pallas’s shield, the Ægis, had 100 tassels, each of the value of 100 oxen. In another place, Homer laughs at the folly of Glauclus, who exchanged his golden armour worth 100 oxen for the bronze armour of Diomed, worth 9 oxen. In another place, Achilles offers as a prize in the funeral games in honour of Patroclus, a large tripod, which the Greeks valued at 12 oxen, and to the loser a female slave, whom they valued at 4 oxen. But it must be observed that these oxen did not pass from hand to hand like money. The state of barter continued, as it is quite common at the present day to exchange goods according to their value in money, without any actual money being used. Such a state of things in no way implied the existence of money.

The necessity for money arises from a different cause. So long as the things exchanged were equal in value there would be no need for money. If it always happened that the exchanges of products and services were equal there would be an end of the transaction. But it would often happen that when one person required some product or service from some one else, that other person would not require an equivalent amount of product or service from him: or perhaps even none at all. If, then, a
transaction took place with such an unequal result, there would remain a certain amount of product or service due from the one to the other: and this would constitute a Debt—that is, a Right or Property would be created in the person of the one who had received the less amount of product to demand the balance due at some future time: and at the same time there would be the corresponding Duty created on the person of the other who had received the greater amount to render the balance due when required.

Now, among all nations and persons who exchange this result must inevitably happen: persons want something from others when those others want nothing, or not so much, from them. And it is easy to imagine the inconveniences which would arise if persons never could get anything they wanted unless the persons who could supply those things wanted something in return at the same time.

In process of time all nations hit upon this plan: they fixed upon some Material substance, which they agreed to make always exchangeable among themselves to represent the amount of Debt.

That is, if an unequal exchange takes place among persons, so leaving a balance due from the one to the other, the person who has received the greater amount of product or service gives a quantity of this Universally Exchangeable Merchandise to make up the balance, so that the person to whom the balance of product was due might get an Equivalent from some one else.

Suppose that a wine dealer wants bread from a baker: but the baker wants no wine, or not so much wine, from the wine dealer.

The wine dealer takes the bread from the baker, and gives him in exchange as much wine as he wants, and makes up the balance by giving him an amount of this generally exchangeable merchandise equivalent to the deficiency: or if the baker wants no wine at all, the wine dealer gives him the full equivalent of the bread in this merchandise.

The baker perhaps wants meat or shoes, but not wine. Having received this universally exchangeable merchandise from the wine dealer, he goes to the shoemaker or butcher, and obtains from them the equivalent of the bread he sold to the wine dealer. Hence the satisfaction which was due to him from the wine dealer is paid by the butcher or shoemaker.
This universally exchangeable Merchandise is called Money: and these circumstances shew its fundamental nature. Its function is to represent the Debts which arise from unequal exchanges among men: and to enable persons who have rendered services to others, and have received no equivalent for them, to obtain that satisfaction or equivalent from some one else.

Many different kinds of substances have been used for this purpose: but however different in their form, this is the universal want they supplied: and it is clear that the true nature of Money is to be a Right or Title to demand something to be paid or done by some one else.

Now when one person takes a piece of money in exchange for products or services he can neither eat it nor drink it, nor clothe himself with it: it is of no direct or absolute use to him in itself: its sole use is to be a Right or Title to demand some thing from some one else. At the same time it is not a Right or Title to any other specific thing. The person who takes Money in exchange for a product only does so because he believes or has confidence that he can exchange it away again for something he does want whenever he pleases. It is therefore what is called Credit.

Thus a London merchant, writing in the time of the Commonwealth, says, "Having now pointed out the inconvenience of these metals (Gold and Silver) in which the medium of commerce or Universal Credit hath formerly been placed. . . . Now that such Credit is as good as Money will appear if it be observed that Money itself is nothing else but a kind of Security, which men receive upon parting with their commodities, as a ground of Hope or Assurance that they shall be repaid in some other commodity."

So also Edmund Burke says of Gold and Silver, "The two great recognised species that represent the lasting conventional Credit of mankind."

Hence we obtain the fundamental Conception of Credit:

Credit is anything which is of no direct use in itself, but which is taken in exchange for products and services solely on the Belief or Confidence that we can exchange it away again for something we do want.

Credit is therefore the Right or Property of demanding something to be paid or done by some Person. It is not a
Right to any specific thing. It is only the Right to a future payment by some person: it must be carefully observed that Credit is the Name of a certain species of Right or Property.

Aristotle, the Physiocrates, Berkeley, Smith, Thornton, Mill, and Jurists have seen the true nature of Money

The subject of Money and Credit is of such fundamental importance, and so much misconception has prevailed respecting it, that I must shew you that a whole series of writers have seen the identical nature of Money and Credit.

Thus Aristotle says, “But with regard to a future exchange (if we want nothing at present, that it may take place when we do want something), Money is, at it were, our Security (σφαγεῖς).”

So an old pamphleteer, in 1710, saw the same truth. He says, “Trade found itself unsufferably straightened and perplexed for want of a specie of a complete intrinsic worth as the medium to supply the defect of exchanging, and to make good the balance where a nation, or a market, or a merchant demands of another a greater quantity of goods than either the buyer hath goods to answer, or the seller had occasion to take back.”

So the celebrated metaphysician, Bishop Berkeley, asks in his Querist—

Whether, other things being given as climate, soil, and the wealth be not proportioned to industry: and this to the circulation of Credit; be the Credit circulated by what Tokens, or Marks whatever?

Whether the true idea of Money, as such, be not altogether that of a Ticket or Counter?

Whether the terms Crown, Livre, Pound Sterling, are not to be considered as exponents or denominations: and whether Gold, Silver, and Paper are not Tickets and Counters for reckoning and recording and transferring such denominations?

Whether Power to command the Industry of others be not real Wealth? And whether Money be not in truth Tickets or Tokens for recording and conveying such Power?

Whether all Circulation be not alike a Circulation of Credit, whatsoever medium—Metal or Paper—is employed: and whether Gold be any more than Credit for so much Power?
Baudouin, one of the most eminent of the first school of modern Economists, says, "This coined Money in circulation is nothing but effective Titles on the general mass of useful and agreeable enjoyments which cause the well-being and propagation of the human race."

"It is a kind of Bill of Exchange or Order payable at the will of the bearer."

"Instead of taking the share in kind of all matters of subsistence, and all raw produce annually growing, the sovereign demands it in Money, the effective Title, the Order, the Bill of Exchange, &c."

So Smith says: "A guinea may be considered as a Bill for a certain Quantity of necessaries and conveniences upon all the tradesmen of the neighbourhood."

So Henry Thornton, the eminent banker, says: "Money of every kind is an Order for goods. It is so considered by the labourer when he receives it, and is almost instantly turned into money's worth. It is merely the instrument by which the purchaseable stock of the country is distributed with convenience and advantage among the several members of the community."

So Mill says: "The pounds or shillings which a person receives weekly or yearly are not what constitutes his income, they are a sort of Ticket or Counter, which he can present for payment at any shop he pleases, and which entitle him to receive a certain value of any commodity that he makes choice of. The farmer pays his labourers and his landlord in these Tickets, as the most convenient plan for himself and them."

It is so clearly understood that Money is nothing but the Right or Title to demand something to be paid or done, that many Jurists expressly class Money under Incorporeal Property. Thus Vulteius enumerates among Incorporeal Property: "Numerus in quo non materia ipsa, sed Valor attenditur." — "Money, in which not the Material is regarded but the value"

Gold and silver money may therefore be justly termed Metallic Credit.

I have thus shown you that writers of all classes, philosophers, Economists, practical men of business, and Jurists, are perfectly well agreed upon the fundamental nature of money. It represents Indebtedness; or services due to its owner which he can command at any time he pleases.
A great many different substances have been used by different nations to represent this universal want. The Hebrews, we know, used Silver: although no money was in use in the times of the Homeric poems copper bars or skewers were sometime afterwards used as Money in Greece, which were superseded by a silver coinage. The Æthiopians used carved pebbles: the Carthaginians leather discs with some mysterious substance sewn up in them. Throughout the islands of the Eastern ocean and many parts of Africa shells are still used. In Thibet and some parts of China little blocks of compressed tea are used as money. In the last century dried cod was used in Newfoundland: sugar in the West Indies: and tobacco in Virginia. Smith says that in his day nails were used as money in a village in Scotland. In some of the American colonies, powder and shot: in Campeachy, logwood: and among the North American Indians, belts of wampum were used as Money. We read of another people who used cowries for small change, and the skulls of their enemies for large sums. It is said that in 1867 the proprietors in Virginia were reduced to such straits as to use dried squirrel skins as Money.

But when we consider the purposes for which Money is intended it is easily seen that no substance possesses so many advantages as Metal. The use of Money being to preserve the record of services due to the owner of it for any future time, it is clear that Money should not be liable to alter by time. A Money of dried cod would not be likely to keep very long, nor would it be very easily divisible. I very much doubt that bankers would like to keep their accounts in Finnan Haddocks, or tobacco, or sugar, or powder and shot. One of the very first requisites of Money is that it should be easily divisible into very small fragments, so that its owner should be able to get any amount of service he pleases at any time. Taking these requisites into consideration, it is manifest that there is no substance which combines these qualifications so well as a Metal. It is uniform in its texture: it can be divided into any number of fragments, each of which shall be of equal value to another fragment of equal weight, and if required these fragments can always be re-united and form a whole again, of the aggregate value of all its parts, which can be said of no other substance. All civilised nations
therefore have agreed to adopt Metal as Money, and of Metals—Gold, Silver and Copper have been chiefly preferred.

On Credit

So long as nations continue in a low state of civilisation this Credit or Money is made of some material substance: when they advance in civilisation they use Credit of another form.

It has been seen that the necessity for Money arose out of unequal exchanges among men. Now suppose that instead of Money, the Debtor gives the Creditor a simple Promise to render the balance of service due when required. Then the Creditor has the Right to demand an equivalent at a future time. But that Promise is only a Right against a particular person. If I have a tea merchant’s Promise to give me five pounds of tea, and I happen to want tea, and if the tea merchant can fulfil his promise and give me the tea whenever I want it, such a Promise is exactly equivalent to me to so much Money.

Now that Promise is only the Right to demand a particular thing from a particular person: and that person may die, or become insolvent, and unable to fulfil his promise. Hence the Value of the Promise is particular and precarious. The tea is the Value of the promise: and to any one who wants tea the promise is exactly of the same value as Money. So if any one wants any particular thing, an Order for that thing is of exactly the same Value as Money with regard to that particular thing. If a person wants a shilling’s worth of bread, an Order for that amount of bread is of exactly the same Value as a shilling with regard to bread: an Order for a shilling’s worth of milk is of the same Value as a shilling with regard to milk: and so on with everything else. The only difference is that each of these Orders only entitles the owner to get one particular thing: whereas with a shilling he can buy a shilling’s worth of bread, or of milk, or of wine, or of anything else he pleases. Hence each of these Orders has got only one Value, whereas Money has a multitude of Values. Again, if the person who has made the promise cannot fulfil it, the Promise has lost its Value. But if a person has Money, he can always find some person to give him the equivalent he wants for it. Hence such an Order has only particular and precarious Value: but Money has general and permanent Value.

Now, this Order or Promise or Right is what is usually
termed Credit: and it is clearly seen that though it is of a lower form, it is yet of the same general nature as Money. And as in Economics we are in no way concerned with the materials of things: and since these Rights or Orders may be exchanged or bought and sold equally as well as any material Chattels, they are termed Pecunia, Res, Bona, Merx, in Roman Law: χρήματα, δύναμις, πράγματα, ὄλκος in Greek Law: Goods and Chattels, and Vendible Commodities in English Law: and therefore Wealth in Economics.

From this it is seen that it is perfectly possible to carry on the exchanges of society without material Money. During the late civil war in America gold and silver money entirely disappeared from circulation: and private Tickets of the nature I have described took its place. Instead of Metallic Money people had their pockets filled with bread tickets, milk tickets, railroad tickets, and many others. If a man had his hair cut and tendered a dollar in payment he could not get change in money, but he received so many tickets promising to cut his hair so many times. I observed one case in an American paper in which payment was made in tickets promising to buy strawberries when the season came on.

The whole matter may be put in a very simple form. Suppose a person has sold commodities, or done services to other people, he is evidently entitled to receive either an equivalent service at the same time, or the Right to demand some equivalent service at a future time. Now this Right may be in two forms: it may either be in the form of Metallic Money, which is a General Right to demand any equivalent service from the whole mercantile community: or it may be in the form of a Promise from some particular person, and only enforceable against that person. In either case the Creditor is entitled to receive a Right: the only difference is that one form of Right is general and permanent, and the other is particular and precarious. But for all that they are of the same general nature. It is therefore clear that Money and Credit are homogeneous quantities, and that Money is only the highest and most general form of Credit.

The reason why Paper can supersede Metallic Money is now evident. An order to receive a coat could not serve as a substitute for a coat, because it cannot serve the same purpose: an order to receive bread cannot supersede the bread itself, because it cannot serve as food. An order for such things can never super-
sede the things themselves, because they are heterogeneous quantities. But an order to pay Money can supersede Money, because they are homogeneous quantities. As Daniel Webster, the eminent American Jurist, said—"Credit is to Money what Money is to Goods:" that is, Credit is an Order to pay Money, and Money is an Order to pay Goods. Consequently the exchange of Paper for Gold is only the exchange of a Particular Right for a General Right. To be useful Money must be exchanged away, just as Paper is. Hence if Paper can be exchanged for exactly the same things that Gold can, Paper has the same Value as Gold.

Now, as we have agreed that exchangeability is the sole essence and principle of Wealth: and that whatever can be exchanged, or bought and sold is technically termed Wealth in Economics: and as these Credits or Debts can be exchanged or bought and sold just like any material chattels, it follows that these Credits are Wealth, for exactly the same reason that gold is. The whole mass of these Credits in a country constitute a vast mass of Exchangeable Property, and they affect prices exactly as so much gold: and they are the subject of the most colossal commerce in modern times, namely, the business of Banking.

**On Capital**

We are now come to the last Definition, or General Concept, whose meaning it is absolutely necessary to fix in order to understand the subject—namely, **Capital**.

The word **Capital** is derived from the word *Caput*, which is the root of a plant, or the source of a spring, or the source from which any increase flows. Stephens in his Thesaurus defines the word thus—

Κεφαλάον—*Caput unde fructus et reeditus manat*  

**Capital**, the source from which any Profit or Revenue flows.

So Senior, the eminent Economist, says—"Economists are agreed that whatever gives a Profit is properly termed Capital."

This is a good general Definition, suitable for the purpose of Science: and the **whatever** gives a Profit must be interpreted in as wide and general a sense as the **Anything** whose **Value can be measured in money** is in the definition of Wealth.
Now any Economic Quantity whatever may be used in two different ways—

1. The proprietor may use it himself for his own personal enjoyment

2. He may trade with it: i.e., use it so as to produce a Profit

When any Economic Quantity is traded with, or used to produce a profit, it is termed **Capital**

The definition of Capital is this—

**Capital is any Economic Quantity whatever used so as to produce a Profit**

We have seen that Economic Quantities are of three distinct orders: (1) Material Things; (2) Labour, or Personal Qualities; and (3) Rights; and each of these Quantities may be used in either of the above ways: that is, each of them may be used as **Capital**

1. *Material Things.*—Suppose that a person has a sum of money. If he expends it on his household requirements or on personal enjoyments, such money is not used as **Capital**

   But if he lends it out at Interest, then it is used as **Capital**. Or if he buys into the Funds, or buys Shares in a Commercial Company which bring him in a Revenue, he uses that money as **Capital**

   Or if he buys Goods with the intention of selling them again with a profit, he uses the Money as **Capital**: and the Goods are also **Capital**, because they are intended to be sold again with a Profit

   So, if the owner of land lives upon it himself and uses it for his own enjoyment, he does not use the land as **Capital**: but if he lets it out to farmers, or to a builder to build houses upon, and receives a Rent for so doing, then he uses the Land as **Capital**

   Some great noblemen possess large tracts of land upon which a great part of London is built: that land yields them an enormous revenue: and therefore it is **Capital** to them

2. *Personal Qualities.*—All modern Economists, Smith, Say, Senior, Mill, and others, agree with the author of the Eryxias that Personal Skill, Abilities, Energy, and Character are Wealth, and may be used as **Capital**, because persons can make an Income by their employment as well as by any material Chattel
But Personal Qualities may be used to make a Profit, or a Capital, in two distinct ways: if used in one way they are termed Labour: if in the other Credit.

(a) Personal Qualities as Labour.—If a man digs in his garden for his own amusement; or if he sings, acts, or gives lectures for the private delectation of his friends, such Labour is not Capital.

But if he sells his Labour in any capacity whatever, either as a ploughman, or artisan, or in any professional capacity, such as an advocate, a physician, an engineer, &c., and makes a Profit by so doing, he uses his Labour as Capital. He makes an Income which is measurable and taxable just in the same way as if he made an income by selling material commodities, such as corn, or cattle, or wine, or other goods: and therefore he uses his Labour as Capital.

Thus Huskisson said he “had always maintained that Labour is the poor man’s Capital.”

So Mr. Cardwell, addressing his constituents, said—“Labour is the poor man’s Capital.”

So a writer in a daily paper, speaking of the Irish peasants, said—“The only Capital they possess is their Labour, which they must bring into the market to supply their daily wants.”

And the Economist, speaking of them, said—“They have no Capital but their Labour.”

(b) Personal Qualities as Credit.—But a man may use his Personal Skill, Character, and Energy for the purpose of Profit in another way besides the direct exertion of them for money.

He may use them for the purpose of purchasing goods, materials, or employing Labour, by giving in exchange for them a Promise to Pay at a future time, instead of actual Money. In popular language, this Purchasing Power of Character is termed Credit. A merchant or trader is said to be in “good Credit” when persons are willing to sell to him goods or labour, and take in exchange for them a Promise to Pay at a future time instead of actual money. And a trader makes a Profit by trading with his Credit, precisely in the same way as if he traded with money.

Thus Smith says—“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 [i.e., his Stock and his Credit]; 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.”

So Mill expressly defines wealth to be anything which has Purchasing Power; and in a multitude of places he says that Credit is Purchasing Power; and therefore Wealth by his own definition

But a merchant’s Credit or Purchasing Power does not come into Economics until he actually does make some purchase with it; and when he does exercise his Credit in this way, he gives his Promise to Pay in exchange for the goods instead of money, and it is the Promise to Pay which is the Economic Quantity termed Credit, and it may be bought and sold like any chattel any number of times before it is paid off and material extinguished

(c) Rights.—When Personal Qualities are used as Credit a Right of Action is created, and this Right of Action is a saleable commodity—*Pecunia, Res, Merx*—and may be bought and sold, and used as Capital, as well as any material chattel. The Commerce in these Rights of Action is the most colossal branch of modern Commerce, and is, as we shall see, the express business of Banking

But any other Right may be used as Capital. If a person buys into the Funds they produce him a Profit, and are, therefore, Capital to him. If he buys Shares in a Commercial Company, they are Capital. If a trader buys the goodwill of a business, it is Capital to him. If an author writes a successful work, the Copyright of it is Capital to him, and he may sell it to a publisher, and then it becomes Capital to the publisher

*There is no such thing as Absolute Capital*

We observe from the preceding considerations that there is no such thing as Absolute Capital—that is, there is nothing which is in its own nature, and always, Capital. Whether anything is Capital or not depends entirely upon the method in which it is used. As Mill says, the distinction between
Capital and non-Capital does not lie in the kind of the Commodities, but in the Mind of the Capitalist; in his will to employ it in one way rather than in another. It is sometimes supposed that Capital means simply the accumulation of the products of past labour; but this is a most vital error, and must be most carefully guarded against. All the accumulation of the past is not Capital; but only that portion of it which is used for the purpose of Profit, or traded with; and we shall shortly see that we can trade with, and make a Profit of, not only the accumulation of the Past, but also of the Anticipation of the Future.

Capital may Increase in Two Ways

Now, Capital may increase in two different ways—
1. By a direct and actual Increase of Quantity: thus flocks and herds, cattle, corn, and all fruits of the earth, increase by adding to their number or quantity.
2. But Capital may also increase by Exchange—that is, selling something at a higher price than it cost; that is, by Commerce.

It is in the second of these ways that Money is used as Capital. Money is used as Capital by exchanging it away for goods which are sold for a greater sum than they cost, or by advancing a sum of money and acquiring the Right to be repaid a larger sum at a future time; and it is also clear that any Economic Quantity which is used as a substitute for money to purchase goods with, and for the purpose of profit may be used as Capital as well as money, by the force of the definition which Senior says all Economists are agreed upon.

Hence, if a trader can purchase goods by means of his Credit—that is, by giving his Promise to Pay at a future time, and by so doing sells the goods at a higher price than he gave for them, and so makes a Profit after paying and discharging the Debt he has incurred—it is clear that his Credit is Capital to him exactly in the same way and in the same sense that Money is.

Take a very simple example. Suppose a trader buys goods for £100, and sells them for £125; he first replaces his original Capital of £100, and then he has a Profit of £25; he is, therefore, better off by £25 at the end of the operation than he was at the beginning, and he has used his money as Capital.
On the other hand, suppose that a trader saw that he could make a Profit, if only he had the means to purchase the goods; but suppose that he has no money and has no Credit, then he can purchase no goods and he can make no Profit.

But suppose that he has Credit—that is, the owner of the goods has confidence in his skill, integrity and character—he may sell him the goods and take in exchange for them the trader's *Promise to Pay* at a future time, instead of actual money.

Now, as the payment is deferred, and there is always some risk of failure of payment, the Price in Credit is higher than the Price in Money. Suppose the Price in Credit is £105; then, as before, the trader sells the goods for £125. At the agreed upon time he discharges his debt of £105, and he has then £20 of Profit over: that is, he is better off by £20 at the end of the operations than he was at the beginning; and thus he has used his Credit as Capital.

Now by the Cash purchase he is £25 better off, and by the Credit purchase he is £20 better off than he was at the beginning. It is true he does not make so great a Profit by Credit as by Cash; but yet he has made a Profit by his Credit which he could not have made without it. Hence by the very definition, his Credit has been Capital to him, and it has produced exactly the same circulation of commodities that Cash would have done. Hence it is clear that Credit is Productive Capital exactly in the same way and in the same sense that Money is.

We now see how a clear and distinct understanding of fundamental terms removes all difficulties and doubts. You are doubtless aware that many persons have found it very hard to apprehend how Credit is Capital. But when we agree that *Wealth* is Anything which has Purchasing Power, all difficulty vanishes. Because Credit is Purchasing Power. Money is Purchasing Power; and a Trader's Credit is the Purchasing Power of his Character, one and above his Money. His Money and his Credit are equally Purchasing Power, and therefore equally Wealth. And as we have seen that Capital is Anything which produces a profit, and a trader makes profit equally by his Money and his Credit it necessarily follows that his Money and his Credit may be equally used as Capital.
You thus see that the expression that Credit is Capital, which has called forth so much dissent, means nothing more than this, that Commerce is carried on by means of Promises to Pay or by Rights of Action, as well as by Money.

I am happy to say that we have now examined and settled the meaning of all the fundamental terms which are necessary for our subject, and in the two following Lectures I shall proceed to explain the mechanism of the colossal commerce in Credit or Debts.
LECTURE III

THE THEORY OF CREDIT—MEANING OF CREDIT—ON THE CREATION OF OBLIGATIONS—ON THE TRANSFER OF CREDIT OR DEBTS—ON THE EXTINCTION OF OBLIGATIONS

We have now, I am happy to say, laid a solid foundation for the apprehension of the mechanism of the great System of Credit. We have seen that Economics is nothing more than the Principles and Mechanism of Commerce in its widest extent, and in all its forms and varieties; that Wealth is anything whatever which is brought into commerce and exchanged, whatever its nature may be; that there are Three, and only Three distinct orders of Quantities which can be bought and sold, or exchanged; that the true meaning of Property is a Right; and that there are three distinct kinds of Exchangeable Rights, giving rise to six distinct species of Exchanges; that a Credit or a Debt is an Exchangeable Right, or a Commodity, which can be bought and sold like any material Chattel; and that it has value just for the very same reason that anything else has Value, because it is Exchangeable for Money at a certain time; that the essence and principle of Wealth and Value consists in Exchangeability and not in Labour, as is so often supposed. And when we clearly understand and grasp these conceptions all difficulty in apprehending the System of Credit vanishes: because the System of Credit consists merely in the Creation, the Sale and Exchange or Transfer, and the Extinction of the Goods and Chattels, the Commodities or Merchandise termed Credits or Debts.
As what I am going to say may appear new to some, I wish at once to say that there is in reality no novelty in it at all. It would be quite unsuitable to bring novelties in science before a popular audience. Scientific theories must first be elaborated and examined and approved of by men of competent skill in their studies: and it is only after they have been so examined and approved of that they should be brought before the general public. And this is exactly the present case.

If it were asked how that wonderful people, the Romans, commencing with a petty village, gradually extended their empire over so large a portion of the world, it would probably be said that it was due to their hardihood and discipline. But probably a cause which has been entirely overlooked contributed in no slight degree to the result: it was their wonderful and methodical habits of business.

When the practice of writing became common it was established as a custom or law at Rome that every Dominus, or head of a house, should keep a family ledger, as strict and exact as those of a modern banker. In this he was obliged to enter all his receipts and disbursements: all sums of money borrowed and lent: all trade profits and losses: and these family ledgers were the only legal evidence of Debts among Roman citizens received in Courts of Justice. And it is from these family ledgers that the whole modern system of bookkeeping and Credit has been developed. As the Romans extended their conquests the Roman bankers established correspondents in foreign cities, and thus invented the whole system of Bills of Exchange. The Juridical Theory of Credit was developed and brought to absolute perfection by the great Roman Lawyers, and is contained in the great Code or Digest of Roman Law, called the Pandects of Justinian, and has been the Mercantile Law of all Europe, except England, for 1800 years. It is contained in all the great Continental Jurists, too numerous to mention, and also in the institutional writers of Scotch Law, Stair and Erskine, and has recently been adopted by Statute as the Law of England.

I propose, then, in the present lecture to explain the great Juridical Theory of Credit as it was developed by the Roman Lawyers, and in the following one to shew its practical application in the mechanism of the business of Banking.
ON THE NATURE OF CREDIT

Personal Qualities are Wealth

I shewed you in my first Lecture that the author of the dialogue Eryxias in ancient times expressly classed Personal Qualities as Wealth, because persons can make an income by their use.

Adam Smith, and all Economists of note since his day, agree in this. Thus under the title of Fixed Capital, Smith enumerates "the acquired and useful Abilities of all the inhabitants, or members of the Society. . . These Talents, as they make a part of his fortune, so do they likewise that of the society to which he belongs." Thus you see that Smith expressly classes Personal Qualities, Ability, Energy and Character under the title of National Wealth; and in order not to weary you by too many quotations, I will simply say that all Economists of note—Senior, Say, Mill, and others—do the same. And the reason is that persons can make an income by trading with their Personal Qualities exactly in the same way as if they were trading in material goods. Personal Qualities may be called Moral or Personal Capital.

Personal Qualities may be used as Capital, or so as to produce a Profit, in two distinct ways:

1. By their direct exercise as Labour, with which, however, we are not concerned in this course.

2. They may be used as Purchasing Power—that is, by purchasing Goods and Labour, by giving a Promise to Pay at a future time, instead of actual money, in exchange for them.

Personal Character used in this way as Purchasing Power, is, in popular language, termed Credit.

Innumerable eminent writers recognise Personal Credit as Personal Property or Wealth.

Thus Demosthenes says—δυναν Ἀγαθοὶν δύντων πλοῦτου τε καὶ τοῦ πρὸς ἀπαντας πιστεύσαι, μεῖζον ἐστὶ τὸ τῆς πίστεως ὑπάρχον ἡμιν.

There being two kinds of Property, Money and General Credit, our greatest Property is Credit.

So again—ei τοῦτο ἁγνοεῖς ὅτι Πίστις Ἀφορμῇ τῶν πασῶν ἐστὶ μεγίστῃ πρὸς χρηματισμὸν πᾶν ἂν ἁγνοήσεις.
If you were ignorant of this that Credit is the greatest Capital of all towards the acquisition of Wealth, you would be utterly ignorant.

Thus you will see that Demosthenes expressly classes Personal Credit under the terms ἀγαθά, Goods; ἐπαρχην, Property, and ἀφορμή, Capital.

I will only cite a few modern writers.

Melon says:—“To the calculation of values in Money there must be added the current Credit of the merchant and his possible Credit.”

Dutot says:—“Since there has been regular commerce among men, those who have need of Money have made Bills or Promises to pay money. The first use of Credit therefore is to represent Money by Paper. This usage is very old; the first want of it gave rise to it. It multiplies specie considerably; it supplies it when it is wanting, and which would never be sufficient without the Credit, because there is not sufficient gold and silver to circulate all the products of nature and art. So there is in commerce a much larger amount in Bills than there is specie in the possession of the merchants.

“A well-managed Credit amounts to tenfold the funds of a merchant, and he gains as much by this Credit as if he had ten times as much Money. This maxim is generally received among all merchants.

“Credit is therefore the greatest Wealth to every one who carries on commerce.”

So Junius says:—“Private Credit is Wealth.”

Franklin says:—“Credit is Money.”

On this subject none is more emphatic than Mill.

Thus in the beginning of his work Mill expressly says:—“Everything forms therefore a part of Wealth which has a Power of Purchasing.”

He then says:—“For Credit, though it is not productive power, is Purchasing Power.”

Also “The amount of Purchasing Power which a person can exercise is composed of all the Money in his possession, or due to him (i.e., the Bank Notes, Bills and Notes he has) and of all his Credit.”

Also—“Credit, in short, has exactly the same Purchasing Power with Money.”
And he repeats the same thing in numerous other passages. Now if Mill lays it down as the fundamental definition of Wealth that "Everything that has Purchasing Power is Wealth"

And if he says that "Credit is Purchasing Power"

Then the necessary inference is that "Credit is Wealth"

That is a syllogism in which Mill is safely padlocked, and from which there is no escape.

Hence it is seen by the direct statement of all these writers—and I might cite innumerable others if necessary—that Mercantile Character is Purchasing Power and is Personal Capital, because it is used as well as Money to purchase goods and labour with. And if a man can purchase Goods, Labour, or Money with his Personal Credit, then his Credit has a Value which is measured in Money as well as that of any material chattel.

Hence Mercantile Character is Wealth, Valuable Property, and may be used as Capital as well as any material chattels.

And a merchant's character or Credit may be damaged and injured by false reports, just as his material chattels may be damaged and injured by material violence. To damage a merchant's Credit is to injure and destroy his Purchasing Power: and as we have seen that everything which has Purchasing Power is Wealth; to ruin a merchant's Credit is exactly the same injury to him as to rob him of so much money: and he has an action against any one who injures his Mercantile Credit equally as he has against any one who injures his material chattels.

On the Creation of Obligations

Mercantile Character or Credit is, then, now universally admitted to be Purchasing Power or Wealth; but as Value or Demand does not enter into Economics unless a person manifests his Value or Demand for something by giving something in exchange for it: so Mercantile Character or Credit does not enter into Economics until the merchant actually exercises his Credit by making a purchase with it.

And when a merchant buys goods with his Credit it is an absolute Sale just as much as if the purchase had been effected.
with money: he acquires the Property in the goods as fully and
effectually as if he had paid for them with money.

But at the very instant that the Property in the goods is
ceded to the merchant, a Contract or Obligation is created between
the two parties, the Buyer and Seller of the goods, which consists
of two parts.

1. The Right to demand payment in the Person of the Seller
2. The Duty to pay in the person of the Buyer

These two Quantities constitute the Contract or Obligation or
the Bond of Law between the two persons.

In this Contract or Obligation it is the Creditor's Right of
Action to demand payment at a future time, which in Law,
Commerce, and Economics is termed the Credit.

And this Right of Action, this Credit, is the Price or Payment
for the goods. When any trader takes a merchant’s Bill at three
months in exchange for goods it is payment for the goods, just as
much as if it were money. When a merchant gives his Bill at
three months for goods he has paid for the goods: what he has
to do at the proper time is to pay his bill.

And the Right of Action is Property or an Exchangeable
Right: it may be bought and sold, or exchanged: it may be
recorded on paper, and be exchanged against goods any number of
times, exactly like a piece of money, until it is paid off and
extinguished.

Hence it is seen that a Credit is the name of a certain species
of Incorporeal Property: a Credit is always a Right of Action
against a Person to pay or do something: a Credit in a Bank
is a Right of Action against the bank for a sum of money: a
letter of Credit is a letter, giving the holder the Right to demand
a sum of money.

When these Rights of Action merely exist in the person of the
Creditor, they are termed Verbal Credits; when they are
recorded on Paper in the form of Bank Notes, Cheques, Bills of
Exchange, &c., they are termed Paper Credit; when they are
recorded in the books of Traders, they are termed Book
Credits or Book Debts; and when they are recorded in the books
of Bankers, they are termed Deposits.

I think that this is a convenient opportunity to warn you
against erroneous conceptions of the nature of Credit which are not uncommon. It is often supposed that a Credit means the goods which are sold on Credit; sometimes it is supposed that a Credit is the Transfer of goods. But both these notions are erroneous. A Credit is the Right of Action which is given in exchange for the goods; and it is termed a Credit because any one who buys it knows that he does not buy the Right to any specific money, but he only buys the Right to demand some money from some Person. A Credit is purely an action against a Person; it is a *jus in personam*, and not a *jus in rem*; and he only buys it because he has the confidence or belief that the person can pay it at the proper time.

Hence this Right of Action is a distinct Property, or goods, or merchandise by itself, exactly like a bale of cotton, a quarter of corn, or a ton of coals. Not only may it be exchanged against goods, but one Right of Action may be exchanged against another Right of Action; and the whole mass of Credits of all sorts is a mass of Exchangeable Property, just like so much gold, or silver, or corn, or timber, or any other chattels. Byles, J., speaking of the mass of Property consisting in Bills of Exchange, &c., says:—

“This species of Property is now in aggregate Value inferior only to the Land or funded debt of the kingdom.” This sentence was originally written fifty years ago, and it may be safely asserted that the mass of Credit in its various forms in circulation at the present time, several times exceeds the funded debt of the country, and is inferior only to that of the land.

*Division of Opinion among Jurists as to the Case of the Debtor in an Obligation*

Now, when an Obligation has been created between two parties, as just described, the case of the Creditor is clear. In exchange for the goods he has received a Right of Action. This is his Property: which he can sell and exchange for goods or for money.

But a strong division of opinion exists among Jurists as to the case of the Debtor in the Obligation. When a merchant has bought goods, and given a bill at three months for them, is he in Debt at the present time? The great Roman Lawyers say that he is in Debt, but that the Remedy is deferred.
But English Law takes a different view. It says that there is no Debt until the bill becomes due; and if an action be brought against a person before the Debt becomes due, his answer is simply that he is not in debt at all. When a merchant agrees to take a Bill at three months in exchange for goods he gets what he has agreed to take; and he is therefore Paid for them: what the trader has to do is to pay this bill when it becomes due.

An analogous case will shew the correctness of this view.

Suppose a tenant takes a house or an apartment, and agrees to pay the Rent quarterly. Suppose that after he had been a week in the house the landlord came and demanded his Rent: the tenant would reply that he owed his landlord nothing: that no debt arose until the completion of the three months.

The case of a trader who gives a Bill at three months in exchange for goods is exactly similar. The bargain is that he shall not be asked for payment till the three months have expired; and accordingly until the three months have expired there is nothing due, and therefore no debt.

The importance of this consideration consists in this. It is often supposed that when a person is under an Obligation that the amount of the Obligation is to be subtracted from his present property, and it is expressed by the sign \textit{minus} or -. But this is evidently an error. The Debtor’s Duty to pay has no present effect; it is no subtraction from his present property: it is a mere memorandum that he has to make a payment or an exchange at a future time.

\textit{On the Three Ambiguities in the Theory of Credit}

I have now to request your special attention to Three perplexities, or Ambiguities, in the Theory of Credit, which uninformed persons who write upon the subject are sure to fall into, and which have been the cause of much misconception.

\textbf{First Ambiguity.—A Debt is not Money owed by the Debtor, but the Personal Duty to Pay Money}

When an Obligation has been created by the sale of the Property in Goods or Money, the Credit is the Personal Right of the Creditor to demand the Money, and the Debt is the Personal Duty to pay the Money.
It is very frequently supposed that a Debt is Money owed by the Debtor, or Money in the Debtor's possession to which the Creditor has a Right.

But this very common error is expressly provided against in Roman Law. It is said in the Digest:

Obligationum substantia non in eo consistit ut aliquod corpus nostrum faciat: sed ut alium nobis adstringit ad dandum aliquid

The essence of an Obligation does not consist in this, that it makes any specific Goods our Property: but that it binds some Person to give us something.

And every Jurist in the world has carefully pointed out that a Credit is not the Right to any specific thing, or a Jus in rem; but it is a mere abstract Right against the Person, or a Jus in personam.

The distinction is perfectly plain and of the greatest importance in Economics: because if the Creditor had the Right to any specific money in the Debtor's possession that would be a diminution of the Debtor's property; he would have no Right to sell or part with it. But as a matter of fact the whole of the money remains the Debtor's Property, which he can sell or exchange as he pleases: and the Creditor cannot prevent him. But the Creditor can sell or exchange away his Right of action to any one he pleases; and it may circulate in commerce quite separately and independently, exactly like so much money, until it is paid off and extinguished.

If the Creditor's Right were the Right to any specific sum of money in the Debtor's possession, it would follow that a person could never be insolvent: because if he had no money his Creditor could have no Right. But unfortunately in too many cases persons are insolvent. In fact the Obligation, or the Creditor's Right to demand and the Debtor's Duty to pay, remains exactly the same, whether the Debtor has any money or not.

If the Creditor's Right were the Right to any specific money, it would follow that the quantity of Credit in circulation could never exceed the quantity of money: but this is contrary to well known fact: because the Quantity of Credit in existence cannot be much less than fifty times the quantity of Money.
Second Ambiguity.—The word Debt means both the Creditor’s Right of Action as well as the Debtor’s Duty to pay

The second Ambiguity is this. The word Debt would seem strictly to mean the Debter’s Duty to Pay: but it has long been used both in Law and Common usage to mean the Creditor’s Right of Action as well.

The word Debitum means an obligation: it includes both the Creditor’s Right to Demand as well as the Debtor’s Duty to pay. I am not aware whether it was ever used to mean the Right of Action in classical times. But it had already acquired this special meaning in the 12th century. In 1194 Richard I. issued instructions for a judicial visitation on financial matters, and it was ordered:

Omnia Debita et vadia Judeorum inbreuientur, terra, domus, reeditus, et possessiones

Let all the Debts (i.e., Rights of Action) and pledges of the Jews be scheduled, their lands, houses, rents and possessions.

And the words Debitum and Debitale are constantly used in Mediæval charters to mean Rights of Action.

And this is the meaning which the word Debt has long acquired in English Law. Thus in the Act 46, Geo. III., c. 125, it enacts that “one Debt or Demand may be set off against another.”

So Mr. Williams says: “Within the class of choses-in-action was comprised a Right of growing importance, namely, that of suing for money due, which Right is all that is called a Debt.

“We have seen that a Debt was anciently considered as a mere Right to bring an Action against the Debtor.

“Debts being formerly considered as mere Rights of Action.”

So, as may be seen in any daily paper, the executors of deceased persons advertise for any persons who have “Debts, Claims, or Demands” against the estate, to give in a statement of them.

Sometimes the word Debt is used in the same Act of Parliament in both senses of the Creditor’s Right of Action and the Debtor’s Duty to Pay.
Thus in the Supreme Court of Judicature Act it is said:—
"Any absolute assignment by writing under the hand of the
assignor of any Debt or other legal chose-in-action... to
receive or claim such Debt or chose-in-action" where the word
Debt means the Creditor's Right of Action

But in the same section it is also said—"whose estate may
prove to be insufficient for the payment in full of his Debts
and Liabilities," where the word Debts means the Debtor's
Duty to Pay

So in Scotch law Debts are included under the title Movable
Rights; and in a Scotch marriage contract it is usual for the
bride to transfer to her husband "all goods, gear, Debts, sums
of money, or other movable estate"

I need not give any more examples. I will only say that it is
necessary for the student to observe that the word Debt is
constantly used perfectly indiscriminately both in Law and
common usage to mean both the Creditor's Right of Action as
well as the Debtor's Duty to Pay; and it requires constant
vigilance to perceive in which sense it is used

The word Right had also this double meaning in English,
and it has so at the present day in Scotland

Thus in the House of Lords Lord Shelburne said—"He
would think that America had as good a Right to pay taxes as
Great Britain"—that is, was as much their Duty

So it is quite common in Scotland to say "I have no Right
to do that," meaning it is not my Duty to do so

Thus the student must observe that the word Debt is con-
stantly used in both senses; and the explanation of this seeming
confusion is this. The word Debt, or Debitum, means that
which is due; Right or rectum means that which is ordered; and
if one person has the Right to demand a sum of money from
another person, it is equally due and right that the one person
should receive as that the other should pay; hence they are
equally Debts and Rights

On the Continent it is usual to term them Active Rights or
Debts, and Passive Rights or Debts: and a person's Rights are
termed his Actif, and his Liabilities his Passif
Third Ambiguity.—On the double meaning of "Lend," "Loan," and "Borrow": or the distinction between Mutuum and Commodatum

We have still one more ambiguity to clear away, which has been the cause of most of the confusion in modern times on the subject of Credit.

All the older writers, who were chiefly men having a practical knowledge of business, seeing that commodities are circulated by Credit equally as by Money, said that Credit is Capital, without giving any nice definition either of Credit or Capital.

Since the time of the French Economist, J. B. Say, however, this doctrine has been the subject of much ridicule. In one passage Say says that those who say that Credit is Capital, maintain that the same thing can be in two places at once. Mill has also, in one passage, sneered at those who say that Credit is Capital.

But the most remarkable thing is that both these writers have, over and over again, said that Credit is Capital. Unfortunately I have no time, on the present occasion, to read long passages from their works to prove this. You must therefore be content to accept my statement that such is the fact. The truth is that both these writers, though being highly distinguished literary men, were not mercantile lawyers, and were not able to form and retain a clear and distinct grasp of fundamental conceptions: and they have contradicted themselves in the most extraordinary manner. They have committed one of the most flagrant fallacies in Logic—that is, the Fallacy of Confusion: they attribute different meanings to the same word in different passages.

Now, though I cannot quote long passages, I can tell you very shortly the nature of the fallacy they have committed. In numerous passages Say quite understands that Credit is a Right of Action, or the Right to a future Payment, and then he repeatedly says that Credit is Capital.

But in another passage he considers Credit to be the Goods lent; and then he asks how the same Goods can be in two places at once, and serve two persons at the same time.

So also Mill, in a multitude of places, says that Credit is Wealth and Capital. But in another passage he says that Credit is only the Transfer of Capital; and then he sneers at those who say that Credit is Capital.
Careless and indolent readers, catching at a stinging epigram, who have neither sufficient knowledge of Mercantile Law to perceive the fallacy, and who never take the trouble to compare one part of the book with the other, and who quite overlook the fact that by Credit both these writers mean totally different things in different parts of their works, repeat these silly sarcasms.

But as a matter of fact a Credit is neither the Goods "lent"; nor is it the Transfer of them: a Credit, as I have clearly explained to you, is the Right of Action to demand the price of them, which is given in exchange for the goods; and is itself a Property, an Exchangeable Right, which circulates in commerce, and produces exactly the same effects as so much money until it is paid off and extinguished.

All the confusion and misconception on the subject of Credit has arisen from the want of knowledge of the most elementary principles of Mercantile Law, and from not being aware that the words "Lend," "Loan," and "Borrow" have two distinct meanings, and are applied to two transactions of a totally distinct nature.

I will now shew you how the most subtle and profound principles of Mercantile Law are exemplified in the ordinary transactions of common life.

When persons ridicule the idea of Credit being Capital they argue something in this way: they say suppose I "lend" my horse, or my book, or my carriage to a friend, that does not make two horses, or two books, or two carriages; and they jump at the conclusion that to say that Credit is Capital is to say that a thing becomes doubled by lending it.

But now let me put a case to you that perhaps may have happened to you in your student days. It may have happened to you then to have "borrowed" a book or an umbrella from a fellow student, and when you did so you acquired no Property in the book or the umbrella, but you gave back the very identical book or umbrella that you "borrowed".

But this case may also have happened to you in those student days. Perhaps a fellow student may have come in to see you in the evening; and perhaps from inexperience in housekeeping, your supplies may have run short when you wished to entertain him: and you may have "borrowed" from another student friend a
pot of strawberry jam, or a loaf of bread, or some tea, or a scuttle of coals. Now, having “borrowed” the jam, or the bread, or the tea, or the coals, you were of course bound to repay the “loan,” and give back to your friend, a pot of jam, or a loaf, or some tea, or a scuttle of coals. But did you give back to your friend the very identical pot of jam, or the very identical loaf, or the very identical tea, or the very identical coals you had “borrowed”? Of course you know you did nothing of the sort, you only gave back an equivalent pot of jam, or an equivalent loaf, or an equal quantity of tea or coals to what you had “borrowed”.

You therefore already see that you had “borrowed” a book or an umbrella, or a pot of jam, or bread or tea, or coals, yet when you came to return the “loan” the return was quite distinct in the two cases. In the one case you return the very identical thing, the very book or the very umbrella you had “borrowed,” in the other case you only return an equal amount of an equal quality of the thing borrowed, but not the very identical thing.

Now, in the preceding lecture I explained to you that there are two kinds of Rights—the Right of Possession only and the Right of Property. And there are two kinds of “Loan,” the one in which the Right of Possession only is given for a limited time, and at the end of the given time the identical thing “lent” is restored: the other kind of “loan” is where the Absolute Right of Property in the thing lent is transferred to the borrower: and the lender only acquires the Right to have an equivalent amount of the thing lent, but not the identical thing lent.

There are some kind of things which can be “lent,” and the “borrower” can enjoy their use without acquiring the absolute Property in them; and having so enjoyed their use, he can restore the identical things “lent.”

Thus if a person lends his horse or his book to a friend, his friend can ride the horse or read the book without acquiring the Property in them; and after he has enjoyed their use he can restore them to the owner. In this case the “lender” does not cede the Property in the thing “lent” to the “borrower,” but only the Right of Possession of them for a certain time. In this case there is no Exchange and no new creation of Property. In this case the relation of Creditor and Debtor does not arise
between the "lender" and the "borrower," and there being no Sale or Exchange, there is no Economic phenomenon.

Such a "Loan" is called in Roman Law a Mutuum.

But there is another kind of "Loan" in which the things "lent" cannot be used or enjoyed without their Destruction, or Communication, or Alienation. Thus if a person "lent" wine, or bread, or tea, or cables, he cannot use them without destroying them, and they are "borrowed" and "lent" for the very purpose of being consumed. Hence from the very necessity of the case the Property in such things must be transferred to the "borrower," and he undertakes to return to the "lender" only an equal amount of the things "lent" in quality and quantity.

So also when a person "lent" money he cannot use it unless he exchanges it away for something else: consequently the person who "lent" money must necessarily acquire the Property in it. So if a person "lent" a Passage Stamp, the only way he can use it is to offer it to a lender, by which it is destroyed. Hence he must acquire the Property in it.

In all cases, therefore, of the "Loan" of such things as wine, jam, bread, etc., and Kind of Money and Passage Stamps, the "lender" acquires the Property in the thing "borrowed" to the "borrower." And thus an Obligation is created between the "lender" and the "borrower" by which the "borrower" is bound to restore to the "lender" an equivalent amount of the things "lent," but not the identical things "lent.

A "Loan" of this nature is termed in Roman Law a Mutuum, which word the Roman Lawyers said came from quod de meo tuum fiat (because from being my Property it becomes yours). Modern scholars, however, repudiate this etymology. However strange it may appear, the Romans knew very little of their own language. Modern scholars say that Mutuum comes from mutare, to exchange. But though the etymology may be fanciful, as so many given by ancient writers, it exactly expresses the fact. In the "Loan" of the Mutuum there is always an exchange of Properties. In all cases of the Mutuum the relation of Creditor and Debtor is always created between the parties, and the Right which the lender has to demand back from the "borrower" an equivalent amount of the thing "lent" is the Credit. Such a transaction is always a Sale or an Exchange, and is an Economic phenomenon.
The student must therefore carefully observe that every "Loan" of Money is a Mutuum: it is a Sale, or an Exchange. Suppose, as it is commonly said, a person "lends" £100 for one year at 5 per cent. interest—what is the real nature of the transaction? Every Jurist has pointed out that every "Loan" of Money is in reality a Sale, in which the lender cedes the Property in the Money and receives in exchange for it the Right or Property to demand £105 at the end of the year: and this Right is termed a Credit or a Debt. And the Money is the Price of the Debt: and the Debt is the Price of the Money.

Thus the whole confusion and misconception on the subject of Credit has arisen from the English words "Loan," "Lend," "Borrow" being used to denote two operations of essentially distinct natures. But the distinction is clearly pointed out in Roman Law, and the Latin language has a distinct word for each operation. No one who had the simplest knowledge of the elementary principles of Roman Law, or of Mercantile Law, would ever have committed the mistake of confounding the distinction between the Loan of an ordinary chattel and the Loan of Money.

On the Error made by some Mathematicians in calling Debts Negative Quantities

I have now to invite your attention to an interesting branch of the subject which does perhaps present some novelty.

In my first lecture I brought to your notice that Mill expressly says that Economics is a physical science, and to be constructed in the same manner as other physical sciences.

Now in all Physical Sciences there are Positive Quantities and Negative Quantities. Therefore if Economics is a Physical Science we should naturally expect that there would be Positive Quantities and Negative Quantities in it, as well as in all other Physical Sciences.

It has been the usual custom for Mathematicians for the last 150 years to give Debts as examples of what they term "Negative" Quantities. But unfortunately from a want of knowledge of the principles of Mercantile Law, and practical business, they are completely mistaken in their application of the term "Negative" to Debts.

For when they term Debts "Negative" Quantities, they mean
either that Debts are to be subtracted from the Debtor's property, or they mean that they are Money in the Debtor's possession to which the Creditor has a Right. I have already pointed out that both these ideas are entirely erroneous. I have shown that this error into which the Mathematicians have fallen is expressly provided against in Roman Law, and by every Jurist since. The Creditor's **Right of Action** which is termed the **Debt** is not the Right to any specific money in the Debtor's possession: it is a mere Right against the **Person** to pay the money; and the **Duty** to pay a sum of money at a future time is no **subtraction** from a person's present **Property**: it is a mere memorandum that he has to pay a sum at some future time.

*On the Application of Algebraical Signs to Economics.*

I have now shown that Mathematicians have termed Debts **Negative** Quantities, but that every mercantile lawyer and man of business can at once see that they have quite mistaken the nature of the case, and that their interpretation of the Negative Sign cannot be accepted. I have now to show you what it does really mean. And I hope that you will not be alarmed at the name mathematics: because though it has a formidable sound to many persons, I will show you that like many other difficulties, it is in reality extremely simple, and that as Monsieur Jourdain suddenly discovered that he had been talking prose all his life without knowing it, so you will find that you have been talking mathematics all your life without knowing it. You will find that I shall say nothing beyond the most elementary principles of Algebra, the first things which are taught to a schoolboy. The only thing is that I shall apply these ordinary principles to a new subject.

Now, in opening a common book on Algebra you are told that the sign + means **addition**, and that the sign — means **subtraction**.

You are also told that + × + gives +, and that — × — also gives +: which is expressed in common language as **two negatives make an affirmative**.

Perhaps you may be surprised to hear that for 1600 years
mathematicians have been saying that $-x-$ gives $+$, but that until about 50 or 60 years ago no one could tell the reason why. Newton could discover the laws which govern the motions of the heavenly bodies, but he could not tell why $-x-$ gives $+$, and it is only within the present century that the subject has been understood. And I have now to explain to you in a very few words what the general meaning of the expression is: and then to show you its particular application to Economics.

It is perfectly true that the signs $+$ and $-$ do mean addition and subtraction in some cases: but the fact is that that is only one of their meanings: they have in reality an immense variety of meanings according to the particular circumstances under which they occur: or the body of facts to which they relate: and it is wholly impossible to determine their meaning until we know the particular circumstances out of which they arise.

In order to explain the matter in the fewest words possible it may be said that throughout all nature there is Opposition, or Contrariety or Inverseness. Both Opposition or Contrariety of Quality and Opposition or Contrariety of Operation.

Thus, if you take the meridian of Greenwich as 0 you have degrees of Longitude East and West of Greenwich: these are opposite to each other, and therefore if one be called $+$ the other is termed $-$. Again, taking the Equator as 0, you have degrees of North latitude and South latitude: these are opposite to each other, and if one is called $+$ the other is termed $-$.

Thus, in short, take any Quantity, whatever it may be: and then take its opposite: and if you designate one of these as $+$ then the other is $-$.

Thus Up and Down: Right and Left: Before and Behind: Before and After: the Past and the Future: Above and Below: Yes and No: Supporters and Opponents: Face to Face: Back to Back: Erect and Inverse: Concave and Convex: Sympathy and Antipathy: Rights and Duties: Active and Passive, are all Opposite, Contrary, or Inverse to each other, and are all distinguished by the Signs $+$ and $-$.
In these cases the Signs + and — are termed Signs of Opposition or Distinction

But also Opposite, Inverse, or Contrary Operations may be performed on these Quantities: and these operations of Contrary or Inverse natures are also distinguished by the same signs + and —, no matter what the Contrariety or Opposition may consist in.

Thus, to Add and to Subtract: to Pay and to Receive: to go forward and to go backward: to Do and to Undo: to build up and to pull down: and numerous others are Opposite Operations and distinguished by the signs + and —.

In these cases the signs + and — are termed Signs of Operation.

And these Opposite Signs may be applied to any new quantities whatever that are brought under consideration, and to any new species of operations whatever which are brought under observation.

So in every new body of facts which is brought under scientific control: and in every new science whatever, Opposition, or Contrariety or Inverseness is sure to appear: and consequently the signs + and — receive new applications of meaning in every new science, and we shall see what is their true application in Economics.

Now as I have said that any operations of an Opposite nature may be denoted by the opposite signs + and —, whatever the opposition may consist in, to Create or to call into existence out of the Absolute Nothing, and to Cancel, Annihilate or to Decrease into the Absolute Nothing are Opposite, Inverse and Contrary Operations, and consequently if to Create be denoted by +, to Cancel or to Annihilate, or to Decrease will be denoted by —.

I will now give one or two simple examples to show you that these meanings constantly occur in the ordinary affairs of life.

Thus in a thermometer if the Freezing point be taken as 0, degrees above that point are marked +, and are termed degrees of Heat, and degrees below are marked —, and are termed degrees of Frost.

Now suppose the mercury rises from 10 degrees of frost to 15° of Heat, the total number of degrees passed over is 25.
and so the Negative degrees must be added to the Positive ones to find the total increase of heat.

Again, the Supporters of a Government may be denoted by +, and its Opponents by —.

I will now shew you the meaning of the maxim that — × — gives +.

Supposing that on a division the numbers for Government were 240, and the numbers against were 200. Then if you add 20 supporters to the Government their majority would be 60; but if instead of adding 20 supporters you took away 20 opponents, it would have exactly the same effect: their majority would be 60. Thus you see that to add 20 supporters, which is + × +, has exactly the same effect as taking away 20 opponents, which is — × —.

Therefore in all cases whatever to add a Positive Quantity is exactly the same in effect as taking away a Negative Quantity, and in commerce as well as in every other science, as we shall presently see.

Let us now apply these very simple principles to Economics.

One of the commonest applications of the signs + and — is to Time. If any era in Time is taken as 0, then if Time past is distinguished as +, Time future is distinguished as —.

As, for example, if the Christian era be taken as 0 the years before it may be called Positive, and the years after it as Negative; to find the number of years from the foundation of Rome to the present time we must add the + 753 years to the — 1882 years, or 2635 years altogether.

I will now give you a very simple example which will be very useful in Economics.

Suppose I were to ask this question: a father’s age is 40 and his son’s 15, when was the father twice the age of his son? and you will find that the answer comes out — 10.

What does the Negative answer mean? It means that the father never was twice the age of his son in time past, which is taken as positive in the question, but that the epoch or event of his being twice the age of his son will be in time opposite to the past, that is in the future. He was not twice as old as his son.
ten years ago, but he will be so ten years hence, as is very obvious, because in 10 years' time the father will be 50 and the son 25.

This example shews that if any event which has happened in Time past is Positive, then the same event if it is to happen in time future is Negative.

Thus if a Product or Profit has been realised in Time past be denoted as Positive, the same Product or Profit if it is to be realised in Time future is Negative.

Hence if any Economic Quantity or Capital of any form whatever produces a continuous series of Products or Profits those which have been produced or realised in Time past are positive and those which are to be produced or realised in Time future are Negative.

And consequently the Right to the Profits already realised may be termed Positive, and the Right to the profits which are to be realised may be termed Negative.

And the total Value of the Economic Quantity or Capital comprehends both the Right to the Profits already realised and the Right to the Profits which are to be realised in the future: or both the Positive Right and the Negative Right.

The Theory of the Value of Land

I will now show the application of these considerations in the Theory of Credit: and first let us see in what the Value of Land consists.

Suppose we purchase an estate in Land for £100,000; where is the Value for our money? Does it consist in things which are already in existence? The veriest tiro would answer, certainly not. Where then is the equivalent for the purchase money?

When we purchase an estate in Land, we purchase not only the Right to the existing products of the land and labour, such as the houses and crops on the ground, but also the Right to receive its annual products for ever—that is a series of products which will only come into existence at definite intervals of time for ever. Thus Property in Land consists of two perfectly distinct parts, the Property in the Products of the past together with the Property in the Products of the Future, say £3,000 a year for ever. And as these products will only come into existence in future time, they may be termed Negative.
But though the yearly products of the land will only come into existence at future periods, the Right or Property in them when they do come into existence is Present, and may be bought and sold like any material chattel. That is, each of these annual products has a Present Value, and the purchase money of the Land is simply the Sum of the Present Values of this series of future products for ever. And though this series of future products is infinite, it has a finite Limit, depending chiefly on the current average rate of interest.

Now when a purchaser has bought an estate in Land, it may be said to owe him a series of annual payments for ever, because he bought it merely on the belief or expectation that he would receive these products. Hence we may call this Right to receive the future products of the Land, the Credit of the Land.

Many Banks in central Europe have been founded for the purpose of making advances to cultivate land, on the principle of demanding an annual instalment of repayment out of the products of the Land. These are called Banks of Credit foncier or Banks of Land Credit, and a very large portion of the advance in agriculture during the last 130 years have been due to them.

Personal Credit.—Now a merchant exercising any profitable business is analogous to Land. He may have accumulated Money as the product and fruit of his past industry, but besides his Money he possesses his Skill, Energy, and Abilities, his Personal Capital, his Mercantile Character his Capacity to earn profits in the Future exactly as he has already done in the past. He has, of course, the Right or Property in the products of his Future industry. And if we call the Right he has in the profits he has already earned, Positive, his Right to the profits he will earn in future is Inverse to the first Right and is therefore Negative.

And he may trade in two ways. He may buy goods with Money—the fruits of his past industry, or he may buy goods by giving in exchange for them a Right to demand money at a future time, which is intended to be earned by his future industry. Personal or Mercantile Character used in this way is, as we have seen in popular language termed Credit, and as we have defined Wealth to be anything which has Purchasing Power, and as Money and Credit are equally
Purchasing Power, it necessarily follows that **Money** and **Credit** are equally **Wealth**.

But as we have already seen that **Capital** is any Wealth or Economic Quantity used for the purpose of **Profit**, it follows that **Money** and **Credit** may be equally used as **Capital**.

**If Money is termed Positive Capital Credit may be termed Negative Capital**

A merchant’s Purchasing Power is his Money, his Rights to demand Money (i.e., any Bank Notes or Bills he may possess), and his **Credit**.

If he buys Goods with his Money and sells them with a Profit, he first replaces the Money he has expended, and the surplus is his Profit.

If he buys goods with his Credit he incurs a Debt: when he sells the goods he first discharges the Debt he has incurred: and the surplus is his Profit.

In either case the Profit consists in the excess of his Property at the end of the operation above what it was at the beginning.

If he buys goods with Money he makes Capital of the **realised Profits of the past**: if he buys them with Credit he makes Capital of the **expected Profits of the future**.

In each case he makes a Profit: hence by the definition **Money** and **Credit** are equally **Capital**: but as they are **Inverse** and **Opposite** to each other, if Money is termed **Positive Capital**, Credit may be termed **Negative Capital**.

**On Debts as Negative Quantities**

We have seen that Mathematicians call Debts "Negative" Quantities; but they have mistaken the application of the term "**Negative.**" After the considerations we have discussed, the real meaning of the term "**Negative,"" as applied to Debts, is perfectly clear and simple.

An Obligation consists of two parts—

1. The Creditor’s **Right to demand**
2. The Debtor’s **Duty to pay**

These two Quantities are **Opposite** and **Inverse** to each other: the first is **Active or Positive**, and the second is **Passive.**
Hence the Creditor's **Right of action** is the **Positive Quantity**, and the Debtor's **Duty to pay** is the **Negative Quantity**.

Therefore if a person has a balance of £500 at his banker's and is bound to pay £50 at some given time, and therefore his Property may be represented by £500 — £50, it is not to be read as if he had only a balance of £450: but it is to be read this way: he possesses £500, but coupled with the **Duty to pay** £50 at some given time.

Hence in Economics the symbol (+ £100) always means actual Money, or the Right to Demand money, such as Bills and Notes: and the symbol (— £100) always means the **Duty to pay** money.

It is now seen how necessary it is to observe the double meaning of the word **Debt** in common usage; because when a Debt is called Goods and Chattels, or Merchandise or a Commodity, it means the Creditor's **Right of action**; but when a Debt is termed a Negative Quantity it means the Debtor's **Duty to pay**.

**On the Transfer of Credit or Debts**

Having now clearly, and, I hope, beyond the possibility of doubt or misapprehension, explained to you that a Credit or a Debt is an exchangeable commodity, goods and chattels, or merchandise, just like any material chattel, I now come to its sale or transfer.

This Debt or Credit, however, being invisible and intangible, cannot be transferred by manual delivery so long as it remains in that abstract form. It nevertheless can be bought and sold and exchanged with the most perfect facility even in that form. If a person wishes to sell his debt to another person, he has only to go to the debtor, and tell him that he has transferred it to some one else. The Debtor then agrees to pay the transferee, and is released from his Debt to the Transferor. Thus the Right of Action is transferred with the most perfect ease.

The Greeks, however, hit upon the plan of recording the Debt on some material; and the material, such as paper, or any other, may be passed from hand to hand, exactly like money or any other chattel; and the Right of Action is transferred along with it. Thus a simple Right of Action can be transferred from hand to hand by manual delivery, like any material chattels. You are too
familiar with this in your everyday business to render it necessary for me to say anything more about it.

**On the Extinction of Obligations**

Having now shewn you how Obligations are created, and how Credits or Debts are transferred, the last point to be considered is how they are extinguished. I have shewn you that Credit is the name of a certain species of Property, which is of the same nature, but is inferior in degree, to money: and it fulfils the same purposes as Money as a medium of Exchange or Circulation. Credit, in fact, is to Money what steam is to water: and while, like that power, its use within proper limits is one of the most beneficial inventions ever devised by the ingenuity of man, its misuse by unskilful hands leads to the most fearful calamities. Credit, like steam, has its limits: and I have now to shew you the proper limits of Credit. By its very name and nature it is always created with the express intention of being capable of being extinguished. It is **Unextinguished Credit** which produces those terrible monetary cataclysms which scatter ruin and misery among nations. It is chiefly by the excessive use of Credit that *over-production* is brought about, which causes those terrible catastrophes called Commercial Crises; and the inability of Credit-shops to extinguish the Credit they have created—commonly called the failures of banks—is the cause of the most terrible social calamities of modern times.

You will now observe the advantages of clear and distinct definitions: because when you once seize the true conception of Credit, its real limits are seen in its very definition. If you will carefully observe that in all cases whatever "**Credit is the Present Right or the Present Value of a future Payment**" all difficulty vanishes. Credit in this country is always a Promise to pay Money, and it is clear that if the Debtor is in possession of sufficient money to pay his Promise when it falls due, the Credit has not been excessive. Credit being the Right to demand something to be paid, and the Debt being the *duty to pay*, of course the Payment of the thing promised fulfils, discharges, and extinguishes the Right as well as the Duty: and thus the Obligation is absolutely annihilated and extinguished.

Now Commercial Credit in this country is always expressed to be payable in money, and many uninformed persons suppose that
Bills of Exchange are always paid in Money or Bank Notes. Every one, however, who has the slightest practical knowledge of business knows that this is a pure delusion: and in a great commercial centre, like London, probably not one Bill of Exchange in a thousand is ever paid in actual money.

There are four different ways by which Obligations can be extinguished. These are—

1. By Release or Acceptation
2. By Payment in Money
3. By Renewal, or Transfer, or Novation
4. By Set Off, or Compensation

Of Release or Acceptation

All Contracts or Obligations are created by the mutual consent of the parties, and so they may be annihilated and extinguished by the same consent of the persons which called them into existence.

At Rome all Contracts, all Loans of Money, and all Payments were made in the presence of witnesses. The Debtor brought the Money to the Creditor before the legal number of witnesses, and said to him, "What I have promised do you regard as received?" The Creditor said, "I do; and have entered it as received" (Acceptum fero). He then entered the sum as received in his ledger: and this was termed Acceptatio.

Suppose that the Creditor wished to release the Debtor from his Debt: the same form was gone through: and the entry was made: and when this was done it could never be questioned: because every entry in a Roman Ledger was held to be absolute truth: consequently, if a Creditor entered in his Ledger that he had received his debt, it was a final and valid form of Release. You thus see the meaning of Acceptation, which is a term commonly used in the Law of Scotland.

The Release of a Debt is in all cases Equivalent to a Payment in Money.

I shall now proceed to shew you the application of the Principles of Jurisprudence and Algebra to Commerce.

You are aware that it is one of the most elementary principles...
of Algebra that \( + \times + = - \times - \): and that both of these operations gives +

Now it is a fundamental principle of Roman Law that the **Release of a Debt** is in all cases equivalent to the **Donation** or the **Payment of Money**

You will see at once that these are identical doctrines: because if you choose to call Money (+), and also giving Money (+), then the gift of money is \( + \times + \): and if you call a Debt (−) and also taking away (−): then Releasing from a Debt is \(- \times -\): and by the Laws of Algebra these are exactly equivalent. I will now shew you some of the practical applications of this principle which perhaps may surprise you

1. Suppose that I owe £100 to a banker, in how many different ways can I pay it?
   
   (a) I may pay him in actual money, that is \( + \times + \)
   
   (b) I may pay him in his own Notes, that is by returning his Notes to him I **release** him from his **Debt** to me, and that is the same as Paying my Debt to him. Now, Releasing him from the Debt is \(- \times -\)
   
   (c) I may pay him £50 in money, and also £50 in his own Notes. Now paying him £50 in Money is \( + \times + \), and paying him £50 in his own Notes is \(- \times -\)

   Thus, I may pay a debt to a Banker entirely in Money, entirely in his Notes, or partly in Money and partly in his own Notes, and you all know that all these modes of payment are exactly equivalent

I will now give you an example of this principle which may possibly surprise you, and you will see its importance. It depends on this principle whether the Capital of the Bank of England and of almost every other Joint Stock Bank is a solid reality or mere moonshine

The Bank of England was founded in 1694, and its first Capital was £1,200,000, which of course was paid up in Money. But from various circumstances which are too long to be stated here, it stopped payment in 1696, and its Notes fell to a discount of 20 per cent. In order to strengthen it Parliament resolved to increase its Capital by £1,000,000, but not a single farthing of this million was paid up in money. £800,000 were paid up in Exchequer Bills and £200,000 in its own depreciated Notes,
the Right of Action he has against him in payment of the sum he owes him. That is, each Releases the other from the Debt he owes. Thus the two debts are discharged by mutual releases: and the two Obligations are extinguished.

2. Suppose a banker holds a merchant’s acceptance for £100: and suppose the merchant holds £100 of the banker’s notes. When the banker demands payment from the merchant of his acceptance, the merchant tenders him his own notes. Thus, as before, each pays his own debt by Releasing the other from his debt, and the two Obligations are extinguished.

3. I will now shew a most important application of this principle. Before bankers undertook the discount of bills on the Continent there were formerly great fairs four times a year at the great commercial centres, Lyons, Antwerp, Nuremberg, and many others. In these countries merchants did not make their Bills payable at their own houses, which would have obliged them to keep cash to meet them: but they made them payable only at these great fairs. In the meantime the merchants’ acceptances circulated throughout the country, and effected exchanges, exactly like so much money, and got covered with indorsements. On a certain day, during the fair, the merchants met together, and made a mutual exchange of their Obligations: and Boisguillebert says that by this means 80 millions of commercial obligations were settled without a single coin.

Thus we see what a prodigious extension of Credit and Commerce is effected by the system of Payment without the use of Money: in fact, Money is never used now in commerce except to pay the balances which arise from the unequal exchanges of Debts.

I have now developed the complete Theory of Credit, and explained the great Juridical and Mathematical principles it is based upon. You will see that the principles of commerce are capable of the strictest scientific demonstration: an example of Voltaire’s aphorism that “All Nature is nothing but Mathematics.”

I propose in the next and concluding lecture to shew how the great scientific principles of Credit are exemplified in the mechanism of the business of Banking.
LECTURE IV

THE THEORY OF BANKING—MEANING OF BANK AND BANKER—ON DEPOSITS AND ISSUES—ON THE CASH CREDIT SYSTEM OF SCOTLAND—ON THE RIGHT OF PRIVATE PERSONS TO ISSUE NOTES—ON THE RIGHT OF FOREIGN BANKS TO OPEN BRANCHES IN ENGLAND

In the preceding Lecture I explained the complete Juridical Theory of Credit, as it was developed by the Roman Lawyers, and I have now in this, the last lecture of this course, to shew how it is practically exemplified in the mechanism of the great business of Banking.

But, first of all, what is the meaning of the words Bank and Banker? and I hope that I shall not wound the susceptibilities of any one here when I say that I have read many books on Banking, and conversed with many Bankers, and I never found one yet who could give a correct definition of his own business.

For what is the common idea of the meaning of the word Bank? and of the nature of the business of Banking?

If we take up the most common works on the subject we find it stated (1) that the word Bank comes from the Italian word Banco, a bench; (2) that the business of a banker consists in acting as an intermediate agent between persons who wish to lend
and those who want to borrow; and (3) that the Profits of a Banker consist in the difference between the interest he pays for the money he borrows and the interest he charges for lending it out.

Now this description of the word Bank, and the nature of Banking, reminds me of an anecdote, which I beg you will allow me to relate to you.

That learned body, the French Academy, were charged with making a complete dictionary of the French language: and to give accurate and true definitions of all the words in the language. They at length came to the word Crab. At that time Cuvier was the greatest living naturalist, and it might have been supposed that they would have applied to him to furnish a definition of the word, which was entirely out of their line. However, they determined to frame a definition for themselves, and having incubated over the subject for a long time, they produced this definition:—

"A Crab is a fish, which is red, and walks backwards."

Having at last produced their definition, they submitted it to Cuvier for his revision. The great naturalist, smiling with the utmost politeness, said: "Gentlemen, your definition of a Crab is excellent—with a few trifling exceptions. In the first place, a Crab is not a fish; secondly, it is not red; and, thirdly, does not walk backwards. With these trifling exceptions, gentlemen, your definition is admirable."

Now, with respect to the description of a Bank and the business of Banking, as commonly given, it is excellent, with these trifling exceptions:—In the first place, the word Banco, as applied to a Bank, does not mean a bench; secondly, a banker is not an intermediate agent between persons who want to lend and those who want to borrow; and, thirdly, a banker’s profits do not consist in the difference between the interest he pays for the money he borrows and the interest he receives from those to whom he lends it. With these trifling exceptions, the common opinion as to the nature of a bank and banking business is admirable.

On the Meaning of Bank

And now, as I have said that the word Banco, as applied to a
Bank, does not mean a Bench, I will tell you what it does really mean, and how it originated.

In the year 1171 the City of Venice was at war both with the Empires of the East and the West. Its finances were in great disorder, and the great Council levied a forced loan of 1 per cent. on the property of all their citizens, and promised them interest at 5 per cent. Such a loan has several names in Italian, such as Compera, Mutuo, but the most common is Monte, a Joint Stock fund. This first loan was called Monte Vecchio—the old loan. Commissioners were appointed to manage the loan; and in exchange for the money paid in by the citizens they issued Stock Certificates or Credits, which they might transfer to any one else.

At this time the Germans were masters of a great part of Italy, and the German word Banck, a mound or heap, came to be used as synonymous with Monte, and was Italianised into Banco, and the loans or public debts were called indifferently Monti or Banchi.

That the word Banco in Italian means a Public Debt might be proved by numberless quotations. I will only give one or two.

Thus in an Italian Dictionary, published in 1659, it says: "Monte, a standing Bank or Mount of money, as they have in divers cities of Italy."

So a recent Italian writer, Cibrario, says: "Regarding the Theory of Credit which I have said was invented by the Italian cities, it is known that the first Bank or Public Debt (il primo Banco o Debito Pubblico) was erected in Venice in 1171. In the 13th century paper money is mentioned at Milan: the Credit was paid off. A Monte or Public Debt (un Monte o Debito Pubblico) was founded at Florence in 1336."

Thus you see that the words Monte and Banco are synonymous, and mean a Heap, a Mound, a Joint Stock fund formed by the contributions of a number of persons.

This was the meaning of the word when it was first introduced into English.

Thus Bacon says: "Let it be no Bank or Common Stock, but every man be master of his own money."
A well known Mercantile writer, in 1622, speaks of Mons Pictatis or Banke of Charity, and says that in Italy there are Montes Pictatis, that is Mounts or Bankes of Charity.

Another writer, about the same period, speaks of the Three Bankes of Venice, "meaning the three public loans."

Ben Jonson, in his Volpone, the scene of which is laid at Venice, says:

"I make no profit in the Public Bank"

meaning: I do not dabble in the Venetian Funds.

So Blackstone says: "At Florence, in 1344, Government owed £60,000, and being unable to pay it, formed the principal into an aggregate sum called metaphorically a Mount or Bank."

The Bank of England was a company of persons who advanced a sum of money to Government, and received in exchange for it a perpetual Annuity or a Right to a series of payments for ever from the State. This annuity, in popular language, is termed the Funds, but the legal name is "Bank Annuities."

Now the essential feature of all these Banks was this: the subscribers advanced the money as a Loan or Mutuum: and thus it became the absolute property of the borrowers: and in exchange for their Money they received a Credit, or Certificate entitling them to an annual payment by way of interest: and the very essence of "Banking" is to buy money as a Mutuum, and issue Credit in exchange for it.

Thus you see that the true meaning of the word Banco is not a bench but a Public Debt or Loan of Money, in exchange for which the subscribers received a Credit.

On the meaning of Banker

Equally great misconception prevails as to the meaning of the word Banker, and the nature of Banking business.

It is said in a popular work on banking: "A banker is a dealer in capital, or more properly a dealer in money. He is an intermediate party between the borrower and the lender. He borrows of one party and lends to another; and the difference between the terms at which he borrows and those at which he lends forms the source of his profit."

I will now show you at once what a complete misconception of
the nature of Banking business it is to say that a banker is "an intermediate party between the borrower and the lender."

It is quite common for a firm of solicitors to act as intermediate agents between persons who wish to lend and others who wish to borrow. They may have some clients who wish to lend and others who wish to borrow. They then arrange the terms between these parties, and receive a commission for so doing. But no one ever thought of calling a firm of solicitors who transact this business "bankers;" which shews that there is an essential distinction between the business of such a firm and that of banking.

Solicitors who transact such business do not acquire any Property in the money which passes through their hands. They are only entrusted with the temporary custody of the money for a specific purpose, and if they applied it to their purposes it would be theft or embezzlement. The actual Property or ownership in the money passes directly from the lender to the borrower, through the medium of the Trustees. In such a case the relation of Debtor and Creditor is not created between the solicitors and their clients.

But the essential feature of a "Banker" is that when his customers pay in money to their accounts, they cede the Property in the money to the banker. The money placed with him is a Mutuum or Loan or Sale directly to himself. The banker buys the money from his customer, and in exchange for it gives him a Credit, or Right of Action, in his books, which the customer may transfer to any one else. And the relation of Debtor and Creditor is created between the Banker and his customer.

Let us now trace the operations of Banking.

Let us suppose that a banker's customers begin by paying in £10,000; this money becomes the banker's actual Property as a Mutuum. He buys the money from his customers, and in exchange for it he gives them Credits on his books for an equal amount, which are Rights of Action to demand a resale to them of an equivalent amount of money at any time they please. These Rights of Action, Credits or Debts, are in banking language termed Deposits.

After such an operation his accounts would stand thus:

<table>
<thead>
<tr>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit... £10,000..........</td>
</tr>
<tr>
<td>Cash... £10,000</td>
</tr>
</tbody>
</table>
Now, though his customers have Rights of Action against the banker to demand back exactly an equal quantity of money as they have paid in, yet persons would not place money with their bankers if they meant to draw it out again immediately; just as no one would spend all at once all the money he had. Nevertheless some will want to draw out part of their funds; but if some customers want to draw out money, others will probably pay in about an equal sum. I think that it will be found that in ordinary and quiet times a banker's balance in cash will seldom differ by more than one thirty-sixth part from day to day; so that if he retains in cash sufficient to meet one-tenth of his liabilities, that is ample and abundant in all ordinary times.

If, then, in such a case the banker retains £1,000 in cash to meet any demands, he has £9,000 to trade with; and it is just in the method in which bankers trade that so much misconception exists.

It is usually supposed that when a banker has the £9,000 to trade with he employs it in purchasing bills, and so receives a profit only on the £9,000. But that is a complete misconception of the nature of "Banking."

A "Banker" never buys Bills with money in the first instance: that is the business of a Bill broker.

The way a "Banker" trades is this: He sees that £1,000 in cash is sufficient to support £10,000 of Liabilities in Credit; consequently he argues that £10,000 in cash will bear Liabilities to several times that amount in Credit.

One of the most eligible methods of trading for a banker is to buy good commercial debts; and he buys these bills exactly in the same way as he bought the Cash—that is, by creating Credits, or Debts, or Rights of Action, against himself, in his books to the amount of the Bills, deducting at the same time the Interest as Profit, agreed upon.

This Credit or Right of Action, so created to purchase the Commercial Bill, is equally termed a Deposit as the Credit created in exchange for the Cash. Supposing that the banker buys £40,000 of Commercial Bills, and that the Rate of Profit agreed upon was 4 per cent. per annum, and the Bills at three months, the sum to be retained or the Discount would be £400; consequently, in exchange for Bills to the amount of £40,000, he
would create Credits or Deposits against himself to the amount of £39,600

Hence, just after buying these Bills, his accounts would stand thus:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposits ... ... £49,600</td>
<td>Cash ... ... £10,000</td>
</tr>
<tr>
<td>Bills of Exchange 40,000</td>
<td></td>
</tr>
</tbody>
</table>

£49,600 | £50,000

The balance of £400 being his own Property or Profit

By this process the "Banker" has created or added £39,600 in Credit to the previously existing cash, and his profit is clear. He does not gain 4 per cent. on the £9,000 as cash, but 4 per cent. on the £40,000 of Bills purchased.

Now this is what the business of Banking essentially consists in, and the true definition of a Banker is this:

A Banker is a Trader whose business consists in buying Money and Debts by creating other Debts

Thus we see that the essential and distinctive feature of a Bank and a Banker is to create and issue Credit payable on demand; and this Credit is intended to be put into circulation and serve all the purposes of Money. A bank, therefore, is not an office for borrowing and lending money, but it is a Manufactory of Credit

And now we see how Credit is Capital to a Banker

For what is the Commodity a Banker deals in? He opens his place of business, and has an array of clerks with their desks and ledgers, &c. He then intimates that he is ready to buy any gold from any one who has any to sell. And what does he buy the gold with? His own Credit. He then intimates that he is ready to buy any good Commercial Debts that any one has got to sell. And what does he buy these with? Nothing but his own Credit. And he charges exactly the same price for his Credit as if it were money. The only Commodity, then, which he has to sell, is his Credit; and he makes his Profits by selling his Credit, exactly as any other trader makes Profits by selling the goods he deals in. Therefore, by the very definition we have obtained in the preceding Lecture, a Banker's Credit is his Capital. It is the
Commodity he deals in. And just by so much as he can maintain his Credit in circulation over and above the Cash he keeps in reserve, he so much practically increases the Capital of the country.

When the Bank of Scotland was first founded it received no deposits from the public; the proprietors paid in £10,000 of their own money, and on that basis of cash they found that they could easily maintain £50,000 of their Notes in circulation; and John Law justly says that was equivalent to so much additional money.

Again, what are the commodities a "Banker" buys to make a Profit of? They are Commercial Debts. Now, in my former Lectures I have over and over again pointed out that all Jurists in the world term Debts Merchandise, Goods and Chattels. Vendible Commodities. Adam Smith expressly classes Bills of Exchange under the term Circulating Capital, and under the term Circulating Capital he classes all the goods in a shop which the trader is to make a Profit of by selling. Now the Bills in the portfolio of a banker are exactly similar to the ordinary goods in the shop of a trader. A trader makes profits by buying goods at a lower price from one person and selling them at a higher price to another. So a banker buys a commercial debt at a lower price from one person—namely, his own customer—and sells it at a higher price to another—namely, to the acceptor or the debtor. Thus the debt the banker buys is increasing in value every day from the time he buys it till it is paid off. It therefore produces a profit, and is therefore Circulating Capital, just in the same way as any ordinary goods are.

On a Common Error respecting Deposits

I must now draw your attention to a very common error respecting the nature of Deposits.

In Roman Law a thing was termed a Depositum when it was placed in some one else's charge or custody for the mere purpose of safe keeping, but without the Property in it passing to him. Thus it is the well understood part of a London banker's business to take charge of his customer's plate, jewelry, or securities, if required to do so. I am not aware whether it is part of a Scotch bank's duty to do this. This plate or jewelry
so committed to the banker's charge for safe keeping only is a Depositum or a Deposit; but he acquires no Property in it, and he receives no remuneration for so doing.

Now it is often supposed that when a customer pays in money to his account that Money becomes a Deposit. That is the first error in the subject: because the Money so paid in is not a Depositum, it is a Mutuum. The money is in reality sold to the banker, and it has become his actual property. In banking language, moreover, it is not the Cash which is termed the Deposit, but the Credit or Right of Action created in exchange for it. So when a banker discounts or buys a Bill of Exchange, the Credit he creates in exchange for it is also termed a Deposit. The Money or the Bill of Exchange sold to the banker are his Assets. The Deposits are his Liabilities, or the Price he pays for his Assets.

I will now shew you an amusing error which is usually seen in the newspapers every half year after the Joint Stock Banks publish their accounts. Many papers give summaries of the accounts of the Joint Stock Banks, which shew that they have £200,000,000 of Deposits, and the writers enlarge on the wonderful quantity of money the Banks have to lend out or trade with. As a matter of fact, there are nothing like two hundred million sovereigns in the whole country. I believe the best authorities do not estimate the quantity of sovereigns in the whole country at more than one hundred and twenty millions. Of course, any one who knows the real meaning of the technical language of banking knows that it is a complete error and delusion to suppose that the Banks have two hundred millions of actual money, as any one may see by looking at their assets in cash. These Deposits are not Deposits in cash at all; they are mere Credit, and are merely so many Bank Notes in disguise. They are nothing but an enormous superstructure of Credit, reared up on a comparatively small basis of bullion, exactly like the Issues of Notes. These figures do not shew the quantity of cash the Banks have at their command to lend with; but they shew the quantity of business they have created out of their liabilities they have created. These apparent Deposits, being so much cash, are nothing but the Cash of Action the bank has created, that is, the Cash it has purchased the Cash and Bills of
Assets. A sudden increase in banking Deposits is in reality nothing more than an inflation of Credit, just exactly similar to a sudden increase of Bank Notes. After all the great monetary panics, it is invariably observed that the Deposits in Banks greatly diminish. It is often supposed that after these panics persons withdraw their money from the Banks, and so diminish the Deposits; but the Banks have then just as much Cash as before. The real explanation is that after these panics there is a great destruction of Credit. There are not so many Debts to buy, consequently the Banks cannot create Deposits by buying bills. Hence this diminution of Deposits is not a diminution of Cash; but it is a Contraction of Credit.

In Banking Language a Deposit and an Issue are the same.

The student must therefore carefully observe that in the language of Banking a Deposit and an Issue are the same thing. A Deposit is simply a Credit in a banker's books, giving his customer a Right of Action against him for a sum of money. But this Credit in his books is also an Issue. The word Issue comes from exitus—a going forth; and in Mercantile Law the technical meaning of to Issue an instrument, is to deliver it so that the holder of it has a Right of Action against the Issuer. A Bill of Exchange is not Issued until it is delivered to some one who acquires a Right of Action on it; and as soon as a Banker has created a Credit or a Deposit in his customer's favour in his book, he has Issued a Right of Action against himself.

It is, then, a fundamental error to distinguish Banks into Banks of Deposit and Banks of Issue. All Banks whatever are Banks of Issue equally as of Deposit. The sole function of a Bank is to create Issues or Deposits, and whether it puts these Issues or Deposits into circulation by means of Notes or not in no way increases its Liabilities.

Error of the Common description of Banking

I have now shewn you by the description of the actual mechanism of Banking, what a complete misconception it is of its nature to say that Bankers are merely agents or intermediaries.
between persons who wish to lend and those who wish to borrow. This is entirely untrue in the ordinary sense of "lending" and "borrowing": because in the ordinary case of lending the lender deprives himself of the use of the thing lent. But when a person pays in money to his banker he does not in any way intend to deprive himself of its use; on the contrary, he means to have the same free use of it as if it were in his own house. A customer, therefore, lends his money to his Banker, but at the same time has the free use of it. The banker, upon the strength of the money being deposited with him, buys Debts by creating other Debts, several times exceeding the amount of the cash placed with him, and the persons who sell him their Debts have the free use of the very same coin which the lender has the same right to demand. Thus the "lender" and the "borrower" have the same rights at the same time to demand the same coin. And all Banking depends on the calculation that only a certain portion of each set of customers will demand the actual cash, and that the majority will be satisfied with the mere Credit or Promise to pay.

Banking, like Insurance, is entirely based on the doctrine of chances: it is of course possible that a banker may be called upon to pay all his liabilities at once, just as it is possible that all the lives insured in an office may drop at the same instant; or that all the houses insured may be burned at once. A large and sudden demand for money on a Bank is termed a Run: and a run upon a Bank is analogous to a conflagration or a pestilence to an Insurance Office. But all Insurance and Banking is based upon the expectation that these contingencies will not happen. A banker multiplies his liabilities to pay on demand, and keeps by him a sufficient amount of cash to ensure the immediate payment of all claims which are likely to be demanded at one time. If a pressure comes upon him he must sell some of the securities he has bought or borrow money on them.

**On the Method of Utilising Bank Credits**

The Banker having thus Issued these Credits or Deposits, or Rights of Action against himself to his customer, we have now to consider how he can utilise them. He cannot, of course, transfer them to any one else by manual delivery. In order to do this they must be recorded on paper, and this may be done in two forms.
1. The banker may give his customer his own Note, promising to pay him or any one else he pleases such a sum on demand.

2. The customer might write a note to his banker directing him to pay such a sum either to some particular person, or to his order, or to bearer.

These paper documents neither create nor extinguish Liabilities. They are for the sole purpose of recording them on paper and transferring them to some one else.

Bankers' notes were at first merely written on paper like any other promissory notes, and they were for any sums. In 1729 Messrs. Child & Co. introduced the practice of having their Notes partly printed and partly written, like a modern Cheque, and the banker just filled them up with the name and sum required. London bankers appear to have issued their own Notes till about 1793. There was a panic in that year, and it is probable that they then discovered the danger of having a large sum of their notes floating about in the hands of the public; at all events they appear to have entirely discontinued issuing their own notes about that time, though they never were forbidden to do so until the Bank Charter Act of 1844.

When therefore a Banker has created a Credit or Deposit in favour of a customer he can put this Credit into circulation either by means of the Banker's own note or by means of a Cheque; and when he does so the following different results may take place:

1. The customer himself or the holder of the Cheque or Note may draw out the actual money; if they do so the Banker's liability is extinguished. It is a resale of money to the holder of the Note or Cheque, and the banker buys up the Right of Action against himself.

2. The Cheque or Note may circulate in commerce, and effect any number of payments exactly like money; and it may ultimately be paid into the account of another customer of the same bank, and the series of transactions finally closed by the mere transfer of Credit from one account to another.

3. The Cheque or Note may, after performing a similar number of exchanges, fall into the hands of the customer of another Bank, and be paid into that Bank. So the banker becomes debtor to the customer of another bank. But if the Banker A becomes debtor to the customers of the Banker B, the
chances are that about an equal number of the customers of the Banker A will have claims against the Banker B. If the mutual claims of the customers of each Bank on the other are exactly equal, the respective orders are interchanged, and the Credits re-adjusted to the accounts of the different customers without any payment in money. Thus if the mutual claims among any number of bankers exactly balanced, any amount of business might be carried on without requiring a single coin. Formerly if the mutual claims did not balance the differences used to be paid in coin or bank notes; but now, by an ingenious arrangement at the Clearing House, which is too long to be described, the use of coin and Bank Notes is entirely dispensed with: and all the banks in the clearing are really and practically formed into one huge banking institution for the purpose of transferring Credits amongst each other, just as Credits are usually transferred from one account to another in the same bank without a single coin being required. You may judge of the importance of this system when I say that in the year 1874 upwards of £6,000,000,000 of Credits were transferred between the different banks without the use of a single coin.

On the Cash Credit System of Scotland

The Credit created by Bankers in the operation we have just been considering was employed to purchase Commercial Bills which arise out of the transfer of commodities: and we have seen that they can create credit to several times the amount of the cash in their possession. And some writers seem to imagine that this is the limit of legitimate Credit. I have now to describe a species of Credit of a totally different species invented in Scotland, and which has been one cause of the improvement of the country. It is Credit created, not for the purpose of transferring commodities already in existence, but for the express purpose of calling New products into existence.

When after a long period of inactivity the energies of a people are suddenly turned into an industrial direction, they find innumerable enterprises which would be profitable, if only they possessed the means of setting them agoging. The quantity of money which was found sufficient for a non-industrial people is now found to be wholly inadequate to the increased demand for it.
The only consequence can be that if there is a greatly increased demand for the existing quantity of money, the Rate of Interest will rise proportionally, and rise to such an extent as to preclude all possibility of profit from such enterprises even if effected.

It has therefore invariably been found that whenever this takes place multitudes of schemes are set afloat for increasing the quantity of money. This was particularly the case after the restoration in England, when men, weary of politics and polemics, began to turn their attention to commerce.

Among fields of enterprise, at that period, none seemed more promising than agriculture. But all the available specie was absorbed in commerce: none was to be had for agriculture: or at least only at such rates as to be practically prohibitory.

This real want gave rise to a multitude of schemes for founding land banks at this period. Among the most famous of these was one proposed by John Law for the purpose of basing Paper Money on land, which he offered to the Parliament of Scotland in 1705, and they fortunately rejected it. It was carried out in France in 1721 under the name of the Mississippi scheme.

I have no time at present to point out the errors in theory of Law’s system; but ten years after the failure of Law’s scheme in France, the Scotch Banks, by the admirable invention of Cash Credits pushed Credit to the utmost extent of its legitimate limits, and realised all that was practicable in the various schemes that were then rife for founding Land Banks: and it is to this system that the principal progress of Scotland in agriculture and all public works is due.

In order to understand clearly the principles of the system, let us recur to our fundamental definition or conception. Because a true definition or fundamental conception is the pole star to guide us through all difficulties and perplexities.

I have shewn you in the preceding lectures that the true definition of Credit is the “Present Right or the Present Value of a future Profit:” and every future Profit from whatsoever source arising, or of whatsoever nature, has a Present Value, which may be brought into commerce, and may be bought and sold like any material chattel.

I also shewed you that the land is an Economic Quantity producing a continuous series of Profits: and a trader exercising any
profitable business is an Economic Quantity analogous to land, as he produces a series of continuous Profits.

I then explained to you the system of Commercial Credit; and shewed you that its true limits were the future profits; and that all Credit was sound which was redeemed by the future profits.

Now having argued from Land to Commerce, let us reverse the case, and argue from Commerce to Land.

If every future Commercial Profit has a Present Value which can be brought into commerce and exchanged, the same is equally true of land. The Present Value of every Profit from Land can be equally brought into commerce and exchanged. And if the Credit be strictly limited to the future Profits of the land: Credit may, under certain conditions, be created in anticipation of the future Profits from the land as safely as on the future Profits of commerce.

The Bank of Scotland was founded in 1695, with powers of unlimited issue, both in amount and denomination. At first it only issued Notes of £100, £50, £10, and £5. In 1704 it began to issue £1 notes. It received a monopoly of Banking for 21 years: and in 1727, after the expiry of its monopoly, the proprietors of the Equivalent fund were endowed by Charter with the powers of Banking, and assumed the name of the Royal Bank of Scotland.

In the very contracted sphere of commerce in Scotland at that time there were not sufficient Commercial Bills to exhaust the Credit of the two Banks; and the new Bank devised a new means of getting its Credit into circulation.

It agreed, on receiving sufficient guarantees, to open Credits to certain limited amounts in favour of respectable and trustworthy persons.

A Cash Credit is therefore a drawing account created in favour of a customer upon which he may operate precisely in the same manner as in a common drawing account; the only difference being that instead of receiving interest on the daily balance at his Credit, he pays interest on the daily balance at his Debit. It is thus merely an Inverse drawing account.

Cash Credits are applicable to a totally different class of transactions from those which are Bils of Exchange.
difference being that Bills of Exchange arise out of the transfer of existing commodities; and are payable in one sum at fixed dates, while advances in Cash Credits are not issued on the transfer of existing commodities, or on any previous transaction, and are not repayable in one sum at fixed dates, but are a continuous working account.

Cash Credits have been of enormous assistance to persons in their private capacities. Every one having access to the *arcana* of the different banks must be aware of numerous instances of persons whose rise in life is entirely owing to a Cash Credit. Mr. Monteith, then Member for Glasgow, told the Committee of 1826 that he was then a manufacturer employing 4000 hands, and that he began the world with a Cash Credit; and every Banker must know of numerous similar instances. But at present I have no time to enlarge on the advantages of Cash Credits to private individuals: my purpose is to shew their effects in advancing the agriculture and public works of the country.

Let us suppose that in many parts of Scotland there is abundance of reclaimable land and abundance of people, but unemployed for want of Money or Funds to set their industry in motion.

Let us then suppose that a Proprietor comes with £10,000 in actual money, and applies it in reclaiming the land, sowing the crops, and it would be admitted that the Money was used as Capital; and the produce of the land would replace the Capital expended.

But suppose that there being plenty of reclaimable land and unemployed people, as before, there is no Money in the district; then the Banks open branches and send down a supply of £1 notes, and grant Cash Credits to the farmers. These notes are universally received as readily as coin. The farmer can now pay wages and reclaim the land: and with the products of the land they repay the debts incurred: and thus large tracts of barren land have been changed into fertile corn fields.

Now the actual effects of expending money and employing £1 notes in this way are absolutely identical: the people are employed and the land is reclaimed from the wilderness, and produces a
continuous series of profits. And if it be admitted that Money expended in this way is Capital, why are not £1 notes also expended in this way Capital? An equal sum in Money and in £1 notes produce exactly the same effects, and consequently they are equally Capital: the only difference is that in using Money the employer makes Capital of the accumulated Profits of the past: in using Credit he makes Capital of the expected Profits of the future.

Every one knows that the prodigious progress in agriculture which has been made in Scotland during the last 180 years has been chiefly effected by means of these Cash Credits. And in a similar way almost all the great public works of every description, roads, canals, docks, railways, &c., have been made by Cash Credits. It was stated to the Committee of the House of Commons, in 1826, that the Forth and Clyde Canal was executed by means of a Cash Credit of £40,000, granted by the Royal Bank. So all railroads are executed by similar means. When the directors have got their Act they obtain a Cash Credit from a Bank which supplied the necessary funds in its own £1 notes.

And thus we see how Credit is applied to the formation of new products equally well as to the transfer of existing ones: the principle of the Limit, however, being exactly the same, namely, the Present Value of the Future Profit.

All these marvellous results, which have raised Scotland from the lowest state of barbarism up to her present proud position in the space of 170 years, are the children of pure Credit. It is no exaggeration, but a melancholy truth, that at the period of the revolution, in 1688, and the establishment of the Bank of Scotland, this country, partly owing to such a series of disasters as cannot be paralleled in the history of any other independent nation, and partly owing to its position at the very outskirts of civilisation, and far removed from the humanising influences of commerce; divided into two nations, aliens in blood and language, was the most barbarous and lawless country in Europe. And it is equally undeniable that the two great causes of her rapid rise in civilisation and wealth have been her system of national Education and Banking. Her Banking has been of infinitely greater service to her than gold and silver. Her Banking system has tended forth every manly virtue:
mines of the precious metals would probably have demoralised her people. In the character of her own people Scotland has found Wealth infinitely more beneficial to her than all the mines of Mexico and Peru.

The express purpose of these Banks was to create Credit, Incorporeal entities, created out of Nothing, for a transitory existence, and when they had performed their functions vanishing again into the Nothing from whence they sprang. And has not this Credit been Capital? Will any one, with these results patent to all the world, believe that it is maintained by some writers, who are supposed to be Economists, that the effects of Credit are purely imaginary. That Credit conduces nothing to Production and the increase of Wealth. And that those who allege that Credit is Capital are such puzzled-headed dolts as to think that the same thing can be in two places at once!

Now it must be carefully observed that these Cash Credits are for a distinct purpose, quite different from the discount of Commercial paper. They are not founded upon any previous transactions, nor upon the transfer of commodities already in existence. They are for the express purpose of creating new products, which would either have had no existence at all but for them, or, at all events, they would have been deferred for a very long time, until actual money could have been accumulated to have produced them. Then we have an enormous mass of Exchangeable Property created out of Nothing by the mere will of the Bank and its customers, which produces all the solid effects of actual 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, having served their purpose, they were Decreased into Nothing: which are

"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 wreck behind." On the contrary, their solid results have been the far-famed agriculture of Scotland: her manufactures: the unrivalled steamships of the Clyde: great public works of all sorts: canals: roads: bridges: docks: railroads: and poor young men converted into princely merchants.
On the Economical Effects of Banking

Having now given this exposition of the actual mechanism of Banking, and of some of its effects, which the experience of every one present knows to be true, it is now clear what a complete misconception of banking it is to say that bankers only borrow from some persons in order to lend to others.

The business of Banking is to build up a superstructure of Credit several times exceeding the basis of bullion: and this Credit is intended to circulate and produce all the effects of money.

It is the custom among writers who have no practical knowledge of the subject to maintain that Banking cannot increase the Capital of the country; but every one who can describe the effects of Banking in accurate language, knows well enough that Banking enormously increases the Capital of the country.

The only really accurate description of Banking that I am aware of is that by Alexander Hamilton, the eminent financier of the United States. When called upon to present a Report on the expediency of establishing a National Bank, he said—

"The following are among the principal advantages of a Bank:

"First: The augmentation of the active or productive Capital of a country... It is a well-established fact that Banks in good Credit can circulate a far greater sum than the quantum of their Capital in gold and silver... This faculty is produced in different ways.

"(1). A great portion of the notes which are issued and pass current as cash are indefinitely suspended in circulation, from the confidence which each holder has that he can at any moment turn them into gold and silver.

"(2). Every loan which a banker makes is, in its first shape, a Credit given to the borrower in its books, the amount of which it stands ready to pay, either in its own Notes, or gold, or silver, at his option. But in a great number of cases no actual payment is made in either... The same circumstances illustrate the truth of the position that it is one of the properties of Banks to increase the active Capital of a country. This additional employment of money, and the faculty of a bank to lend and circulate more than the amount of coin, are to all the
purposes of trade and industry an \textit{absolute Increase of Capital}. Purchases and undertakings in general can be carried on by means of Bank Paper, or Credit, as effectually as by an equal sum of gold or silver. And thus, by contributing to enlarge the mass of industrious and commercial enterprises, Banks become nurseries of national wealth—a consequence as satisfactorily verified by experience as it is clearly deductible in theory."

I have alluded to J. B. Say as the author of the silly sarcasm that those who say that Credit is Capital say that the same thing may be in two places at once: and yet you will, perhaps, be surprised to hear that this very Say alleges that Banking Credits increase the Capital of a country. He says: "If bills of Credit could replace completely metallic money, it is evident that a Bank of Circulation veritably augments the sum of National Wealth, because, in this case, the metallic wealth becoming superfluous as an agent of circulation, and nevertheless preserving its own value, becomes disposable, and can serve other purposes. But how does this substitution take place? What are its limits? What classes of Society make their profit of this interest of the \textbf{new fund added to the Capital of the Nation}?"

"According as a bank issues its notes, and the public consents to receive them on the same footing as metallic money, the number of monetary units increases

"If, suppose, it issues 100 millions of notes, it will withdraw, perhaps, 40 millions in specie, which it will put in reserve to meet the payments which may be demanded of it. Therefore if it adds 100 millions to the quantity of money in circulation, and if it withdraws 40 millions from circulation, it is as if it added only 60 millions

"We now wish to learn what class of society enjoys the use of this \textbf{New Capital}?"

Thus you will see that Say, who is the author whose dogma has been most frequently quoted in ridicule of the doctrine that Credit is Capital, himself expressly classes Credit under the term Capital.

Not many persons are aware, probably, of the immense consequences produced by banking. When the London goldsmiths first took to banking the ordinary rate of interest was 10 per cent.: and even that was low for the loan of actual money. But the bankers found that they could maintain a large amount of their Credit
in circulation, which served the purposes of money: they found their resources multiplied: and consequently they began to bid against each other, and in a very short time the average rate of interest was reduced from 10 per cent. to 3 per cent.: about which it may be said to have remained ever since. When the Bank of England was founded, Exchequer Bills and other Government Securities were at a discount of about 40 per cent. In a very short time the Bank brought down the Rate of Government Securities to 3 per cent.

One of the consequences of this was to triple the Value of land: the value of land depends chiefly on the current average rate of interest. In the days of Charles II. the usual rate of interest was 10 per cent., and the land was worth only 10 years' purchase. But now that the current rate of interest is reduced to 3 per cent., the common value of land is about 30 years' purchase.

Besides that, it has given a prodigious stimulus to industry of all sorts, agricultural and commercial: because to effect agricultural improvements, the very first requisite is to be able to obtain capital on very moderate terms: thus you see what a prodigious advantage a solid banking system is to a country: and you also see what an advantage it is to a country to cultivate banking habits among the people, because every sovereign paid into a bank enables the bank to multiply its effect by fivefold through its credit. In short, if I had time to trace the effects of Banking through all its ramifications, you would see the truth of what the great Statesman and Jurist of the United States said: "Credit has done more, a thousand times, to enrich nations than all the mines of all the world."

On the Right of Private persons to issue Notes and other Instruments of Credit

I now have to touch upon a subject of the greatest importance to Bankers and other members of the Mercantile community—namely, the Right of private persons to issue Notes and other Instruments of Credit.

In 1692 a great contest took place between the bankers of the City of London and the Court of Queen's Bench, presided over by that very eminent judge, Lord Holt. For about thirty years previously the City Bankers had been issuing their Notes payable
to bearer on demand, and in several cases they had been allowed to be legal documents. But in that year a case upon a Banker's note came before Lord Holt and the Court of Queen's Bench, and the Court unanimously held that such documents were illegal at Common Law. It had been affirmed by Lord Coke that Choses-in-action or debts could not be assigned or transferred at Common Law so as to enable the transferee to sue the debtor in his own name.

Accordingly, this doctrine being held by such distinguished authority, when the Bank of England was founded in 1694, a clause was inserted in the Act legalising the transfer of their Notes by indorsement. But a series of decisions held private bankers' notes to be contrary to the Common Law. At length, in 1704, an Act was passed placing Promissory Notes on exactly the same footing as inland Bills of Exchange. Accordingly, from that period it was held to be an established dogma in the Law of England that debts could in no case be assigned and transferred, that Bills of Exchange were contrary to Common Law, and only permitted as part of the Lex Mercatoria, or custom of Merchants, and that the legality of Promissory Notes entirely depended upon the Statute of Anne. Such was the doctrine laid down in every text-book of Mercantile Law, and which was carefully inculcated on every aspirant to the bar; and such was the doctrine which I stated in the early editions of my works, trusting in the uniform dogmas of the judges for nearly 200 years. Among other opinions to that effect, Lord Chancellor Cranworth, in a very well-known appeal case from the Court of Session, said that it was not to be tolerated by the law, either of England or Scotland, that any one should issue a floating Right of Action against himself. The evident consequence of such a doctrine was that the whole issues of Notes and Bills were illegal at Common Law.

However, in 1867, the Government of the day issued a Commission to certain distinguished Lawyers, among whom were Lord Cranworth, Lord Westbury, Lord Selborne, Lord Hatherley, Lord Cairns, and Lord Penzance, to take measures to prepare a Digest of certain branches of the Law for the guidance of the Courts of Law, in the then contemplated fusion of the Courts of Common Law and Equity which has since taken place. The Commissioners invited members of the bar to offer themselves to
prepare these Digests. One of the branches of the Law selected was Bills of Exchange, Bank Notes, &c.

I entered into this competition, and in preparing the Paper for it it occurred to me that the doctrines of the Common Law on the subject of the transfer of Debts were contradictory; because in some cases it was perfectly admitted that it was legal to transfer them. Upon investigating the matter, I found a continuous series of decisions of the Courts of Common Law from the days of Edward III. to that of William III., being more than 800 years, in which they unanimously held that wherever a Debtor or Obligor created an Obligation, transferable to assignee or bearer, that the assignee or bearer might sue him in his own name

Accordingly, in the Paper I prepared for the consideration of the Commissioners, I submitted that the doctrine held by the Judges from the time of Edward III. to that of William III. was the correct doctrine; and the series of cases decided by Lord Holt in 1692, and adhered to since his day, were erroneous, and ought to be set aside

The Commissioners acquiesced in my arguments, and selected me to prepare this Digest, and I was invested with the duty of preparing the Digest of this branch of Mercantile Law, and reducing into systematic and scientific order the whole cases on this subject, both at Law and in Equity. And as it was to be a Declaration of the Law on the subject, it was my duty to set aside and reverse such cases as were erroneous

Accordingly, I began the Digest by setting aside the whole series of cases decided by Lord Holt upon which the modern doctrine is founded, as erroneous, and stated the Law to be as it was held by the Courts during the preceding 800 years

After working at the Digest for some considerable time, the Commissioners determined to discontinue it in its then form, but recommended that it should be begun in another way. The Government, however, never carried out this suggestion, and my Digest was never published

But I published the new doctrine in my *Principles of Economical Philosophy*, and in the new edition of my *Theory and Practice of Banking*, because I considered that the approval of the Commissioners of my view of the Law in preference to that which was commonly held by the profession, was in fact equivalent to a judgment of the House of Lords in my favour. Because the
Commissioners included all the Law Lords except one, and if they approved of my doctrine in their capacity of Commissioners, they must equally have done so in their capacity of Law Lords.

Shortly after the publication of my *Principles*, the point came before the Court of Queen's Bench, and the present Lord Blackburn, in delivering the judgment of the Court, restated the Law as it had been previously held, in very strong and decided terms.

I was, therefore, placed in this somewhat unpleasant position: as the expressly authorised exponent of the Law I was in direct conflict with the Court of Queen's Bench as to the fundamental principles of the Common Law of England on Credit.

However, the very same point came again before the Court of Exchequer Chamber in 1875, when the whole subject was thoroughly discussed: and in the course of the argument the Lord Chief Justice of England pronounced the series of cases decided by Lord Holt, and adhered to ever since, to be a blot on our judicial history, and the Court unanimously reversed them and annulled them.

This was in the case of *Goodwin v. Robarts*: and it is beyond all question the most important mercantile case of modern times. The effect of it is for the first time to establish the whole business of Banking and Bills of Exchange on a solid legal basis.

In delivering the judgment of the Court the Lord Chief Justice did me the very high honour of referring to my Digest by name, and said: "We find it stated in a Law Tract by Mr. Macleod, entitled *Specimen of a Digest of the Law of Bills of Exchange*, printed, we believe, as a Report to the Government, but which from its research and ability deserves to be produced in a form calculated to ensure a wider circulation."

I wish you, therefore, to understand that all that I have said on the subject of Credit has been strictly scrutinised and approved of by all the Law Lords and Judges of England: and that when the Council of your Institute have accorded me the opportunity of addressing you, they are acting entirely in conformity with the recorded judgment of the Judges of England.

You will at once appreciate the importance of this Judgment; because until its delivery, it had been held that issuing Notes, payable to bearer on demand, was contrary to the Common Law of England, and that it was a privilege specially conferred by Act
of Parliament; whereas it is now clearly and finally settled to be a Right at Common Law which can only be taken away by Act of Parliament.

On the Right of Foreign Banks to open Branches in England

I have now come to the last point I have to touch upon in the present course.

You are, of course, aware that several of the Scotch Banks have within recent years established branches in London. It is perhaps somewhat surprising in these days of free competition that their doing so has created some opposition, and in fact their right to do so has been questioned in Parliament. Now of course it is entirely out of my province to discuss their reasons for so doing; that is a matter exclusively for their own consideration. My sole purpose is to state their Legal right to act as they have done.

Now as for the purposes of trade and commerce, England and Scotland are one country, there is no apparent reason why they should not have this Right. No one questions the right of English banks to establish branches in Scotland if they choose to do so; and in fact several of the English Colonial Banks have agencies in Scotland. Why, then, should it be supposed that it is contrary to Law for Scotch Banks to open branches in England?

The onus of proof lies entirely on those who deny their Right to do so. And I may say at once that the whole question turns on the privileges of the Bank of England; and I will now state exactly what these privileges are. The privileges of the Bank of England are a penal enactment against the rights of the rest of the trading community, and therefore they are to be construed strictly. Nothing is contrary to law except what is clearly and distinctly forbidden by them. Everything else is legal and permissible.

At its first institution the Bank of England received no monopoly. The Ministry of William III., in 1694, when it was founded, was not composed of one party in the State as it now is, but was partly Whig and partly Tory. The Bank of England was founded by the Whig section of the Ministry, and was especially intended to further commerce. The Tory
portion of the Ministry endeavoured to get up a Bank to assist agriculture, which they called the Land Bank. Every reader of Macaulay knows how the scheme failed; and its failure was one of the causes which produced the stoppage of the Bank in 1697. Accordingly, when the Capital of this Bank was increased by Parliament in 1697, it was enacted that no other Bank should be sanctioned by Act of Parliament. There was nothing to prevent private banks being formed of any magnitude, nor did it prevent any other corporation or company from setting up banking business. Accordingly, a company, called the Mine Adventurers of England, commenced doing banking business. In order to prevent this it was enacted, in 1709, that no company or society exceeding six persons "in that part of Great Britain called England, might borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand, or at any less time than six months from the borrowing thereof."

Now at that time no one had framed a definition of banking; but it was supposed that issuing notes payable on demand was so essentially what constituted the business of banking, that to prohibit companies from doing that was to prevent them from banking. And so it was understood at the time, and for several years no attempt was made to infringe the privileges of the Bank of England.

About 1742, however, when the Charter of the Bank expired; several attempts were made to evade the words of the Act, and in order to preserve them more effectually, the following clause was inserted in the Bank Charter Act of that year.

"And to prevent any doubts that may arise concerning the privilege or power given by former Acts of Parliament to the said Governor and Company of Exclusive Banking, and also in regard to the erecting any other Bank or Banks by Parliament, or restraining other persons from Banking during the continuance of the said privilege granted to the Governor and Company of the Bank of England, as before recited, it is hereby further enacted and declared, by the authority aforesaid, that it is the true intent and meaning of the Act, that no other Bank shall be erected, established, or allowed by Parliament, and that it shall not be lawful for any body politic or corporate whatsoever united, or to be united in covenants or partnership, exceeding the number of six persons, in that part of Great Britain called"
England, to borrow, owe, or take up any sum or sums of money, on their bills or notes payable at demand, or at any less time than six months from the borrowing thereof, during the continuance of such said privilege of the said Governor and Company, who are merely declared to be and remain a Corporation with the privilege of Exclusive Banking as aforesaid.

These words, which were always contained in subsequent Bank Charter Acts, strictly define the exclusive privilege of the Bank of England. Its sole monopoly is that no Bank having more than six partners should issue Notes payable at less than six months in England; but all other kinds of banks and banking are left absolutely free.

There is no doubt whatever that Parliament intended to confer an absolute monopoly of banking on the Bank of England; but by strictly defining what they conceived banking to consist in, they, in fact, ultimately defeated their own purpose. For a considerable number of years it was effectual for purpose, and no banks were founded exceeding six persons.

After the great crisis of 1825, however, the Bank consented to give up a portion of their monopoly, and in 1826 Joint Stock Banks were allowed to be formed to issue Notes beyond the limit of sixty-five miles from London, provided they had no Head Office in London, and did no business in London. Among other Banks founded under this Act was the National Provincial Bank of England, which for many years carried on a very large business in the provinces, and had a large issue of notes, but had no head office, and did no business in London.

But I have observed already that the private bankers of London had of their own accord discontinued issuing notes about 1793, and they were the first to shew that banking might be carried on without issuing notes. Accordingly some persons, about 1820, began to allege that there was nothing in the monopoly of the Bank of England to prevent banks of any magnitude and any number of partners being formed, provided that they did not issue notes. Nothing was done at that time to give effect to that suggestion; but in 1832 a company was formed under the management of Mr. Gilbart, and called the London and Westminster Bank, to bank according to the usual custom of London bankers without issuing notes. The Bank of England was thrown into great perturbation at seeing the flank of their monopoly turned in this unexpected manner, and this
invasion of what they considered their privileges, and they applied to the Government to insert a clause in their new Charter Act, which was then passing through Parliament, to prevent the formation of such banks. But the Law Officers of the Crown declared that there was nothing in the monopoly clause of the Bank Charter Act to prevent such banks being founded, and that they were legal at Common Law. Accordingly many Joint Stock Banks have been founded, and carry on business in London without issuing notes.

Such then is a simple statement of the Law of the case. And with respect to the Scotch Banks opening branches in London or any other part of England the sole question is: Do they issue Notes payable at less than six months after demand in England? The clear answer is that they do not; and consequently they have an absolute right to open branches in London or any other part of England if they choose to do so.

The sore point of the case is this: the National Provincial Bank and another country bank which had large issues of notes have found it expedient to become London Bankers, and have established their head offices in London. But to do this they have been obliged to give up their issues in the provinces. And they consider it very unjust that they have to give up their country issues when they do London business, while the Scotch Banks may do London business and still maintain their issues in Scotland. But the answer to all that is that it is a pure matter of Law. By opening branches in London the Scotch Banks do not infringe the monopoly of the Bank of England: whereas Banks issuing notes in the provinces of England do infringe that monopoly if they do business in London. As a matter of fact any bank in any part of the world may open any number of branches in London or any other part of England that it pleases, so long as it does not issue notes in England. But the country Joint Stock Bank may not do any business in London or within 65 miles of it, without giving up their issues of Notes.

Whatever may be the hardship or injustice of the case, the remedy certainly does not lie in depriving the Scotch Banks of their legal rights: but rather in a thorough revision and rectification of the Banking Laws of England, which the logic of facts will probably force, however unwillingly, on the Government before very long.

Institute of Bankers in Scotland

LECTURES ON CREDIT AND BANKING
HENRY DUNNING MACLEOD, ESQ.

EXAMINATION PAPER, 7 TO 9 P.M.
EDINBURGH, FEBRUARY 16: ABERDEEN, FEBRUARY 16, 1882

1. Explain the meaning of the term "Economics"

2. (a) What is the technical meaning of the word "Wealth," as used by all ancient writers, and by the most recent Economists?
   (b) How many distinct kinds of Wealth are there? Give instances of each

3. (a) Enumerate the different kinds of Exchange of which Commerce in its widest extent consists
   (b) Which of these does "Banking" include?

4. (a) Explain fully the meaning of the word "Property"
   (b) How are Lands, Houses, Jewelry, Cattle, &c., and also Rights of Action, Bank Notes, Bills of Exchange, Shares in Commercial Companies, Copyrights, the Goodwill of a Business, &c., equally "Property" and "Wealth"

   [Bishop Berkeley asks in his "Querist"—"Whether all circulation be not alike a circulation of 'Credit,' whatsoever medium—Metal or Paper—is employed; and whether Gold be any more than 'Credit' for so much power?"
    Edmund Burke speaks of Gold and Silver as "the recognised 'Credit' of mankind"
    Baudeau speaks of coined Money as a "Bill of Exchange or 'Order' payable at the will of the bearer"
    Adam Smith calls a Guinea a "Bill" upon all the tradesmen in the neighbourhood
    Henry Thornton, the banker, says—"Money of all sorts is an 'Order' for goods"

5. (a) Define "Credit"
   (b) What is meant by saying that "Money" is a form of "Credit"?
Demosthenes says—"If you were ignorant of this, that 'Credit' is the greatest 'Capital' of all, you would be utterly ignorant"
Dutot says—"'Credit' is therefore the greatest 'Wealth' to every one who carries on commerce"

6. Junius says—"'Private Credit' is 'Wealth'"
Mill says—"'Everything' which has 'Purchasing Power is Wealth'"
He also says—"'Credit' is 'Purchasing Power',"—
From which the necessary inference is that "'Credit' is 'Wealth'"

(a) Define "Capital"
(b) Explain how "Credit" is used as "Capital"

7. (a) What is the value of anything?
(b) It is often asserted that labour is the cause of all value
Is this assertion true?
If you are of opinion that it is not true, quote any number of cases which occur to you in which there is value, and no labour

8. (a) Define an "obligation"
(b) Of what parts does it consist? And what are their names?

9. (a) What is the double meaning of the words "Debt" and "right"?
(b) Explain the reason of this double meaning

10. Explain what is meant by saying that—
(1) Debts are "goods and chattels"
(2) Debts are "negative quantities"

11. (a) Explain the distinction in principle between—
(1) The "loan" of an umbrella
(2) The "loan" of a pot of strawberry jam or a bottle of wine
(b) Give the names in Roman law of these distinct kinds of "loan"
(c) To which of these classes of "loan" does a loan of money belong?

12. Define—(1) "acquitilation"; (2) "novation"; (3) "compensation" and give instances of each

13. A father's age is 58 and his son's 18: when was the father three times as old as his son?
Solve this equation: explain the meaning of the answer: and show its application in the Theory of Credit

14. What is meant by saying that if money is termed "positive capital," credit may be termed "negative capital?"

15. What is the meaning of the word "bank"? To what office was it first applied?
16. It is said in the Report of a Committee of the House of Commons—

"The use of money, and that only, they regard as the province of a Bank, whether of a private person, or of the Banking Department of the Bank of England."

In your opinion is this a correct description of the business of "Banking?"

It is officially stated that in the year 1881 the aggregate Assets in Cash of the Scotch Banks were £3,902,983, and their aggregate Liabilities were £88,778,485.

Describe the process by which the aggregate Liabilities of the Scotch Banks amount to twenty-three times the Cash they hold.

And from this description deduce the correct definition of "Banking."

17. (a) What is the technical meaning of—

(1) A "Deposit" in Banking language
(2) An "Issue" in Mercantile Law

(b) A customer pays in 100 sovereigns to his account at his banker's. Is the Money paid in a "Deposit?"

(c) A accepts a Bill for the Accommodation of B and delivers it to him. Is the Bill "Issued?"

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List of Successful Candidates

EDINBURGH.

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Certificates of Honour.

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ABERDEEN.

Prizes.

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