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ECONOMICS

by

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I am again appearing under a handicap. I have had another of those oral operations. I am beginning to disintegrate and as a result, one by one, I am losing those necessary appendages and I talk with a little difficulty. I hope you will bear with me and be able to understand my somewhat inarticulate remarks.

I thought I might do as I tried to do last year and that is, paint a word picture of what the science and the field of economics is. I know that in those more or less troublesome times the term economics and economy have been so much used and discussed that the average person is inclined to believe that it is a very difficult and intricate subject. However, that is not true and I shall try in the time that is allotted me to draw you a picture of just the field of activity which is covered by the science of economics, and I shall try to do so in a way that may be easily understood.

The science of economics is subject to many definitions; that which perhaps illustrates it better than any other is that which says economics is a science which studies two things; first, the nature and character of those wants to which you and all of us as human beings are subject; and secondly, the manner or means whereby these wants are gratified. That is the entire scope of the subject of economics, human wants and their gratification. All human wants are subject of satisfaction by the possession and utilization of what the economist terms "want gratifying goods" and if we understood the character of man and the nature of his wants and then if we knew the nature and character of want gratifying goods and can relate the one to the other, we know the whole science of economics. Those want gratifying goods which are the entire basis of the subject of economics may further be divided as being of one or two kinds; everything that you or I desire is classified by the economists as a want gratifying good. All of those want gratifying goods are classified as either a free good or an economic good. The distinction between the two is a relatively small one, a free good like the air we breathe exists for us in a relatively unlimited quantity and because it comes to us as a result of no active effort on our part to obtain it, the economist calls it a free good, and since it is unlimited in quantity and requires no conscious effort to obtain it, the economist is no longer concerned with man in his relation to free goods because they offer no problem. Air and water are typical free goods. On the other hand, the vast majority of our wants are not so easily satisfied, that is, they are not satisfied

by the simple possession of good which is unlimited in quantity and which is easy for us to obtain. So there is a vast quantity of goods which we need to satisfy our wants and they are called by the economist "economic goods." The distinction between free good and an economic good is that the former exists in unlimited quantity and requires no effort to obtain, whereas the latter is limited in quantity and requires conscious economic activity to obtain, therein lies the real economic problem. These economic goods are capable of further subdivision because they too are of one or two kinds, they are either intangible or tangible. The intangible economic goods are called "services", the tangible goods are more or less loosely termed "wealth", and the importance of this distinction is that it shows the relative position in the field of economic activity of those tangible goods which we recognize as wealth and those intangible services which are just an necessary for the creation of economic well-being as are the tangible goods. Who can say as to the relative importance to you and to me of the possession of those gratifications which come as the result of the performance by some other person of a service, by comparison or in contrast to the possession of such tangible goods as food, clothing and shelter? It is just as necessary to your and to my economic well-being that we enjoy the services of those who perform them as it is that we have had our breakfasts this morning; perhaps not to the same degree but of real importance in the well rounded economic state of well-being. So these economic goods are either tangible, called wealth, or intangible, called services, and if services as well as wealth, are an economic good then we are able to say that those who perform those services for us are just as truly economic producers as those who create the tangible kind of economic goods which we have called wealth.

The question might arise: "What good does a policemon do? Is he an economic producer or an economic parasite?" He produces and creates a very important service. We saw that demonstrated some years ago in one of our major cities - Boston. When the necessity arose there were no police and if we ever doubted the importance of the policeman or the Police Department we learned their economic importance then. By performing a service which is necessary for our economic well-being a policemen is just as much an economic producer as is a man who by the exercise of tremendous physical force, aided and abetted by implements of capital is able to produce a foodstuff. And so these economic goods, the possession of which is the aim and end of all economic activity, are either tangible called wealth, or intangible called services.

The economic goods called wealth are divided into two kinds. The tangible economic goods - those things we can see and

touch and taste and smell - those things which we create not in their present form or design but which we create as a result of the application by man or men of his own ingenuity, brain and muscles to those complements or aids of nature which have resulted in the creation of a physical product to satisfy a human want - those are divided into either a consumer's good or a producer's good. This is a very important distinction because it shows the distinction between wealth and capital. The distinction between a producer's good and a consumer's good is the distinction between a doughnut and a plow. A doughnut was obviously created as a result of the efforts of man for the purpose of satisfying some temporary passing fancy which he might have for that particular kind of foodstuff, but when man created a plow he created it because he knew that by the use of it in the application of his own labor to land his efficiency would be tremendously multiplied, and by its use he would be able to have more doughnuts. And so a consumer's good is a tangible economic good which satisfies a human want as all economic goods do, but which was created by man for the one purpose of satisfying a present and passing economic desire like a doughnut, whereas a producer's good is likewise a tangible economic want gratifying good which, as all economic goods are, is limited in quantity, requiring conscious economic activity on man's part to produce, but which is created not for the purpose of satisfying some temporary or passing pleasure but which is created for the purpose of aiding him in future production. There lies, to the economist, the important distinction between wealth and capital which are alike in the sense that each is a tangible economic want gratifying good. But the distinction between them is that that kind of tangible economic want gratifying good which man has adapted to the purpose of aiding himself in future production is called by the economist "capital", whereas all other kinds of tangible economic want gratifying goods created only for that temporary present purpose are called "wealth".

So therein lies the subject matter of the field of economics. If we had an understanding of our own natures as individuals and if we could relate man, being what he is as we know him, to those want gratifying goods, tangible and intangible, wealth and capital, we could be fully conversant with the entire science of economics, because therein lies its subject matter - man and economic goods.

For the purpose of convenience the economist has divided the study of his subject into four parts and I shall, with your permission, indicate those four branches and try to show you the field which each covers and pick from all of the four those outstanding characters which are perhaps most important in the branches of economic activity.

The first is called "consumption" - "economic consumption". The second is called "economic production". The third is called "economic exchange" and the last is termed "economic distribution". Economists usually begin the study of the subject with a discussion of the nature and character of economic consumption, and the reason is apparent because economic consumption means only the utilization of those want gratifying goods which we have just defined for the purpose of satisfying human wants. Obviously therefore, since economic consumption concerns itself with the utilization, which sometimes although not necessarily involves the destruction of these economic goods, economic consumption is the end of all economic activity. When the doughnut is consumed it is, to all intents and purposes, completely utilized and destroyed and therefore it is obvious in the field of economic consumption that when the consumption of goods takes place economic effort and activity has ended. So economic consumption is not only the end of economic activity - it is the beginning. It is the loss we find in economic consumption which furnishes the motivating force that causes all economic activity. It is because man is constituted as he is that he works at all. You and I have heard a man described, either living or dead, as having worked for the mere love and pleasure of work. Well, there may have been one such; I never knew him. The average man, you and I, work and engage in economic activity because we have to. When I say we have to work I don't mean that we will starve if we don't. There are many men who could live in comfort the rest of their lives who are working, yet those men work because there is some kind of urge within us as a result of which, no matter how much we possess, no matter how great is our ability to command economic goods for the purpose of satisfying our passing pleasures, we still have the desire to consume more, and so it is the very nature of man himself which furnishes the motivating force as found in the study of economic consumption and which results in economic activity in order that there may be created those want gratifying goods which are necessary to satisfy the desires of man and all mankind.

Now in the field of economic consumption we come in contact with two fundamental economic laws. There are perhaps a half dozen economic laws which are commonly quoted or misquoted in the press with which we must come in contact if we live at all, and before indicating the nature of these two fundamental economic laws I want only to say that economic law is not like the civil law or military law, it is not a conduct which is prescribed by competent authority for the observance of the governed; it is not of that character at all. An economic law is only a recitation of what has been found to be man's conduct when related to a given economic phenomenon. For example, there is a very active economic law called "Gresham's law". Gresham was the master of the mint for Queen Elizabeth and

shortly after she ascended the throne she had Gresham make a survey of the coinage or monetary conditions in England as a result of which he found that there were very few good coins in circulation. Most of them were what you and I might call "phoneys". It had been the practice of the eminent predeces or of Elizabeth when the full weight gold coins came into the treasury to deduct some of the gold and replace it with base r metal and put it back in circulation. There were some good coins left but not in circulation, and as a result of that observation Gresham was given credit for formulating Gresham's law which tells us that if there are two kinds of money in circulation, one good and one bad, the bad will drive the good out of circulation. That is Gresham's law. If you put your hand in your pocket and find four quarters and three are new and the other is a Canadian quarter, the first thing you do is try to get rid of the Canadian quarter. e try first to get rid of the one about which we are not sure. If you have two bills, one new and one soiled, you pass the soiled one first, yet one is as good as the other. This is a simple way of saying that you and I would follow Gresham's law, not because he was master of the mint and made the law but because the very nature of economic law is that experience has shown that under a given set of economic facts man will act as he does, and the strongest motive behind all economic laws is self-interest.

So in the field of economic consumption we come in contact with two fundamental and very important economic laws. The first we call the law of multiplicity and the second, which is perhaps more often quoted, is called the law of diminishing utility. These laws in themselves are of relatively little importance, but taken into conjunction and indicating a tendency, they are of tremendous importance. The first of these laws was, some years ago and is today, frequently illustrated by a comic strip which was called "keeping up with the Joneses." You know our tendency is to expand expenses upon any increase in our income. When we are making $3,000 a year and spending it all we feel that if we had another $1,000 a year all our worries would be over, but when we get that other thousand we are just as bad off because man is so constituted just as soon as he has completely satisfied one pressing group of economic desires, immediately another comes into existence and as soon as we have satisfied all the wants we think we have, we wake up some morning and find there is still something we want, and as a result we are impelled on to increased economic effort in an attempt to keep pace with our wants. We are so constituted that our economic desires will always outrun our ability to overtake them. That is a simple statement of the law of multiplicity of human wants which tells us that they are expansive and they tend to increase beyond our individual ability to keep pace with them.

The second, the law of diminishing utility tells us that in the consumption or utilization of these tangible economic goods or intangible services the consumption of succeeding units of the same good brings a diminishing amount of utility. First let us define utility to explain that. Utility is the ability of an economic good to satisfy a human want. Utility is that which an economic good possesses which makes us want it. I said in the beginning that all of the things man wants are contained in the one word "goods". He wants goods and these goods are either free or economic, tangible or intangible, wealth or capital. That which these goods possess which makes us want them is the utility of the good. We want a glass of water! the utility of a glass of water is its faculty to quench thirst. If we were out in the midst of some great desert and there was no water and no ability to get to it, there is still the same ability in the glass of water to satisfy the want. I tell you this to show how utility is determined. The utility of the good depends on two things; first on the objective utility of the good itself to do that which it was created to do, and secondly, it depends on the intensity of the desire of the person brought into contact with that good. So the utility of the good is objectively always the same but because of its relation to the subject of desire of the individual varies appreciably from person to person and for the same person from time to time. That is an important consideration in the attempt to explain economic phenomena. Changes in value are based upon the principle that the value of the good depends on its utility and utility depends not altogether on the subjective or objective nature of the good but on the intensity of the desire brought into relationship with the good. I illustrate that in this way. Prior to several years ago the standard of value in America was a gold dollar which weighed 25.8 grains and which was 9/10ths fine, containing therefore some 22 and 23/100ths grains of pure gold. That was the standard or market value. The value of all other money, nickels, dimes, silver certificates, Federal Reserve notes, and all of the seven kinds of paper money in circulation obtained their value from that standard - the gold dollar. Then by act of Congress early in 1933 the content of the gold dollar was cut approximately 40%. That is, by Executive Order after an enabling Act of Congress the President decreed that the standard of value was no longer a gold dollar weighing 25.8 grains but a gold dollar weighing 25.8 grains minus 40%. You would expect that as a result American commodities would show an appreciable change up to 40% but practically no change at all occurred, and the reason for that is that the value of the dollar, like the value of the glass of water, depends not on the gold content of the dollar but on its ability to satisfy the want and also on the individual. There is much psychology in value because of the attitude of the individual.

There was no appreciable change in the value of the gold dollar even though it has lost 40%, or in the price of commodities which are related to the price of the standard dollar, and that was the purpose behind the depreciation - an attempt to raise prices, but that rise that did come may be attributed to other factors. That is the nature of utility - that ability which these economic goods have to do the thing for which they were created - the water to satisfy thirst, the doughnut to satisfy hunger. So the, utility of these various economic goods is made to depend first upon their own objective ability to do the thing for which they were created and secondly upon the intensity of the desire of the individual who comes in contact with that economic good. You know how nice a chair seems when you are terribly tired yet when you are strong and well it does not seem so much to you. So we see by the law of diminishing utility that when you consume a number of units of the same good the utility of the succeeding units tends to diminish; and we know that the utility diminishes not because there is any change in the good itself but because there is a change in our desire for it. I am thirsty, I drink a glass of water, I am still thirsty and I drink a second glass of water, but I stop some time because there is a change in the intensity of my desire which soon becomes satiated or completely satisfied. So we have all experienced the working of the law. Often after a good dinner you have what appears to be a particularly good cup of coffee, so you have another. It is the same kind of coffee but you say it is not as good as the first. Your desire for coffee has been somewhat diminished by the fact that you have already had a cup. If you sit here in this room for some time and then go out and have an opportunity to smoke a cigarette, how good it tastes when you have been denied it. But if you light a second one you probably won't finish it, your desire for a cigarette has changed. So we have this so-called law of diminishing utility that says man is so constituted that he is ultimately satisfied in the consumption of economic goods.

What is the importance of these two laws? We saw the application of these laws of multiplicity and diminishing utility and they are rather interesting, but their importance is this. If you individually had time you could sit down and write on a piece of paper all of the things you want, and you would have a long list. Then if someone told you you could have five of these things you would go over the list and pick out the five most pressing. Then that person might say "Now take from the five, three" and you would eliminate two. My purpose is to show you that human wants are all of different degrees of intensity. We could if we would, choose for ourselves that one want which is most important of all the wants we have. Each of us could, if necessity arose, determine for himself that want which is to us most imperative. If it were not for the fact that the law of

diminishing utility says that any one human want is capable of full and complete gratification and it is because as you continue to utilize that good the utility diminishes until it would have no utility at all, so if we can select the one most imperative want and if we are told in the application of the law that one human want is capable of full and complete satisfaction, then we are consoled by the fact that having fully gratified that want we can then bend our effort to the gratification of our second, and then when the utility of that is diminished to the point of satisfaction we can bend our efforts to satisfying the others. The law of diminishing utility creates the opportunity and the leisure as a result of which we are able, through the means of that leisure to satisfy other pressing desires. But we are told by the law of multiplicity that never can we reach the point where we can satisfy all of our economic desires, so man is constantly urged and impelled to increased economic activity in order that he may attempt to catch up with his rapidly expanding desires and, being able by the law of diminishing utility to satisfy a single desire he is then able to bend his efforts to catching up under the law of multiplicity. So these two laws, the law of diminishing utility and the law of multiplicity, show us that human progress is made possible for two reasons first, because man does not have to spend all of his time in his attempt to satisfy his most pressing desire, and therefore has opportunity to use his additional time in the attempt to satisfy his constantly expanding desires, and because they are constantly expanding man is always showing increased effort in attempting to keep pace as best he can. We would not have our diversified industries, our automobiles, our radios, or many of our luxuries which have become part of our lives if it were not for the fact that the human constitution is as it is. We would be spending time to produce the crudest kind of food and clothing and shelter, but because we are thus constituted, we have leisure and opportunity to spend chasing the rainbow.

There is just one other law sometimes cited - that is referred to as the Malthusian theory of population. It is of historical interest and cannot be entirely disregarded. An Anglican clergyman named Malthus made a survey and as a result found that population unrestricted tends to double itself every twenty-five years, but that the food supply was not able to be doubled proportionately because the nature of land is such that it tends through use to lose some of its mechanical and chemical properties for reproduction and tends to exhaustion, so he formulated the principle that as population tends to increase in geometrical progression, food supplies increase only in arithmetical progression. That is, as population would increase 1,2,4,8,16,32, 64, 128, food supply would only increase 1,2,3,4,5,6, and the hiatus between the numerals represents 25 year periods of time

during which the population would tend to double. If that were true it would be obvious that at the end of a relatively short period of time the population would be so multiplied that there would not be enough food to go around and starvation would be the necessary evil. Poor Malthus was roundly criticized for two reasons first, because he was misquoted, and secondly because things have happened since then which even he could not explain. How could he know that it would be possible to deliver fresh beef to the city of London, or that Canada and Australia would supply England with all the foodstuff she needed. He could not know of the transportation of commodities, of modern refrigeration, etc. He was unjustly criticized because it was said he advocated certain restrictions upon population. He did not say it doubled every twenty-five years. He said "population unchecked would be doubled". When asked how, he said it could be done in a number of ways, the most popular then were wars, famine and disease. They were effective restraints upon population and he was critized because people said he advocated war, pestilence and disease in order that population might be checked. Of course he did not; he merely recognized those effective restraints or checks upon population. So I cite Malthus's theory of population merely for its historical interest and because it always creates in our minds the possibility that future generations may perhaps experience the effect of the plan of Malthus - that if we do not keep pace by increased methods of productivity, which we have, and we do not, by conservation measures protect the ability of the soil to produce, and we do, the burden will be on the unborn generations.

The second branch of the field of economic activity is called production, and we have heard much said about this second branch in recent times. Our system of economic production is what is called or designated as a capitalistic system of production. When I say a capitalistic system of production I do not, of course, imply that capital here is some kind of giant with a lash in his hand who is subjugating labor to his own ends. I use it in the true economic sense, I merely mean that ours is a roundabout, indirect method of production. If a man wanted to make a pair of shoes he could make some kind of a pair which might to some degree satisfy his needs, but they would not be very satisfactory. It is much easier to buy them from somebody else - someone specializing in the manufacture of shoes. That individual did not make shoes with his hands but with highly developed tools and machines. That is what we mean by the capitalistic system of production, wherein production is the result of the use by labor of highly specialized tools and machinery. The tools and the machinery are capital, they are the things man has created - like plows, not like doughnuts - for the purpose of aiding him in creating more wealth

in the future. So our system of economic production is a capitalistic society. It involves the creation of those things we call utilities; the economist creates utilities which are found in economic want gratifying goods. I have a desire; I satisfy it in economic consumption. As a result of that desire either I or someone else engaged in economic activity creates an economic good which possesses utility, which utility is necessary to the satisfaction of the desire I originally had, showing again that consumption is the beginning as well as the end of economic activity.

So economic production does not involve the creation of matter. There is just as much matter in the world today as there was when Adam and Eve were flying around that mythical garden, but there is a tremendous increase in the amount of worldly wealth since that time and the reason for that increase has been the creation by man of economic utilities. These utilities which man creates to satisfy human wants are of four kinds: form, time, place, and possession. The whole subject of economic production centers about the creation of form, time, place and possession. There are certain commodities, for instance, flour, yeast, milk and water, if we are hungry I suppose we could drink the milk, eat the salt, etc., but if somebody who knows how would take those commodities and combine them and allow natural forces to take place, and subject the whole to heat we would have a nice loaf of bread which would satisfy our desire for food much better than the individual commodities in their native states. When the loaf has been made there is no more matter than there was before. A change has taken place in the form of the existing matter, so we have created a form utility. That is the nature of economic production, no creation of matter but a rearrangement of existing matter so that in its new form it will be better able to satisfy our needs, because the change involves an increase in the utility.

When the bread has been made I might not be anywhere near it so the bread as baked will have no utility to satisfy my desire unless it is conveniently located so that I might procure it. Those agencies which are responsible for bringing the bread from the place of manufacture to the place where it is to be consumed also create utilities, and these utilities are called place utilities. It is necessary to grow the wheat and produce the salt, etc., but production of these commodities has only begun when the form utility has been created. It is just as much a part of the production process to bring the form utility from the place where it has been created to the place of ultimate consumption as it was that it was produced at all. A pair of shoes in the factory in New England does not help me unless some agency brings that pair of shoes to the point where I might consume it. It has got to be in the hands of some retailer or wholesaler who holds

it until I want it. This is called place utility and it is just as important in an economic sense as the creation of the utility. So our transportation facilities are just as important in our economic structure as are the factories or farms, because they create a form of utility called place utility. I may want the shoe today or maybe three months from today, so we have an agency which holds tangible economic goods until such goods shall be in demamd by the ultimate consumer, creating what is called time utility. Our great warehouses where agricultural commodities are stored, the great factories which hold them subject to the whims and desires of the individual, are just as truly economic producers because they create time utilities. It is just as important to me that the utility be brought to my personal possession so that I individually might consume it as it is that it was originally created, so all of the merchandising establishments whether they be chain store or department stores or specialty shops which ultimately make the sale of the tangible economic goods to me, create the last step in the chain of economic production - creating what is known as possession utility, because not until consumption begans has production ended, and production does not end until the four utilities have been created - form, place, time and possession. Frequently it is said that these wholesalers and middle men who intervene in the creation and consumption of goods are unnecessary. The question is asked "Is not there too much handling of goods? There is a wide variance between prices at the factory and prices to the consumers." Well, as we all know, there are countless methods whereby the product of the factory is brought to the consumer. We read the advertisement "From factory to you". You can go out to the farm and buy milk and butter, but see if you save any money by doing it. You can eliminate the middle man but not his function. The factory is equipped to make shoes but not to transport them; nor is it equipped to hold them until you are ready to buy them. These functions of transporting or holding goods until desired have to be performed by someone. The creating of the form, place and time utilities is of equal importance so far as you and I are concerned. The transportation agencies, the great warehouses, the wholesalers and retailers, are all economic producers because they too create utilities. How are these utilities created? By the combined activity of four factors - land, labor, capital and business enterprise. They combine their activities - land, labor, capital and enterprise, for the purpose of creating those utilities of form, time, place and possession.

There are three foundations on which our capitalistic productive society has been built, first, the institution of private property, secondly, the freedom of contract, thirdly, competition.

Our capitalistic productive society has been built, first, the institution of private property, secondly, the freedom of contract; thirdly, competition. Our capitalistic society has been predicated on the right of private property, the right of the individual to freely contract for his own labor or for the sale of his own commodities, and the existence of competition. Naturally, that philosophy has undergone a change. The change has been more rapid in the past few years but in the past fifty years we have changed the concept of capitalistic productive society. There was a time when the right of private property was an absolute right. If I owned a piece of property I could do with it as I pleased, today we have zoning regulations, fire regulations, etc. Just because you own a house you haven't the right to set fire to it, you would endanger the property of other people. Your right of ownership and right of use must not interfere with the right of others.

At one time the right to freely contract for our services or the sale of our commodities was an absolute right; even before the changes of the past few years the freedom of contract was no longer an absolute right unless there was equality of contractual power. You could not freely contract with a capitalist because the bargaining was not equal, it was more important to labor to get a job than for the capitalist to hire him. So we organized labor into a group to make its bargaining power more nearly equal to the bargaining power of capital.

So with competition - it tends to become destructive, so by regulation we altered the ability of certain kinds of business organizations to compete. So the cornerstone of capitalistic society is the institution of private property, freedom of contract, and competition.

The third branch is the field of economic exchange. It is an important field and serves this purpose in economic consumption we talked about the utilization of utilities, in economic production were concerned with the creation of utilities, in economic exchange we are concerned with balancing one against the other to determine their respective value. The purpose of the study of economic exchange is to convolute utility, that is done by balancing one against another in order to determine the respective values of each. Balance a glass of water against an apple and see whether you can make an exchange. If you wanted the water bad enough you might give an apple for a glass of water. There are certain circumstances under which you might give a million dollars for a glass of water, and others when you would not give an apple. So when you balance utility you must remember it can only be done

at one time and place, because values change. Potatoes may be $1.00 a bushel today, and 40¢ tomorrow; the reason for the variation would be that the value of potatoes tomorrow is not what it is today. That depends on what value is, if we understand the nature of value then we can understand how and why economic utilities balanced one against another to show respective values vary with the individual and at different times. The thing all economists mean by value is the power of attraction, just as we know that gravity is the attraction the earth has for a physical body. Value is the power of attraction an economic utility has which impels us to give something in order to get it. The value of a glass of water to me is the power of attraction that a glass of water has for me as a result of which I am willing to give some other utility in exchange for it; and what I am willing to give will depend on what utility it has to me by comparison to that which I am willing to give for it. If I give a nickel for it, it means that the water has a greater utility than the nickel.

So the field of economic exchange concerns itself with the balance of utilities one against another in order to determine their respective values, and the value of an economic utility is measured by its power of attraction which impels us to give something to obtain it. In order that it may be more convenient to discuss, the economist has determined upon a standard of value which is a measure of this power of attraction. So we have the dollar as the standard of value and economic exchange involves not only the problems of supply and demand but the study of money, which is the standard of value, and the study of price, which is value expressed in terms of money, and then the study of money substitutes - the use of credit as an economy in the use of money; extending of various kinds of credit, and lastly, with the study of the entire field of finance and banking which is the basis of all credit.

The fourth branch of our science is called distribution and distribution is today perhaps even more emphasized in modern business than the field of economic production. Distribution is sometimes misunderstood, that is, you undoubtedly use the term distribution in an economic sense when you have in mind physical distribution of commodities all over the country. When you talk about it you have in mind the means thereby a wide group is marketed. That is a problem in economic production because as I tried to point out, the creation of these form utilities is only one part of the branch of economic production. The physical distribution of these commodities from centers of production to centers of consumption involving the factors of place, time and possession, is a part of economic production. The problem of marketing is a productive problem, not a distributive problem. The problem of distribution in its economic sense means the division or allocation of the national dividend among those who are responsible for its creation.

As one economist says, "We are all boarders at the national table". Those who produce only as much as they consume are retarding progress, those who consume more than they produce are parasites.

The national dividend is made up of the sum total of economic utilities produced over a given period of time. In 1928 ninety billions of dollars of value was produced by American land, labor, capital and business enterprise. The task of distributing, or dividing that tremendous fund of value - that tremendous quantity of utilities, is the field of economic distribution. Economic distribution is divided into interest, wages, profit and rent. It is a very difficult field. It might be easy enough to say that a pair of shoes is worth $?. and were made by land, labor, capital and enterprise, so we will give business enterprise one-fourth, land one-fourth for rent; let us give capital one-fourth for the use of the equipment, and one-fourth to labor. If it were that easy you could divide the value among them. But would you give the same share to the man who cuts the leather and the girl who merely stamps the name on the lining of the inner sole? You can't compare the economic value of the various functions of labor and even if you could your problem has only just begun. There are various kinds of capital. Is the stamp which the girl used as important an instrument of capital as the machine which stitched the upper to the lower? So if you give one-fourth to capital you would have to allocate a portion to each unit of capital or labor commensurate with the cost of the part it played in the production. The economist has evolved a principle called "marginal unit of productivity" which shows tendency, where normal forces are permitted to operate without interference, to give to each unit (labor, capital, etc.) by way of a distributive share that amount of productivity which is used by the marginal unit of that factor. If we knew what the productive or marginal unit of labor was, this theory says that that margin tends to establish the income of units of equal productivity. There is only one way to determine that and it can't be done, it would be to take your unit out of production and measure it, then put it back again and measure the return of productivity because of its presence, then you would have its value. Just imagine taking a unit of labor out of a steel girder and measuring its value. It is difficult to measure, yet not impossible. It is a sound theory if it could be worked because it would make the individual distributive share depend upon not union wages but upon the ability of the individual to earn for itself in the field of economic production. It would measure distribution by the only standard it ought to be measured by, and that is productivity. If we could go through life in our own feeble way trying to produce some kind of service and if you could

believe that without reference to acts of legislature establishing standards for us, we could believe that you and I would be rewarded in proportion to our ability to operate, we would be a well satisfied economic group. Thank you.