BANKING AND MONETARY THEORIES AND POLICIES IN THE WRITINGS OF FRANCIS AMASA WALKER

BY

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INTRODUCTION.

In selecting, as the subject matter of my thesis, The Banking and Monetary Theories in the Writings of Francis Amasa Walker, I was partly influenced by the monetary problems confronting the United States today, which are similar to the monetary problems of Walker's time, and partly by the fact that Francis Walker, one of the outstanding men of his time in American Economics, is so little known to the average student of economics.

General Walker was a fluent and prolific writer. In economics he never was an extremist. He was an ardent bimetallist, but held that no one government was powerful enough to establish bimetallism alone. Unlike many economists, he possessed a pleasing literary style, and had the ability to make such difficult subjects as monetary theories, clear and interesting to the general reader. His text books are used in Oxford on an equality with the writings of Marshall the other great English economists. Until the first decade of the twentieth century there were only two English books considered first-rank authorities on monetary subjects and these were the ones written by Stanley Jevons and Francis Walker.

When Walker wrote, monetary and banking theories in the United States were in a formative stage. We had no clearly defined theories or principles. Practically all of our monetary and banking principles were borrowed from the English economists. Until Walker wrote his book on "Money" there was no book on monetary principles published in the United States.

In the following chapters I will endeavor to show the influence exerted by Walker's writings upon the economics of his time and also give his critical and constructive contributions to the Science of Economics. Part one of the Thesis deals with the period preceding the writings of Walker and part two, deals with the contributions of Francis Amasa Walker.

The writer wishes to acknowledge his indebtedness to Professor Theodore H.Ave-Lallemant for suggesting the theme and title of the Thesis and for his personal encouragement and guidance in the coolecting and assembling of the material used. To Dr. Stewart Scrimshaw for his friendly criticism of the text of the Thesis. To Dr. Paul Mundie for his valuable suggestions as to the form of the Thesis.

Alexander John Gregory.

PART I

FRANCIS AMASA WALKER AS AN ECONOMIST

CHAPTER I

WALKER'S EARLY TRAINING

I. Early Training of Walker.

Francis Amasa Walker was born in Boston, Massachusetts, in 1846, the son of Amasa Walker, a noted economist of the formative period in American economic theory. He was graduated from Amherst College in 1860, and began the study of law, but in 1861 he joined a volunteer regiment and served in the civil war, where he attained the rank of brigadier-general. In 1869 he was made special Commissioner of Revenue, and was placed in charge of the Bureau of Statistics in Washington, D.C. His efficiency in renovating the Bureau proved his capacity, both as an administrator and as a statistician, and led to his appointment to superintend the censuses of 1870 and 1880.

In the midst of his statistical work, Walker was called into the general field of political economy by an appointment as professor of political economy in the Sheffield Scientific School of Yale University in 1872. His aptitude for such studies seemed to be a family trait. He had begun to write upon monetary subjects for the press in 1857 and had studied under his father as had John Stuart Mills had studied under the older Mills. Walker had assisted his father in his scientific studies and writings and had lectured in Amherst College at times in his Father's place.

2. Writings.

By his discussions of the result of the census of 1870 and a book on the Indian question, written when he was Commissioner of Indian Affairs in 1871, Walker had secured the attention of the public and his first important treatise "The Wages Question"(1876), had attracted instant notice. In this book, as a part of his comprehensive review of the whole wage subject, Walker made a vigorous attack upon the wage-fund theory, arguing that wages are paid from the product of labor and not from accumulated capital. He also developed with great clearness the functions of the Entrepreneur as distinguished from the functions of the Capitalist. The distinction consequently made between business profits and interest on invested capital enabled him in his "Political Economy"(1883), to work out a law of business profits analogous to the law of rent, So he could present a theory of distribution under which rent, interest, and profits, each determined by a law of its own, labor becomes the "Residual Claimant" to all that remains. This bold generalization became the subject of much discussion.

Walker's second important treatise, "Money"(1878), appeared at a critical moment in the history of Federal legislation upon currency, and by its broad and candid review of the whole field, did much to establish opinion in favor of the specie standard. Its careful survey of the question of silver coinage, and its conclusions favorable to International Bimetallism, together , with Walker's appointment in the same year as a representative of the United States to the International Monetary Conference at Paris, gave to its author an important place both in theoretical and in practical discussions of the problems of money and monetary policy.

In 1881 Walker was elected President of the Massachusetts Institute of Technology. His administration was brilliant. In 1882 he became President of the American Statistical Association. In 1885 he was made President of the American Economic Association, in the organization of which he had taken a leading part, and in 1893 was President-adjutant of the International Statistical Institute. Walker held memberships in many foreign learned societies and received honorary degrees from leading Universities, in America and England alike. He died in 1897.(1)

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(1) Palgrave, R.H.- Dictionary of Political Economy, Vol. 3, pp.649-650.

CHAPTER II

STATE OF, AND TENDENCIES IN, AMERICAN ECONOMICS WHEN WALKER BEGAN TO WRITE, WITH RESPECT TO BANKING AND MONETARY THEORY AND POLICY.

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1. Colonial Economic Thought.

Economic writers of the United States prior to 1820 did not do much towards the development of a theory of political economy. We did not have any well known economic writer who, writing during this period, to any great extent, influenced American economic thought. According to Charles Dunbar: "No American, down to the year 1820, has produced any treatise on political economy which the world has cared to remember. Such books of that period as came to light, are crude, unsystematic, full of empirical notions; and are now intellectually obsolete".(1)

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(1) Dunbar, Charles F.- "Economic Science in America 1776-1876", North American Review, Jan.1876, p.134.

This early period of economic thought in America was influenced by English and French economic theories. The German school of economics had not as yet attained the influence that it was later to exert upon American economic thought. In examining the writings of the early American economists, we find that they were mainly influenced by economic conditions in America as they saw them. The United States was a new country with unlimited natural resources.

A spirit of optimism prevailed and the industrial expansion of the country was carried rapidly. The need for an adequate and stable currency was expressed by the rapidly growing industries of the nation. The problems of monetary policy growing out of the scarcity of money and capital and out of the instability of the currency attracted the keenest minds to its solution. This scarcity of money shaped American opinion in monetary and banking theories and policies.

2. Colonial Banking and Monetary Theories.

The theories of banking and money prevailing in the United States before 1820 were primitive. Colonial discussions had dealt largely with paper money issued by the government, or by the land banks of the period. Accordingly, what progress was made in the theory of banking had little bearing upon more than the most elementary principles of commercial banking of the modern type.

Not until about 1820 does the knowledge of banking principles in the United States seem to have reached a degree of development comparable with that to be found in the "Wealth of Nations". The notion that a certain fixed quantity of currency is necessary to circulate the annual produce of the country's industry underlay the views and theories of all the early writers. We were too new at the business of banking and regulating the currency to develop sound theories immediatly. Our experience was too limited.

The early Colonial writers saw in a bank little more than a source of a form of currency. There was a scarcity of circulating media and the discussion and the very conception of banks were dominated by the need of securing an adequate currency for the use of the growing industrial requirements of the country. These early economists and publicists conceived the principle function of the banks to be the issuance of circulating notes, and our early American history of banking show that many banks were started for the sole purpose of issuing notes.

On the other hand, some of the colonial writers thought of banks as places where payments could be effected by the transfer of book credits that had originated through the deposit of money, or other valuables. The early colonial conception of banks as little more than the source of a form of media of payment, was losing its adherents.

The early writers saw only one important advantage in banks and that was the direct enrichment of the community through an increase in the amount of media of payment. The dominant theory among the early writers, however, was not that increase in the quantity of media of payment was in itself an addition of wealth or that it needs always lead to such; But where an adequate supply of currency was lacking , the issuance of paper money, it was felt, would greatly stimulate industry and trade.(2)

(2) Miller, Harry E.- Banking Theories in the United States Before 1860, p.27.(Harvard University Press,1927)

3. Various Banking Theories Set Forth During the Period Preceding the Civil War.

Note issue was regarded by many as synonymous with banking; others, whose numbers were increasing, urged that it be denied to banks completely. Of the latter, Hamilton was the leader. He and his followers advocated that the issue of paper to serve as money should be confined to one kind of banks. This issuing bank is to be neither a bank of discount nor of deposit. These functions should be left to another class of institutions, which in their turn, were to be denied the priveleges of circulating any paper of their own.(3)

(3) Hamilton, Alexander - "Banks and the Currency", Hunt's Merchants Magazine, Sept.1839, p.215.

Hamilton asserted that; "The establishment of a bank augments the productive capital of a country. Gold and Silver, where they are employed merely as the instruments of exchange and alienation, have been denominated dead stock, but when deposited in banks to become the basis of a paper circulation , which takes their character and place as the signs or representatives of value, they then acquire life, or in other words, are active and productive quality".(4)

(4) Hamiton, Alexander - "Banks and the Currency", Hunt's Merchants Magazine, Sept. 1839, p.218

Hamilton also believed that the establishment of a bank would facilitate the payment of taxes, by increasing the quantity of circulating media, and by quickening circulation. Similar views, no more sound than those of Hamilton, persisted during this period. Some of the writers maintaining that an abundant currency brings prosperity and a low rate of interest. Others believed that capital is created in the process of inflating the currency.

Not all the writers contemporary of Hamilton's time, agreed with him on the efficacy of banks. One prominent writer said that; "Banks create no real money, no gold or silver, nor anything that will procure them from abroad. They create no value, and add nothing t o the demand for labor, or to the products or wealth of the community; but they create debt, inflate prices, furnish machinery for speculation, and expel gold from the country, to make room for their own debt, and gain interest theirin. They do not, and cannot, make any permanent addition to the currency. It is marvelous what a perfect hallucination upon this subject, possess the minds of men otherwise thoroughly intelligent."(5)

(5) Carroll, Charles - "Specie Prices and Results", Hunt's Merchants Magazine, Oct. 1857, p.429.

Amasa Walker, a noted economist of the period of 1820, maintained that banking operations swell the quantity of the currency, causing the community to pay interest on inflation, of no possible utility. The most mischievous of all heresies of early banking theory was that which attributed to banks the power of adding to the nation's capital through the process of inflating the currency. To this the reply was soon made that such inflation does not affect the real capital of the community in the least; that it signifies, in fact, but a depreciation of the monetary standard. The direction in which this criticism leads is obvious, and it was not long before the possibility of increasing the quantity of media of payment through note issue, with resultant price fluctuations, became the ground for the gravest of all the charges against banks.(6)

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(6) Miller, Harry E.- Banking Theories in the United States Before 1860, p.55.(Harvard University Press,1927)

The Notion that expansion of the currency by means of bank notes implies a direct increase of capital,became generally discredited after 1820. This was partly due to the wild inflation introduced by the suspension of specie payment during the war of 1812. While this early doctrine was being abandoned, the claim that the issue of bank notes effects an increase in the amount of capital in the country began to take another form. The banks seemed to have an inexpensive substitute for the currency of gold and silver and increasing the nation's wealth to a like extent. The economists of this period believed that bank notes are a circulating media less costly than gold and silver and just as effective.

It was also believed that substituting paper money for metallic released the specie for export. Productive goods could thus be brought into this country. This double thought furnished the principle arguments of the paper notes advocates. This theory recurred in all the writings of the period following 1820 till it became the chief tenet of American monetary theory of this period.

4. American Monetary Theories and Policies
During the Period, 1820 to 1840.

Nearly every writer of this period complained of the scarcity of currency and to explain the want of a sufficient media of payment, argued that the unfavorable balance of trade with England caused the metallic money of the colonies to flow from America to England. The introduction of a paper currency it was thought, would relieve this deficiency in our currency.

During this period following the War of 1812, specie payment was suspended. Consequently some writers maintained that an abundant currency was needed to bring prosperity and a low interest rate. Others went so far as to mention that large issues of inconvertable paper was desireable.

The ablest writer of this period, Dr. William Douglass, denounced the authorization of paper money as debtor-class legislation. He accepted the view that it was the paper money that caused an unfavorable balance of trade by encouraging extravagance and that it was necessary only to reduce the amount of bills in circulation to bring and retain an adequate supply of specie into the country.(7)

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(7) Douglass, William - "A Discourse", American Economic Association Studies, Vol.2, 1897, pp.321-322.

William Douglass shared with his contemporaries the opinion that; "The interest rate varies with the supply of money", but qualified this with a contribution to the theory of interest. "Increase in the amount of silver money lowers the interest rate, but increase in the amount of paper money sinks the value of the principal, and the lender to save himself is obliged to lay the growing loss of the principal upon the interest" (8) Thus Douglass was about the first early writer to state the relation between depreciation of currency and the rate of interest.

(8) Douglass, William - Op.Cit. p.335.

The cheap currency advocates were bitterly opposed by a conservative group of monetary writers. Charles Carroll said that; "An expanded and consequently cheap currency is the most costly and wasteful machinery a nation can possess; the history of the world shows it to be uniformly unprofitable or disastrous. It is evil whether formed of the precious metals or of bank debt, for a cheap currency and high prices of commodities are synonymous terms. It must encourage imports, check exports - excepting the precious metals which must be exported - and involves the community in debt; and bankruptcy follows. This cannot fail to be obvious to every reflecting mind; nevertheless it has been unaccountably ignored by writers and talkers upon the subject of the currency" (9)

(9) Carroll, Charles H.- "Interest and Cheap Currency", Hunt's Merchants Magazine, Jan. 1858, p.37.

According to Amasa Walker: "The cause of the crisis of 1857 was the use of a almost fictitious money; a currency almost destitute of the elements of value, and, of course, a currency on which no safe reliance can ever be placed -- a currency which always fails when most needed, which gives the greatest possible facilities for getting into trouble, and the least for getting out.--- If instead of issuing paper money and filling all channels of circulation, we had kept one-half of the gold of California, which we have shipped to England since 1848; and were that gold in the banks, as it ought to be, we should at this moment have a currency which we could fall back upon with entire security -- a currency that no panic could destroy." (10)

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(10) Walker, Amasa - "Commercial Crisis of 1857", Hunt's Merchants Magazine, Nov. 1857, p.532.

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5. Influence of Adam Smith on American Monetary Theory.

The paper money advocates were influenced to a very large extent by the doctrine as formulated by Adam Smith: "That the substitution of paper in the room of gold and silver money, replaces a very expensive instrument of commerce with one much less costly and sometimes more convenient. Circulation comes to be carried on by a new wheel, which it costs less both to erect and maintain than the old one." (11)

(11) Smith, Adam - Wealth of Nations, Vol.1, Book 2, Chap.2, p.292 (London, G.Bell and Sons, 1921.

This cheap currency principle of Adam Smith's was bitterly attacked by the "Hard Money" advocates. One writer, in commenting on Smith's thesis said: "This celebrated economist is as unfortunate in his illustration as in his argument with respect to paper money. A paper wheel would not seem to be very valuable in a powerful machine. On the application of power, it is quite certain the machine would stop or run to destruction, and such, in my mind, is the effect of the paper substitute for money in the currency. It has thrown out of gear, repeatedly, all the machinery of commerce in every nation that ever adopted it, and will now. The wild work we are having now is precisely owing to this nuisance in the center of our system.

Dr Smith understood perfectly well that every pound note, or every bank credit, added to the currency, expels its amount of gold and silver; but it never seemed to have occurred to his mind that the additional currency must degrade the value of the whole, before the precious metals can be displaced -- that they must be sold at the degraded value, and that the excess, which causes the degradation, must be thrown off in the inflated price of commodities; so that the metals are utterly lost to the community that substitutes the bank currency." (12)

(12) Carroll, Charles - "Interest and Cheap Currency", Hunt's Merchants Magazine, Jan. 1858, p.37.

6. Later Paper-Money Theories.

By the middle of the ninteenth century it generally was accepted that changes in the volume of convertable paper money affect prices quite as directly as variations in the supply of specie currency. Also it was believed that bank notes cause temporary price disturbances, and the main differences in opinion among the writers were mainly as to the magnitude of the fluctuations.

CHAPTER III

WALKER'S REACTION TO THE ECONOMICS OF HIS TIME

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1. Walker's Position in Economics.

As an economist, Francis Amasa Walker occupied an important position in American Economic Science. His influence helped to secure for economics a respected position in the American institutions of higher learnings. He also made some very definite contributions of both a critical and a constructive character to the economics of his day.

He attacked successfully the Classical wage-fund theory and made an analysis of profits. He being one of the first among economic thinkers to break up profit into its component parts. He spoke of the four distributive shares; rent, wages, interest, and profits rather than, as the classical writers had done of the three shares; rent, wages and profits. Walker also was one of the first of English speaking economists to make the distinction between the Entrepreneur and the Capitalist, and to distinguish the term "Profit" from interest and wages.

Walker was also recognized as an authority on money and the quantity theory of money. He also was the leading champion of International Bimetallism in the United States. To his contributions in the field of money, I shall devote a chapter later in the book, limiting this chapter mainly to his critical and constructive contributions to the field of political economy.

2. Walker' Attack on the Wage-Fund Theory.

The theory of a wage-fund was, up to 1879 the accepted doctrine of the English economists. This doctrine ran as follows: "There is, in any country, at any time, an amount of wealth set apart by economic forces for the payment of wages. The ratio between the aggregate capital and the portion thus devoted to the payment of wages, is not necessarily the same in different countries at the same time, or in the same country at different times. That ratio may vary with the conditions of industry and the habits of the people; but at any given time, the amount of the wage-fund, under the conditions existing, is determined in the amount of capital. Were the amount of that capital greater, the wage-fund would be greater, and greater in precisely the same proportion. Were the amount of that capital smaller, the wage-fund would be smaller in the same proportion. The Wage-Fund, therefore, may be greater or less at another time, but at the time taken, it is definite. The wage-fund, at any given time, being thus determined, the rate of wages will be accordingly proportionate to the number of persons then applying for employment." (1)

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(1) Walker, Francis A.- Political Economy, 3rd Ed., p.264, sec.453, (New York, Henry Holt and Co. 1887.)

Prfessor Walker in 1876 in a treatise on the "Wages Question": maintained that wages stand in no necessary relation to the amount of capital at all, that it is only for the sake of convenience that they are paid out of capital; that their amount is in no sense determined by the proportion of population to capital; "Rather that wages are in a philosophic view of the subject paid out of the product of present industry, and hence that production furnishes the true measure of wages". He also describes the laborer as the "Residual Claimant" to the products of industry; "Holding that after the deduction of rent, interest and profit, the whole remaining body of wealth, daily or annually created, is the property of the laboring class, their wages or remuneration for their services".(2) Most modern writers have adopted these views of Walker's to such an extent that the wage-fund doctrine has passed out of existence. Walker forced economists to recognize to some extent that the wages depend upon the production of industry.

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(2) Walker, Francis A.- Op. Cit., pp.366-367.

Professor Fetter disagrees with Walker's "Residual Claimant Theory", as being one of the most optimistic theories in favor of labor. He says: "Walker's view was that various shares of production, such as land rent, income from machinery, and the enterprise profits were fixed by forces independent of wages, and any increase in the output must therefore fall to the laborer as the residual claimant. This appears to explain the raise in wages in the past century, but the fallacy of its methods is evident. It involves the circular reasoning that land rent (a surplus over the cost of production) is fixed regardless of wages, whereas the cost of production itself is made up chiefly of Wages". (3)

(3) Fetter, Frank A.- Economic Priciples, Vol 1, p.504.

3. Walker's New Concept of Profits and of the Entrepreneurial Functions.

As already noted, General Walker was one of the first of the English-speaking economists to differentiate between the Entrepreneur and the Capitalist and to employ the term "Profit" in a narrow sense, distinguishing it from interest on invested capital and wages. By the term "Profit", Walker understands the special remuneration of the Entrepreneur, disregarding any interest which he may draw as the possessor of capital. The majority of earlier English and American economists have always confused the functions of the Entrepreneur and the Capitalist. In France, J.B.Say, an ardent follower of Adam Smith, had already in 1838, made the distinction that Walker had arrived at. Walker holds that abnormal profits in some industries do not represent wages withheld from the workers, as the classical economists thought, but implies the greate earning capacity of the Entrepreneur.

Walker in his explanation of the income of the Entrepreneurial class made use of the rent doctrine of the Classical School, and says that the services of the Entrepreneur are rewarded in accordance with a law analogous to tha t of rent and that these rewards are not subtracted from those of rent.

According to Walker, the enrpreneurial function developed out of conditions found only in advanced stages of indusyrial and commercial development and he said that:"The economists, almost without exception, have regarded capital and labor as together sufficient unto production, the capitalist being the employer, the laborer the employed and the entrepreneur was not recognized by earlier economists because they were accustomed to take their illustrations of the offices of labor and capital from the savage state, or at least from a very primitive condiyion of industry --- But when, in the development of industry, the forms of production became almost infinitely numerous and complicated--- the mere possession of capital no longer constituted the one qualification for employing labor; and, on the other hand, the laborer no longer looks to the employer to furnish merely food and the materials and tools of the trade; but to furnish technical skill, commercial knowledge, and the powers of administration; to assume responsibility and to provide against contingencies; to shape and direct production, and to organize and control the industrial machinery"(4)

(4) Wa lker, Francis A.- The Wages Question,pp.244-245, (New York, Henry Holt and Co.,1882.

Walker also emphasized the fact that under the conditions described above, the employer of labor may not be a capitalist at all. Nor did he admit all employers of labor to the rank of Entrepreneur.

The first real development in the field of profit theory in America was the work of Professor Francis Walker.

He effectually emphasized the place and importance of the Enrepreneur or so called "Captain of Industry" and helped to free the future economic writings from the careless handling of profits as an element in interest.

In explaining the income of the Entreprenourial class, Walker used the rent doctrine of the classical school. "Some industries", according to Walker, "Yield no profit at all beyound remunerating capital and labor at the normal rate and leaving enough for the entrepreneur to prevent his abandoning the undertaking alltogether. Other industries yield a little more, and we pass from such mediocre undertakings to more prosperous ones, and finally reach those yielding immense profits. These abnormal profits are not wages withheld from the laborer. This superior income is a pure surplus like rent of land. Under free and full competition the successful employer of labor would earn a remuneration which would be exactly measured, in the case of each man, by the amount of wealth which he could produce, with a given application of labor and capital, over and above what would be produced by employers of the lowest industrial, or no-profit, grade, making use of the same amount of labor and capital, just as rent measures the surplus of the produce of the better lands over and above what would be produced by the same application of labor and capital to the least productive lands which contribute to the supply of the market, lands which themselves bear no rent."(5)

(5) Walker, Francis A.- Op. Cit., pp.247-248.

4. Separating of Profits from Interest.

Walker reasoned that profits as distinguished from interest and wages is the share of the entrepreneurial function and ability, an ability which is possessed by the Entrepreneurs in varying degrees and which in its highest forms is especially scarce. Profits like rent is a differential return for the superior natural advantages. "All profits" says Walker, "Are drawn from a body of wealth which is created by the exceptional abilities (or opportunities) of those employers who receive profits, measured from the level of those employers who receive no profits, just as all rents are drwn from a body of wealth, which is created by the exceptional fertility(or facilities for transportation) of the rent lands, measured from the level of no-rent lands.

These profits do not enter into the price, since it is the cost of production of that portion of the supply which is produced at the greatest disadvantage, that is, by the industries managed by these entrepreneurs who receives no profits, that determines the price of the whole supply. Neither are these profits subtracted from wages, since the employers of the lowest industrial grade -- the no-profit employers--- must pay wages to hire laborers to work under their direction. These wages constitute an essential part of the cost, to the employer, of the production of goods" (6)

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(6) Walker, Francis A.- Political Economy, pp.240-241.
(New York,Henry Holt and Co.,1887.)

Thus Walker's attack of the wage-fund theory and his separation of the entrepreneurial function influenced American and English economic thought just as much as did his monetary theories, of which I shall discuss in a later chapter. Walker was an optimist and his influence on the economics of his time was great. He was a clear and logical thinker, besides being a brilliant writer.

PART II

WALKER'S CRITICISM OF BANK AND MONETARY POLICY IN THE U.S.

CHAPTER IV.

BRITISH BANK ORGANIZATION AND POLICY (AFTER THE PEEL ACT) AND ITS INFLUENCE IN THE UNITED STATES.

1. Origin of the Bank of England.

The Bank of England owes its origin to the financial straits in which the government found itself in carrying on the war with Louis the Fourteenth. The revenues of the Kingdom were small and the public credit weak. The growing wealth and business of the country had caused private banking houses to come into being. The paper given by these houses to their creditors had acquired a circulation, limited and sufficient to show its convenience, and so projects for the establishment of a public institution on the scale, if not on the model, of the great continental banks had been discussed for years.(1) To raise money to continue the war, the Government, in1694, offered for public subscription a loan, allowed special priveleges. The funds so raised were utilized to form the capital of the present Bank of England.

(1) Dunbar, Charles - Theory and History of Banking,pp132-33. (London, G.P.Putnam Sons, 4th Ed.1922.) For a detailed account of the origin of the Bank of England see, Andreades,A.,The History ßf the Bank of England, 1924.

The Act of 1694 provided for a loan by the Bank of England to the Government and incorporated the subscribers as the Governor and Company of the Bank of England. It empowered the Corporation to deal in coins, bullion, and exchange and to loan upon security but not to deal in any form of merchandise. In 1696 the Bank was allowed to issue notes payable on demand. It also became the chief depository of the public money, and the agent of the Treasury in many of its financial operations. The Act of 1742 gave the bank a monopoly on note issue and the exclusive right of banking. The Act provided that no other bank would be allowed to be established by Parliament during the existance of the Bank of England.

In 1826 a new law permitting banks with an unlimited number of partners to be established any where in England outside of the city limits of London. This law was designed to encourage the establishment, in the provincial towns, of banks that were larger and financially stronger than those previously founded in these towns. The Bank of England was allowed to establish provincial branches. This privelege was granted the Bank to compensate it for the furthur limitations imposed on its monopoly and also to give the provinces the advantages of a closer and more direct contact with the Bank of England. It was the incorporated bank of deposit without the right to issue notes and catering principally to the needs of commerce.

2. Paper-Money Theories About 1840.

In the period following the crisis of 1839 a peculiar doctrine of finance developed in England, which obtained a strong footing among public men with only a rudimentary knowledge of political economy and had spread to some extent upon the continent of Europe and in the United States. This doctrine affirmed the view that bank notes are a form of currency ent rely distinct from other commercial paper and forms of credit; that an expansion of bank notes issues, even though redeemable in coin on demand, is a potent cause of commercial crises, and that, therefore, the way to prevent crises is to fix limits upon note issues of banks. Few advocates of this theory have undertaken to place definite limits upon the volume of bills of exchange or other forms of commercial paper issued by solvent borrowers, but have maintained that bank notes were money for all practical purposes of daily use; that an undue expansion in the volume of money has stimulated speculation and expelled gold under the operation of Gresham's law; and that the curtailment of note issues would maintain sobriety in the mercantile world and restore the equilibrium of the foreign exchange.(2)

(2) Conant Charles,- History of Modern Banks of Issue,p.120 (New York, G.P.Putnam Sons,6th Ed.,1927

3. The Peel Act and Its Effect on English Banking.

Peel, one of the most ardent advocates of this new "Currency Principle", in 1844 introduced a bill in Parliament which became the basis of the present charter of the Bank of England. The law commonly known as the "Peel Act". It cut off the creation of banks, and made the future elasticity of English currency dependent upon deposits of coin or bullion with the Bank of England. The new charter separated the issue department from the banking department in the Bank of England and placed the former department under the charge of a committee of the directors appointed by the entire body. The issue department was to pay coin and bullion for notes and to issue notes for coin and bullion; no department of the bank was authorized or permited to issue notes in excess of the limits established by the charter. In forbidding the issuance of notes by private and joint-stock banks, the Act had in view the ultimate withdrawl from circulation of all notes other than those of the Bank of England.

Peel's Act and the principle on which it was based have been severely criticised. It has been questioned whether the separation of the Bank into two departments was either necessary or advisable. Since it separates the resources of the bank into two unequal parts, all demands would fall first on the smaller of the two funds, that of the banking department. In the second place this separation was considered partly responsible for the frequent variations in the discount rate. The difficulty that resulted from this limitation was that in the future it would be impossible for the bank in times of crises to come to the aid of the financial world and to restore confidence, as it had previously done, by the issuance of notes. Peel thought this act would prevent crises from arising but he did not forsee the enormous development of trade and industry in the latter part of the ninteenth century.

The great expansion of English banking after the middle of the ninteenth century led to a serious doubt as to the capacity of the Bank of England to maintain commercial credit in every conceivable emergency. It was pointed out that the entire fabric of English credit rested upon the gold reserve of the Bank of England. The private and joint-stock banks made no effort to maintain a coin reserve of their own, for such a policy would have locked up their capital. They carried only such cash as was needed from day to day for ordinary business transactions and relied upon their deposits with the Bank of England for the cash to meet emergencies. Thus the credit of the entire business community depended upon the solvency of the Bank of England.

4. Influence of the Bank of England Upon American Banking Policies.

The Bank of England is not a governmental institution. It has a partial monopoly on the right of note issuance which is the only paper legal tender in Great Britain. It is also the chief depository of the Government and is in charge of the public debt. In the attempt to stabilize the currency of the United States after the revolutionary war we tried to model our banking system after that of England's. The First and Second Banks of the United States were supposed to occupy in our banking system the position that the Bank of England did in the English banking system. But unlikethe Bank of England, our central banks were political institutions with the government as part owner of the capital stock, These banks were used by political parties to furthur their own ends and therefore were doomed to failure. We could not keep our banking system free from political entanglements and it was not until the National Banking Act was passed in 1860 that we established a fairly stable banking system.

CHAPTER V

AMERICAN CENTRAL BANK ORGANIZATION AND CENTRAL BANKING POLICIES BEFORE THE TIME OF WALKER.

1. Banking Facilities Needed in Colonial Times.

The need for an adequate supply of specie and the need of capital for industrial uses gave rise to a movement to supply these needs. The Colonial Governments and various private individuals attempted to meet these needs by issuing bills of credit and notes. The imperfections of these methods of circulating media caused the new government to charter banks of issue that would supply the money needs of a growing nation. All the early experiences in banking in the United States were concerned largly with the issue of circulating notes and with the fiscal operations of the Government.

The first bank established in the United States was the Bank of North America in Philadelphia, which was chartered by the Continental Congress in 1781. It was planned in order to give financial support to the revolution. The principle business of this bank and the others which were chartered along the same lines were the exchanging of their own non-interest bearing no tes, payable on demand, for the interest bearing notes of merchants and others which were payable at future times. They also received deposits and had a checking account system a nd foreign exchange services. The charters of these banks, which were granted by the state of these banks or by the Federal Government, provided for the accumulation of a capital fund by the contributions from the owners, a portion of which had to be paid in before business could be carried on.

2. First Bank of The United States.

The First Bank of the United States was chartered by Congress in 1791, as a part of the scheme of Hamilton to strengthen the new Federal Government. The establishment of the bank was opposed on the grounds that the Constitution did not give Congress the power to create banks, But Congress and the President passed the Act and the bank was founded.

The bank was patternd after the Bank of England and was intended to provide a depository for the public funds, to act as a fiscal agent for the new government and to regulate the currency. The bank could loan upon real estate but could not own any. The only limitation upon its note issues was that which limited all debts other than deposits to the amount of capital stock. The notes were received for dues to the government so long as they were redeemable in coin on demand. The charter was granted for a period of twenty years, with the provision that Congress was not to charter another bank during this period. This provision did not imply a monopoly of note issues for the state banks were in no way disturbed in their privileges and methods except in so far as the new institution by its example acted as a regulator of the currency, an d its large capital and pre-eminent position were intended to give it such a commanding position as was occupied by the Bank of England among the banks of that country.(1) But as I had previously mentioned the Bank of the United States was doomed to failure because it could not free itself of its political entanglements and was used as a political football by the enemies of the administration in power. The Bank of England was not in any way connected with the government and was free of all political ties.

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(1) Conant, Charles - History of Modern Banks of Issue, 6th Ed., 1927, p.337.

The charter of the First Bank of the United States expired in 1811 and Congress refused to renew it. Political opposition to the party in power coupled with the enmity of the State banks defeated the attempt to renew the charte. With the removal of the competition of this central bank, there was a rapid increase in the numbers of State banks. All of these banks issued notes and no provisions were made by them for the redemption of the notes they issued, while fraud was common in attempts to prevent the redemption of their notes. Many of these banks were established just to raise capital for some outside enterprise in which the bank promoters were interested.

3. Conditions of the Banking System after the Fall of the First Bank of the United States.

The Government was compelled to rely on the state banks in the war of 181', and their suspension of specie payment in 1814 almost paralyzed the financial operations of the treasury. It became impossible to make transfers of funds from one section of the country to another because the notes of one section did not pass at par in another section. The situation became so bad that in 1816 the Second Bank of the United States was chartered for twenty years along the same lines as the first bank. It was under the direct control of Congress and had to open branches in designated cities in the country. It secured the resumption of specie payments throughout the country. Later it checked the tendencies of the states banks towards over-trading and unsafe practices. It also aided the government in its financial affairs and furnished a uniform currency for foreign exchange. It became involved in a political struggle and coupled with the opposition of the state banks, its charter was not renewed. After the closing of the Bank of the United States, the government deposits were put into selected state banks, but the crisis of 1837 caused most of these banks to suspend payment, putting many of them into bankruptcy and the government was unable to get its deposits, so that finally, in 1846, an independent treasury system was formed.

The banking system during this period and up to the civil war was in a chaotic condition and the currency problems were almost beyond solving. A true picture of the situation was given years later by Francis Walker, the eminent American economist, who saidthat: "The evils of this period were chiefly due to the vices of paper money banking seems too clearly known to be questioned. The opening of the western country would inevitably hawe led to much wild adventure, commercially and industrialy; but it was the 'elasticity' of the circulation, the facility of local issue, without the realty, or scarcly the pretense of redemption, which made the banks, even the best of them, reckless as to the character of the enterprise to which they gave assistance; while the money thus put into circulation, without 'reflux', enhanced prices, and still furthur stimulated both speculative investments and speculative trading. When the courage of the better class of banks gave way, hundreds of 'Wild-CaT' or 'Coon-box' banks, so called, without capital, without a constitution, with no past and no expectation of a future, whose managers risked nothing and had nothing to lose, came forward with loans to speculators who planned to build cities in the wilderness. Again, as in early New England, a bank meant a batch of money---"(2)

(2) Walker, Francis A.- Money, Trade and Industry, p.219.

4. Growth of State Banks.

With the discontinuance of the Second Bank of the United States, the state banks increased rapidly throughout the country. Many of the States tried to provide safegaurds and suitable regulations for these banks but most of this legislation proved ineffective. Many of the States compelled banks to secure from their owners the capital required and to do business in proportion to their capital. Most States later required a definite amount of specie to be kept on hand to back the notes issued by these banks, and also that a statment of the bank's affairs be made to the States Department at states periods. Thus, through varying degrees of success and failure, the States regulated their banks and were slowly working their way towards a system of sound banking suited to their local needs. Though some of these states banking systems secured for limited sections of the country a fairly uniform and safe currency, they lacked the essential quality of uniformity which was to be given them later by the adoption of the National Banking System in 1863.

5. Introduction of a National Banking System.

The National Banking System was established in 1863 and grew out of the financial difficulties of the Civil War. It was started for the purpose of providing a uniform paper circulation and a means of increasing the sale of government bonds. Banks already in existance might become national banks by depositing with the Secretary of the Treasury, registered bonds of the United States to the extent of one-third of their capital, receiving in return notes for circulation. The government and not the banks was responsible for the redemption of these notes. The weak feature of this system was the inelasticity of the note issues, which were prevented from fluctuating with the needs of business.

CHAPTER VI

ESTABLISHMENT OF THE GOLD STANDARD IN OTHER COUNTRIES-- GREAT BRITAIN, GERMANY, FRANCE--AND ITS INFLUENCE ON THE UNITED STATES.

1. Early History of the Monetary Standard.

Prior to the eighteenth century silver was the metal in which debts in England and practically all of Europe were estimated and in which most of the internal trade was carried on; but during the later part of this period, gold had been increasing in importance, and silver, though nominally the standard, was falling back into the position of a sbsidiary currency. In England, this predominance of gold over silver was due to the policy of the government in overrating gold relatively to silver, which, by causing a constant inflow of gold and an outflow of silver, forced the use of gold on the country, for all important transactions. The early English economists of the seventeenth century held that only one metal must be the standard and in England that metal is silver.

In the eighteenth century, the tendency towards the predominence of gold was increasing. As a result of the continued over-rating of gold, it became the cheapest medium in which to pay debts, until finally it became in practice, though not in theory, the standard of value. All the chief legislative measures concerning the currency tended in the same direction. Adam Smith held that the metal in which wages were paid and debts taken care of would be the metal standard. Hence he held that silver was still the standard metal in England, but he did believe that gold was the regulator in the coinage although not the standard. The Act of 1816, introducing the single gold standard, did little more than legalize a state of things already in existance.

The ancient world had a double standard of gold and silver,. The single standard prevailed during the middle ages. Then the double standard was reintroduced and prevailed until the nineteenth century, when it was superceded by the present gold standard. The market values of the two metals are subject to the law of supply and demand and fluctuate with reference to each other. The ratio of their value has at times been subject to erratic changes.

2. Adoption of the Gold Standard in England.

England was the first country to attempt to stabilize the ratio. In 1717 gold was over-valued and silver exported. Gresham's law was in operation and the only silver coins remaining in circulation were those which had been reduced in weight by clipping. (1) In 1774 Parliament passed a law limiting silver as a legal tender anf later it was prohibitedthe mint to coin silver for the account of private persons.All defective gold coins had to be recoined to their full weight. In 1816 it was enacted that gold coin should be full legal tender and coined for private persons, that silver could not be legal tender above a certain amount and could be coined only by the government. This Act established the gold standard in England. Before the Act gold had already been the accepted standard in all business transactions and it merely needed the Act to legalize it.

(1) White, Horace - Money and Banking, 5th Ed.,1914,p.62.

3. The United States on the Gold Standard.

The next country to adopt the gold standard was the United States. As in the case of England, the United States passed from the silver to the gold standard by an accidental over-valuation of gold. At first the unit of value in America was silver, the Spanish silver dollar. It was coined on the spot by the local mints. The supply of precious metals came to America from Mexico and Peru, and as gold was over-valued in Spain and Portugal it was silver that came into the United States and was the standard until 1775. After the revolutionary war, paper money was issued to such an extent that it became practically valueless. When a national coinage was formed it was based on the old Spanish dollar. Gold also could be coined at the ratio of 15:1, but as the value of gold in Europe was rising and France still had a 15½:1 ratio, this was an under-valuation and gold did not come into the United States.

In 1834 it was decided to raise the ratio in order to attract gold into the United States. The ratio adopted was 16:1. As a result, gold took the place of silver, which so became subordinate to gold, as it already was in England. But in 1853 the loss of silver, due to the over-valuation of gold, became inconvenient and subsidiary silver coins of a lesser fineness were coined on the model of the English system. During this period England and the United States were the only countries that had a gold standard. France and the Latin Union still had a bimetallic standard and the rest of the countries were on the silver standard.

4. Adoption of the Gold Standard by European Countries.

In the period following the gold discoveries in California and Australia, France and the Latin Union had steadily been taking in gold and exporting silver. In 1865 it became necessary to institute a subsidiary silver coinage, below the standard fineness. As it seemed that France would be forced to adopt a gold standard, Germany, fearing that a continuation of the silver standard would place her at a disadvantage economically, adopted the gold standard. At first the new standard did not effect the value of the German monetary unit as their ratio of 15½:1 was the same as the market ratio. But when the Scandinavian countries went on the gold standard the price of gold went up and the ratio became 16:1. The bimetallist countries had to limit and then finally suspend free coinage of silver because of the drain of their gold. The rapid displacement of silver by gold in Germany in 1872 had led all European countries where silver was the standard to defend themselves against the flood of silver by suspending the free coinage of silver. The general demonitization of silver had upset the ratio of 15½:1. As one writer has said: "The American inflationists discovered that the United States had almost by accident participated in the general movement. In 1873 the coinage act had quietly dropped the silver dollar out of the list of standard coins. The transaction from a bimetallic, but practically a gold standard, to a legal gold standard had been effected in the United States as in England at a time when the general use of paper money made coinage legislation of interest to few." (2)

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(2) Hawtrey, R.G.- Currency and Credit, 3rd Ed., 1928,p.361

England before the bank restriction and the United States after the Civil War, both returned to a gold standard which had been substantially in operation before the issue of irredeemable paper had begun. In both countries there was a change of standard because both gave recognition by legislation to the gold standard during the paper regime. Thus we see that a metal which may by law be coined, is as little the standard as a metal which the law forbids to be coined. Gold became the standard because the people brought it to be coined and not silver which the people did not bring. Adam Smith, in 1776, had seen that gold had become the standard even though the government had not as yet made it a legal standard.

CHAPTER VII

THE CONFLICT OVER BIMETALLISM AND THE DEMONITIZATION OF SILVER.

1. Introduction of the Gold Standard in Europe and United States.

Bimetallism is the maintaining of two metals as the monetary standard, the ratio of the metals to be fixed by the government. Previously to the seventeenth century, silver production exceeded that of gold but with the gold discoveries in California and Australia, the gold supply of the world was enormously increased; the increase of gold causing a rise in prices. For a time the relative value of gold and silver was not affected by the gold discoveries. But with the increase in the production of silver in 1870, due to the discoveries of the Nevada mines, the price of silver dropped. The introduction of the gold standard in several European countries and in the United States, coupled with the reduction of the demand for silver from India, caused the value of silver to fall still furthur. With France and the Scandinavian countries finally substituting gold for silver, causing a demand for gold for currency purposes instead of silver, there was a steady fall in the price level.

The fall of prices and the depression of trade coinciding with the great depreciation of silver started the belief that the demonitization of silver was the principal cause of the trade difficulties of the time. It was suggested that bimetallism was the only remedy.

2. Arguments in Favor of Bimetallism.

The arguments brought forward in favor of bimetallism were all based on the assumption that a common agreement between nations was possible, resulting in International Bimetallism. The advantages expected to be derived from it were mainly an increased steadiness of prices and of the foreign exchange, with resulting benefits to trade.

The bimetallists maintained that the double standard would eventually steady prices, which during this period were falling, though the use of the two metals might involve more frequent fluctuations in the relative value of money. The latter fluctuations would not be as violent as under a single standard, as the fluctuations of the two metals would counter-balance each other. Bimetallism being a step towards a universal currency, would also have a beneficial effect on commerce, since a uniform ratio between the metals would facilitate exchange between the various countries. Then again, under a bimetallic system, the quantity of money in circulation would be greater, which would help to maintain a high level of prices. Moreover, it was said that, if a single gold standard were maintained, gold would appreciate too rapidly and the consequent scarcity of circulating media would handicap the commerce of the world.

The bimetallists believed that the value of money depended only slightly on the cost of production and that such value could be determined partly by legislation. Since it is the province of legislation to determine what substance should be used as money, they thought it possible to fix a ratio between the two metals, as near as possible to the market ratio, and to maintain it by international agreement. Moreover, they believed that this international ratio would tend to prevent violent fluctuations in the market ratio and that at the ratio of 15½:1 both metals could be kept permanently in circulation.

Even if universal agreement could not be obtained, the agreement of several of the chief countries of the world would be an enormous advantage; for they could act as intermediaries between the gold-using and the silver-using countries.(1)

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(1) Dodd, A.- History of Money in the British Empire and the United States, p.193.

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3. Arguments Against Bimetallism.

The mon-metallist, on the other hand, believed that the effect of the double standard in increasing the steadiness of prices and of the exchange would be but slight. They based their opinion on the ground that steadiness, both of prices and of the exchange, depends on a number of causes, of which the metallic currency is only one. Prices are affected by the condition of credit and by conditions on industry generally, while the exchanges are affected by the balance of trade as much as by the movements of money; also, the development of paper money and of various forms of credit has made the use of metallic currency of much less importance than formally.

The monometallists also denied that the quantity of money in circulation would be increased; for under bimetallism there would only be the same quantity of money in the world, though the two metals might be more evenly distributed. At the same time they denied alltogether that an increased amount of money in circulation, even if it could be brought about, would in itself be an advantage unless it were accompanied by a general expansion of trade. The monometallists attributed more importance to the cost of production and less to the action of the government in the determination of the value of money than did the bimetallists. They thought that it would be impossible to keep the ratio between the two metals steady; that the legal ratio would constantly be varying from the market ratio; and that one metal would always be at a prmium. Therefore, unless bimetallism was universally adopted, the two metals would be in use alternately and the cheaper metal tending to flow out of the country. These constant alternations would be bad for the trade and would necessitate constant recoinage on the part of the government.

France, under a bimetallic regime, had not been able to keep the two metals in use concurrently. The result of allowing the unlimited coinage of both metals had been that the mint was constantly coining metals of lesser value. This metal when coined, was used to displace the metal of higher value, so that country was always being drained of either gold or silver. So France and the Latin Union were finally forced on to the gold standard.

4. The Three Monetary Conferences.

A monetary conference was held in Paris in 1878, in which the American delegates asked the other nations to join in a scheme for the free coinage of silver. The American bimetallist, Francis Walker was a member of this commission. He said it was not desirable that silver should be excluded from free coinage in Europe and in the United States, that on the contrary, free and unlimited coinage and the use of silver as an unlimited legal tender should be retained when and where they existed. The European delegates held that the selection of a standard should be governed by the position of each nation or group of nations.

In 1881, at the second conference, France declared itself in favor of bimetallism and was followed by the United States, Italy, Austria and the Netherlands. The French delegates stated that the great fluctuations in the value of silver relatively to gold were injurious to trade and that, in their opinion, a fixed relation of value between gold and silver would be productive of great benefits to the commercial world. But the rest of the nations wanted the gold standard and the conference broke up without coming to any understanding on the question.

In 1893 the third and last monetary conference was held, at which France stated definitely that she would not adopt bimetallism unless the other nations would do likewise. The United States consequently was left alone in its support of bimetallism.

5. A Brief History of Monetary History of the U.S.

Gold and silver had been made legal tender by the United States Congress in 1792 at the ratio of 15:1. The gold standard was in practical operation at the time though not legalized. The European ratio was higher, so Gresham's law began to assert itself and American gold coins became scarce. In 1834 the ratio of 16:1 was adopted in an effort to bring gold back. Gold was debased as the silver dollar contained the same amount of pure metal while the amount in the gold dollar was reduced, consequently silver dollars disapeared from circulation. In the Act of 1853 we adopted the principle of the British Act of 1816 in reducing the weight of the small silver coins and limiting their legality as legal tender. But we still kept our silver trade dollar. During this period, neither silver nor gold was in circulation; we were using irredeemable paper. In 1873 the United States followed Great Britain and Germany in going on the single gold standard. The gold dollar became the unit of value while silver was demonitized and only the government could have silver coined.

After the act of 1873 was passed a charge was brought by the silver-coinage men, who declared that they knew nothing of the contents of the Act and that it was passed secretly. A strong agitation for the remonitization of silver sprang up. Walker, in an address on the free coinage of silver, in 1893 declared that: "The act was passed without calling attention to its contents. Every one knew that few members of Congress read the text of one in twenty of the bills they have to pass and it was the duty of the committee to see that the proposed change had been fully explained and the attention of the members called to it".(2) He goes on to say that so completly without observation was the Act passed that it was nearly a year after before the people knew that silver was demonitized. Walker believed that these so called silver agitators were not truly bimetallists, that all they were was silver inflationists.

(2) Walker, F.A.- "The Free Coinage of Silver", Journal of Political Economy, Vol.1, 1893, pp.164-165.

6. Francis A.Walker's Position on Bimetallism.

Francis Walker was not an advocate of national bimetallism; he wanted International Bimetallism. He did not believe that any country could have a national bimetallic currency for any lenghth of time without other nations joining with her. It was for the purpose of establishing relations of exchange between the silver-using and the gold-using nations, which would facilitate trade and increase production, that Walker desired international bimetallism. He believed that if bimetallism was to be re-established it would have to come through an international agreement. Nosingle nation would be powerful enough to do it alone.

Walker explains what he meant by bimetallism in the following terms:(3)---"In ordinary speech, if without qualifications or previous explanations, with free coinage of both metals at the legal ratio, such as existed in the United States from 1792 to 1873, in France after 1785, and in many countries at various times, or else and this more properly, the system of International Bimetallism -- again with free coinage of the metals at a ratio common to the contracting -- such as existed under the Latin Union between 1865 and 187 ; such as has been proposed to be constituted between the wider groups of natios, in successive International Conferences, and in a host of treaties, tracts and public addresses."

(3) Walker,F.A.- International Bimetallism, p.1.

7. Walker's Position at the Monetary Conference of 1878.

At the monetary conference held in Paris in 1878, General Walker set forth the reasons for his belief in the possibility and efficiency of International Bimetallism. He held that the propositions did not simply raise a theoretical question, but a practical question, distinct from and free from the embarrassments of economic theory, of vast importance to Europe and the United States. In the following words he combated the idea that the misfortunes of silver were due to the workings of national law: "Silver has not ceased to be money as the result of natural causes, that is, of economical forces operating upon the choices of individual producers or exchangers. The very suddeness of the change and the violence by which it has been accomplished would suffice to show this, did we not know that the rejection of silver has been effected by the action that was distinctly political, the laws or decrees of the government, those laws having, it is notorious, been suggested and urged by the political economists of a certain school, incited thereto in no small measure by the recommendations of a conference not unlike the present ----- A uniform coinage of money by all civilized nations would offer certain, definite, appreciable, but not momentous, practical advantages, and would be of considerable sentimental importance. It is worth the incurring a certain definite expense in recoinage and a certain temporary embarrassment in recoinage and of trade pending the readjustment of monetary systems." (4)

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(4) Russell, Henry,-International Monetary Conferences, pp.235-6

Furthuremore, according to Walker, there are not more than three territorially extensive countries in the world which could possibly maintain a single gold standard upon true economic principles. Germany is not one of these. England, he maintained, could keep in circulation a large amount of gold coins because of her great wealth and rapid circulation. Walker then showed the conference that a fixed relation could be maintained that would free International Exchange from embarrassment so that none would lose. He then went on to show the probable effect upon the production of wealth by the continued demonitization of silver, saying:

"Cutting, as in the first instance it does to the very quick, into profits of the men of business, which profits constitute the sole motive to production under the modern organization of industry, and enhancing, as in its ultimate operation it must, the burden of all debts and fixed charges, public, private, or corporate -- which debts and charges are in effect the mortgage which the representatives of past production hold upon the products of current production and industry -- a diminution of the money supply is one of the gravest evils which can menace mankind -- At a time when production of the two historical money metals, jointly, is diminishing, this most, unfortunate ocassion is taken to throw one of them out of use as money of full value; to remit it to the uses of token m oney and to banish what of the accumulated stock of three thousand years production cannot thus be employed, to be hoarded in the East as treasure or devoted to personal adornment. The representatives of the United States are here to try to prevent such a wrong to civilization and to the hopes of man."(5)

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(5) Russell, Henry - Op. Cit.,p.237.

Mr Feer-Herzog, the delegate from Switzerland, was the chief defender of the gold standard. He said that, contrary to Walker's assertion, the United States showed itself to be a warm supporter of the gold standard; also that the greater part of the troubles and disasters which have accured in the various nations have been caused by the use of the double standard. He also denied that the exclusive gold standard led to the injurious issue of fiduciary money, but re-asserted that such was the result of the double standard that General Walker was advocating. (6)

(6) Russell, Henry - Op. Cit., p.238.

Walker was deeply disappointed at the outcome and failure of the International Monetary Conference of 1878, of which he had been a member, and, gave increasing study to the problems of fluctuating prices. He was fully convinced that the conditions of the period leading up to the panic of 189 and to the prolonged industrial depression were due to the demonitization of silver by Germany in 187 , and the abandonment of bimetallism by France and the Latin Union.

After the failure of the three monetary conferences, Walker in an address on International Bimetallism said that: "A few European nations and bimetallists gave some encouragement when the United States attempted to undertake the free coinage of silver alone, but the greater group of bimetallists of Europe were opposed to any such measure on the part of the United States. If the advantages of bimetallism shall not prove sufficient to overcome the jealousies and animosities of European nations, we shall at least say that the people of the United States, by reason of their high standard of wage s, their large accumulations of wealth and vast undeveloped resources, can endure the evils of gold mono-metallism as long as the best of them."(7)

(7) Walker, F.A.- "International Bimetallism", The Bimetallist, Vol.2, 1896p.219.

8. Walker's Criticism of Bimetallism in the U.S.

Refering to the establishment of bimetallism in the United States, Walker declared that: "A fair trial of bimetallism , under reasonably favorable conditions, could not possibly, in the nature of the case, have been conducted here. The people of this country throughout the period under consideration, habitually used so small an amount of either or both of the precious metals, in comparison with other nations, and in comparison with the stock of those metals throughout the world, that a fair bimetallic law instituted here could not have afforded a fair trial of bimetallism."(8)

(8) Walker, F.A.- International Bimetallism, p.112.

Furthurmore Walker declared that: "The manner in which bimetallism was put into operation here, by the Act of 1792, on the one hand, or by that of 1834, on the other hand, was such as necessarily to bring about an early failure, even though the principles of bimetallism were admitted to be perfectly sound." (9) He based this statemant partly upon the selection by Hamilton of a ratio which was different from that of France and of the market ratio. Walker did admit that the influence of the United States was against it.

(9) Walker, F.A.- International Bimetallism, p.114.

9. Walker's Defence of Bimetallism.

In the defence of bimetallism, Walker explains how it will secure a higher degree of stability in the mass of the money formed by it, than can possibly exist with the two metals separate and fluctuating independently in their value. "If then", he says, "Each metal has its own value in commerce subject to the natural causes which govern the demand, it is evident that we shall have an incessant fluctuations, not only in the relation between the two metals, but also in the relation of metal money to prices. Such fluctuations cannot in the nature of the case, be suppressed: but if the two metals can be joined together in their function as money, it is highly reasonable to expect that the aggregate influence of the fluctuations in price will be reduced. There will be a considerable compensating effect, giving the result of a greater degree of stability in values. Whenever one metal tends to fall and the other to rise, or where both tend to rise or to fall with different degrees of rapidity, the operation of the bimetallic system must be in the direction directed."(10)

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(10) Walker,F.A.- Op. Cit., p.148.

Then Walker shows how by the operation of bimetalism greater stability of values is secured: "The object of bimetallism is by joining the two metals together in the coinage , at a fixed ratio, to diminish the extent of the fluctuations to which the value of each would be separatly liable, by generating a compensatory action between the two, by which the cheapening metal shall receive a larger rise, while the appreciating metal drops partially out of its former demand, thus making the two fall together, in the opposite case, or, conceivably, making the tendencies of the one to fall precisely counteract the tendency of the other to rise."(11)

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(11) Walker, F.A.- Money, Trade and Industry, p.166.

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10. Criticism of Walker's Bimetallic Position.

On these statements, Henry Miller took issue with Walker saying that: "There is not under bimetallism any joint supply of gold ar silver, and that it is highly improper to regard, or to speak of, the two metals as being joined and united into one joint supply, or tospeak of a joint demand upon the joint or compound mass of the supply of both metals, or of a demand upon the two metals jointly. There never was, nor will there be under bimetallism any such things as a joint or compound mass of supply of silver or gold. All that bimetallism does, in this respect, is to have the law declare that a certain portion of silver shall be equal, in the circulating media, to a certain portion of gold. It is this equality which constitutes bimetallism, and its mission is to preserve this equality."(12)

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(12) Miller, Henry A.- Money and Bimetallism, 1898, p.257.

The leading economists of the day were not the only one's to take issue with Walker on his bimetallic position.

The newspapers which advocated gold mono-metallism attacked him vigorously in their editorial articles; of these the New York Evening Post was his bitterest antagonist. In an editorial of the Evening Post of March 22, 1894, appeared the following criticism: "The most unfortunate feature of the new silver movement started by General Walker in Boston is the fact that it gives the rest of the country a false impression as to public sentiment in the East. The silver lunatics of the South and West are not given to fine discriminations, and do not take the trouble to read with discrimination long papers on financial topics. They jump to the conclusion that Walker and some other men whose names are known to them are in favor of silver coinage like themselves, and by another jump decide that this must be the sentiment of New England." (13)

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(13) Cf. Stokes, A.P.- Joint-Metallism,5th Ed.,1896,p.13.

Walker met these attacks by having a letter published in the Boston Herald, in which he said: "The South and West have got hold of a half truth, or rather a half-truth has got hold of them and has excited them almost to the point of frenzy. The half-truth which has thus moved our fellow citizens is that diminished money supply constitutes a grave and increasing danger to society and industry. As Mr Balfour said in his great Mansion House speech, a diminishing money supply constitutes 'the most deadening and most benumbing influence which can touch the enterprise of a nation'.

To the silver fanaticism of the South and West the gold mono-metallists oppose a half truth of their own, namely, that an inflated, depreciated and fluctuating currency is a monstrous evil. Now a half truth which arouses fanaticism has never yet been successfuly opposed by a half truth appealing to their conservatism.

The only way to meet a dangerous half truth is by telling the whole truth. In this case the whole truth is bimetallism -- bimetallism on the broadest national basis which would at once put a stop to the disastrous appreciation of gold that has been going steadily forward ever since 1873, and at the same time give to the metallic money of this country and of the world, a deeper degree of stability which is literaly impossible under the system of gold mono-metallism in some countries and silver mono-metallism in others." (14)

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(14) Cf. Munroe, J.P.- Life of Francis Walker, p.361

Not only in the United States was Francis Walker criticised but also in Europe. In the National Review, a speech he gave in London was commented upon unfavorably by J.H.Tritten, as follows: "The address delivered at the annual meeting of the bimetallic league, in London in1896, by Professor F.A.Walker, however eloquent it may have been thought at the time, contains when read and examined, an amount of assumption too great too allow it to pass unchallenged.--- Had our friends the bimetallists been able to prove their case, their system would have been adopted long ago and International

Conferences would not have been necessary.--- The Professor assumes that International Bimetallism has not been throughly discussed in England. We join issue with him when he assumes mono-metallism invokes, 'The sacrifice of the large interests of the regular, confident, progressive production of wealth'. We say that mono-metallic countries, more particularly Germany and England, are and have been for some time past, regularly, confidently and progressively producing wealth."(15)

(15) Tritten, J.H.- "The American Crisis", The National Reveiw, 1895, Vol.28, p.70.

But in spite of all these adverse attacks and comments of economists and newspapers, General Walker adhered faithfully to his beliefs in the efficacy of bimetallism as a cure for our monetary evils. He also believed that every nation joining the bimetallic group strengthened the system: first , by contributing to the supply of the metal which may, under conditions prevailing at the time, tends to become dearer; and, secondly, by withdrawing itself from the list of States which may contirbute to the demand for that metal.

CHAPTER VIII

RECEPTION AND INFLUENCE OF WALKER'S CRITICAL AND CONSTRUCTIVE CONTRIBUTIONS ON BANKING AND MONETARY POLICIES.

1. Walker's Conception of Money.

In the United States the most ardent follower of the quantity theory of money was Francis Walker. His writings on money drew the admiration and the criticisms of many prominent economist, and his conceptions of money influenced the monetary writings of later writers. In treating of the functions of money Walker denied that there is any separate and independent function of a value denominator, since any money can serve as a value denominator anly through its use as a medium of exchange.(1) Money may, according to Walker, serve as a standard of deferred payments, but that a measure of value at a given time and place is not needed. (2) With him prices are not obtained by a comparison between goods and a standard, but solely by being offered against the medium of exchange.

(1) Walker, F.A.- Political Economy, p.137(sec.182)

(2) Walker, F.A.- Money, p.10.

He goes on to say that: "Money is the medium of exchange. Whatever performs this function, does this work, is money. No matter what it is made of and no matter how it came to be the medium at first or why it continues to be such. So long as in any community there is an article which all producers take freely and as a matter of course, in exchange for whatever they have to sell,--- that article is money--- there is no other test of money than this. That which does the money work is the money thing."(3)

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(3) Walker, F.A.- Political Economy, p.123(sec.162)

A recent authority on monetary theory, in commenting on Walker's definition of money, has this to say: "This definition is to my mind the most satisfactory and workable scientific definition of money that has yet appeared. It is based upon the most important function of money -- the one from which all others are largely derived-- It is comprehensive, reasonably precise, easily understood and corresponds with popular usage." (4)

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(4) Kemmerer, E.W.- Money and Prices, p.28.

Walker then continues to define his conception of money as follows: "The value of money, like the value of anything else, is purely a question of demand and supply--- The demand for money varies with the amount of money work to be done, which, in turn varies with the industrial organization of communities, with seasons and with circumstances innumerable---(the supply of money) is the money force available to do the money work required to be done, in the given community, at the given time,-- but is composed of two factors -- the amount of money and the rapidity of circulation." (5)

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(5) Walker, F.A.- Political Economy, pp.130-131,(sec.172)

Thus, with a given supply of money, if more goods are offered, prices will fall; if fewer goods are offered prices will rise. With a given money-work, a decrease of the supply of money will lower prices. What money is then acquires supreme importance. But, according to Walker, only that medium of exchange which has universal acceptance is money. This definition of Walker's thus rules out bank checks, deposit currency and other forms of commercial papers which practically all economists recognize as performing the functions of a medium of exchange. Thus Walker is not very clear as to what constitutes money as a medium of exchange. He contradicts himself in his definition and his conception of money and its functions. If he would stick to his definition of money that 'Money is what money does', he would be unassailable in his monetary theory, but this very inconsistency is what causes later economists to criticize his monetary theories.

2. Criticism of Walker's Monetary Theories.

Walker did not believe bank checks could act as money because they do not have universal acceptance. The greater majority of economists disagreed with him on this point and held that bank checks and other forms of commercial paper were money and acted as money. He also denied that they could serve as a medium of exchange, but we can see how in all business transactions they serve to a very large extent as mediums of exchange. In fact most of the commercial business of the world is done and carried on by the aid of bank drafts and various forms of commercial paper.

The distinction drawn by Walker between bank notes and checks in his work on money is that bank notes are a form of credit between the holders and the issuers, but not between the buyer and the seller, while checks are a form of credit between the holder and the issuer and between buyers and sellers alike. He also says that checks are accepted with reference to the character and competence of the persons offering them, while bank notes are not, and that checks pass usually by successive endorsements, while bank notes do not require these endorsements. This distinction drew many unfavorable comments from the writers of his day. One writer says: "In both instances the degree of accepatability is gauged by the credit of the issuer. It is somewhat astonishing to find Professor Walker classifying inconvertable paper as money, while excluding checks and bills of exchange, especially after defining, 'All that is money which performs the money function'."(6)

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(6) Kitson, Arthur - Scientific Solution of the Money Question, p.248.

Walker thinks that gold, or whatever other commodity is used as the standard, will owe the attainment of its 'Acceptability' to the fact that it has been constituted money by the government of the community. If the community makes paper money legal tender, then there is no reason why paper notes should not measure value as well as gold. Many economists disagree with Walker on this point. Carlile in his discussion on money refers to Walker and his monetary theories, praising and then criticising him: (7)---"Professor Walker, whose discussions of the subject of money in his money, Trade and Industry (p.6) is within limits, most lucid and enlightening, after defining money as that which every one receives without the slightest reference either to his own need for consumption, or to the credit of the person who offers it, remarks; 'When an article reaches this degree of acceptability it becomes money, no matter what it is made of, and no matter why people want it'. This conception of an article as becoming money spontaneously as soon as it has reached a certain required degree of 'Acceptability' is certainly much nearer the truth than Adam Smith's conception, which seemed to assume that the prehistoric communities first decided that the establishment of money would be desireable, then experimented with a variety of commodities as money and finally, for irrisistable reasons, fixed on the precious metals"

"Supposing the attainment of the required degree of acceptability by any commodity successfuly completed, Professor Walker goes on to show how it came to measure the value of all other commodities. The passages in which he does this are to my mind among the most important of recent contributions to Economic Science."

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(7) Carlile, W.W.- The Evolution of Modern Money, p.228,1901.

Professor Kemmerer also defends Walker's conception of money and his conception of a media of exchange in relation to its use as a value denominator, as follows: "The pertinent characteristics of a medium of exchange is rather to be found in the manner in which it serves as an instrument for the exchange of one commodity for another involves in a manner the measurement of value of one commodity by that of the other, still Walker was right, Ibelieve in maintaining that an article becomes a common measure of value only by becoming a common medium of exchange." (8)

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(8) Kemmerer, E.W.- Money and Prices, p.26.

Walker's definition and conception of money brought forth many unfavorable criticisms. He did not think that the common definition, that money is a medium of exchange, was wide enough. He thought it too narrow saying that the term was somewhat vague for exact definition, but, as the phrase is commonly understood, it is correct. But he does not explain how this phrase is commonly understood, and his explanation does not clear up the matter.

Arthur Kitson, a prominent writer of Walker's day, in an article says: "The long and somewhat skillfull arguments by which Professor Walker endeavors to overthrow the errors of the so-called 'Hard money' advocates is founded upon a fallacy as great as those he seeks to expose. When he writes of money as 'Expressing Values' and as the 'Value Denominator' he is writing correctly and scientifically. He is then treating money from the standpoint of economics. When, however, he writes of money as an 'Article of Uniform Quality', susceptible of easy and exact division, he is treating money as a commodity, and from the standpoint of a legalized institution--- an institution both unscientific and contrary to the nature of things.--- And so in trying to reconcile two opposing and contrary theories, Professor Walker, in common with other able economists, misses the goal.--- The pranks played by this association of money with a commodity are the strangest possible. It has led Francis Walker, one of the cleverest economic thinkers, to conclusions directly, opposite to those he should have logically reached. It made him condemn paper money, after having reached a satisfactory and conclusive proof of its capability of performing perfectly well the money functions, because it did not possess the functions of a commodity, and yet he starts with the definition 'Money is that Money does'. And again he says, 'Money is that which passes freely from hand to hand, throughout the community in final discharge of debts and full payment for commodities." (9)

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(9) Kitson, Arthur - Scientific Solution of the Money Question, pp.164-165.

3. Attacks Upon Walker's Conception of
the Quantity Theory of Money.

Walker, unlike most of the economist defending the Quantity theory of money, holds to the extreme quantity theory, that the value of money, like the value of anything else, is purely a question of demand and supply. In his discussion on Seniorage in which he expounds his theory of the value of money, Walker says: "He follows Mr Ricardo without deviation believing that he was the economist who most fully and justly apprehended the relations of money to price."(10) But Professor Laughlin and the other economists say that Walker only quotes from Ricardo those passages which support the quantity theory.(11) Laughlin goes on to say that: "Walker's Quantity Theory, as applied to metallic money, applies only to inconvertable paper and token money, and it does not hold as a theory of prices in regard to any metal whose coinage if free, A general theory of prices based on that which is apparently true only of token money and inconvertable paper, does not seem logically sound for present use, when there has been a general adoption of the free coinage of gold." (12)

(10) Walker, F.A.- Political Economy, p.146 (sec.197)
(11) Laughlin, J.L.- The Principles of Money,1903, p.283.
(12) Laughlin, J.L.- Op. Cit., p.284.

General Walker, however, saysthat: "Ricardo failed himself thus to qualify his proposition, that however debased a coinage may become, it will preserve its mint value, has caused much apprehension of his views." (13) So Walker adds the proviso: "If debasement of the coin be carried so far and carried so long that a popular reluctance to receive the money pieces be generated, sufficient to cause men to modify or limit their production in order to avoid exchanges, or to cause them to encounter the inconveniences of barter rather than handle the distrusted coin, then depreciation may result. That is, the supply of money will become excessive through the blow inflicted upon the demand for money.-- Men take money because they believe others will, in turn, take it from them. If a man may be only assured of this, he has no reason to care, in fact he does not care, what the coin contains."(14)

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(13) Walker, F.A.- Political Economy, p.149 (sec.200)
(14) Walker, F.A.- Op. Cit., p.150 (sec.201)

Professor Laughlin, on the contrary, does not believe it safe to teach that it makes no difference 'What the coin containsprovided men will only attribute a value to coins which they do not possess'. He does not believe that the interpretation of Walker's will give the Quantity Theory logical or historical support.(15)

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(15) Laughlin,J.L.- Principles of Money, 1903, p.286.

In accordance with this extreme quantity theory, Walker holds that the process of evaluation between goods and a money metal can take place only through the direct comparison of goods with that metal as a medium of exchange(16)

He denies that cost of production operates in fixing prices. Prices can be made only through a market comparison of the supply and demand. The later economists do not accept this view, as they all show that manufacturers, after improving their processes, do not wait until the market is overstocked before lowering their prices; nor do they, in times of prosperity, wait until the quantity of currency is increased before raising their prices. It is the demand for the particular goods that raises its value in the relation with other goods.

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(16) Walker, F.A.- Political Economy, p.137 (sec.183)

Walker believed and taught that prices resulting from one, or a few, sales in which the money is actually passed from hand to hand as a medium of exchange set the prices at which vast masses of goods exchanged by credit are bought and sold.(17) Laughlin denies this assertion of Walker's; saying that: "This seems highly absurd; but it is certainly Walker's view that goods exchanged by credit have no effect on prices; that prices can be set only by the actual transfer of money. This is almost equivalent to saying that there can be no wholesale prices, since wholesale transactions are effected, in the main, by deposit currency and not by the actual use of money. It is now only in retail trade that money is passed from hand to hand and hence must gauge wholesale prices--an obvious absurdity."(18)

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(17) Walker, F.A.- "The Quantity Theory of Money", Quarterly Journal of Economics, July 1895, p.373.
(18) Laughlin, J.L.- Principles of Money, 1903, p.287.

Horace White, an early American authority on banking and monetary problems, while not disputing the soundness of Walker's reasoning, opposes his Quantity Theory of Money as 'Barren and Inconsequental'. He rejects the theory as being based on indeterminate factors and accepts the statistical proof of it as decisive.(19) Professor Taussig, on the other hand, accepts Walker's versions of the Quantity Theory and the logic of his reasoning.(20)

(19) White, Horace - Money and Banking, 5th Ed., 1914, p.419.
(20) Taussig, F.W.- The Silver Situation in the United States, 1893, p.147.

Professor J.S.Nicholson, an English contemporary of Walker's, said that: "The great weakness in the quantity theory as advocated by Walker was the lack of understanding and explaining what constitutes money, which its change of quantity can affect the general price level." (21)

(21) Nicholson, J.S.- A Treatise on Money and Monetary Problems, 3rd Ed., 1893, p.146.

Laughlin thinks that the central error of the quantity theory, as explained by Walker, rests in the assumed premise that prices are fixed by a comparison between the goods to be exchanged and the media of exchange, by which the work is done; that the force regulating the price, or the amount of money actually obtained whatever that may be. (22) He also says that: "General Walker's attitude in asserting that the quantity theory of money was only a statement of the principle of supply and demand, and therefore not to be tested by inductive study, cannot be accepted."(23)

(22) Laughlin, J.L.- Principles of Money, p.315.
(23) Laughlin, J.L.- Op. Cit.,p.313n.

In thus examining Walker's quantity theory, we can readily see how he contradicts himself in his conception of the value of money and its relation to prices. We have seen that his definition of money is, 'Money is that Money does'. According to this definition he ought to include all mediums of exchange as money whatever they be, but in his writings he rules out checks, bills of exchange, and the like as mediums of exchange. If he had stayed with his definition of money as he gave it, instead of saying that inconvertable paper is a medium of exchange and then ruling out other forms of paperthat is being used as money, later economists would not have been able to attack his monetary so vigorously; his very inconsistencies gave them the necessary opening to do so.

CHAPTER IX.

CONCLUSION

In the preceeding pages we have seen that Walker's contributions to the Science of Economics were by no means of insignificant or unimportant. On the contrary, he made some definite and lasting contributions, both in the fields of political economy and of monetary theory.

It was Francis Walker, in his "Wages Question"(1876), who did more than any one else to destroy the old wage-fund theory, by forcing economists to recognize that, to some extent, wages depend upon the productivity of the undertaking, and that profit is not the result of the exploitation of the laborer, but the result of the greater productivity of the industry.

Walker was one of the first of English speaking economists to make the distinction between the functions of the entrepreneur and the functions of the capitalist, and to distinguish the term profits from interest and wages. He used the rent doctrine of th classical school to show that greater profits in one industry as compared with another, imply greater capacity of the entrepreneur in the one industry than in the other.

In the monetary field, Walker held an eminent position. Even today his definition of money, according to some eminent monetary economists, is one of the most satisfactory and workable scientific definitions of money that has yet appeared. Walker adhered to the quantity theory of money and defended it to the utmost of his ability. Walker does not adhere srictly to his definition of money. He holds that the medium of exchange which has universal acceptance is money, ruling out bank checks and other forms of commercial paper which practically all economists today recognize as performing the functions of a medium of exchange.

General Walker was the foremost advocate of bimetallism in the United States. His position seems to reappear in present tendencies of thought upon the monetary problems of the United States. Speaker Rainey, one of the foremost members of the United States Congress, thinks that the United States is headed towards bimetallism. In the Milwaukee Journal(April 8,1934) Congressman Rainey was reported as saying: "We are going to have a double standard. We will get it before long. We are going to store silver bars in the Treasury and issue silver certificates."

The silver party, so prominent during Walker's time, has risen again, agitating for the remonitization of silver. A reading of the writings of Walker would repay the effort, even if his conclusions should not wholly be accepted.

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