actions give colour to the charge that she organised the war in the interests of her own industry and trade, she will commit a fatal error. It was by proceeding on Machiavellian lines that Germany provoked the antagonism of the world. Lastly, if Britain should countenance the large schemes of Protection put forward in some quarters, "Britain would appear to abdicate her great place as ruler of India in India's interest."

The Value of Money. By B. M. Anderson, Jun., Ph.D., Assistant Professor of Economics, Harvard University. Author of Social Value. (New York: The Macmillan Co. 1917. Pp. 610.)

"THE theory of the value of money is a special case of the general theory of value. . . ."

"Value is not a ratio of exchange or 'purchasing power,' but is an absolute quantity prior to exchange."

"Economic value is a species of the genus, social value, coordinate with legal value and moral value. . . ."

"The value of money, being a special case of economic value, is subject to the same general laws. . . ."

These propositions are taken from a summary in which the author recapitulates theorems propounded in the first two parts of his treatise, constituting about two-thirds of the entire work. Thirty-six articles are required to sum up the reformed economic faith. Or, rather, only the fundamental doctrines are set forth in this confessio fidei. On this basis is reared a superstructure of higher theory, culminating in a sublime topic, "the reconciliation of statics and dynamics."

We shall not attempt to sketch the imposing system as a whole. We shall direct attention to some important points, with respect to which we either dissent from the author or suspend our judgment.

Agreeing with Dr. Marshall as to the relation between cost of production and value, we disagree from the following statements:—

"To the Austrian economists we owe a rational theory of costs. . . . Value causation comes ultimately, not from the side of supply, but from the side of demand. . . . 'The real cost doctrine of the Classical School has failed' . . . 'it is virtually only as a pecuniary doctrine, costs from the entrepreneur point of view,

 1 See Principles of Economics as to Cost of Production passim, and as to Mill, Book V. ch. iii. § 2, p. 339 note (6th ed.).

that the cost doctrine is met in modern theory. . . . Cost as conceived by Mill is a superficial pecuniary notion " (Chap. III.).

Our attitude towards other pronouncements is more neutral. They produce no conviction, but they provoke no contradiction. We have no strong opinion about the relation of the individual to society—with what truth an "organic unity" may be predicated of minds. We do not deny that "absolute value" may be attributed to money in some intelligible sense. We have not carefully compared the doctrines of Wieser, Mises, and Schumpeter as to marginal utility. We do not feel qualified to pronounce on the distinction drawn by one of them between the "inner objective value of money" and the "outer objective value of money" (Chap. V.).

We are disposed to agree with the author's dictum that the ultimate test of scientific theory must be practice—the capacity to solve problems. But we are not convinced that the new theory of social value would come out well from the test. Consider the following questions. If the money incomes of a class be increased ceteris paribus, in what circumstances is it possible that they will buy less than before of certain commodities? Is it true that if a rise in the price of bread raises the marginal utility of money to the poorer classes, they may consume more bread. Marginal utility as used by mathematical writers seems more adequate to resolve such knotty problems than the new refinements

Fortunately on the flood of dialectics some stray facts are found floating. The particulars given about the ways of business seem to us more valuable than the general theories which they are intended to illustrate. Thus, after perusing the chapter (Chap. XXIII.) which deals with credit in general, we do not find ourselves much wiser. But the following chapter, which deals with credit in relation to bank assets and bank reserves, contains some interesting information. It appears that only a small portion of the assets held by American banks can be regarded as liquid. Only a very small portion consists of "commercial paper"; and of the rest not so much as might be supposed is immediately available. The following case is described as typical:—

"A New York bank is at present lending to a small manufacturer of automobile supplies about \$30,000. Of this, about \$10,000 is liquid, periodically covered by "bills receivable," and if the bills receivable should fail, in the period in question, to cover the \$10,000, the bank would insist on a reduction of the

¹ See Economic Journal, Vol. XXV. (1915) pp. 47, 61, 190, referring to Marshall (*Principles of Economics*, Book III. ch. vi. § 4), who refers to Giffon.

loan. The remaining \$20,000, however, is not liquid. It was spent for non-movable equipment; the bank expects to renew the notes for this sum periodically, and is well aware that it could not force collection without bringing the business to a close—or else forcing the factory to get accommodation elsewhere."

Loans on the security of crops having a natural term may be considered liquid; loans on animals being fed for the market belong to the same category. But of the loans on the security of livestock fully two-thirds are to breeders and not feeders, and hence are not liquid. We accept the facts about bank assets on the writer's authority. We do not endorse his theory that the function of bank reserves is entirely "dynamic": "the static law of bank reserves is that none are needed."

The characteristics which we have attributed to the work as a whole are noticeable also in that part of the work to which we would direct the reader's special attention: Part II, in which the quantity theory of money formulated by Professor Irving Fisher is disputed. Here, too, the facts appear to us more important than the theory. The higher theory of statistics which deals with index numbers seems to be ignored when it is asked, with reference to "T," the denominator in Professor Fisher's expression for the price-level, "how does one sum up pounds of sugar, loaves of bread, tons of coal, yards of cloth, etc.?" "T" is equally increased by adding a hundred papers of pins, a hundred diamonds or a hundred newspapers"—and so forth.¹ While we differ from our author's statistical reasoning we are almost indifferent about the logical issues for which he contends hotly, the questions raised in passages such as the following:—

"Rapidity of circulation, whether of money or of goods, is not a causal factor independent of prices, but rather in part depends on prices"..." the first change in the situation may appear in prices themselves" (Chap. VI.). "Particular prices can and do rise without a prior increase in money, or bank deposits, or change in the volume of trade, or in velocity of money or deposits, and also without compensating fall in other particular prices."...
"The cause is with the prices" (Chap. XV.).

The statement last cited refers to the following clean cut apophthegm:—

"Suppose we assume a combination of employers of maidservants which forces down the wages of maidservants from \$20 to \$10 per month. . . . The masters now have \$10 a month each more to spend. . . . The maidservants now have \$10 each less

¹ Sec on this and other points connected with the attack on Professor Fisher's theory Currency and Finance in Time of War. By the present writer.

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to spend. . . . These last two changes exactly neutralise one another. The first change, in the price of domestic service, remains unneutralised. The general price-level is, then, lowered by a cause acting from outside the equation of exchange directly on prices."

Commenting on this example, our author well says "the equation is kept straight by a reduction in velocity." He had better have said no more. When he goes on to locate the cause of the fall in the price-level we are reminded of a reflection made by Jowett in a lecture on ecclesiastical history: "How much effort has been wasted in attempting to answer questions which ought never to have been asked!"

We come to something more tangible when Professor Anderson instances cases of barter which are not taken account of in the equation of exchange constructed by Professor Fisher. There is barter in its simplest form, expressed in advertisements of the type: "Wanted to trade a well-trained parrot for a violin." Again, there is the practice of taking as part payment for a new sewing-machine or automobile the similar thing which the buyer is discarding. A more important case of (virtual) barter is formed by the stock and produce exchanges, by means of which the use of money is greatly economised.

The omitted transactions appear to us to be of a magnitude which relieves the equation of exchange from the imputation, sometimes attributed to it, of being an identical proposition. On the other hand, the omissions are not so serious, but that they may be, so to speak, jumped in the inductive leap from the known to the unknown. A wider chasm is disclosed when it is alleged that the transactions which occasion the flow of (credit) money designated by M' V' are for the most part not of the kind contemplated, not of the species represented by items in the volume of business, T. The huge total of about a billion dollars, 200 million pounds, per day is said to be made up principally of cheques, drawn in the course of speculative sales and loans between brokers. A " morning loan" may occasion the creation of three or more cheques. "Cheques fly about recklessly in Wall Street, and men will turn over money many times if an eighth of 1 per cent. or less can stick by the way on a good sum" (Chap. XIX.). If this account of the ingredients which go to make up the monetary flow is accurate, it certainly seems prima facie that some alteration, not indeed in the principle, but in the details, of Professor Fisher's calculation is required. But our readers may be advised to suspend their judgment until they hear the other side.