use, and the artificial and arbitrary restrictions to production and exchange, which have come into existence in consequence of private appropriation of "rent" abolished, the motion of the industrial body will become centric. The desires of men will then have a natural outlet, the demand for the means of satisfying them greatly stimulated, and will outrun the supply.

Under such conditions, conditions which Single Taxers hope and expect will prevail when the principles they are contending for shall have been established, men, individuals, will still seek to satisfy their desires by the least exertion. They will produce capital as a means to this end, and only with the reasonable expectation that it will yield a return.

It seems contrary to reason, therefore, to conclude that "capital" will cease to yield a return in consequence of the substitution of public for private ownership of "rent."

BROOKLYN, N. Y.

BY S. J. CHUBB.

Joseph Faidy, discussing in the Autumn Number of the REVIEW Henry George's theory of interest, commences with the statement that the fallacy of the theory begins to look like a certainty; but says it is a matter of congratulation "that the new theory, *if it is sound*, [italics ours], not only reinforces the rest of his philosophy from a theoretical standpoint, but will tend greatly to facilitate and expedite its practical accomplishment."

I agree with Mr. Faidy that there is no doubt of the fallacy of Mr. George's theory, and that it is a matter of regret that this defect should exist in his work. And, no doubt, the true theory, when made known and generally accepted, will tend to support the great principles which have become so closely associated with his name, and to hasten the date of their practical application.

But I cannot admit that this new theory, which Mr. Faidy accepts with so much confidence, dividing the honor of its discovery between Messrs. Berens and Flurscheim, is in any degree nearer the truth than that of Henry George. Its promulgation in Mr. Berens' very interesting little book, "Toward the Light," may, however, he the means of leading thoughtful minds to the discovery of the true theory; for, though the light of truth does not seem to have reached the author with the clearness that might be desired, yet the book proves its right to its chosen title by dispersing a good deal of the fog with which that light has hitherto been surrounded, and leading its readers, if not right up to the light, well on the way toward it.

In his chapter on interest, Mr. Berens, quoting some of the words of Henry George, puts the question, "Is interest, or the premium now obtainable for loans, which has now to be paid for the use of wealth, a natural or an arbitrary thing? Is it the result of the laws of the universe which underlie society, and therefore just? or is it the result of a particular social organization, and therefore but the robbery of labor which under social conditions based on natural law, upon justice, would tend to disappear?" In a previous chapter he has shown that "the reciprocal exchange of services is the animating principle of peaceful, voluntary association, the inspiring principle of all social life."

The question, therefore, resolves itself into this: whether in the payment of interest there is such a reciprocal exchange of services between the borrower and the lender. A suggestion of the answer to this question is conveyed in Mr. Berens' classification of wealth in two divisions, the one consisting of "enjoyable," the other of "serviceable," commodities. The latter being such as are usually classed as "capital," those for the use of which interest is paid. Is it not paid in return for their "service" to the borrower?

To the word "capital" Mr. Berens objects, designating it a "mystic and mysterious term, calculated to confuse and perplex rather than simplify and enlighten." He prefers the word "tools" to express those auxiliaries of production commonly known as capital. But here he is met with much the same difficulty, for, while the word "capital," as commonly used, includes too much, the word "tools" has too limited an application; and he has to use it in a broader sense, making it include all those things which he elsewhere classes as "serviceable" commodities. Including the seed of the agriculturist, as well as his spade or plow.

The fact is, the terms in common use will none of them serve for exact reasoning without some modification in their application. When we begin to think more definitely it becomes necessary to use words in a more definite sense to convey our thoughts. The important point in the present case is to have a clear idea of the nature of the distinction which exists between wealth in general, comprising all the products of human industry, and that limited portion of wealth which has relation to interest, and which is usually denominated "capital." If this term has been used variously and with uncertain sense by past writers, it is because their ideas of this distinction were vague, and differed with each writer. While such was the case the substitution of any other term would not have helped the matter, for it is not possible to express a confused idea in clear and definite terms. With a clear idea of the thing itself, the word "capital," properly defined and limited in its application, is, perhaps, the most suitable term that can be chosen for its expression.

While discussing this term Mr. Berens says that "Even the master mind of Henry George seems to have been perplexed when confronted with this elusive and delusive term." George's exceedingly simple and comprehensive definition of capital as "that part of wealth which is devoted to the aid of production" does not seem to indicate perplexity of mind. Indeed, the perplexity seems rather to be in the mind of Mr. Berens, for, while Mr. George makes it perfectly clear that in his view the test of capital is in the use to which the wealth is for the time being devoted, Mr. Berens leaves it vaguely indefinite whether he understands the distinction to be in the use to which things are devoted, or in the nature of the things themselves. George is not inconsistant, as Berens intimates, in including stocks of merchandise, for this is wealth devoted by the merchant to the aid of his labor. It is the chief "tool" of the merchant, using the word in the broad sense adopted by Mr. Berens.

The term "serviceable commodities," if by that phrase is understood, not commodities which are peculiarly serviceable in their nature, but any kind of commodities which are for the time devoted to "service" rather than to "enjoyment," is well adapted to express the distinctive feature of capital. And the use of this expressive term should have led Mr. Berens' thoughtful mind directly to the true theory of interest, for interest is but a payment made in return for the service rendered by a loan of capital. But his confused idea of what constitutes the true distinction between capital and other wealth has prevented him from following the lead of the light he himself carried. He speaks of the counter service rendered by the borrower in preserving wealth for the future use of the lender, and anticipates that competition between capitalists seeking investments and between borrowers seeking loans will determine whether at any time interest shall be paid for loans, or a premium for the preservation of wealth, believing that, under normal conditions, these two services will balance each other, and thus interest will disappear. But no such relation exists between interest paid for loans and the premium paid for the preservation of wealth, for capital is not wealth stored up for future use, but wealth devoted now to immediate use; to a special kind of use which Berens aptly designates "service," to distinguish it from "enjoyment," the use to which other wealth is put. The seed wheat of the farmer, for instance, which Berens includes under the term "tools" in the wider sense in which he uses it, is needed by him for immediate use. If the farmer has any surplus wealth for the storage of which he is willing to pay, it may be that portion of wheat which is intended for family use, but not the seed. It is always "enjoyable" commodities, not "serviceable" commodities for the preservation of which the premium is paid. And so far from the premium commencing with the fall of interest to the zero point, and increasing with the continued increase of competition between lenders, it must rather tend to increase as interest rises, for interest on capital invested in warerooms, and some times in heating or cooling appliances for the preservation of wealth in its different forms, constitutes a good part of the expense of its preservation.

When the purpose is the saving of "wealth," not the preservation of any particular object, for future use, the savings may be, and usually are, through the banks, devoted to use as capital in the mean time. And in these cases, no doubt, the service rendered to the lender in preserving his wealth would alone be sufficient inducement for him to permit its use in this way. But though, by the law of competition, the supply of capital from this source must tend to reduce the rate of interest, it could never actually bring it to the zero point, for the demand is limited by the rate of interest, increasing as the rate falls, and at the zero point; that is to say, with loans to be obtained free in the open market, the demand would be practically unlimited, or limited only by the impossibility of applying more capital in such a way as to increase the production of wealth.

In seeking the answer to his question, "Why should interest be?" Henry George unfortunately fell over a stumbling block dropped by himself in his path; and L. H. Berens, following too closely in his steps, fell also at ths same point. On arising they each diverged, but in slightly different directions, from the true path.

The true basis of interest is evidently, as stated by Bastiat, "The power which exists in the tool to increase the productiveness of labor." All capital is not in the form of tools, but it all has the same relation to interest; its use is in all cases to increase the productiveness of labor. Henry George, however, in enlarging Bastiat's illustration of the borrowed plane, introduces a fallacy by which he obscures the truth and deceives himself, making it appear that no increase in the product results from the borrowing of the plane. In the illustration James lends a plane, the result of ten days' labor, to William, who at the end of a year returns a new plane, the old one having been worn out in use, with a plank in addition as interest. Commenting on this Henry George says, "Now, if James had not lent the plane he could have used it for 290 days, when it would have been worn out, and he would have been obliged to take the remaining ten days of the working year to make a new plane. If William had not borrowed the plane he would have taken ten days to make himself a plane, which he would have used for the remaining 290 days. Thus, if we take a plank to represent the fruits of a day's labor with the aid of a plane, at the end of a year, had no borrowing taken place, each would have stood with reference to the plane as he commenced, James with a plane and William with none, and each would have had as the result of the year's work 290 planks. If the condition of the borrowing had been what William first proposed the return of a new plane, the same relative situation would have been reversed. William would have worked 290 days and taken the last ten days to make a new plane to return to James. James would have taken the first ten days of the year to make another plane which would have lasted 290 days, when he would have received a new plane from William. Thus, the simple return of the plane would have put each in the same position at the end of the year as if no borrowing had taken place."

Thus, each man working 290 days with the aid of capital and ten days without its aid, the results of their labor are equal, and nothing is gained by the borrowing of the plane. Which is mathematically correct, but does not illustrate the manner in which intelligent business men use borrowed capital in actual life.

No intelligent man would borrow capital in the form of tools, and after using them until completely worn out, go back to his old methods, and, out of the meager income thus obtained while working at a disadvantage without the aid of tools, attempt to save enough to repay the loan. Had William taken time to replace the borrowed plane before it was completely worn out he might, working with the aid of capital, have made a new one in a day, and thus have saved nine days' labor; which would have given him nine more planks as the result of his year's work, out of which he could easily have paid one as interest and profited by the transaction. Mr. George says, "The fallacy which makes Bastiat's illustration pass as conclusive with those who do not stop to analize it, as we have done, is that with the loan of the plane they associate the transfer of the increased productive power which a plane gives to labor." This is not a fallacy, for the sole reason for borrowing capital is the increased productive power which it gives to labor; and it is only out of the resulting increase that interest can be paid without loss to the borrower. William does not borrow the plane because he has not the skill to make one, but because he can make planks more rapidly with the aid of capital than without its aid.

Having, as he supposes, refuted the theory that the basis of interest is "the power which exists in the tool to increase the productiveness of labor," and knowing that people do pay interest on loans of capital and profit by the transaction, he seeks for another basis of interest, and thinks he has found it in the power of spontaneous increase possessed by some forms of capital through the action of the reproductive or other forces of nature. Interest, he explains, is paid for the use of capital in the form of tools because the owner might have had his capital in the form of live stock or growing crops, having a power of natural increase, and is unwilling to lend his tools for less than the return he would obtain by the use of his capital in these forms. But the unwillingness of the owner of capital to lend without interest would not enable William to pay interest for a loan which, as shown in the illustration, in no way increases the product of his labor.

Berens accepts George's reasoning as a complete refutation of Bastiat's theory of interest, but objects to the new theory of the basis of interest being found in the powers of increase possessed by certain forms of capital, rightly claiming that there is no such distinction in the relations of different forms of capital to interest, for man always in every industrial operation utilizes both the material and the forces of Nature. This is made very clear by J. S. Mill, in the first chapter of his work on the "Principles of Political Economy," part of which Mr. Berens quotes. Mr. Mill says, "If we examine any case of what is called the action of man upon Nature, we shall find that the powers of Nature, or in other words the properties of matter, do all the work when once objects are put into the right position." And for illustration he calls attention to several mechanical operations where these forces come into action, as the force of cohesion uniting the fibres in the weaving of cloth, and the chemical forces and heat developed by setting a match to fuel placed under a boiler resulting in the power of steam, which has so many applications in connection with human industry.

But though Mr. Berens rejects Mr. George's theory he offers another very closely resembling it. He attributes the demand for interest on loans to the fact that the owner of capital has the option of exchanging, not for other forms of capital, but for land; and will not lend his capital for less than he could obtain for its equivalent value in land. This theory, like that of Henry George, does not explain how William is able to pay interest for a loan which does not in any way increase the product of his labor, though the owner of capital may be ever so unwilling to lend without interest. And the idea that the rate of interest is controlled by the amount of rent which may be obtained for a given value in land, or in other words, by the relation between the price and the rent of land, does not harmonize with his statement, when treating of rent, that "The market price of any given holding of land is simply so many times its revenue; when land is saleable at ten years' purchase, at ten times, when at twenty years' at twenty times its revenue, and so on." He does not say why it sometimes sells at ten and sometimes at twenty years' purchase, but evidently this depends upon the rate of interest which prevails at the time of sale. In common language the price of any given holding of land is the capitalized value of its rent; that is to say, it will sell for a sum which at the current rate of interest will yield an amount equal to the rent. (This, of course, does not include "speculative value," which it is not necessary to deal with now). The price of land is thus controlled by the prevailing rate of interest. How, then, can the rate of interest be controlled by the ratio between the price and the rent of land?

CAUSES WHICH INFLUENCE THE RATE OF INTEREST.

While discussing Bastiat's theory of interest, Mr. George says, "If the power which exists in tools to increase the productiveness of labor were the cause of interest, then the rate of interest would increase with the march of invention." This by no means follows. The amount of increase which capital has in any given case is the measure of its utility to the borrower, while the rate of interest is the commercial value of the service, and will be controlled by competition, and will, therefore, depend on the relation between the demand for and supply of capital. As expressed by Mr. Mill, "The rate of interest will be such as to equalize the demand for loans with the supply of them." The word "capital" in place of the word "loans" would, however, be more correct; for capital is not always supplied in the form of loans, and the relation of demand and supply, as affecting the rate of interest, is between the needs of laborers having use for capital and the amount of capital placed at their service, whether it be in the form of loans to the laborers, or whether they be employed at wages by the owner of the capital.

The "march of invention," by facilitating the production of wealth, will tend to increase the supply of capital, and thus, through the competition of lenders or investors, to lower the rate of interest.

The demand for loans is sometimes attributed to poverty, and it is supposed that with social institutions founded on justice, and the more equal distribution of wealth which must follow, the business of the money lender will cease, and interest no longer be paid. Mr. Berens seems to hold this view, believing that "under equitable social conditions a premium for the temporary use or control of 'wealth' would be obtainable only in a time of scarcity, or in communities in which accumulations were but small or in but few hands, and the power to produce is limited in proportion to the requirements of the people."

But "demand," as a commercial or trading term, does not imply simply the desire for a thing; it consists essentially in the things, or services, offered in exchange. As Mr. Mill says, "A beggar may desire a diamond; but his desire, however great, will have no influence on the price." Demand for capital, so far as it influences the rate of interest, must come from those who are able to give something in return for its use; it is, therefore, an indication of prosperity on the part of borrowers. While workmen are idle their tools must remain idle, too; and the demand for tools, or for capital in other forms, must increase as the opportunities for employing labor become more abundant, and thus with the prosperity of laborers.

The supply of capital, depending as it does on the proportion of the total product of wealth which is devoted to "the aid of production," or as Berens would put it, to "service" in place of "enjoyment," must depend on the inducements to so use it; which will be great when opportunities for employment are scarce and wages low. Under such conditions there will be great inducement to seek other sources of income, and, therefore, to devote all available wealth to the uses of capital. When low wages are the result of unjust social conditions, through which a large proportion of the wealth produced is appropriated by a few at the expense of the laboring class, the supply of capital will be great; for saving will be easy to those having such large incomes; while the intense competition among the many for an opportunity to earn a meager living by labor, will make them anxious to guard against such a fate for themselves or those dependent on them. Thus, those conditions which tend to limit the demand tor capital by restricting the opportunities for employment tend also to increase the supply by stimulating those who have wealth to devote a large proportion of it to this use, and interest must tend to fall with low wages and increasing poverty.

We may thus see something of the conditions, or causes, which tend to raise or lower the rate of interest. But, as Mr. Berens points out, "high" and "low" are relative terms. Is there then "any level to which, under natural and equitable conditions, the rate of interest would constantly tend," or in other words, what is the "Law of Interest?" Henry George's statement of the "Law of Interest," being founded on his theory of interest as resulting from the power of increase possessed by certain forms of capital, must, of course, be rejected if we reject that theory. It is as follows:

The relation of wages to interest is determined by the average power of increase which attaches to capital from its use in reproductive modes. As rent arises, interest will fall as wages fall, or will be determined by the margin of cnltivation.

This statement is in conflict with what Mr. George calls "The fundamental law of Political Economy," namely, the law that men seek to satisfy their desires with the least exertion.

The average is a mean between extremes; it is, therefore, implied that some capital, that which yields a less increase than the average, is used in modes giving a smaller increase than the current rate of interest. By error of judgment men sometimes use their capital in modes which give little or no increase, but evidently they would not intentionally so use it as to yield less than they could obtain by lending it at the current rate of interest.

And the statement does not indicate any definite relation between the rate of interest and wages; any point of equilibrium about which the rate of interest will tend to settle.

There evidently is such a point, for capital is used to save labor, is indeed, a substitute for labor, and there is a relation between the cost of labor and the cost of capital depending on the rates of wages and interest. All forms of capital do not save labor to the same extent. An employer may by the use of a machine multiply many times the product of the laborers in his employ; he cannot, however, go on increasing their product in this way without limit. By adding to his capital in some of its various forms and modes of use he may still further increase the product, but not in the same degree. If he continue adding to his capital, obtaining a less return with each additional investment, he will eventually arrive at a point where it will be, at current rates of wages and of interest, more profitable to hire additional labor than to borrow capital. If then wages should rise, it will become profitable for him to use capital in less productive modes, for the saving effected by substituting capital for this higher paid labor will be greater. Or it will become profitable for him to use capital at a higher rate of interest if the competition of borrowers should force him to do so. Thus there is a relation between the rates of wages and of interest which may be stated thus as

THE LAW OF INTEREST.

The rate of interest will be such as to equal the value of the labor saved by capital in its least productive modes of use; or that the cost of hired labor and the cost of hired capital shall be equal. If wages rise, the use of capital will be extended into less productive modes, or interest will rise; in either case until the equation between the cost of hired labor and the cost of hired capital shall be restored.

TOWARD THE LIGHT.

In my endeavors to clear away the fog that still obscures the light toward which Mr. Berens desires to lead his readers, I have paid more attention to the obscure and dimly lighted regions than to those brighter parts where the light shines in its full splendor; let it not be inferred that his book is dull, or false to its title. Mr. Berens has, indeed, made a bright and interesting contribution to the literature of that, in old time, "dismal science," Political Economy. His implicit faith in the principles of Justice and Freedom is worthy of all admiration, even though he may not clearly see what results are to be expected from their application. He believes that the question of interest can be safely left to be settled through the operation of natural law when once justice is established. He says, "All can unite to attain this end; and when it is attained, then, if interest continue, we shall know that it is both natural and just; whilst if it disappear, we shall know that it was unnatural and unjust; that it was, in truth, but one of the fruits of privilege and monopoly, of that unjust social system which produced poverty in the midst of plenty, and which conferred advantages and privileges on the few, at the cost and to the detriment of their 'disinherited' fellow-citizens."

But though we who have confidence in those broad principles of justice in relation to the land so ably set forth by Henry George, may be content to let minor questions remain in abeyance while we work for the establishment of these principles, it must not be forgotten that the unsettled question of interest is a stumbling block in the way of many earnest reformers, and, therefore, a hindrance to the progress of reform. Mr. George says, "The feeling that interest is the robbery of labor is widespread and growing, and on both sides of the Atlantic shows itself more and more in popular literature and in popular movements. Socialists and Anarchists, the two extremes in popular agitation for reform, alike condemn interest as unjust, and usually give more prominence to the matter of interest, or usury, than to the land question. And much of the agitation for monetary reform has its root in the feeling, or thought, that interest is unjust; accompanied by erroneous theories of the relation between the rate of interest and the quantity, or form of money in circulation."

There can be no doubt that the true theory of interest, when more widely known, will, as Mr. Faidy says, "Not only reinforce the rest of his (George's) philosophy from the theoretical standpoint, but will tend to greatly facilitate and expedite its practical accomplishment."

The almost unanimous opposition of the commercial and manufacturing classes is one of the greatest hindrances in the way of the incorporation of these principles in legislative enactment. Let it become widely known that the owners of capital will be benefited equally with wage workers, that interest must rise as wages rise, by the establishment of equal rights to land, and we may look for a large accession to our ranks from these classes, and for the speedy triumph of our principles.

TORONTO, Ontario.

BY H. J. CHASE.

It is possible that Mr. George would have had less to say as to the cause of interest had he been less anxious to combat the belief so widely entertained that it is a form of robbery. Now, to demonstrate that interest is not robbery it is not necessary to enter at all into the question of why it exists. The producer of wealth ought to have the liberty to make any disposition of that wealth that he may see fit, provided such disposition does not constitute an infringement upon the equal liberty of any other individual. Consequently he ought to have the liberty to charge for its use whatever he may see fit; just as the laborer ought to have the liberty to charge for his services whatever he may see fit, and just as the land owner (under the Single Tax) ought to have the liberty to charge for the use of his land whatever he may see fit.

The explanation of the fact that people always have been, and probably always will be, willing to pay interest is as simple as the explanation of the fact that they are willing to pay wages, or of the fact that they are willing to pay rent. It is because the production of wealth takes more or less *time*. The man who desires capital has the choice of producing it himself or borrowing it. In the former case, he must defer the satisfaction of his ultimate desires for as many days, weeks, months, or years as will be required for the production of the capital. In the latter case, he can at once engage in the direct pursuit of his ultimate desires and so achieve them as many days, weeks, months, or years earlier. This is why the use of capital is worth something, and why it will continue to be worth something until everybody can be supplied with an Aladdin's lamp.

This, I understand, is, in substance, the "Austrian" theory of interest, so called, I suppose, because its author, Böhm Bowark, is an Austrian. Practically the same view was presented some twelve years ago by an American writer in "Annals of the American Academy," who, according to the editor of that magazine, was unaware of being in virtual agreement with Böhm Bowark, having followed an altogether different line of reasoning. It will be seen that the Austrian theory, no more than Bastiat's or Turgot's, conflicts with the deduction that interest moves with the margin of cultivation.

This, however, can scarcely be affirmed of the theory endorsed by Mr. Faidy, the credit of originating which, he informs us, seems to belong equally to Michael Flurscheim and Lewis H. Berens. They assert, according to Mr. Faidy, that interest is due to the fact that anyone who has the wherewithal can buy land, the ownership of which, unlike the ownership of anything else that can be bought, insures the owner against the necessity of ever having to work for a living.

"The prevalence of high rates of interest in new countries," says Mr. Faidy, "——accords with the new theory. Its cause is the rapid increase of population——; rent consequently rises rapidly, and these profits of land owning attract capital from legitimate employment. The capitalist in a new country, with opportunities for profit through land speculation, will not lend his capital at a low interest."

Certain expressions in the foregoing, together with one used a little earlier —"the opportunity of investing capital in land"—warrant the suspicion that the distinction in Mr. Faidy's mind between capitalist and land owner is not as clear as it might be; but let that pass. What he asserts is flatly contra-