SCIENCE.-Supplement.

FRIDAY, JUNE 11, 1886.

ETHICS AND ECONOMICS.

In the study of no science is it more important to bear in mind the distinction between words and ideas than in political economy. Locke enforces the far-reaching character of this distinction in general in one of the books of his wonderful work, 'Essay on the human understanding.'

The following personal anecdote is narrated; and so weighty is the truth which it conveys, that it ought to be read frequently, and fully grasped: "I was once in a meeting of very learned and ingenious physicians, where by chance there arose a question whether any liquor passed through the filaments of the nerves. I (who had been used to suspect that the greatest part of disputes were more about the signification of words, than a real difference in the conception of things) desired, that, before they went any further on in this dispute, they would first establish amongst them what the word 'liquor' signified. . . . They were pleased to comply with my motion, and, upon examination, found that the signification of that word was not so settled and certain as they had all imagined, but that each of them made it a sign of a different complex idea. This made them perceive that the main of their dispute was about the signification of that term, and that they differed very little in their opinion concerning some fluid and subtile matter passing through the conduits of the nerves, though it was not so easy to agree whether it was to be called 'liquor' or no, - a thing which then each considered he thought it not worth the contending about."

This illustration brings us at once to the heart of a large part of past economic controversies. The same words have stood to different men for different ideas; and in their hot debates about capital, value, money, and the like, they have often been talking about things not at all the same, though they supposed them to be so. One man comes forward with a definition of value, and cries out, 'It is of vital importance,' as if that would settle all the social problems of the ages, whereas he has simply told us how he intends to use a particular word. He has really accomplished nothing in economics. Having settled upon his signs, he is ready to begin work.

I may choose to adopt another definition: what does that signify? Simply this: to me this sign stands for this idea; both may be right, though it is of course important to be consistent, and retain throughout, the same sign for the same idea. Another gives a definition for capital, and then says, "To speak of productive capital is mere tautology."-" of course, my dear sir," I reply, "the idea of productivity is implied in your definition, but it is not implied in mine. Your proposition, as often happens, is a mere repetition of what you already said about capital in your definition; but capital is not a living definite thing, like a horse or a cow. If it were, our difference of definition might imply error; at any rate, a difference of opinion."

Let us take the case of money. One economist ardently maintains that national bank-notes are money; another denies this. Controversy waxes warm; but ask them both to define money, and you shall find that each included his proposition in his definition. It is mere logomachy, nothing more

One writer — and a very clever one — says 'value never means utility.' That is absolutely false. Good writers have used it with that meaning. What he ought to have said is, 'according to my definition it can never mean utility.'

When we pass over to definitions of political economy, we encounter like divergence of conception, and this explains much controversial writing. The words 'political economy' do not convey the same meaning to all persons, nor have they been a sign for an idea which has remained constant in time.

A definition means one of two things,—what is, or what one wishes something to be. What is political economy? We can give an answer which will describe the various classes of subjects treated under that designation, or we may simply state what we think the term ought to include. The latter course is that which the doctrinaire always follows.

Professor Sidgwick, in his 'Scope and method of economic science,' complains because certain recent writers include 'what ought to be' in their economic discussion. Does political economy include any thing more than what is? Is its province confined to an analysis of existing institutions and the social phenomena of to-day? Here we have to do with a question of fact. What do writers of recognized standing discuss under the

heading or title 'political economy'? Open your Mill, vour Schönberg, vour Wagner, vour economic magazines, and you readily discern that the course of economic thought is largely, perhaps mainly, directed to what ought to be. It is not, as Professor Sidgwick says, that German economists, in their declamations against egoism, confound what is, with what ought to be; for no economists know so well what is, but that they propose to help to bring about what ought to be. This is the reason why the more recent economic thinkers may be grouped together as the 'ethical school.' They consciously adopt an ethical ideal, and endeavor to point out the manner in which it may be attained, and even encourage people to strive for it.

This establishes a relation between ethics and economics which has not always existed, because the scope of the science has been, as a matter of fact, enlarged. The question is asked, what is the purpose of our economic life? and this at once introduces ethical considerations into political economy. Of course, it is easily possible to enter into a controversy as to the wisdom of this change of conception. Some will maintain that economic science will do well to abide by the conception current at an earlier period in its development, and restrict itself to a discussion of things as they are. The discussion between representatives of these two conceptions would reveal differences of opinion as regards economic facts and economic forces.

Why should economic science concern itself with what ought to be? The answer must include a reference to the nature of our economic life.

This life, as it is understood by representatives of the new school, is not something stationary: it is a growth. What is, is not what has been, nor is it what will be. Movement is uninterrupted; but it is so vast, and we are so much a part of it, that we cannot easily perceive it. It is in some respects like the movement of the earth, which can only be discerned by difficult processes. We are not conscious of it. Although the thought of evolution of economic life had not until recently, I think, been grasped in its full import, yet economists of the so-called older school, like Bagehot and John Stuart Mill, admitted that the doctrines which they received applied only to a comparatively few inhabitants of the earth's surface, and even to them only during a comparatively recent period. In other words, English political economy described the economic life of commercial England in the nineteenth century. Now, a growth cannot well be comprehended by an examination of the organism at one period. The physiologist must know some-

thing about the body of the child, of the youth, of the full-grown man, and of the aged man. before he fully understands the nature of the human body. Our biologists, indeed, insist that they must go back to the earliest periods, and trace the development of life-forms forward during all past periods, and they endeavor to point out a line of growth. The modern economist desires to study society in the same manner. Lord Sherbrooke and others have claimed for political economy the power of prediction, and this has been based on the assumption that men will continue to act precisely as they have acted in time past. What seems to me a more truly scientific conception is this: the economist hopes to understand industrial society so thoroughly, that he may be able to indicate the general lines of future development. It follows from all this, that the future is something which proceeds from the present, and depends largely upon forces at work in the past.

More than this is true. The economic life of man is to some considerable extent the product of the human will. John Stuart Mill draws the line in this way: he says that production depends upon natural laws, while distribution 'is a matter of human institution solely.' Both statements are somewhat exaggerated. The truth is, political economy occupies a position midway between physicial or natural science and mental science. It is a combination of both. With the inventions and discoveries of modern times, we seem almost to have solved the problem of production; but the problem of an ideal distribution of products still awaits a satisfactory solution. But how largely does this depend on human will? Mill points to the institution of private property as fundamental in the distribution of goods. This is true, and the historical economist discovers that the idea of property is something fluctuating. He ascertains that there was a time when landed property was mostly held in common; that in certain parts of the earth it is still held in that manner; while there are far-reaching variations in systems of land-tenure, even in England, France, and Germany, -all of them, countries in about the same stage of economic development. Take changes in labor. The laborer has been a slave, a serf, and a freeman in various stages of economic development. His condition has been one of human institution, yet how largely fraught with consequences for the distribution of goods. One more illustration: take even railways. How differently would the wealth of the United States to-day be distributed, had we adopted an exclusive system of state railways in the beginning of railway constructions, and adhered to that system!

The ethical school of economists aims, then, to direct in a certain definite manner, so far as may be, this economic, social growth of mankind. Economists who adhere to this school wish to ascertain the laws of progress, and to show men how to make use of them.

It has been said that recent tendencies in political economy indicate a return to Adam Smith; and as in philosophy the watchword, 'Back to Kant,' has come into vogue, it has been thought that political economists ought to find inspiration in the cry, 'Back to Adam Smith!' While recognizing the truth which this implies, I am inclined to the opinion that in some respects the drift is back even to Plato. If you should attempt to develop a conception of political economy out of Plato's writings, would it not, when formulated, be about as follows: Political economy is the science which prescribes rules and regulations for such a production, distribution, and consumption of wealth as to render the citizens good and happy? With this compare Laveleye's definition as found in his text-book: "Political economy may therefore be defined as the science which determines what laws men out to adopt in order that they may, with the least possible exertion, procure the greatest abundance of things useful for the satisfaction of their wants; may distribute them justly, and consume them rationally." 2 Though exception may be taken to this definition as a rather too narrow conception of political economy, it answers very well the purposes of the present article, for it draws attention to the ethical side of the recent development of economics.

It is well to describe somewhat more in detail the ethical ideal which animates the new political economy. It is the most perfect development of all human faculties in each individual, which can be attained. There are powers in every human being capable of cultivation; and each person, it may be said, accomplishes his end when these powers have attained the largest growth which is possible to them. This means any thing rather than equality. It means the richest diversity for differentiation accompanies development. It is simply the Christian doctrine of talents committed to men, all to be improved, whether the individual gift be one talent, two, five, or ten talents. categorical imperative of duty enforces upon each rational being perfection 'after his kind.' Now, the economic life is the basis of this growth of all higher faculties, — faculties of love, of knowledge, of aesthetic perception, and the like, as exhibited in religion, art, language, literature, science, social and political life. What the political economist desires, then, is such a production and such a distribution of economic goods as must in the highest practicable degree subserve the end and purpose of human existence for all members of society.

This is different from the conception of life which is current in society, though it is in harmony with the ethical ideal of Christianity. The majority of the well-to-do tacitly assume that the masses are created to minister unto their pleasure, while this ethical ideal does not allow us to accept the notion that any one lives merely 'to subserve another's gain.' An illustration will make clear this difference. Listen to two ladies discussing the education of the serving-class, and you shall find that the arguments probably all turn upon the effect thereby produced upon them as servants.

As has already been stated, the demand of ethics is not equality. A large quantity of economic goods is required to furnish a satisfactory basis for the life of the naturally gifted. Books, travels, the enjoyment of works of art, a costly education, are a few of these things. lower in the scale of development will need few economic goods. One may be able to satisfy all rational needs for what can be purchased for three dollars a day, while another may need four times that amount. Again: while it is probable that those who belong to the ethical school, as it is called, with Mill, look forward with satisfaction to a time when the condition of an ordinary servant will be held to be beneath members of civilized society, it is doubtless true that large numbers to-day, like, perhaps, the majority of our negroes, will find in the condition of servants in really superior families precisely the best possible opportunity for personal development which they are able to use.

The ethical view of economics rejects the communism of Baboeuf as something not merely impracticable, but as something not at all desirable. On the other hand, social ethics will not allow us for one moment to accept the apparent ideal of Renan, when he calmly assures us, that, to such an extent do the many subserve the gain of the few, that forty millions may well be regarded as dung, do they but supply the fertility which will produce one truly great man. Like many others, including indeed representatives of high culture, he seems to regard human development as something existing altogether apart from individuals, as an end to be pursued in itself without regard to the condition of human beings as such.

It cannot well be argued that present society satisfies, in so high a degree as one may rationally desire, the demands of ethics. On the one hand,

 $^{^{\}rm 1}$ See the writer's ' Past and present of political economy,' p. 48.

² Taussig edition, New York, 1884, p. 3.

we see those who are injured by a superfluity of economic goods; and, on the other, those who have not the material basis on which to build the best possible superstructure. In both cases this is waste of human power, or, we might say, waste of man.

It is desired in future so to guide and direct the forces which control the production and distribution of economic goods, that they may in the highest degree subserve the ends of humanity. It is not claimed that the power of man is unlimited, but it is maintained that it can and will accomplish great things.

Here we have at once a standard by which to test economic methods. Take the case of low wages. It is argued that low wages increase possible production. Even if this be so, such wages diminish the power of the recipients to participate in the advantages of existing civilization, and consequently defeat the end and purpose of all production. Child labor, female labor, and excessive hours of labor, fall under the same condemnation. In the language of Roscher, "the starting-point as well as the object-point of our science is man."

It has been said truthfully that the essential characteristic of the new political economy is the relation it endeavors to establish between ethics and economic life. A new conception of social ethics is introduced into economics, and the stand-point is taken that there should be no divergence between the two. While representatives of an older view endeavor carefully to separate the two, the adherents of the ethical school attempt to bring them into the closest relation, - indeed, I may say, an inseparable relation. They apply ethical principles to economic facts and economic institutions, and test their value by that standard. Political economy is thus brought into harmony with the great religious, political, and social movements which characterize this age; for the essence of them all is the belief that there ought to be no contradiction between our actual economic life and the postulates of ethics and a determination that there shall be an abolition of such things as will not stand the tests of this rule. If industrial society as it exists at present does not answer this requirement, then industrial society stands condemned; or, in so far as it fails to meet this requirement, in so far is it condemned. It is not that it is hoped to reach a perfect ideal at one bound, but that the ideal is a goal for which men must strive. The new conception of the state is thus secondary, in the opinion of the adherents of the ethical school, to the new conception of social ethics. Doubtless there is a new conception of the state; for in this co-operative institution is discovered one of the means to be used to accomplish the end of human society, the ethical ideal. Perhaps still more important is the departure of economists from the individualistic philosophy which characterized the era of the French revolution, and which has gained such a stronghold in America, because our republic happened to be founded at a time when this view of individual sovereignty was in the ascendant. The philosophy of individualism came to us from England, which had been influenced by France, as well as directly from France, at a time when our thought was in a formative period, and was especially open to new ideas. But the ethical school, I think it safe to say, places society above the individual, because the whole is more than any of its parts. In time of war, society demands even the sacrifice of life: in time of peace, it is held right that individual sacrifices should be demanded for the good of others. The end and purpose of economic life are held to be the greatest good of the greatest number, or of society as a whole. This view is found distinctly expressed in Adam Smith's 'Wealth of nations,' particularly in one place, where he says, "Those exertions of the natural liberty of a few individuals, which may endanger the liberty of the whole society, are, and ought to be, restrained by the laws of all governments." This view, however, does not imply a conflict between the development of the individual and the development of society. Selfdevelopment for the sake of others is the aim of social ethics. Self and others, the individual and society, are thus united in one purpose.

It is not possible to develop all these thoughts in a single article, for that would indeed require a large book; nor can any attempt be made to offer any thing like complete proof of the various propositions enunciated. It has been my purpose to describe briefly a line of thought which it seems to me characterizes what is called the new political economy; and it should be distinctly understood that this paper claims only to be descriptive and suggestive.

It may be well, in conclusion, to point out the fact that the ethical conception of political economy harmonizes with recent tendencies in ethics. The older ethical systems may, I think, be called individual. The perfection of the individual, or the worthiness of the individual, to use another expression, was the end proposed. Moral excellence of a single person was considered as something which might exist by itself, and need not bear any relation to one's fellows. Men were treated as units, and not as members of a body. The new tendency of which I speak, however, proceeds from the assumption that society is an

organism, and that the individual is a part of a larger whole. Rudolph von Ihering develops this idea in the second volume of his 'Zweck im Recht.' The source of ethics he finds in society: the end of ethics likewise is discovered in society; and from society, according to this theory, is derived the ethical motive-power which resides in the human will. Social ethics thus replaces individual ethics. Ethics becomes one of the social sciences, and indeed, to use Ihering's expression, the 'queen' of them all. With this view of Ihering, should be compared the teachings of Lotze; and I will close this paper with a quotation of some length from his 'Practical philosophy:' "To antiquity, man appeared without any manifest attachment to a coherent system, transcending his earthly life, pre-eminently as a creature of nature, whose aim — not so much moral as altogether natural—could only consist in bringing all the bodily and spiritual capacities with which he is endowed by nature, to the most intensive, and at the same time harmonious, cultivation. . . . This whole culture is not a preparation of the powers for a work to be accomplished; but it is a self-aim to such an extent that the self-enjoyment of one's own fair personality, and its secure tenure against all attacks from without, form the sole content of such a life. . . . Just the opposite of this, under the influence of Christianity, the conviction is formed, that, strictly speaking, every man is called only to the service of others; that the effort to concentrate all possible excellences in one's own person is, at bottom, only a 'shining vice;' but true morality consists in the complete surrender of one's own self, and in self-sacrifice for others. . . . Nothing, therefore, remains for us to do but to supplement the ancient self-satisfaction, without surrendering aesthetic culture, by having all the powers acquired by such culture placed at command for the accomplishment of a life-aim in accordance with motions of benevolence; "and "benevolence, . . . the service of others, constitutes the focal point of ethical ideas." 2 RICHARD T. ELY.

[A reply by Prof. Simon Newcomb, to this article, will appear in an early number.—ED.]

DR. HUGHLINGS-JACKSON ON EPILEPSY.

For many years Dr. Hughlings-Jackson of London has been advocating a theory of epilepsy highly important for its general bearings on

physiology and psychology, and for its harmonizing with recent results obtained by experiments on animals. An era in the study of cerebral physiology was made when Fritsch and Hitzig discovered that the cortex of the brains of dogs was directly excitable, and that the result of such excitation was a series of co-ordinated movements of definite parts of the body. Dr. Jackson carried this fact over into pathology, and interpreted an epileptic discharge as nothing else than a sudden, rapid, excessive, and discharging cortical lesion: to use his own forcible language, it is simply a brutish development of many of the patient's ordinary movements. "Speaking figuratively, we may say that the epileptic discharge is trying to develop all the functions of the body excessively, and all at once: a severe fit is a fairly successful attempt. Let me give a very simple illustration. If there be a centre for locomotion, then, during slight sequent discharges of its elements in health, there is walking or running; but if very many of those elements were to discharge suddenly, rapidly, and excessively, the man walking or running would not go faster: on the contrary, he would be stopped, would be stiffened up into a tetanuslike attitude by the contemporaneous development of many locomotive movements."

In a recent article (Brain, April, 1886), Dr. Jackson has further extended and in part modified his His former position was that all discharging lesions issued from the cortex; i.e., the highest developed centres. He now admits that some such discharges have their central seat in less highly organized brain parts. That such is the case in animals was shown by such facts as that convulsions are possible in a rabbit through rapid bleeding, when the brain proper has been removed. This fact Dr. Jackson now carries over to human pathology in a very ingenious way. The fits involved by a discharging lesion of a lower centre, i.e., a medullary centre, would be apt to be connected with the respiratory apparatus which is represented in that region. Now. these 'inward fits,' or respiratory convulsions (laryngismus stridulus), occur mostly in children under one year of age, not often after two. This fact Dr. Jackson interprets as follows: at that period the highest cortical centres are not developed; of the activities developed in the infant at that time, these automatic vital functions are represented in what are then its highest functioning centres; and it is a discharging lesion from these that we see in a respiratory convulsion. The cause of the rapid and excessive discharge is shown to be a rapid increase in the venosity of the blood, which, when mild and gradual, serves as the normal stimulant of that

¹ See work, 'Zweck im recht.' A résumé of his arguments may be found in his article, "Die geschichtlich-gesellschaftlichen grundlagen der ethik," in Jahrbuch für gesetzgebung, verwaltung, und volkswirthschaft, für 1882.

² See Lotze's 'Practical philosophy,' Professor Ladd's edition, Boston, 1855, pp. 58-60.