

ing increase of nervous and mental diseases. Thus it is that the problem of keeping sane becomes the problem of civilization: civilization is the cause of mental weakness as well as the result of mental strength.

The two factors that have of late come into greatest prominence in this connection are the use of stimulants and the universal applicability of the laws of heredity. The fact that these come first is a sufficiently suggestive text to which the sermon can readily be added. Dr. Schulz looks forward to the time when these truths will be incorporated into social morality, and imprudent marriages be placed in the same category with criminality.

It is more true of nervous than of any other diseases, that the ideal to be aimed at is not so much to cure them as to prevent them. In the work of prevention it is the parent and the teacher who can do the most. The ancient phrase that calls the teacher the doctor of the mind is more than a metaphor. The doctor and the educator are at work upon the same problem. What the latter does is taking so much of a load from the shoulders of the former, and in the next generation the debt is repaid. And still more is this true of the parent. Our increased knowledge of nervous and mental diseases enables us to recognize their incipient stages when they can be checked from further development. That no one is perfectly sane is a commonplace. What it means is, that each one detects in himself latent tendencies in one direction or another, which, if they remain unchecked and are left to develop freely, would become morbid. A normal, rational life cures these tendencies of itself. They are absorbed in the growth of character. Yet it is very necessary to remember that our insane fellow-man is not made of different material from ourselves; he has simply elaborated one of the factors of life at the expense of all the others, and has thus lost his mental equilibrium: and it is also well for teachers to know as much of the nature of such tendencies as can be acquired from the reading of such a book as this.

The mental life of children presents problems peculiar to itself. We are beginning to take the step from the empirical to the scientific statement of these problems. We are learning to see things from the child's point of view; to appreciate how very intimate is its mental connection with its physical well-being; to know that education does not mean instruction; and, above all, the awful significance of that period of life when the boy or girl becomes a man or woman is recognized as the key to all higher character-building. Whatever may be said against the materialistic tendencies

of our day in other directions, in the field of education it has introduced wonderful reforms. In the school-room it has banished the middle ages and rationalized methods.

Enough has probably been said to show the point of view from which mental unsoundness is treated in the works of which this is a good type. It is an anthropological study of brain-culture. It describes the morbid tendencies in mental development, and thus gives additional knowledge of the normal mind; and, finally, it brings the problems of modern civilization to a focus where they can be studied and practically thought out for the benefit of the races to come.

#### *ECONOMICS, SCIENTIFIC AND POPULAR.*

*The economics of industry.* By A. and M. P. MARSHALL. 3d ed. New York, Macmillan. 12s.

THE wide-spread interest in the prominent economical questions of the day has brought forth new editions of two English works which are in different ways most timely and useful. The 'Economics of industry' well deserves the honor of a third edition. As professing to solve the problem of distribution in a scientific manner, it is of course especially interesting in its bearing on the controversy now flagrant between the old and the new school of economic thought. The authors do not formally array themselves with either of the antagonists. By casting some of the most distinctive doctrines of the new school into a purely scientific form, they refute the charge that the modern theories remove economics from the category of sciences. On the other hand, they are far from rejecting the system and methods adopted by the great expounders of the old school. The purpose of the volume is expressly declared to be a completer development of the theory of value, wages, and profits as propounded by John Stuart Mill. It is well known that Mill was, of all the older school of economists, the least inclined to consider its conclusions absolute and final verity. Nothing could be more natural, therefore, than to use his work as the foundation for a more modern superstructure. Our authors contribute much, indeed, to the elucidation of the truth that the new economics, which its younger and more enthusiastic devotees are apt to hail as an inspired creation, is in reality only a growth. It is the flowering and the fruiting of the symmetrical but in many aspects repulsive stalk which has hitherto been all that the world could see of political economy.

The influence of the modern tendency manifests itself at the very outset by a broadening in the definition of the fundamental concepts of the science. Wealth, for example, is made to include

non-material possessions as well as the tangible utilities. A larger scope in the conception of capital is, of course, the necessary corollary. The ordinary analysis of capital is, furthermore, improved by the division into 'specialized' and 'non-specialized,' depending upon the degree of difficulty in diverting it from one trade to another; and convenience in phraseology is enhanced by distinguishing between 'remuneratory,' or 'wage-capital,' and 'auxiliary capital,' or that employed to aid the labor which the first supports. In such a spirit of broad definition and logical distinction, book i. of the 'Economics of industry' presents the ordinary doctrines of land, labor, and capital with clearness and conciseness.

Book ii. treats of normal value. Here, with most painstaking care, is elaborated the theory of value and the solution of the problem of distribution which especially distinguishes the modern economy. In the theory of value, the old lines are generally followed, save in the more or less important substitution of 'normal value' for the concept which has become familiar as 'natural value.' The discussion of distribution, however, reveals a departure from old standards at the very outset. Instead of the ancient assignment of the product of industry to the various classes of rent, profits, and wages, we find a division into rent, earnings, and interest. In accordance with a principle that is characteristic of the new school, the *entrepreneur* class is differentiated from the capitalists, and its share of the produce is grouped with the wages of labor rather than with the wages of abstinence. The law fixing the rate of interest is accordingly worked out as the sole determinant of the capitalist's share of a product, while the profits of the employer of labor are assimilated in treatment to the income of skilled wage-earners. The justice and logic of this arrangement cannot be questioned. The industrial revolution which began last century, and may not yet have culminated, has certainly evolved a new economical factor. As Walker says in his work on wages, "It is no longer true that a man becomes an employer because he is a capitalist. Men command capital because they have the qualifications to profitably employ labor. To these captains of industry (or organizers of industry), capital and labor alike resort for the opportunity to perform their several functions." The tendency of this class to increased importance is well illustrated by the demonstration of the principle that those who, with little or no capital, depend upon their business profits for a livelihood, undersell and drive out of trade those who, having capital, undertake the management of industry merely to increase their income (pp. 136, 137). Modern pro-

duction has, in short, attained that stage where ability without capital has a much fairer hope of great rewards than capital without ability. It would be useful to have this fact instilled into the minds of the masses who are constantly complaining about the 'capitalists.' The chapter entitled 'Earnings of management,' in the book under review, contains a most admirable investigation of the nature and functions of the *entrepreneur* class.

It was to be expected that an author of modern economic propensities would touch up that *bête noir* of the new school, the wages-fund theory. We find this subject buried in the depths of the chapter on trades-unions. The authors are rather inclined to adopt the position of Mill in his later days as opposed to the bald doctrine of the extreme old school. Jevons and all the other lights of the new school throw themselves unreservedly upon the doctrine that wages and profits can increase simultaneously; in short, that the law of supply and demand operating in the respective classes determines wages of labor and wages of management. The Marshalls appear unwilling to go thus far; but they emphasize the idea that the efficiency of labor as well as the amount of antecedent capital exercises a potent influence upon wages. Trades-unions, they think, may enable laborers to obtain a general increase of wages, which, however, will only be permanent if attained by means that do not seriously hinder production, and if used in such a way as largely to increase at least the personal capital of the laborers, and so to add much to their efficiency (p. 203).

*The wealth of households.* Danson. Oxford, Clarendon pr. 12s.

In striking contrast with the scientific spirit that pervades the volume just discussed, is the air of breezy popularity that characterizes 'The wealth of households.' Why the author chose to disguise a treatise on political economy with such a title is an unsolved mystery. We hazard the conjecture that the reason might be found in the same trait of Mr. Danson's mind which has led him to turn the customary order of economic discussion all topsy-turvy, while not aiming at any novel result. His book was originally concocted for the benefit of his children. This probably explains the division of the text into numbered paragraphs of an average length, that suggests a second or possibly a third reader, and on a principle of logical connection that has no parallel outside of the authorized version of the Bible.

The intimation in the preface is not necessary to assure the reader that Mr. Danson has been a 'man of business.' Nor is it difficult to guess the special line he was in. The able, vigorous, and

reiterated defence of the usefulness of the 'dealer' or middleman in the economical structure of society might, but probably would not, have been penned by any one but a commission-merchant. As might be expected, the author's practical training produces the best results in those parts of the subject where a personal concern in affairs is essential to a thorough understanding. His chapters on banking, commerce, and credit are clear and incisive. There is no striking novelty in them, but the fresh and vigorous style clothes the old ideas with a living interest. In his treatment of the fundamental definitions and generally accepted principles of scientific economics, Mr. Danson is in many respects rather original than convincing. While deprecating the confusion that arises from the use of the same term in different meanings, he defines 'profit' in an entirely novel manner, and, on the strength of this, goes on to combat the theories of profit that have been proposed by economists who retain the old definitions. He maintains that profit is earned only by risk: it is therefore inseparable from capital. The manager who conducts business on borrowed capital receives only wages; for the lender risks the loss of his capital, and the additional rate of (so-called) interest he receives to cover the risk is really the 'profit.' On this theory, it is evident that Mr. Danson would limit the term 'interest' to the remuneration for loans on which the security is absolutely perfect, or, in general, to a purely hypothetical quantity, and would use 'profit' principally to denote the income of insurance companies. We doubt that economists generally will follow him.

'Rent' is another term in respect to which our author courts originality. He regrets the variety of meanings assigned to the word, and proceeds to mend matters by setting forth an entirely new one. We shall not follow him in his career. Ricardo will doubtless survive the latest sceptic's assault. The result of our author's doctrine is wrought into a radically conservative view of the modern land-question. Henry George is neatly annihilated by a demonstration of the fact that there is no such a thing as an 'unearned increment' in the value of land. The general treatment of the land-question indicates a probability that some of the profits, or rather 'wages,' of the commission-merchant have found investment in an English estate.

On the labor and wages question, Mr. Danson cleaves to the old school. The interests of labor and capital are identical, and all that the laborers have to do is to eschew trades-unions and become millionnaires as soon as possible. Inspection-laws for factories, like poor-laws, are inherently vicious,

and, in general, *laissez faire*; some of which sentiments indicate that a Liverpool commission-merchant feels under no necessity of advancing merely because the rest of the world does.

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#### SOME RECENT MINERALOGICAL TEXT-BOOKS.

*Manual of mineralogy and petrography.* By JAMES D. DANA. 4th ed. New York, Wiley. 12°.

THE well-known manual of Professor Dana appears in much its former guise, but with such alterations as are needful to keep it abreast of the progress made in mineralogical and petrographical science during the nine years which have elapsed since the publication of the third edition. The old arrangement is preserved throughout, which will prove acceptable to those who are already familiar with the book. It is only intended for an elementary treatise, for the use of schools or of the practical miner and geologist; hence the arrangement of the species according to their principal metallic base is advantageous. The full list of American localities and the tables for determining minerals are also valuable addenda. The chapter on rocks has undergone extensive changes. The terms 'petrography' and 'petrology' are preferred to 'lithology,' which was formerly used. The various grounds of classification are stated, and the rocks divided into, 1°, calcareous; 2°, fragmental, not calcareous; 3°, crystalline, not calcareous. The arrangement of the members of the last class is much like that of Rosenbusch. The banded and schistose varieties are classified with the massive ones, but they are for the most part considered 'metamorphic,' by which term the writer seems to imply that they are altered sediments. The metamorphism of eruptive rocks into schists seems hardly to have secured recognition. Altogether the book is increased by only forty-three pages, but its many improvements will secure it a welcome among all teachers.

*Tables for the determination of common minerals.* By W. O. CROSBY. Boston, J. A. Crosby. 8°.

Professor Crosby's tables are intended to aid beginners in the identification of the commoner minerals, chiefly by means of their more apparent physical properties, and then to show them how the determination may be confirmed by simple chemical tests. The classification is, 1°, according to lustre (metallic and non-metallic); 2°, according to the color of the metallic, and the streak of the non-metallic minerals; and, 3°, according to the hardness. In this way forty-one classes are formed, which are further subdivided in the analytical key by specific gravity, texture, crystal form, cleavage, etc. The method is the result of