

stations, particularly Moose Jaw (which owes its name to the shape of the bend in a creek there), you may buy excellent specimens of buffalo-horns, somewhat polished, and bound together with forehead-hides or bead-embroidered flannel, — the work of Indians and half-breeds.

ERNEST INGERSOLL.

NEWCOMB'S POLITICAL ECONOMY.

IN illustrating the ease with which labor may rush from one channel to another in case of a change in demand, Professor Newcomb remarks on p. 115 that "a professor of one science can commonly teach another." If he had said that it is unhappily true that an ignorant and unthinking public often considers that a man eminent in one department is equally so in several or all other departments, or that it is a common but most vicious notion that a college professor of one branch might just as well be professor of another also — as, for instance, that the professor of Christian evidences and New Testament Greek may also take physics as well as not, — and that this absurd notion is at present one of the most serious obstacles to any real improvement of our educational system, he would have been very much nearer the truth, and, we cannot help believing, nearer to his own real opinions when in his soberer moments. Certain it is, at any rate, that if a man who had given the best years of his life to the study of political economy should wander over into the field of astronomy and physics, and undertake "to bring order into the reigning confusion," and "to give the subject a recognized place among the sciences by being the first to treat and develop it as a science," Professor Newcomb would be just the man to administer a severe and deserved castigation. The offence is none the less serious, because in this case we have a great and successful astronomer and physicist wandering over into the economic field and undertaking to set things to rights.

The fact is that the progress of modern science in every branch has been so great within this century, that he is a bold man indeed who thinks that he is entitled to speak as an authority even in two or three fields, though they be very closely allied. The mere work of mastering the facts which are necessary to enable one to speak with confidence has become so great in almost any of the more developed branches of human science, that it is the task of years to do this for a single branch, to say nothing of a half dozen. It is, however, perfectly within the power of an able man to write a treatise on a science of whose

present status he knows next to nothing, which shall present the subject as it was some time in the past, provided he goes back far enough toward the beginning of things. This is just what the author has done in this book. If he had published it fifty years ago it would have been a valuable contribution to the subject. Coming at this late day, it is still valuable as an instance of how completely a man may enter into the ideas and thoughts of a past generation, and how skillfully he may re-present them.

There is no evidence in the style of reasoning in this work that the author is at all acquainted with the recent literature of the science either in England or on the continent. One great advance in economic science of the last twenty-five years lies in a change of its prevailing method. It has been affected in a most healthy way by the enormous progress of physical and natural science. It is reaching out to avail itself of their methods so far as possible. As a result of this new method, it has come to reject the old generalizations, and, while recognizing that they were exceedingly valuable in their time, and formed important, nay, necessary links in the chain of scientific progress, it now insists that we have ample evidence of their crudeness and incompleteness, and that, taking whatever may be left of them that is true, we must now look for valuable results to careful and far-reaching inductive study of the facts of our social and economic organism as the indispensable basis of new and more fruitful generalizations.

Of all this there is scarcely a trace in Professor Newcomb's treatment. He repeats exploded theories and almost universally rejected laws with the utmost naïveté as "principles which will be accepted by all who understand the subject." It is true that he calls attention, in his chapter on economic method, to the necessity of more exact definition and careful reasoning; but taken in connection with his actual treatment, it has much the same effect on the professional economist that would be produced on the physicist or astronomer by an attempt on the part of Wilhelm Roscher or Cliffe Leslie to restate the corpuscular theory of light on the Ptolemaic system of astronomy with a greater exactness of definition, and closeness of reasoning. A work prepared in this latter spirit would doubtless have a value, as, for example, for disciplinary purposes in an old-fashioned college, but it would hardly be accepted by prevailing authorities as in any sense a productive contribution to the science.

Professor Newcomb's work is written from the old stand-point of extreme individualism. The author takes it for granted, and indeed expressly asserts in more places than one, that the individual, in fol-

lowing out his own interest as he views it, will at the same time always promote in the most efficient manner the public interest. In speaking of ownership in natural agents, he remarks (p. 81) that "under our actual system the care which every prudent person takes of his own property is extended by the owners of natural agents to their property, and thus the contents of the great store-houses of nature are protected from waste." Surely the author knows of the great devastation of our forest lands by private owners, bent on following their own interest to the exclusion of that of the public. He has surely heard of the revelations recently made in England and Ireland which showed that the productiveness of agricultural lands was permanently lowered by the policy of interference adopted by the landlords, and which led to most vigorous restrictions on freedom of contract in the interest of the community. Surely the author knows that in nearly every state in the union it has been necessary to pass laws for compulsory drainage of swamps, whose owners refused in some cases to have them drained at all, even at others' expense. These are illustrations of a law very different from that enunciated by the author, and that is, that the interest of the individual diverges at a thousand points from that of the whole, and that positive legislation is needed at all times to secure the interests of the latter as against the former. Professor Newcomb himself, indeed, almost immediately takes back the statement quoted above by admitting that we have to depend upon law and public opinion to control private interest; but as he repeats the former statement in many different forms, and founds his whole system of *laissez-faire* upon it, we must accept it as his real view.

As a fair specimen of the mode of reasoning, we may refer to the investigation begun on p. 513, as to whether "any system intended to limit the liberty of any man to acquire all the wealth he can by legal means, and to employ it in the way he chooses, can conduce to the general good." The question, as stated, involves a *petitio principii*. By *legal* means? What does this phrase 'legal' mean? It is evident that the author is thinking of the means which are legal under our present system of laws in this country. But he is trying to get formulas for a general political economy which shall hold good of present, past, and future societies alike, and our laws are not the same as they were a century ago, or as they will be a century to come; nor are they the same as English or French or German laws. Nobody denies a man's right to get all he can by legal means, but very many people deny that certain means now legal

are judicious, and promotive of the public good. The author evidently goes upon the assumptions that our present laws are just and natural, and that any thing which is legal under them is also just and natural,—two assumptions which constitute the whole point in dispute. He sums up the discussion in the remark that "the fact is, that on our present system the enjoyment of the collected wealth of the community is as nearly in accord with the ideal principles of equity as any general system can be." This sounds like a voice from the dead. It is worthy of the worst period of 'Manchesterism.' It is this kind of political economy, which, regarding the case as closed in favor of the existing order in its present form, has done and is doing more to promote the most dangerous type of communistic and socialistic spirit and doctrine than all the vaporings of so-called professorial socialism of the last generation. Even John Stuart Mill declared that communism or socialism could not be any worse than the existing order, if this order is capable of no improvement.

If, passing over this fundamental view, which is, of course, the most important consideration in the case, we look at the details of the book, we shall find much to admire. The qualities which have made the author one of the most eminent astronomers of this generation serve him a good turn in his discussion of several of the most important topics. There is a general tone of fair-mindedness which is often lacking in works written from the general stand-point of the author, and which makes one only regret still more keenly the author's lack of special knowledge, which, if it had been supplied, might have given us a really valuable work. Some misstatements of facts should perhaps be noticed. The discussion of the national banking system was evidently written several years ago, and not revised to date. There is an unhappy confusion of the labor party with the socialists, which again reveals the author's ignorance of actual facts in the social organism of which he treats. In his discussion of bimetalism, he says that the government goes on the assumption that "the values of equal weights of the two precious metals have a certain fixed ratio,"—a statement which is not true as a matter of fact, and is a gross caricature if intended to represent the views of bimetalists.

E. J. JAMES.

TEXT-BOOK OF BOTANY.

NOTWITHSTANDING the rapid multiplication of text-books within recent years, it is a pleasure to

Gray's botanical text-book. Physiological botany, part ii. By G. L. GOODALE. Philadelphia, Ivison, Blakeman, Taylor, & Co., 1885.