text-book than one for class-room use, such as Unwin's. It includes less mathematical discussion than samples of good design- ing, graphically presented. It is full of excellent "dime-store" illustrations of a great variety of machinery, and especially of machine-tools and steam-engines. It gives a large number of rules and tables of proportions of parts of machinery taken from the standard treatises and from the note-books of skilled designers. In many cases the methods of computing and proportions thus given are drawn. The drawings have all been prepared from working drawings, and especially with a view to their use for this purpose. Standard and successful practice is thus laid before the young student, or practitioner; and the art of proportioning is thus not only acquired, but the novice is, at the same time, made familiar with the best designs of his seniors. A combination of this work with that of Professor Unwin would seem likely to make an ideal course; the one being used in the drawing-room, the other in the class-room in conjunction with lectures. For the ambitious apprentice, no better plan could be recommended than a similar course of private reading and practice.

The Philosophy of Individuality, or the One and the Many. By ANTOINETTE Brown BLACKWELL. New York, G. P. Putnam's Sons. $3.

This work is a new attempt to solve the problem of the universe. It is by no means easy reading, the style being at once verbose and obscure, and the same thought is often repeated again and again, without ever being made clear. The fundamental doctrine of the book is a new theory of matter, namely, that matter is not a substance at all, but merely a complex of motions; or, in the author's own words, that "matter is literally composed of aggregated and cooperative modes of motion." Even an atom is regarded as nothing but a combination of balanced and correlated motions: "Our atom of matter, then, is a unit of motions with innate energy to achieve vastly more than has yet been required of it by physical evolution." This view is ex- pounded and illustrated through several chapters, and the en- tire theory appears to be commonly called substances, and to distinguish between these "complexes of motion" and the "free motions" of heat, light, electricity, and gravitation. The theory is admitted to be nothing but a hypothesis, and we fear that it will always remain so.

Passing now from the sizes and proportions given in this work to the realm of matter to that of mind, the author presents a theory of mind and consciousness similar to that of Herbert Spencer, that mind and matter are merely two aspects of one underlying reality. It differs, however, quite radically from Spencer's view in regarding life and consciousness as attributes of an organized body only, but of each individual atom: "The rhythmic atom is alive with the high possibilities of ever-growing sensibility and actual knowledge." The objection that there is no evidence of life or feeling in inorganic matter, that the author endeavors to meet by the theory of "potential life," a genealogical and experiential such as is given instead of arguments and proofs. The grand difficulty with such a theory is to account for personality; for, if every atom is sentient by itself, it would seem that we must have as many minds as there are atoms in our body, and Mrs. Blackwell is by no means successful in removing the difficulty. "We assume," she says, "that the one commanding ego in each higher organism is exclusively but one individual unity!" but, notwithstanding her explanation point, there is no warrant in her theory for such an assumption.

Such are the fundamental doctrines on which the author seeks to found a rational theology and a belief in the immortality of the soul, but we find little in her arguments that is convincing or satisfactory. The whole theory is hypothetical; and, while we recognize the earnest purpose of her book, we cannot think that she has added anything important to our knowledge of nature or of man.

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