

ed with motors, but heavier than the air. This is the form advocated by Langley, Maxim, Barton, Hargreaves, and, in short, the general body of those who have in our day studied the subject in a scientific manner. It is the only form which by any possibility could ever decidedly distance the "ocean greyhound" of to-day. Its real merits cannot be estimated until it has been embodied in some practical shape.

The fourth type is that of instruments neither possessed of ascensional power nor carrying any engine. To be sure, they may, and hitherto generally have, supposed a man to be kept hard at work during their trips. But how little this could amount to, as mechanical work, becomes manifest when we reflect that the more powerful of a man's muscles are unadapted to the long-sustained production of impulses at a greater frequency than, say, two per second. If, therefore, such impulses were to be relied upon to prevent the instrument from falling, since in the interval from one to another the machine would have fallen four feet, it follows that the labor the man would be called upon to perform would be equivalent to that of taking the instrument (say, a hundred-weight) on his back and running up stairs with it at the incessant rate of eight feet per minute, or four hundred and eighty feet per hour. Each reader can speak for himself as to how many hours at a time he would contract to keep up that lively exercise.

It has many times been demonstrated that there is no very formidable difficulty in constructing an instrument weighing about a hundred pounds which shall lift a man, or even two men, up into the air in a fresh breeze, and carry them up into the wind. It is supposed that they could sustain themselves indefinitely, if they were skilful enough, without any particular expenditure of energy, in the same way in which birds ranging in size from the lark to the condor soar. A condor will weigh eighty pounds and will soar all day long without any sign of effort or of fatigue. Various facts go to support the theory of Professor Langley that it is by taking advantage of the puffiness of the wind (its "internal work," as he calls it) that birds soar; though it is not certain that other factors, of which three readily suggest themselves, may not contribute to the effect. It is quite certain that a considerable weight is one requisite. The most successful of the flights of Le Bris occurred one day when the rope by which his instrument (which was intended to carry only himself) became accidentally wound round a second man. Le Bris, not noticing what had happened, carried the man up two or three hundred feet into the air, and forward into the wind for a furlong or so, and could apparently have gone indefinitely further. But when he had descended sufficiently to set his captive passenger free, he found that without that ballast he could no longer fly. Thus far, however, no man has found it possible to acquire the necessary skill to manage such an instrument, in advance of getting killed by his blunders. The thing has not really had a fair trial. Le Bris was a very poor man, a common sailor, and circumstances prevented his practicing on the water, although his machine had been specially constructed with a view to that. Consequently, before

he could learn the art, his machine was smashed; and he lacked the means to reconstruct it.

Although Mr. Walker contemplates the construction of airships of the second type alone, yet, owing to this type reuniting the positive features of the others, his volume contains many facts pertinent to the construction of any airship. As far as our verifications have extended, his numbers are accurate. But nothing more inaccurate and unintelligible than his statements of mathematical rules and formulae can be imagined. For example, on pp. 17 and 18 is an attempted explanation of the manner of calculating the elevation from the pressure of the air. Not until one has corrected several misprints, including the uniform printing of exponents as factors, do the difficulties of finding out what the man means (although the reader knows what he ought to mean) fairly emerge. They are not confined to any one sentence. A number has been obtained, and, being correct, there is substantially but one way in which it could have been reached; yet what relation there is between what is said and this operation, one cannot make out. So it is, in lesser degree, throughout the volume.

RECENT NOVELS.

The Wings of the Dove. By Henry James. Charles Scribner's Sons.

The Virginian. By Owen Wister. The Macmillan Co.

The Desert and the Sown. By Mary Hall-ock Foote. Houghton, Mifflin & Co.

The Champion. By Charles Egbert Craddock. Houghton, Mifflin & Co.

Typhoon. By Joseph Conrad. G. P. Putnam's Sons.

A Sea-Turn and Other Stories. By T. B. Aldrich. Houghton, Mifflin & Co.

Bylow Hill. By G. W. Cable. Charles Scribner's Sons.

The Way of a Man. By Morley Roberts. D. Appleton & Co.

In the Gates of Israel. By Herman Bernstein. J. F. Taylor & Co.

Readers pretty well en rapport with Mr. Henry James will be put to it to tell what his latest contribution to psychological fiction is all about. In the case, the most useful office of the reviewer is to say at once what some of it is about, to declare the situation. In doing so he may acknowledge a sense of indelicacy, even coarseness, much as if he were tearing away the enveloping leaves of a rose just to show its heart, or denuding a much-swaddled infant only to prove that it is all there. As we make it out (with some vanity of intelligence) the actual situation imagined by Mr. James for what he might call a study of the abyssal in human consciousness is this: An impecunious young Englishman, a journalist by profession, named Martin Densher, is in love with, in fact secretly engaged to, Kate Croy, dependent for a luxurious subsistence on "Aunt Maud," otherwise Mrs. Lowder, who dwells in splendor at Lancaster Gate. Mr. Densher, humbly conscious that his only talent is a "talent for thought," recognises with rapture in Miss Croy a "talent for life," and becomes, therefore, for the guidance of their affair, a pliable instrument in her

capable hands. At an early age she had divined that it is "of the essence of situations, under Providence, to be worked"; so we behold her in her great situation electing to conceal from Aunt Maud how far she and Densher have gone, trusting to time and her wits to "square" her invaluable relative. Appears upon the London horizon Miss Milly Theale, an American of the richest, already in love with Densher, and, at the dawn of life, in full possession of its resources, stricken with some mysterious and mortal disease. Milly is the "dove," and has innocently nestled up to Miss Croy, unaware of any relation between her and Densher. When she becomes aware, it is by indirection, with the view advanced that Densher nourishes an unrequited passion for her friend—a view that Miss Croy herself resolutely maintains, for, in Milly's passion she has perceived the situation to be worked, whereby Aunt Maud may be squared and Densher and everything else she wants eventually secured to her.

Exactly what she is driving at nobody can know till he approaches the middle of the second volume, where her plan is explicitly stated. It is Densher who states it. The poor young man feels that he is being pushed in directions too mysterious, through a fog too thick, and demands light. Miss Croy fences thus:

"Don't think, however, I'll do all the work for you. If you want things named you must name them."

"He had quite within the minute been turning names over; and there was only one, which at last stared at him there 'dreadful, that properly fitted."

"Since she's to die, I'm to marry her?"

"To marry her," Miss Croy assures him without blinking. He presses her further: "So that when her death has taken place I shall, in the natural course, have money?" Not in the least flustered, she replies: "You'll in the natural course have money. We shall in the natural course be free."

The situation, thus baldly stated, seems rather monstrous, but Mr. James saves some from moral indignation and others from nervous shock by swathing his situation in the speculative, wrapping it in the conjectural, and protecting it with infinite precaution from direct judgment. He removes it from contact and conflict with moral preferences and emotional susceptibilities, and presents it voluminously to the intelligence as a subject with a wonderful variety of points for subtle disquisition. The simple or superficial has never engaged his interest, and he has always been blessedly free from a desire to proclaim the obvious. Events and their possible consequences attract him only in so far as they prompt conjecture about how certain imaginable people might face them, what they might conceivably do with them. To read him (in his later days) without mystification and utter dissatisfaction there must be a clear understanding on these points; the reader must be able to take a cheerfully reciprocal attitude. For certain sentences, even chapters, the faithful should not be lured into defence, but declare boldly that the author has taken sanctuary and may be as cryptic as he pleases. In *"The Wings of the Dove"* he frequently retires so deeply within himself that the more he labors to express his meaning, the more involved and incom-

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vogance, the scorn, the hatred, the vituperation; the crudities, the absurdities, the falsehoods—all these may be overlooked because of the seraphic music of the style, because of the coruscating wit, because of the incomparable wealth of allusion and suggestion. For these we must go to his books; but those who would have a critical estimate of them, and those who would learn what manner of man their author was, will appreciate Mr. Harrison's essay. His judgments are merciful, but not too partial, and if he goes far in his extenuation, it is a generous fault. As a Positivist, he is sufficiently detached to criticize schemes of social reconstruction with intelligence; and as a man of letters, his competency to judge of literature has been amply proved.

The Origin and Significance of Hegel's Logic: A General Introduction to Hegel's System. By J. B. Baillie. Macmillan Co. 1901. 8vo, pp. xviii, 375.

This book is, on the whole, of any that we have seen, the most helpful for a student prepared to take up the study of Hegel. It is not designed as a substitute for reading Hegel's own works, but, as the title-page proclaims, as an introduction to such reading. It explains how Hegel's 'Phänomenologie,' 'Logik,' and other works came to be written, which is what the student of any system should desire to learn, first of all. In saying this, we are supposing that the student is not a neophyte in philosophy. When a man first takes up the study of philosophy, his difficulty, at the outset, is that he is already possessed by a crude system of metaphysics, and that, while he has a vague curiosity to know why others do not think as he does, he really has no desire to learn. After that first difficulty is conquered, he has to make a study of some one system of philosophy, which, however, it is impossible for him really to understand at this stage, because he does not comprehend the original state of mind of the author at the time his original studies

were begun. In the case of Hegel he must, as a matter of course, understand Kant, and especially the deduction of the categories, not only as his doctrine appeared to Kant himself, in his two editions, but as it appeared to the young theological students who read it while it was fresh. He will necessarily make some study of Fichte's 'Wissenschaftslehre' and of some of the earlier writings of Schelling. He can then take up this book of Dr. Baillie's with profit, and thereafter the study of Hegel (in German, of course, for the 'Logik' is, in a sense, a dissertation on the German language) will not present any insuperable difficulties, unless Hegel's own inaccuracies be considered such. In particular, he should have carefully read Dr. Baillie's admirable concluding chapter, entitled 'Criticism.' His only danger will then be that of overlooking what Hegel entirely overlooks and Dr. Baillie does not distinctly recognize, that thought and 'immediacy' are not the only factors of experience. To avoid that danger he ought to be penetrated with the spirit of science, to understand English thought, that of Herbert, that of Fries, and be well acquainted with modern exact logic.

Hegel is a vast intellect. The properly prepared student cannot but feel that the mere contemplation of the problems he presents is good. But that the study of Hegelianism tends too much toward subjectivism, and is apt to break that natural power of penetrating fallacy which is common to all men except students of logic, especially of the German stripe—seems to be the result of experience.

BOOKS OF THE WEEK.

Allen, F. O. The History of Enfield, Connecticut. Vol. III. Lancaster (Penn.): Published by the Editor. Book-Prices Current, Vol. XVI. London: Elliot Stock.
Butler, H. C. The Story of Athens. Century Co.
Campbell, A. C. Insurance and Crime. G. P. Putnam's Sons.
Carr, Elizabeth L. William Morris. Poet, Craftsman, Socialist. G. P. Putnam's Sons.
Chase, Jessie A. Mayken: A Child's Story of the Netherlands in the Sixteenth Century. Chicago: A. C. McClurg & Co.

Chubb, Percival. The Teachings of English in the Elementary and the Secondary School. Macmillan.
Cobb, A. G. Earth-Burial and Cremation. G. P. Putnam's Sons.
Coe, G. A. The Religion of a Mature Mind. Fleming H. Revell Co.
Cole, Timothy. The Old English Masters. With Historical Notes by J. C. Van Dyke, and Comments by the Engraver. Century Co. \$3.
Corelli, Marie. Thelma. R. F. Fenno & Co.
Ellwanger, W. D. A Summer Snowflake, and Drift of Other Verse and Song. Doubleday, Page & Co. \$2.
Fiske, John. Essays Historical and Literary. 2 vols. Macmillan.
Fowler, N. C., Jr. The Boy: How to Help Him to Succeed. Boston: Oakwood Pub. Co.
Gillman, D. C., Peck, H. T., and Colby, F. M. The New International Encyclopedia. Vols. I, II, and III. Dodd, Mead & Co.
Goldsmith, Oliver. The Deserted Village. (Illustrated by Edwin A. Abbey, R.A.) Harpers. \$3.
Graham, Douglas. A Treatise on Massage. (Manual Therapeutics). New ed. Philadelphia: J. B. Lippincott Co. \$4.
Hill, Janet M. Practical Cooking and Serving. Doubleday, Page & Co. \$2.
Homer, J. K. History of the Expedition of Captain Lewis and Clark, 1804-05-'06. Reprinted from the edition of 1814. 2 vols. Chicago: A. C. McClurg & Co. \$5.
Kingsland, Mrs. Burton. The Book of Weddings. Doubleday, Page & Co. \$1.20.
Lamb, Charles. The Essays of Elia. (Century Classics). Century Co.
Lord, W. B. This is for You: Love Poems of the Sane Sort. Fleming H. Revell Co.
Lovell, Isabel. Stories in Stone from the Roman Forum. Macmillan. \$1.50.
Lyons, R. T. Eugene Field's Favorite Poems. Evanston (Ill.): William B. Lord. 50 cents.
Macdonell, Anne. Sons of Francis. London: J. M. Dent & Co.; New York: G. P. Putnam's Sons. \$3.50.
Mackenzie, W. D. John Mackenzie, South African Missionary and Statesman. A. C. Armstrong & Son. \$2.
McCarthy, Justin. The Reign of Queen Anne. 2 vols. Harpers.
Mowbray, J. P. A Journey to Nature. (Illustrated ed.) Doubleday, Page & Co. \$3.50.
Ott, James. The Cruise of the Enterprise. Boston: W. A. Wilde Co. \$1.50.
Schmidt, Alexander. Shakespeare-Lexicon. New ed. 2 vols. Berlin: George Reimer; New York: G. E. Stechert; also, Lemcke & Buechner. \$8.
Sexton, Ella M. Stories of California. Macmillan. \$1.
Shadwell, C. L. Registrum Orleense: An Account of the Members of Oriel College, Oxford. Vol. II. Henry Frowde. 12s. 6d.
Silberrad, U. L. The Success of Mark Wyngate. Doubleday, Page & Co. \$1.50.
Smith, Gertrude. The Queen of Little Barrymore Street. Fleming H. Revell Co. 75 cents.
Spurr, H. A. The Life and Writings of Alexandre Dumas (1802-1870). F. A. Stokes Co. \$2.
Steele, L. E. Essays of Richard Steele. (Golden Treasury Series.) Macmillan. \$1.
The Gollwitzer's Aladdin. Pictured by Florence K. Upton. Verses by Bertha Upton. Longmans, Green & Co. \$1.50.
The Record of the Celebration of the Two Hundredth Anniversary of the Founding of Yale College. New Haven: Published by the University.
Tomlinson, B. T. In the Camp of Cornwallis. Boston: W. A. Wilde Co. \$1.50.
Vallings, W. Harold. By Dulvercome Water: A Love Story of 1685. Macmillan. \$1.50.
Von Hutten, Baroness. Our Lady of the Beeches. Houghton, Mifflin & Co. \$1.20.
Wright, C. D. Some Ethical Phases of the Labor Question. Boston: American Unitarian Association. \$1.

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