

the crumbling of the kingdom Guinevere comprehends the tragic part she has played. She realizes that Lancelot forsook the true Light, the Light that Galahad saw, to follow her white and gold. The last parting of the two in the nunnery at Almsbury is exquisite in its nuances of sad passion and final sacrifice. She sends Lancelot back into the darkness alone, sure now that he will follow the Light that her beauty obscured for a time. He sees her pale hands like white flowers falling into a grave and knows that she has gone out of his life only to enter it in a greater way. "Where the Light falls, death falls;" sounds the Voice in his ears, "And in the darkness comes the Light."

We must suppose that it comes to him then, comes through the dark forest of human passions into that quiet place where eternal things endure. Human frailties fall and are washed away, only the absolute remains—a foundation for a new world to be built on.

HERBERT S. GORMAN.

Animal Life

The Secrets of Animal Life, by J. Arthur Thomson.
New York: Henry Holt & Co.

THIS is a biologist's sketchbook, to be opened and enjoyed at random, an assemblage of brief essays originally published in the *New Statesman*, whose readers the author periodically keeps in touch with the latest advances of his science. Many of the chapters bear the character of reviews summarizing recent technical literature, others are prompted by seasonal reflections taking a biological turn. Professor Thomson possesses many qualities of the ideal popularizer. He has a keen sense for the human interest side of natural phenomena, and while thoroughly trained in the ways of the laboratory he mingles with the experimentalist spirit that old-fashioned delight in nature which constitutes so much of Fabre's charm. His attitude towards the outer world may, indeed, be best characterized by the German epithet *gemütlich*: it has a genial personal tinge that is noticeably lacking in the writings of most modern scientists. He can, of course, discuss at pleasure the problems of heredity and evolution in current academic phraseology. But of a summer evening he does not disdain to stroll across the Scotch moor in Wordsworthian mood, straining to get into intimate contact with fauna and flora, harking for the hedgehog's call and the song of the lark.

This trait may have a purely temperamental basis that would require utterance in any event, but more probably it is somehow connected with a distinctly though not obtrusively teleological strain in the author's philosophy, of which the purposiveness of the universe forms a cardinal point. To that extent, of course, it savors of scientific heresy. But it would be a grievous error to suppose that Professor Thomson mingles sentimentalism or theology with his natural science. From that pitfall a robust British judgment happily preserves him. Though fortunately he has his poetical moods and allows us to enjoy them in his company, the basic element in his mental constitution is, after all, sober common sense. Accordingly, there is no maudlin dawdling over beast and landscape, and metaphysics instead of being injected in place of established mechanical explanations are relegated to that dim hinterland where science and speculation meet.

As an ethical counterpart to Professor Thomson's common sense looms his scrupulous fairness in exposition. One gladly recalls his highly creditable article on German con-

tributions to science at a time when more hysterical scholars in Allied countries attempted to belittle the enemy's cultural achievements. It is not surprising to find the author free from bigotry in the less delicate moot-problems of biology. Thus, the treatment of neo-Lamarckian experimentation is most generous considering his very decided repudiation of the doctrine that acquired traits are inheritable.

As a matter of fact, Professor Thomson is prone to carry the virtue of gentlemanly appreciativeness to excess. His tacit motto seems to be the Leibnitzian "*Je ne méprise presque rien*," a splendid sentiment but not readily adapted to non-Olympian exigencies. In this respect his attitude recalls that of John Morley's *Recollections* with its kindly allusions to practically every person the autobiographer has ever met and every author he has ever read. At first we are charmed by such universal benevolence, but ultimately it begins to pall and one longs for rather more vivid characterization of individual merit, for a somewhat sharper discrimination between the great and the good, the good and the mediocre. It is true that in the present volume such judgments are wholly subordinate to the presentation of facts and the interpretations suggested by them, so that Professor Thomson's is a venial fault. Yet stronger individualizing along the lines indicated would have added not a little to the liveliness of this instructive and generally admirable volume.

ROBERT H. LOWIE.

Research in Industry

The Organization of Industrial Scientific Research, by C. B. Kenneth Mees, D. S. C. New York: McGraw-Hill Book Co.

IT is a significant fact that our federal government spends considerably less than one per cent of its total budget on research into ways and means of harboring and improving material resources. And it is no less significant that with the ending of the war an excellent book should appear, devoted to the exposition of the nature, types, administrative methods and cost of industrial research. For the imperative need of technical improvement in manufacturing processes is being realized today with an enthusiasm never before displayed. Inevitably, as American industry develops away from the small scale, rule-of-thumb business, as it comes into competition with foreign industries and as the necessity for an abundance of cheap goods is felt, attention is turned to the several methods of reducing unit cost.

The collection of an orderly array of facts, experiments on the basis of a tentative hypothesis, establishment of working principles—this scientific procedure has brought clarity and improved control in the fields of salesmanship, accounting, personnel administration, production planning and scheduling. But despite enormous technical gains in control over process formula in the last ten years, American industry is still relatively unadvanced in the radical application of research methods to the chemistry, physics and mechanics of manufacturing. Yet it is unquestionably in this direction that some of the largest savings and gains in productivity are to be assured.

No one, for example, unfamiliar with the extent to which precise measuring and recording instruments are used in Germany and unused here, can appreciate how unstandardized our processes and formulae are and how backward are

our methods for knowing accurately what we are doing in the factory.

The need for this research is well set forth by Mr. Mees. It will assist in "the elimination of manufacturing trouble; the investigation of possible new methods; the development of standard methods of testing or specification for the purchase of raw material; the investigation of new industrial propositions for which the value has not been commercially established; the investigation of new methods of using products or of improved methods of operating for the benefit of the customers of the firm; fundamental scientific research having the important bearing on the technique of the subject with which the industrial corporation is concerned."

Results of research along these lines have a value not only in the individual corporation but to the whole consuming world. Indeed, the basic need for productivity and its large dependence on further scientific study is being recognized by the organized workers themselves. And in the last annual convention of the American Federation of Labor they went on record as believing that "a broad program of scientific and technical research is of major importance to the national welfare and should be fostered in every way by the federal government, and the activities of the government itself in such research should be adequately and generously supported in order that the work may be greatly strengthened and extended."

The major problem in connection with industrial research is not, then, so much to convince ourselves of its need, as to provide adequately for meeting the need. Different types of laboratory are required for different types of research problems, as Mr. Mees points out. He himself lists seven; but wisely gives substantial evidence to his discussion of the cooperative laboratory—one run by a group of cooperating manufacturers. It seems clear that as national trade associations become stronger they can by working in close conjunction with the research agencies of the federal government assume the largest part of the burden of industrial analysis. Moreover, our governmental research bodies, like the Bureau of Standards and the Bureau of Mines, must be strengthened and extended. The fine professional pride now prevalent and the high quality of work already done in these bureaus, are in a fair way to be extinguished by meager appropriations. Only the other day another able research bureau chief, after waiting for several years for a rightfully expected increase, resigned to take work with a private company at more than double his present salary.

Mr. Mees' book is unwittingly a brief for the adequate public support of such men as these indispensable but reticent civil servants. It is a brief for greater generosity publicly and privately in behalf of industrial research. It is a brief for extending scientific control to that phase of manufacturing work where quality is measured and where all economies in process can be discovered. Clearly, forcefully, tersely written, this book merits a wide reading in professional and business circles.

O. T.

Maureen, by Patrick MacGill. New York: Robert M. McBride & Co.

FREQUENTLY in modern popular fiction the *deus ex machina* appears just in time to save the family plate, the hero's life, the ingenue's virtue, or whatever happy consummation may be desired; but in *Maureen* this convenient god swoops in, tears lover from lover,

murders three characters, and departs leaving the reader gasping with surprise.

The novel essays too much. It gives pungently real scenes from Irish village life. It affords some hint of the backfires from the European war. It considers the Sinn Fein movement. It tells in much detail how to make potheen (equivalent of moonshine). It draws some colorful portraits. But unfortunately it aims to unite all these elements upon a romantic, old-fashioned, and melodramatic plot.

Maureen is the high-spirited heroine, an illegitimate child who is so innocent of everything including land values that she sells the old farm for a pittance to Columb Ruagh. She leaves the parish because of the brand of outcast upon her, and because of her love for Cathal Cassidy who is like the young Washington of the school-books. There is also Eamon na Sgaddan of the older generation. He is constantly being harried by Columb, the miser-villain, who has some inside information on Eamon's private life. In time, however, Eamon goes to his reward, Maureen is persuaded to return to the parish, and Cathal renews his successful wooing. Perhaps at this point the author realized the too standardized course of the story, and hence threw in the unnecessary and far-fetched catastrophe.

The plot, obviously, is of secondary value in *Maureen*. Yet it is so persistently present that it interferes with the effective sketches presented for our consideration. The Sinn Fein movement is touched upon, but that is all. We learn of it as something embraced especially by the younger generation, like the tickle-toe. We get little hint of its causation or inevitability.

Perhaps one expects too much because of the heritage of Synge, Yeats, Dunsany, Gregory, AE, and other great of the immediate past and present in Irish literature. In *Maureen* there is considerable alloy, yet much good metal and some precious. But the whole thing needs fusing.

J. C. L.

The Rolling Stone, by C. A. Dawson-Scott. New York: Alfred A. Knopf.

IN *The Rolling Stone*, Mrs. Dawson-Scott has done an astonishing thing—she has produced an almost incredibly even book. There is not a single sentence that is patently absurd, not a paragraph that is impossible. And this even-minded quality is by no means limited to the writing. Neither in concept or character, in action or setting is the stolidity of the book shaken. There is a restraint that operates upon diction and plot equally. *The Rolling Stone* is predominately a competent book.

It is the story of a middle-class Englishman, from childhood through his wanderings, until, middle-aged and weary of experimentation, he comes home to settle down. But intrinsically, the worn analogy of the title has intrigued the author, and Harry King, after his infancy, never achieves humanity.

The reader is informed that King is different—unconventional—an experimenter—a fierce, strong individual, but he disproves his creator's statement. He is always conventional. The creed is inarticulate, but the attitude—the method—is ready-made and inflexible. No amount of scene shifting changes this conventional person. No spiritual adventure penetrates his dogmatism. The Boer War might have been an iron foundry, or syphilis a flea-bite, for all the development Harry King experiences. Mrs.