

up by anyone who has not been to Berkeley and studied under Leuschner himself. The latter is a modernised version of the methods in vogue on the Continent, and it is unlikely that it will yield, on this side of the Atlantic, to Leuschner's method. It offers more straightforward processes and greater facilities for checking at each stage.

The first three chapters by themselves enable a computer to prepare an ephemeris of a body from its known elements, and also to comprehend fully the motion of a body moving under a central attraction. The tables that accompany the work are printed with flat figures; American printers have not yet realised that head and tail figures only are used in the best tabular productions. Otherwise the book is well printed, and it will certainly be welcome wherever English is spoken. L. J. C.

*Religion and the Reign of Science.* By F. Leslie Cross. (Anglican Library of Faith and Thought.) Pp. x + 111. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1930.) Paper, 2s. 6d. net; cloth, 4s. net.

MR. CROSS is inclined to think that the religion and science controversy has lost interest and that this is due to a prevailing scepticism, which is having a disintegrating effect upon culture in general. People have certainly turned away from the older type of apologetic, but they are still interested in trying to see how scientific theories affect their philosophy of life; and Mr. Cross's book should help them to form intelligent opinions here. He points out that the development of science has led to "an increase in the range of casual determination, but a decrease in that of final determination". Everything had its cause, but nothing its reason. Not only miracles and prayer, but even human freedom, seemed altogether ruled out.

Mr. Cross holds that the question of freedom is more important for religion to-day than the question of miracle: "The unbelieving multitudes to-day are little helped by miracles"; and he gives a very able summary (pp. 30 and 31) of the bearing of recent physical theories upon the problem of freedom. He is not guilty, however, of trying to exploit the new physics in the interests of theological theory, and warns us that the views of such thinkers as Whitehead, Eddington, and Jeans "are highly individual, and have received little assent from the learned world". This is a very competent and useful book.

*The Archaeology of Kent.* By R. F. Jessup. (The County Archaeologies.) Pp. xiv + 272 + 13 plates. (London: Methuen and Co., Ltd., 1930.) 10s. 6d. net.

If London justly holds first place in the "County Archaeologies" on the ground of its historic importance, Kent is no less entitled to the second place for its archaeological interest. It is a county peculiarly rich in relics of the prehistoric and early historic periods. It was in its plateau gravels that Benjamin Harrison found the famous eoliths over which controversy is not yet stilled; Kit's Coty House and Coldrum are amongst the most interest-

ing of our megalithic monuments; and in Richborough, which for some years has been under excavation by the Office of Works and the Society of Antiquaries, it possesses a site which was in occupation by the Romans for practically the whole of the period of their stay in Britain. Its Saxon relics are no less interesting for the light they throw on the relations of Kent both with the Continent and the rest of England. The evidence for the various periods is passed in review by Mr. Jessup, but his account of Kent in the neolithic, bronze, and early iron ages will be particularly appreciated, as this is the first time that the detailed evidence has been brought together. His treatment of eoliths may appear a trifle over-cautious, and it would have been an advantage had he dealt more fully with the physical characters of the various races who settled in the county.

*Insomnia: an Outline for the Practitioner.* By Dr. H. Crichton-Miller. Pp. xi + 172. (London: Edward Arnold and Co., 1930.) 10s. 6d. net.

DR. CRICHTON-MILLER, who is the director of the Tavistock Square Clinic, is to be congratulated on his book on insomnia. It is probably the best book on the subject. It is not too long and is extremely well set out. The author has not shown any hide-bound prejudices and treats each case strictly on its merits. In so many cases, there is an emotional factor at work, and until this is satisfactorily dealt with, it is quite useless giving drugs and trying to 'cure' the insomnia. In the chapter on the psychological aspect of insomnia the various views on the conflict of life are placed before us. In this chapter, Dr. Crichton-Miller is careful to point out that Jung's views are more philosophical than scientific; he is at heart a mystic. The chapters on general treatment and medicinal treatment are good, although we would like to see psychotherapeutic nurses have a training of twelve months in a mental hospital, not three to six months!

*Vorlesungen über Wellenmechanik: gehalten an der Staats-Universität zu Columbus, U.S.A.* Von Prof. A. Landé. Pp. iv + 132. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1930.) 9.50 gold marks.

THESE lectures are more in the nature of comments on wave mechanics than a formal treatment. This is especially true of the first three sections, on waves and corpuscles, the uncertainty principle, and quantum statistics, in which the points of similarity and dissimilarity between the old and new ideas are brought out with great clarity. Under the second head, Prof. Landé gives a neat derivation of the number of degrees of freedom in a system of stationary waves, taking as fundamental the conception of cones of radiation, a method usually explicitly avoided in this connexion. The remainder of the book contains an outline of the applications of wave mechanics on more stereotyped lines, and includes accounts of the derivation and applications of the simple wave equation, the wave mechanics of systems undergoing temporal change, and relativistic wave mechanics.