

*Lectures and Essays by the late William Kingdon Clifford, F.R.S.* Edited by Leslie Stephen and Sir Frederick Pollock. 2 vols. Pp. 410, 342. (London: Macmillan and Co., Ltd., 1901.) Price 10s.

It is neither upon his popular lectures nor upon his crude essays in metaphysics that Clifford's permanent reputation is based. But it is not surprising that they still find numerous readers; they are so free from pedantry, so engagingly frank, so evidently the work of a man who sought truth with a really passionate desire. We may smile at Clifford's theory of "brain-stuff," which is easily demolished by the very same kind of criticism which he himself applied to "The Unseen Universe"; we may feel justly astonished that a mind so penetrating in many ways should believe that consciousness is a complex of elementary feelings, which can separately exist as things in themselves; we may regret the occasional bitterness of his invectives, even while we remember that they were inspired by a hatred of priestcraft and superstition. But with all this, when we turn again to these fresh and stimulating pages, and when we read once more Sir Frederick Pollock's graceful and generous introduction, we can understand how Clifford charmed and impressed his contemporaries, and how keen was their sorrow at his premature death. It is, perhaps, not altogether fanciful to compare Clifford's fate with that of Robert Louis Stevenson; in each case a reaction has followed the too partial praise of admiring friends, and this disparagement is again being corrected by a more dispassionate criticism.

*Teoria delle Funzioni Analitiche.* By Giulio Vivanti. Pp. 432. (Milan: Ulrico Hoepli, 1901.) Price 3 lire.

"A POCKET guide to the Theory of Functions," may strike many pure mathematicians as being a rather startling innovation. But the rate at which mathematical knowledge is added to every year makes it increasingly difficult for a mathematician to acquire a thorough acquaintance of more than a very limited range of study, and if the physicist, for example, has to derive his information on the theory of functions from large treatises and scattered literature, "life is too short" and the work is crowded out by other matters.

The book is divided into three parts, the first containing the elements of the theory of groups, the second the general theory of analytical functions, while the third contains a sketch of certain recent developments of the theory of functions. Prof. Vivanti bases his treatment on Weierstrass's methods. At the end is a list of 218 books and papers dealing with the subject, all for the very small price of half-a-crown.

It is much to be wished that a reaction may be set on foot in this country against the over-elaboration and specialisation of mathematical text-books by the publication of a series of small handbooks similar to this little Italian treatise. The need for a change of this kind is well illustrated by a copy of the 1860 edition of Routh's "Rigid Dynamics," which the present writer has just acquired. It bids fair to be much more useful in teaching a certain class of student than the modern large two-volume editions.

*Graduated Exercises in Elementary Practical Physics.* By C. J. Leaper. Pp. iii + 264. (London: Biggs and Co., 1901.) Price 2s. 6d.

THIS contains the usual elementary exercises in physics, and it is not obvious what special advantages it offers. Many of the diagrams are very bad, and the printing is poor. Examples are given for the students to follow; thus we find the product in Boyle's law carried to six significant figures, and the latent heat of fusion of ice to five figures. How often are we to cry out against this?

NO. 1695. VOL 65]

#### LETTERS TO THE EDITOR.

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#### The Education Bill.

THE suggestion in your editorial memorandum last week on this subject is one for which there is a remarkable precedent in the history of educational controversy. That suggestion is to the effect that, having regard to the complexity of the subject, to the fact that the urgent need of our time is the organisation of secondary and higher instruction, while the condition of our primary instruction is, on the whole, satisfactory and but for the demands of the voluntary schools would not require any material change at all, it would be well to divide the Bill into two parts and to press forward during the present session the enactment, with due modifications, of that part which affects intermediate and scientific education, and so to leave the part relating to elementary education for fuller consideration another year.

This course would be precisely similar to that adopted by Mr. W. E. Forster in 1869, the year before the Elementary Education Act. He had been a member of the Schools Inquiry Commission, which had recently issued a memorable and most comprehensive report, the work largely of the late Lord Lyttelton and the present Archbishop of Canterbury. As Vice-president of the Council, he introduced the Endowed Schools Bill, which was designed to deal with the whole problem of secondary as distinguished from elementary instruction. The Bill was divided into two parts, the former providing for the urgent need of the moment, the reform of the ancient and often obsolete and useless endowed foundations, and the latter constituting central and local authorities for the coordination and improvement of all classes of secondary schools—private, proprietary and municipal—for the registration of teachers, for the provision of needful schools, and for the construction of a coherent system of secondary education for the whole country. But it happened then, as it is happening now, that such a large and far-reaching proposal touched many interests and involved many difficulties, and that it proved impossible to pass the whole Bill in one session. So Mr. Forster wisely abandoned the second part of the Bill, and resolutely secured the passing of the first. The Endowed Schools Act thus simplified and placed on the statute book is still in force, and has proved to be one of the most beneficent of modern Acts of Parliament. It created a special Commission, with power to inquire into the history and resources of educational foundations, to revise and modernise their statutes and deeds of gift, to reform the governing bodies, and to secure the permanence and increased public usefulness of educational endowments generally. Other attempts have been made in subsequent years to deal piecemeal with the larger projects of educational reform contemplated by the Government of 1869; but it remains on record that if an attempt had been made to enforce the enactment of the whole measure, the Endowed Schools Act, which has proved of such signal public service, would never have been passed.

Without renewing any discussion as to the merits or demerits of the new Bill, it may interest your readers to be reminded of the precedent thus set more than thirty years ago. If that precedent were followed in the present case, it would at least give an opportunity to the newly constituted local authorities to deal at once with technical and secondary education, and thus to gain a new title to public confidence. The public would then be enabled to judge, after one or two years' experience, of the expediency of entrusting to these bodies the larger and more difficult task which the present Bill proposes to hand over to them—the virtual reconstruction of the whole existing system of elementary education.

J. G. FITCH.

Athenæum Club, April 22.

I FIND myself in entire agreement with the views expressed by Principal Lodge in the last number of NATURE. And if any practical illustration were needed to support them, I think it is afforded by the invaluable work which has been done for secondary education in the county of Surrey.

Until the County Council took the matter up, the educational destitution of western Surrey as regards secondary schools was