scholars proceeding from the elementary to the secondary schools in the area.

The main conclusions may be very briefly summarised. The ladder of which Lord Birkenhead spoke affects at most 20 per cent. of the elementary school population; 80 per cent. go no further in their scholastic education. It also appears quite clearly that the minority who do pass on are mainly from the lower middle class of clerks and small traders, and that their children by their continued education are enabled to remain or rise a little higher in the same class. Individual cases are mentioned of the sons of manual workers who become professors or civil servants, but it is abundantly proved that the mass of the workers are untouched by the secondary system. The root of the difficulty is poverty. Even if more secondary and central schools were provided, the need of the parents for their children's earnings would prevent any large number taking advantage of them.

To Mr. Kenneth Lindsay this fact points to a much more generous subvention from the State towards the maintenance of scholars: he indicates his own belief in an all-round allowance to parents. From the educational point of view the book will incline most of us to the solution just advocated in the Report of the Consultative Committee on Adolescent Education, namely, the gradual raising of the universal school age to fifteen years as economic conditions permit, that is, concentrating more on the improvement of the education of all than on a large immediate increase either in secondary schools or in scholarships.

F. S. M.

## Our Bookshelf.

The Work of the Royal Engineers in the European War, 1914-1918. Compiled by Col. G. H. Addison. Published by the Secretary, Institution of Royal Engineers, Chatham. Miscellaneous. Pp. iii + 372 + 100 plates. (Chatham: W. and J. Mackay and Co., Ltd., 1927.) 20s.

This volume, the last of the series prepared by Col. Addison to illustrate the manifold activities of the corps of Royal Engineers during the recent European War, covers a wide range of activities. It shows in what manner the corps rose from 1569 officers and 23,521 other ranks (including Territorials) in August 1914 to 11,830 officers and 225,540 other ranks in August 1918. The mere list of units included in 1918 shows what the developments in warfare had brought under the control of the corps: water boring, sound ranging, tunnelling, gas and anti-gas methods, meteorology, land drainage, forestry, laundry, cinema and camouflage were amongst the many which the engineer in-chief had to organise and supply with stores.

The subject of most general interest in this volume is the account of the camouflage service. Once again we see the shattered tree near Burnt Farm, and we learn that Colonel Solomon drew its bark from the King's Park at Windsor. It is not without some amusement that we note that for purposes of R.E. the artists in the Camouflage section were rated as painters and the sculptors as plasterers. From the chapter on the organisation of engineer intelligence and information emerges the somewhat startling fact that none of the maps supplied to the Army by the French staff recorded the existence of the unfinished Canal du Nord.

The chapters on concrete defences, on forward communications (duckboard tracks, decauville, mule tracks, plank roads, etc.) and on machinery, workshops (with the wonderful list of articles manufactured by the R.E. during the War), and electricity have their own special interest and might serve as a very useful text-book for engineers engaged in pioneer work in the outposts of civilisation. The concluding chapters on searchlights, inundations (our own and the enemy's), and training schools help further to illustrate the magnitude of the whole task of organising the engineering services required in the War and the success with which the task was accomplished.

Practical Organic and Bio-Chemistry. By Prof. R. H. A. Plimmer. New edition. Pp. x + 568. (London: Longmans, Green and Co., Ltd., 1926.) 21s. net.

THE need for a new (the third) edition of this book is in itself an indication of the appreciation of the public to which it is addressed. The author in revising his work, in addition to making numerous changes of detail, has again to some extent modified its scope. The book has been made more theoretical and less practical and at the same time more elementary.

We greatly regret this decision on the part of the author. Instead of developing into a valuable aid to laboratory practice in general biochemistry, the book is gradually becoming unequal in its treatment of various branches of the subject and overweighted with theoretical matter, much of which is too condensed (e.g. the anthoxanthins, the terpenes, and the alkaloids) to be of value for the class of students for which the main bulk of the book is intended.

Considered as a text book for medical students, however, the book preserves the qualities which it has always possessed, and the sections on proteins, colloids, and digestion may all be cited as characteristic examples of the mode of treatment.

If, however, its virtues have been retained, so have some of its vices. The author still omits all reference to hydrogen ion concentration, its determination and its influence on biochemical phenomena. This constitutes a very serious, and in our opinion inexcusable, defect from which the book suffers throughout. The student, medical or other, who relies upon this work will find himself in this respect deprived not only of a general point of view of the greatest utility, but also of much