

state of process work will be astonished at the wealth and efficiency of methods that are at his service as shown by the admirable specimens which are included in this volume.

The present issue is considerably larger than its predecessors, both the articles and illustrations being more numerous; greater prominence is given also to the work of various technical schools and institutions.

Enough, perhaps, has been said to indicate the value of this book, which so beautifully portrays the present stage of advancement in process work.

Geometrie der Dynamen. By E. Study. Two vols. Pp. xiii+603. (Leipzig: B. G. Teubner, 1901 and 1903.)

THE title of this book is somewhat misleading. The object of the first two parts is the discussion of certain geometrical theorems. From these the laws for the composition of wrenches (Dynamen) can be deduced as particular cases. To this special application, from which the book takes its title, only pp. 116 to 121 are devoted. In the first part of the book the geometrical theorems (which deal chiefly with the composition of vectors, wedges, motors, &c.) are proved by purely geometrical methods, and the reader is assumed to have only a good working acquaintance with pure geometry, and in particular a knowledge of the theory of the composition of screws and translations (such as is supplied, for instance, in Schoenflies's "Krystall-systeme und Krystallstructur," pp. 326 to 340). In the second part the analytical proofs of the same geometrical theorems are given, but the author still confines himself to elementary methods. The third part, which contains the larger portion of the book, appeals to a more advanced class of readers who are familiar with the method of modern analysis and the theory of groups. Here the author seeks to supplement the work of Plücker, Ball, and Sturm, and to give a complete discussion and classification of linear line-complexes. A good index and table of contents are given in the second volume.

H. H.

The Schoolmaster's Yearbook and Directory, 1904. Pp. ix+1030. (London: Swan Sonnenschein and Co., Ltd., 1904.) Price 5s. net.

THIS is the second annual issue of a very useful publication. It is, what on the title-page it professes to be, a reference book of secondary education in England and Wales. The book consists of two parts; the first contains general information and the second comprises lists of secondary schools for boys and of the masters who teach in them. The general information would have been more useful and more easily accessible had it been considerably condensed; for the essential matter in works of reference is to have the important facts clearly presented with a minimum of description. The "Yearbook" is, however, sure to be widely used, and deserves the popularity it has secured.

Junior Country Reader. I. True Animal Stories By H. B. M. Buchanan, B.A., and R. R. C. Gregory. Pp. vi+121. (London: Macmillan and Co., Ltd., 1903.) Price 1s.

THESE tales, told in very simple language, are sure to please children of seven or eight years of age. The stories are founded on fact—some of them upon observations recorded from time to time in NATURE. The illustrations, from photographs by Mr. Charles Reid, are numerous and good. The book should serve excellently to awaken in children an interest in animal life.

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LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

Destructive Action of Radium.

IT may interest some to know that radium destroys vegetable matter. I happened to replace the usual mica plates, used to keep in the small quantity of radium in its ebonite box, with a piece of cambric, so as to permit the whole of the emanations to pass out, mica stopping the α rays.

In four days the cambric was rotted away. I have replaced it now several times with the same result.

BLYTHSWOOD.

Blythswood, Renfrew, N.B., February 1.

Phosphorescence of Photographic Plates.

WITH reference to letters in NATURE of January 28 and preceding numbers, on "Phosphorescence of Photographic Plates," it seems to be not out of place to direct the attention of those interested in the subject to *Wiedemann's Annalen* of 1888, vol. xxxiv. There will be found, on pp. 918-925, information which may prove of use in further investigation.

P. LENARD.

Kiel, January 31.

The French Academy.

WHAT Mr. J. Y. Buchanan says (p. 293) about the French Academy is to me much more wonderful than the revelations of radium. It appears that there is a happy land close by where a scientific man of recognised standing can indulge in the luxury of original research, and then send in an account of his work, *not* to have it rejected by the opinion of, say, a couple of fellow-men, but actually to have it published as a right! This seems impossible. It is the encouragement of original research. Perhaps it is hopeless to expect such freedom in this stick-in-the-mud country, which is so much in love with tradition and antiquated forms. Without any desire to be "contumelious," I would say that our Royal Society reminds me of the House of Lords in many respects.

OLIVER HEAVISIDE.

January 31.

Ambidexterity.

IN certain schools, notably, for instance, in Mr. Liberty Tadd's art schools in Philadelphia, children are taught to become ambidextrous, at least to a considerable extent. The advantages of this plan have seemed to be evident, but Mr. Wm. Hawley Smith, the well-known writer on educational topics, has lately (*School and Home Education*, March and October, 1903) argued against it. In a letter just received from him, his views are concisely summed up as follows:—"My notion is, that it is not worth while to try to make *all* our children ambidextrous. I believe that it is *far* wiser to follow nature's lead, with each individual child, and develop them in the use of their hands as they naturally wish to use them. . . . I am sure that, in most cases, we shall fail to secure real skill with *either* hand if we strive to train *both* to do the same work." Mr. Smith further argues that it is hard enough to train one hand to do the more complicated kinds of work, and that it does not pay to waste energy trying to accomplish the more difficult feat of training both. Of course the validity of this argument depends largely upon the assumption that the lack of coordination ordinarily seen in adults is inherent, and not the result of acquired habit, or not largely so. It is perhaps allowable to suggest that this point has not yet been fully decided. It is also a question whether the relative inability of one hand is correlated with an inefficiency of the opposite side of the brain, or putting it another way, whether the extra muscular activity necessary to train two hands instead of one involves a similar increase in mental activity.

There is, however, a third possible plan to follow. While I am in nearly all respects right-handed, I draw with my