

would be even clearer, perhaps, to speak of these salts as mono-, di- and tri- *potassium* phosphates. In all cases it is desirable to give the formula as well as the name of the salt.

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THE LOAN OF LANTERN SLIDES TO ILLUSTRATE
LECTURES ON HOOKWORM DISEASE

REQUESTS for the loan of lantern slides to illustrate the anatomy and life history of the hookworm and the methods of preventing hookworm diseases have increased to such an extent that I have ordered several extra sets of forty-five slides each.

These slides will be loaned to medical societies, colleges, schools, teachers' associations, women's clubs, etc., that may desire to use them. The two conditions attached to the loan are: (1) that all requests be forwarded through the secretary of the state board of health; (2) that the slides be returned, express prepaid, immediately following their use.

Preference will be shown to societies and institutions in hookworm-infected states.

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SCIENTIFIC BOOKS

Die Variabilität niederer Organismen. Eine deszendenztheoretische Studie von HANS PRINGSHEIM. Berlin, Julius Springer. Pp. 216.

Dr. Pringsheim has done a unique and valuable piece of work in thus resuming our knowledge of unicellular organisms from the standpoint of the student of variation, heredity and evolution. The book is based mainly on bacteriological work, together with work on yeasts and pathogenic protozoa. This is probably just, since it is chiefly in these groups that investigation has gone deep enough to furnish data on the problems of genetics.

Other groups of protista are not left out of consideration, and a number of the more important pieces of work on these are dealt with, but the pertinent literature is by no means so fully considered as in the case of the groups mentioned. The author is himself an investigator in bacteriological lines, and has gone over the literature in this and related fields with a fine-toothed comb, bringing forth whatever bears on the problems of genetics. This material is well digested and is arranged in unified sections following a well-laid-out plan. The references to literature are so extensive as to make this a handbook of the subject.

There is an introduction dealing with variation and inheritance in a general way. This is followed by sections on the struggle for existence in lower organisms (with many concrete examples, of great interest); on the normal "breadth of variability"; on variation in form and structure; in colonial growth; in movements and reactions; in spore-formation; in production of ferments and of colors; in virulence; variation as evidenced in acclimatization to heat and cold; to light; to variations in food and oxygen, to poisons, etc. A final chapter gives some general results, with suggestions for future work.

A broad view is taken of all these phenomena, so that the author gives us what might be called a general (though condensed and concrete) treatise on the physiology of protista, dealt with from the standpoint of genetics. From the purely physiological point of view the result serves as a valuable corrective for the impressions obtained from physiological works that deal chiefly or only with the supposedly typical.

The author is very conservative as to the conclusions to be drawn regarding fundamental problems, though this does not conceal the enthusiasm which he feels for his subject, particularly for its future. He holds that it has been proved that in certain cases fluctuating variations have shown themselves heritable, giving rise to new races; and that in some cases direct adaptations have proved heritable—concrete cases being cited for each.