education which are to be upheld in China can surely be settled if the experiences of this country are taken into account. It is clear from American experience with low-grade medical schools catering to students with inadequate preliminary training that inestimable damage may be done, both to the medical profession and to the public, by a policy which permits of such a condition, even though it is proposed with the best of motives. The only rational view, looking ahead into the future, is that those responsible for medical education in China must demand an adequate medical training based upon a sufficient preliminary education, including the fundamental sciences. There is little question that education in China is changing with great rapidity. It seems clear that the social status of the physician is growing in popular respect. It is probable that the number of well-trained young men who are anxious to study medicine is constantly on the increase. Further than this, some of the great obstacles to satisfactory education in medicine, notably the Chinese objection to dissection, are gradually being overcome, and there is evidence that the attitude of the Chinese authorities towards western medicine is rapidly becoming more and more favorable.

The question of the language to be used as a medium for the instruction of the Chinese in medicine is also a matter of dispute even among those who have spent years in China. The most potent argument in favor of a foreign language, such as English, seems to be the lack of literature in the Chinese language. The day has gone by when medicine can be studied by means of text-books alone. Further than this, the medical man must be a student all his life and a student of current literature. There are doubtless many weighty reasons against the use of the English language in Chinese medical education. Few of them, we believe, can have the importance of this one in favor of it.

The recommendations of the commission seem to be founded on a fair estimate of the needs of the situation based on an impartial review of the facts obtained. They suggest the financial support of certain medical schools which are well situated and are capable of requiring and enforcing high standards of medical education. They provide for the establishment of model tuberculosis hospitals and aid in developing the general hospitals which serve the medical schools. They suggest the creation of scholarships for Chinese medical students and nurses, and fellowships for Chinese graduates and western medical workers in China who may wish to refresh their knowledge. They encourage the development of one or two well-equipped medical libraries and the advancement of laboratory and research work. All of the activities are to be carried on under the general supervision of a resident commissioner and an advisory committee.

It would be unfair to conclude this review without mentioning one fact that the report clearly indicates, viz., that an enormous amount of unselfish work has been performed under the most adverse and discouraging conditions by the western medical men and nurses now in the Chinese Empire. It is clear that there are practically no medical institutions in China where ideal conditions are to be met with. The lack of funds, the lack of physicians and nurses, the lack of proper buildings and equipment, the traditions of the people, all of them combine to make medical life in China anything but a bed of roses. But after all, these very deficiencies can not fail to appeal to the imagination of medical men and of nurses who are imbued with the desire for service coupled with the spirit of the pioneer. For to the pioneer, more than to all others, comes the joy of the struggle with the crude and the unfinished, and the satisfaction of leaving in its place a finished product stamped with the individuality of the worker.

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Die Lichtelektrizität. Von WILHELM HALLWACHS. Akademische Verlagsgesellshaft Leipzig, Germany. Mit 19 Figuren in Text. Pp. xi + 1–343.

This is, in all respects, the most compendious and complete treatise on photo-electricity which has yet appeared. Being written by one who is credited by Hertz himself with the discovery

of the real nature of the effect of ultra-violet light in facilitating discharge, and in honor of whom the phenomena of photo-electricity are not infrequently called "The Hallwachs Effect," one too whose laboratory has been perhaps the most continuous and prolific contributor to the literature on the subject, this book gains an authoritativeness which none of its predecessors can claim.

In addition, the book has been written with an admirable objectiveness and freedom from bias of either a national or personal kind. All experimental work is reported fairly and fully, and all theories are presented from the points of view of their authors. Professor Hallwachs does not hesitate to state his own convictions, but he never seeks to impose them. If only the scholars and statesmen had carried over into political affairs the method and spirit which Hallwachs here exemplifies, there would have been no great war.

Professor Hallwachs divides his historical survey of photo-electricity into two periods: the first period extends from the discovery of the photo-electric effect in 1887 to the year 1900; the second period covers the period from 1900 up to the present. This division is probably due to the fact that the interpretation of all electrical phenomena from the standpoint of the electron theory began about 1900.

The first two hundred pages constitute an exceedingly valuable digest of all the experimental work done up to August, 1913. In the 11th Chapter, too, this summary is extended so as to include all articles which appeared up to the end of the year 1913. Some of the most interesting photo-electric developments which have appeared since 1913, especially those having to do with the relations of Planck's h to the initial energy of emission and the relation of gases to photo-electric discharge, could not be included at the date at which the book went to press.

The portions of the book thus far considered make it an invaluable reference book to every student of photo-electricity. But it is in the thirty-five pages included in Chapter 9 that the greatest interest in the book will center, for it is in this chapter, which is entitled "Ueber den lichtelektrischen Grundprocess; Versuche einer speziellen Deutung der Lichtelektrischen Vorgänge," that the author reviews and weighs all attempts which have been made thus far at an interpretation of photo-electric results. He does not commit himself to a belief in any theory thus far formulated. He gives, however, a very clear exposition of the strength and weaknesses of the theories which are at present before the scientific world.

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Sewage Purification and Disposal. By G. Bertram Kershaw. London, Cambridge University Press, 1915. Pp. x + 340, 56 figures.

Although books on sewage purification and disposal are becoming increasingly numerous this new work of Mr. Kershaw's is a welcome addition to the list. The author was engineer to the Royal Commission on Sewage Disposal for many years and has a well-deserved reputation not only in England, but in this country. No one has had a better opportunity than he has had to study the various methods of sewage treatment under English conditions.

The present volume is a recapitulation of some of the previous works of the author and is published as one of the Cambridge Public Health series. It deals chiefly with the methods which have shown their value by experience and does not pretend to cover some of the newer processes which are now in the experimental state. For this reason it is a more satisfactory book to place in the hands of students than are those which do not take pains to discriminate between the old and the new, the tried and the untried. Throughout the book there is frequent reference to the cost of processes. The data are valuable, but American readers must remember that the conditions in England are different from those in the United States, and in general it will be necessary to nearly double the English prices in order to make them applicable to conditions in America.

The author omits entirely the subject of disposal of sewage by dilution as that subject