

or perfected intracapsular method; and free from dangers attending pressure required to rupture the suspensory ligament of the lens, and so it may bring intracapsular extraction into more general favor.

The seriousness and formidable character of cataract extraction depend largely on the length of the incision required to furnish adequate outlet for the senile crystalline lens. Discission, linear extraction, or the old suction operation on a soft lens, are much less formidable. Iridectomy is nothing like so serious a menace to the health of the eye. It can be predicted with probability that the next radical change proposed for the operative treatment of cataract will be some method of cutting to pieces, or crushing, the firm nucleus; permitting the removal of the lens thru a relatively small opening. The crushing of stone has largely replaced lithotomy, which in some ways corresponded in general surgery to cataract extraction in ophthalmology. A carefully worked out technic, that would make possible removal of the senile nucleus of the lens thru an 8 mm. incision, would certainly attract attention and become a starting point for new advances.

E. J.

GRADED EXAMINATIONS IN OPHTHALMOLOGY.

America does not always look to "conservative Britain" for radical changes in professional institutions. But it must be admitted that in the matter of examinations to test fitness for ophthalmic practice, the Conjoint Board of the Royal Colleges of Physicians and Surgeons in London has taken a decided step in advance of the American Board for Ophthalmic Examinations. It has announced that graduates in medicine with a registrable qualification may at any time enter for part I of the examination, which includes the anatomy and embryology of the visual apparatus, the physiology of vision and elementary optics.

This plan has important advantages

over that of requiring the needed clinical experience, as evidenced by attendance on clinics, assistantships, etc., or reports of clinical cases, before admitting the candidate to examinations on anatomy, histology, pathology, physiologic optics and diagnostic methods. For the young man fresh from University and State Board examinations, those on the fundamentals of ophthalmology will seem much less formidable or embarrassing; he will be much more likely to try for the evidence of higher qualification at this time, than after years of freedom from such tests and divergence from systematic and laboratory studies. After attention has been turned to clinical work he will be more disposed to meet requirements of case reports, or the clinical examination into his working methods.

But the great advantage of the divided, or graded examination is that it will emphasize the importance of training in fundamentals, before taking up the clinical work in ophthalmology. Those of us who have grown up under the old regime are far more generally lacking in the fundamental training than in clinical experience. And the defects that exist in our clinical knowledge are closely associated with our lack of fundamental training. There is an enormous waste of the student's time in attempting to follow the work of a clinic, before he knows the anatomy and pathology of the structures involved in the diseased conditions presented. More than that the proper insight into disease never can be obtained without the interpretation that fundamental training furnishes.

There is economy of time by concentrating attention first on certain related studies, and then on others that naturally belong together. The course of study in preparation for medical practice is already too long, as compared with the period of human development and active life; and every change that will economize the students' time should be made. The practical spirit of the American profession should be quick to adopt this improvement in the way of testing fitness for

ophthalmic practice, and of indicating to those who are preparing for it, the rational and effective way to pursue their studies.

E. J.

BOOK NOTICES.

Der Augenhintergrund bei Allgemeinerkrankungen. By H. Köllner, M.D. Prof. at Würzburg. 8 vo., 190 pp. with 37 illustrations, 27 in colors. Berlin, Julius Springer. Price in paper 38 marks.

This guide for physicians and students gives an excellent account of the changes in the ocular fundus in general diseases. Its scope is somewhat broader than its name implies, for the first dozen pages are given to the technic of the examination, and ten more to the ophthalmoscopic appearances of the normal eye ground. The general pathology of the retina of the choroid and of the optic nerve occupy 25 pages; and then the special pathology of the various diseases is taken up.

Matter relating to special pathology occupies 125 pages. It is classified under infectious diseases including septic and acute infectious diseases; malaria, tuberculosis, and syphilis, acquired and congenital. Then come diseases of the respiratory organs, those of the digestive organs and sexual organs including the ophthalmoscopic changes in the fundus of the new-born. Nephritis, diseases of the circulatory apparatus, blood diseases such as the anemias, the so-called hemorrhagic diathesis, diabetes, exophthalmic goiter, diseases of the cerebro-spinal system, and the nasal sinuses are considered, and also the poisons that produce ophthalmoscopic changes.

There is an adequate index of subjects. No index of authors is needed for no authorities are cited for the statements made, and no attempt is made to credit authors for the various observations given. The book simply undertakes to give what is already common professional knowledge. This is given in brief condensed form, the facts included being generally well chosen. The illustrations are in half-

tone and both in colors and in black serve to give meaning to the descriptions of the appearances to be looked for. Altho the paper has the high finish suiting it for half-tone reproductions, the letter press is also very clear, and the whole work creditable to both author and publisher.

E. J.

The American Red Cross in the Great War. Henry P. Davison. Small 8vo., 302 pp., 7 illustrations. New York, The McMillan Co.

This account of Red Cross activities by the Chairman of its War Council will be of interest to many people; but contains little referring to ophthalmology. It is calculated to bring permanent support to the organization, by spreading a comprehension of the varied emergencies that such an organization can best meet even in times of peace. One of these is the care and re-education of the blinded soldier. What is done for the disabled is here illustrated by the man blinded. "If in the first stage of hospital treatment it is thought possible that his vision will be permanently lost, the work of re-education begins without his knowledge. From that time on,—even while he is yet ignorant of the truth,—the doctors are "teaching him to be blind." While his eyes are still covered with an unnecessary bandage, perhaps, he is taught to do for himself things that the blind do, such as shaving and finding his way about."

"By the time the blinded man discovers the truth the crushing force of the blow has been broken. From that point onward,—on the journey home and at every stage he must pass before the last hope of saving his sight is abandoned,—he, unconsciously, is being trained in the rudimentary lessons of blindness."

A survey of the industries of the country shows that about 3 per cent of the manufacturing industries involve work which blinded men can do satisfactorily. In some branches blind men are more efficient because of their closer concentration and developed sense of touch.

E. J.