

injury to the neighbouring bones. He finds that the limit of conservative operation is when there is an injury of the patella and condyles at the same time, and recommends resection and fixation for permanent ankylosis. The rest of the article discusses wounds of the ankle and wrist, elbow and shoulder, and also the treatment of septic arthritis that supervenes when the original excision of the wound fails to attain primary union. Dr. Neuman then contributes the results of laparotomies performed from June, 1915, to March, 1918. He begins with a short historical review of the treatment of abdominal penetrating wounds, and then shows the personal statistics, which clearly emphasise the importance of an advanced post for laparotomies. The article then contains a detailed classification of the different types of abdominal wounds, with the appropriate treatment for each type and the statistical results. The article by Dr. Janssen contains a valuable review of the history of cranio-plastic operations, and a detailed account of his own method of cartilaginous or osteoperiostic heteroplastic grafts and the after-results.

Prof. Dustin contributes an article on the fasciculation of the various nerves of the arm and cervical plexus, and points out the importance of the arrangement of the fibres in estimating the prognosis of total section. Dr. Harde reports the relative frequency of the tetanus bacillus and other anaerobic organisms in a large series of wounds, and shows that very few cases ever develop clinical manifestations of the organisms, although they can be bacteriologically identified from the tissues. Further contributions on microbic growth and the mechanism of elimination of organisms from the circulation bring us to the last and longest article, by Prof. Levaditi.

This is a critical investigation into the effects of streptococcal invasion. The sections are arranged as follows: (1) The method of invasion, early and late; (2) the morphological and cultural characteristics of the different types discovered; (3) the reasons why clinical manifestations do not necessarily follow invasion; (4) hypersensibility and acquired immunity arising during the period of infection; (5) the effects of vaccination. Many charts of individual patients and details of their treatment and complications illustrate this important research.

The whole production is excellently printed and illustrated, and contains important contributions to some of the most intricate of war problems.

L. J. AUSTIN.

#### OUR BOOKSHELF.

*Faith in Fetters.* By the Rev. T. R. R. Stebbing. Pp. 223. (London: T. Fisher Unwin, Ltd., 1919.) Price 6s. net.

The author, a veteran naturalist of distinction, a great authority on Crustaceans, has here raised a protest against the continuance of superstition in modern theological doctrines and religious conceptions. The conventionally orthodox attitude to

the Bible is an anachronism. But he tilts too often against windmills, and there is more than a hint of wooden literalism in the examples he gives of Biblical contradictions and of anthropomorphisms which have become grotesque. The science of literature and of folklore has surely changed the educated man's attitude to the Bible much more than Mr. Stebbing's mode of treatment would suggest. The Thirty-nine Articles do not fare much better at his hands than do the Scriptures, for they are redolent with impossible anthropomorphisms. To take these literally may be superstitious, but it is surely possible to read them sympathetically as historical survivals. A theological or philosophical idea may be living and useful, though its particular form has grown musty.

From internal evidence the author shows that "the supposed inspiration and consequential infallibility of the Old Testament Scriptures rests on no solid foundation." But it seems to us that in his prosaic, unscientific treatment of the literature in question Mr. Stebbing leads his readers into a way of looking at things not less erroneous than a belief in "inspiration." If the author thinks that Church councils should make clear that they officially accept the scientific view of the Scriptures which the best modern scholars have expounded and many humble, clear-headed preachers adopt every Sunday, we are with him; but it should surely be possible to get rid of superstition without jettisoning imagination.

*Le Tube Coolidge. Ses Applications Scientifiques, Médicales et Industrielles.* Par H. Pilon. Pp. iii+83. (Paris: Masson et Cie, 1919.) Price 4 francs net.

M. PILON has written an interesting and timely brochure upon the Coolidge X-ray tube. He first enters into a description of the three types of these tubes which are available at the present time, namely, the standard tube, the first model of the inventor and the one ordinarily used; *Modèle A*, in which attention is especially directed towards the production of a very fine focus on the anti-cathode; and, lastly, the radiator type of tube, which was designed to meet the special requirements of the American Army Medical Service; this tube is a beautiful example of the inventive genius of Dr. Coolidge, the diameter of the tube being reduced to as little as 8 cm.

The second part deals with the radiation emitted by the tubes, the data being selected from the work of Coolidge and Moore, de Broglie, and others; a number of well-chosen illustrations exhibit the conditions necessary for clearness in radiographic images.

The concluding section is, for the main part, a reply to various criticisms which have been passed upon the performance of the Coolidge type of tube. A small section is devoted to the industrial applications of X-rays, and a final word is wisely said as to the necessity for the adequate protection of operators against the powerful and penetrating radiation from the modern X-ray tube.