BOOK REVIEWS


In this monograph, the author, a neurosurgeon, intends to bring the prolapse of intervertebral disks to the notice of surgeons and practitioners in Germany. His own experience appears to be very limited—only statistics taken from the predominantly American and British literature are given—and it is often not easy to discern whether he describes his own or quoted material and experience. The book takes the form of a collection of lectures, beginning with a chapter on the pathology and physiology of the disk, followed by discussions of the diagnosis, indications for, and technique of the operation, and the results as shown in the work of others.

He admits that German surgeons lag some years behind American, British, and French operators, and of necessity confines himself on most points to cautious consent to or doubt of the opinions of these authors. On one point he tends to be more radical than most. He considers a true traumatic rupture of the annulus fibrosus to be an extreme rarity and believes that degeneration has to precede most, if not all, cases of prolapse.

To the British reader the book will appear naive and about 10 years out of date. That German research into this sector of "rheumatism unmasked" should have been content with pathology—where Schmorl and Junghanns provided an ample basis—without advancing into surgery and therapy is the more surprising as a German surgeon, Fedor Krause, actually removed a prolapsed disk in 1909, only to misinterpret it as a chondroma.

The list of references once more shows how completely Germany, before and during the recent war, was shut off from the main stream of medical advance in the western world.

L. Michaelis.


This book contains useful information of the mineral content of various spa-waters and on climatology and balneology in general. Nevertheless, one has the impression that the authors, once mounted on their favourite horse, travelled, like John Gilpin, further than they intended. It is unfortunate that their steed failed to make the crossing of the Rhine in a westerly direction, for then the riders would have come under the influence of a different scientific climate. This might have made them hesitate to advocate the use of arsenic and iron-containing waters for iron-deficiency anaemia (p. 241), and, would perhaps, have prevented them from dogmatizing on the specific rejuvenating effect of radioactive baths in old age (p. 204). They would probably also have been willing to modify their belief in the unity of the rheumatic diseases, which, they suggest, should, like syphilis, be subdivided into primary, secondary, and tertiary stages: gout is described as a special variety of rheumatism and "Bechterew's disease" as a localized form (p. 210), while in its chronic form rheumatism is said to give rise to neuralgias, sciatica, etc.

The book is adequately illustrated, has an extensive bibliography (nearly all German), and a good index.

D. Preiskel.


This small book comprises seven lectures in which Professor Selye tells informally the story of his work on stress and of his concept of the general adaptation syndrome.

In the first lecture the author outlines his original interest in the syndrome of "just being sick" which occurs in a multitude of illnesses before specific signs of a particular disease are apparent. Early work on rats made him suspect that there might be an ovarian principle which caused adreno-cortical enlargement, involution of the thymico-lymphatic apparatus, and peptic ulceration. It turned out that this could be produced by many agents varying from putiditary extracts to formalin. He tells of a senior investigator's opinion that he was merely studying the "pharmacology of dirt", of encouragement by Sir Frederick Banting, and of the recognition of the three stages in the non-specific response of the General Adaptation Syndrome (G.A.S.): the alarm reaction, the stage of resistance, and the stage of exhaustion.

The second lecture deals with the dynamics of the syndrome and the role of the adrenal and pituitary. Selye compares the syndrome with that of inflammation; both are non-specific reactions which go through a series of distinct stages and both can be elicited by a variety of agents. The more an animal was injured by heat, cold, infections, and starvation the more the adrenal cortex grew. Some manifestations of the G.A.S. (such as eosinopenia and lymphopenia) were prevented by adrenalectomy, while others (such as gastro-intestinal ulceration and general wasting) became more pronounced.

The third deals with the highly controversial subject of the "diseases of adaptation". Experiments are described in which overdosing rats with DCA produced nephrosclerosis, hypertension, arteriolar lesions resembling periarteritis nodosa, and "rheumatic allergic disease". The difficulties of differentiating between the various factors of the anterior pituitary are discussed.

The fourth is concerned with the "conditioning" factors in these diseases. The author considers that stress invariably stimulates the pituitary-adrenal system, but that this process may have different results: one