

the reasons should apply to the individual, not to a nation; and they should be such as would cause him to exclude an American as quickly as a German, an Italian or a Russian. Science itself is imperilled far more than is any hateful political system when those engaged in the search for truth utilize courses of scientific instruction, scientific laboratories or scientific journals as weapons in political warfare.

In closing let me emphasize the fact that what I have written is in no sense a plea for toleration of totalitarian ideology. I am not among those who believe that it is a Christian duty to regard with tolera-

tion things which are utterly intolerable. And surely nothing could be more intolerable than the enslavement of the human spirit practiced under the totalitarian form of government! What I have done is to record my plea that scientists fight political battles with political weapons, and that they do all within their power to keep our academic halls and research laboratories sheltered from political storms, safe havens of intellectual sanity, calm judgment and free search for truth in a world gone mad.

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SCIENTIFIC BOOKS

INSULIN

Insulin. Its Chemistry and Physiology. By HANS F. JENSEN. New York: The Commonwealth Fund. London: Oxford University Press. 1938. Pp. 252.

It may be stated immediately that Dr. Jensen's book is an excellent one. More than ten thousand reports on insulin have been published since 1922, and an adequate study of this subject now touches upon many aspects of physiology and of protein chemistry. For this reason it is extremely difficult for one author adequately to cover all aspects of the subject, but Dr. Jensen has enlisted the aid of experts in physiological matters, and he, himself, is admirably suited to discuss the problem from the chemical view-point. By the same token, it is expedient for the reviewer to secure opinions from his colleagues who have worked along lines on which he is less competent to comment. One is happy to find that the chemists who have been consulted and who have first-hand knowledge in this field are very enthusiastic about Dr. Jensen's contribution.

In the first chapter an accurate and concise account of the history of insulin is given. In the second, the various methods for the preparation of the hormone are described, and a table showing the yields of insulin secured by the various procedures is given. Here it may be remarked that, as many of the reports express the yield in terms of some absolute unit, results can not be accepted at their face value. The general trend, however, is clear. The preparation and chemistry of crystalline insulin is then discussed. What would appear to be a mistake in a date will be found in the preface, where it is stated that crystalline insulin was prepared in the year 1922. The report of this work was, of course, published in 1926. The fourth chapter deals with the standardization of insulin and is very well handled; the fifth deals with its administration, and the sixth with substitutes for insulin. Here the author gives more prominence to "Duodenin" and "Inerétine" than the reviewer would be prepared to do. The author remarks that it is probable that "all these workers were

dealing with the same substance in spite of differences noted in the effect on depancreatized animals." An equally probable interpretation is that none of the workers were dealing with any active substance. The last chapter deals with the physiological action of insulin and provides a very useful review of this phase of the subject.

It has not been possible in the space available in this book to discuss in a comprehensive manner all the aspects of the situation. One feels that this volume should provide an excellent text for students and that lectures on the chemistry and physiology of insulin could well be based on it. For some courses the book would be adequate, for others it would have to be supplemented by more detailed comments.

There are a few places in which the author has made an interpretation of the results which differs from that which the reviewer feels is correct. This merely means that there are still many problems associated with insulin which have not as yet been settled.

The book is well written, the pages are of a convenient size and the type is good. The bibliography and the author index have been, with a few exceptions, carefully prepared and add greatly to the value of the publication.

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MATHEMATICAL SNAPSHOTS

Mathematical Snapshots. By H. STEINHAUS. G. E. Stechert and Co., New York¹ (printed in Poland; profusely illustrated), \$2.50.

THE only way to review this beautifully made book is to describe its rich and extraordinarily varied content in some detail. It is mathematical recreations at a new level of simplicity, interest and unusualness, somewhat reminiscent of Lucas at his best, but less formal. Each page has one or more excellent illustra-

¹ The Polish copyright date, pasted over, appears to be 1936.