Ocean. The first specimen, 18 feet in length, came ashore on Ormond Beach in 1902. The second, a 38-foot specimen, was taken by Captain Charles Thompson of Miami and Mr. Charles T. Brooks of Cleveland, Ohio, in May, 1912. The third (31 feet long) was captured by Dr. H. Schlegel and others in the Bay of Florida, June 10, 1919, and the fourth (31.5 feet between perpendiculars) is the present specimen. The fifth record for the Atlantic is the specimen (about 30 feet long) rammed by the steamship *American Legion* in May, 1922, near the Abrolhos Light off the coast of Brazil, and noted by me in SCIENCE, 1922, Vol. 66, pp. 251–252, and in *Natural History*, 1923, Vol. 23, pp. 62–63.

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QUOTATIONS

MEDICAL RESEARCH

SIR,—In your issue of the 7th a patient points out in a very vivid letter the benefits, dangers and costliness of insulin in his own case of diabetes. He shows clearly that it is impossible to continue its use indefinitely, and when discontinued that the diabetes returns with death as the unavoidable result. This demonstrates conclusively the need for one thing—the discovery of the real cause of diabetes, and this can only be attained by experimental research.

The key to the discovery of insulin was Minkowski's demonstration in 1905 that every dog from which the pancreas (the sweetbread of our dinner table) was removed died of diabetes. Evidently there was something in the pancreas which prevented the disease. Banting and Best discovered that something. But that discovery still leaves us in the dark as to what is the disturbance of nutrition—the metabolism of the body—which prevents the burning up of the sugar in the blood. This accumulation of sugar inevitably causes death, slowly in most adults, swiftly in children.

It is perfectly evident to any open-minded person that the discovery of the cause of this disturbance of the nutrition in the body cannot be made simply by clinical observation on man. It can only be obtained by experimental research on animals. This is a duty imposed upon our research workers. Any obstacle put in their way is deliberate cruelty to human beings, and not to a small number of human beings, but to a very large number, especially of children.

When the alternative of experimenting on animals or of allowing multitudes of human beings to die of diabetes is presented to any unprejudiced mind, there can be but one answer. The lives of human beings are of infinitely more value than those of animals. Moreover, once the cause is discovered, the lives and happiness of human beings and their families are conserved for all future time. The sacrifice of a relatively few dogs sinks into insignificance in comparison with the lives and happiness of multitudes of human beings.—*W. W. Keen, in the London Times.*

SCIENTIFIC BOOKS

A classification of fishes including families and genera so far as known. By DAVID STARR JORDAN, Chancellor Emeritus of Stanford University. Stanford Univ. Publ. (Biol. Sci.), Vol. 3, No. 2, 1923, pp. 79–243, i-x.

UNTIL the appearance of the work cited, ichthyologists had long waited for a comprehensive classification of all the known genera and families of fishes. Not since the publication of Günther's *"Catalogue of the fishes of the British Museum* (1859 to 1870)" had any one attempted to supply this need. The work of Günther had been a long and tedious one, having required for its completion a considerable part of the lifetime of one of the most laborious of systematic zoologists. Furthermore, the knowledge of ichthyology had since that time been greatly widened in many ways.

The task of preparing a new classification year by year had thus become increasingly large and difficult: so much so, in fact, that Dr. Jordan alone among living workers possessed a knowledge of the literature of ichthyology which was sufficiently comprehensive and an acquaintance with the fishes of the whole world intimate enough to permit of the preparation of such a work.

In this latest classification, fishes, living and extinct, are arranged under six classes: Leptocardii, Marsipobranchii, Ostracophori, Arthrodira, Elasmobranchii and Pisces. The "true fishes" are further divided into three subclasses: Crossopterygii, Dipneusta (Dipnoi) and Actinopteri. The Actinopteri are made to include the superorders Ganoidei, Teleostei and Acanthopterygii (the author, however, certainly did not intend to remove the group last named from nor to coordinate it with the Teleostei). The teleost fishes are divided into no fewer than 39 orders, the increase being largely accomplished by the elevation of various groups, largely the serranoid derivatives, from subordinal to ordinal rank.

Space will not permit of the discussion, or even an outline, of the limits and positions assigned to these various groups. As a whole Dr. Jordan has followed recent suggestions regarding the status of the major groups of fishes.

There is widely used throughout the work, particularly among the "higher" fishes, a group termed the *series*. Usually but not consistently the names of series are formed by adding the suffix *-iformes* to the root of the typical genus of the group. In most cases