phyte, mutations occur which give rise to saprophytic strains. These will thrive while more actively parasitic strains will tend to die out, and loss of infecting power of the culture will occur. When again grown as a parasite, the fungus will regain its virulence, through the development of parasitic strains which originate as mutations, while the saprophytic strains will perish. It may be expected that different organisms will vary greatly in the time required to lose, and regain virulence depending on the frequency of mutation in the species. In some forms, loss of virulence does not occur. Dr. Erwin F. Smith reports a potato rotting organism which is as virulent, after eighteen years in culture, as it was when first isolated.

The proposed theory likewise may prove an explanation of attenuation in bacteria.

At present none of the sudden changes observed in fungi has been studied cytologically, so we do not know whether or not they are capable of explanation on a basis of chromosome behavior. For convenience they are therefore called *mutations*.

The author proposes to investigate known cases of loss of virulence and to test the above theory. He is especially anxious to hear from those who know of well-substantiated occurrences of this phenomenon.

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SPONGILLA LACUSTRIS IN MASSACHUSETTS: A CORRECTION

IN a recent note[1] to SCIENCE, we described the occurrence of the fresh-water sponge, *Spongilla lacustris* Linn., from the Sudbury River near Concord, Massachusetts. Since then Professor Ira Remsen has called our attention to the fact that his study of the water supply of Boston in 1881 revealed the presence of a sponge, which was at that time identified by Professor W. G. Farlow as *Spongilla fluviatilis* Auct. Although there are no descriptions of spicules, gemmules or habits of growth in his report,[2] a colored plate gives conclusive evidence to our minds that he was dealing with the same sponge as the one we described. Further evidence of the identity of the two sponges may be the occurrence of the peculiar "cucumber" odor associated with both.

Revisions in sponge taxonomy since 1881 have restricted the name "fluviatilis" to the genus, Ephydata, formerly called Meyenia by Carter, so that there is no longer any confusion between *Ephydata fluviatilis* and *Spongilla lacustris,* due chiefly to the difference in their habits of growth. American synonyms for the species, *S. lacustris,* are listed by Potts[3] as follows (note the absence of "fluviatilis"):

1863 paupercula, Bowerbank;
1863 dawsoni, Bowerbank;
1875 flexispina, Dawson;
1879 lacustrioides, Potts;
1880 abortiva, Potts;
1880 mutica, Potts;
1880 montana, Potts;
1881 multiformis, Carter;
1884 lehighensis, Potts.

We gladly yield all claim of priority of discovery of this species in Massachusetts to Professor Remsen, and appreciate his calling the matter to our attention.

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"BAR SINISTER"

I BEG leave to submit a line in defense of Professor Willis's delightful little fable, published in SCIENCE of May 29, from the imputation of involving a serious error in heraldry. It is true that the heraldic charge indicative of bastardy is the *baton sinister,* but the French name of this device is *barre sinistre;* the anglicized form of which term, *bar sinister,* has the sanction of centuries of usage.

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QUOTATIONS

SCIENTIFIC MEN AS UNIVERSITY PRESIDENTS

IT is gratifying to note that two of the great universities, Michigan and Chicago, have chosen as presidents men of exact scholarship—one a man of proved administrative ability also, and the other of a turn for practical affairs, but primarily a scientist of the purest type. The former, Dr. Clarence C. Little, the new president of the University of Michigan, a graduate of Harvard and a postgraduate student in science, conducted researches in genetics for many years, and became the assistant director of the Carnegie Institution for Experimental Evolution before he accepted the presidency of the University of Maine. His success there gives promise that the University of Michigan will have not only a competent administrator but a scholar who has gone out to the verge of human knowledge in at least one sector of the great field, and is able to appreciate the problems in every other sector, for the method of advance must

[1] SCIENCE, lxi, 391; 1925.

[2] Document 143, City of Boston, 1881; Report of Joint Standing Committee on Water.

[3] Potts, Proc. Acad. Nat. Sci., Philadelphia, 1887.

be the same whether one use a microscope, a telescope, a retort, a syllogism or an algebraic equation.

The University of Chicago has gone for its new president, Dr. Max Mason, to the University of Wisconsin. He is also preeminently a man of research, with a varied experience as a teacher, both in Eastern institutions and in the Middle West. His going to Chicago gives new emphasis to the purpose which has guided its development since its renaissance under that great scholar and teacher, Dr. William R. Harper, a purpose which has expressed itself in the motto "Let knowledge grow that life may be enriched," and has exemplified itself in practice by calling to university professorships such men as Chamberlin, Michelson, Hale and Millikan.

The faculties of the first of all American universities of the purest type were gathered about a teacher of mathematics, a teacher of Greek and a teacher of chemistry who were the first of scholars in their respective fields. And the University of Chicago owes its swift rise to its policy of gathering men of first-rate scholarship as its master teachers. This precedent has been followed in selecting the new leader. He is a mathematician, and if he needs defense in these days when all scientists are under Fundamentalist suspicion, it may be found in an admirable address delivered by David Eugene Smith before the Mathematical Association of America some years ago, entitled "Religio Mathematici." According to him, mathematics but increases the faith of a man who has faith, and while it shows him his finite nature with respect to the Infinite (for example, shows him that he can not construct a seven-edged polyhedron and is only combating the everlasting truth in trying to do so), it puts him in touch with immortality in the form of mathematical laws that are eternal.

In the midst of all the changes in things thought to be unchangeable it has been true, it is true and will be true throughout the universe and forever that $(a+b)^2 = a^2 + 2ab + b^2$. This is but one illustration of the immortality of law. A great mathematician, other things being equal, ought to be best prepared

> from facts compared the laws to trace
> Where long procession leads to Deity,

and so best prepared to lead on in further quest of truth.—Editorial from *The New York Times*.

SCIENTIFIC BOOKS

Fishes of the Gulf of Maine. By HENRY B. BIGELOW and WILLIAM W. WELSH. 1925. Bureau of Fisheries, XL, Part 1, pp. 1 to 567; figs. 1 to 278.

THIS is a bulletin just issued by the U. S. Bureau of Fisheries as part 1 of volume XL for 1924. It should be in the hands of all persons interested in the marine fishes of our eastern seaboard. The term Gulf of Maine as here used "covers the oceanic bight from Nantucket and Cape Cod on the west to Cape Sable on the east, thus including the shore lines of northern Massachusetts, New Hampshire, Maine and parts of New Brunswick and Nova Scotia." The 150 fathom contour has been chosen as the arbitrary offshore boundary of the region. Some 178 species are treated.

Looked at as a faunal work, this book is an adequate review of the cold-water group of fishes which is at home north of the long arm of Cape Cod, and penetrates only to a limited extent south of that cape, then mainly in winter. Descriptions of the species make of it a handbook for their ready identification, and it is very consistently illustrated with figures of each, and in many cases of their larval forms or fry also. It is comparable (except that fresh-water fishes are not included) to "The Fishes of North Carolina," by H. M. Smith, issued in 1907 by the North Carolina Geological and Economic Survey, and should prove equally useful. The two practically do not overlap; on the other hand they supplement one another admirably, one dealing with the cold-water, the other with the warm-water fauna of our eastern coast, north of Florida.

Advances have recently been made in knowledge of the breeding and life histories of marine fishes. Considerable data on this subject given by Bigelow and Welsh, when not new, is at least recent, and may conveniently be referred to in this volume. The young of sea fishes still offer a wide field for inquiry, in which Mr. Welsh was particularly interested, and that branch of the science of ichthyology has suffered an irreparable loss in his death. Fish migrations, a problem allied to oceanography, and one which has important economic bearings, is frequently discussed. Such discussion here is particularly interesting in view of Dr. Bigelow's knowledge of oceanography.

We look forward to the second part of this bulletin, which, as we understand it, will deal with the general biology and oceanography of the Gulf of Maine. As a memoir on the fishes this first part is complete in itself, ending with eighteen pages of bibliography and an index.

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SPECIAL ARTICLES

MUSCULAR FIXATION OF THE STUTTERER'S VOICE UNDER EMOTION

IT has been long known that stuttering is increased by an emotional experience. This fact should give