

made an examination of ten thousand samples of plankton relative to growth, reproduction and movements of planktonic organisms. This investigation goes to show that temperature and salinity are a great factor in the rise and fall of planktonic life. Since 1910 the mackerel catches on the Atlantic coast have declined to an alarming extent.

Some of the English scientists have advanced the idea that the mackerel are leaving America and migrating to the European coast. If this is a fact and taking into consideration that mackerel are plankton feeders the solution seems to be centered around the study of planktonic organisms.

The investigation of the seasonal distribution of plankton in the Woods Hole region by Dr. Charles J. Fish, Bureau of Fisheries, will in all probability pave the way towards surveying the Atlantic coast.

No doubt the tagging of mackerel will show appreciable results. But unfortunately many uncontrollable factors enter into the above experiments, such as hyperglycemia due to handling the fish and being exposed to the air, thus causing them to fall easy prey to their enemies after being returned to the water.

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ABSTRACTING OLD BOTANICAL WORKS AND MANUSCRIPTS

THE value of a complete abstract journal can not be overestimated; we all recognize the great importance of periodicals, such as *Botanical Abstracts*, *Botanisches Centralblatt*, *Chemical Abstracts* and a number of similar papers in other fields of learning.

These publications, however, are of relatively recent origin. For example, Just's *Botanische Jahresbericht* was founded by Just in 1873. *Botanisches Centralblatt* was started in 1880. Previous to this time a wealth of important work had been published: some of it can be found in a number of well-known serials. Some of them are still being published, but the earlier issues are not easily obtainable, except in some of the large institutions of the Old and New World. We need mention only Curtis's *Botanical Magazine* (1786), *Botanische Zeitung* (1843), *Linnaea* (1826), *La Belgique Horticole* (1851), Transactions and Proceedings of the Botanical Society of Edinburgh (1843), Transactions of the Royal Society (1663), *Flore des Serres et des Jardins de l'Europe* (1845) and a number of others.

I have spent considerable time in a number of libraries like those of the British Museum, of Kew Gardens, of the University of Amster-

dam, of the University of Berlin and others, studying works on plants and on their economical aspects published in earlier centuries. One is surprised by the fine talent of these observers and workers of times long past, men who were heretofore unknown to us. From the sixteenth until the beginning of the last century men like Malpighi, Grew, Swammerdam, van Leeuwenhoek, Camerarius, Linné, Koelreuter or Sprengel have given us an indelible impression of their achievements, but there are others whose work has been forgotten, and no one can estimate the advantage it will be to science and history to have their work revived. If we consider only the work of an investigator of later date, namely, that of Gregor Mendel, one will realize the importance of this task of abstracting.

There are international catalogues besides those of libraries which will facilitate this work considerably. Also publications like Seguiet's "Bibliotheca Botanica," 1740; Wikström's "Litteraturae Botanica in Suecia," 1831; Krüger's "Bibliographia Botanica," 1841, and treatises on the history of botany during certain periods which will contribute very much toward making the task of finding originals easier.

In many libraries there are unknown manuscripts, which are not published and probably never will be published, but which are of enormous value. They may contain views or observations which were not ripe for these days, and therefore were not fully comprehended by the learned world of that time. A systematic search, a perseverance and last but not least a love for one's profession will ensure the completion of this work, which will not only be of great historical value but also to science itself.

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SCIENTIFIC BOOKS

Entwicklung und Bibliographie der Pathologisch-Anatomischen Abbildung. BY EDGAR GOLDSCHMID. Leipzig, Karl W. Hiersemann, 1925, 301 pp., 44 pl. 4°. Price 150 marks.

THIS is the first serious attempt to grapple with a theme of some moment to medicine, namely, the history of pathology. Pathology, as a generic term, connotes and comprises everything relating to the essential nature of disease. In ordinary usage, however, it denotes the changes in structure and function produced by disease and thus includes both the "anatomical idea" of Virchow and what Allbutt styled "altered physiology," i.e., the facial appearance and physical habitus of different diseases, as well as in paralytic deformities and other derangements of function. The