

earnestly request chemists throughout the country to send to me for safe-keeping in the Smithsonian Institution such historical and biographical documents of American chemical history and biography as they may be willing to part with. They will be kept together, catalogued and be easily accessible to chemists, students and other proper persons. Just at present papers by the late Dr. Wolcott Gibbs are particularly desired. Questions of precedence and patent questions may be decided by such a concentration of documents in a single accessible place. Please address them to The Smithsonian Institution, Washington, D. C., care of Dr. Alfred Tuckerman.

ALFRED TUCKERMAN

NOTES ON FISHES AT CORSON'S INLET, NEW JERSEY

ON March 1, 1909, in company with my friend, Dr. R. J. Phillips, the salt-ponds on the meadows at this locality were examined for small fishes. We were rewarded by securing three fine examples of the rare *Fundulus luciae*, a small cyprinodont described from the Great Egg Harbor region by Baird in 1854. As this is the first definite instance of its occurrence in New Jersey waters since that time I have thought it well worthy of record. Dr. T. H. Bean visited the region of the type locality in 1887 and after a careful search failed to locate the fish. The rediscovery of the species was made by Dr. H. M. Smith in the lower Potomac River in 1890, and was based on two small specimens. Baird's types were not then believed to be extant. Our specimens were found associated with numerous small amphipod crustaceae, *Crangon vulgaris*, numbers of *Palæmonetes vulgaris*, small transparent *Anguilla chrisypa*, numerous *F. heteroclitus macrolepidotus* of all ages, many *Lucania parva*, great numbers of *Cyprinodon variegatus* and a single example of *Menidia beryllina cerea*. Dr. Phillips picked up a fine example of *Gobiosoma boscii* on the beach, and on February 15 he secured in a rain-pool on the barrier beach a number of specimens of *Gasterosteus aculeatus* and one of *Pygosteus pungitius*, the latter being the most southern record on the New Jersey coast

we know of. Quite a number of *Pseudopleuronectes americanus* were reported by the fishermen recently, and *Ammodytes americanus* was several times noted during the past winter.

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ACADEMY OF NATURAL SCIENCES,

PHILADELPHIA,

March 6, 1909

SCIENTIFIC BOOKS

*The Mechanical Engineering of Steam Power Plants.* By DR. F. R. HUTTON, Professor Emeritus, Mechanical Engineering, Columbia University. Third edition. John Wiley & Son.

The first edition of this work appeared in 1897 and it has become a standard work of reference in its class. The third revised edition contains some changes in arrangement of topics and material which brings the work up to date. In the last edition the steam turbine is fully described and its advantages, as compared with the piston engine, thoroughly discussed.

There are various technical works which relate to specific machines required for the generation of steam power, but only a few which are devoted to the installation and arrangement of these various machines so as to produce the most economic result, which is the branch of engineering to be considered in the design and installation of the machinery for a complete power plant. The modern power plant involves such a large variety of machinery that its construction constitutes a complicated problem, and it is necessary for the designer to be thoroughly acquainted with the various types of machines and the different varieties of each in order to make an aggregation, of which all the parts will co-act and perform their functions so as to produce the highest economic results. It is obvious that a steam power plant must contain "steam-making" machinery, "steam-using" machinery and the various elements required for transmitting the steam from where it is generated to where it is usefully applied. A knowledge of the industries of this country reveals numerous manufacturers engaged in the production of different vari-