

were, therefore, properly pensioned by a place upon the retired list. To-day their name is largely a misnomer. Under the law, one is assignable to the teaching of ethics and English studies, one of Spanish and one of drawing. In fact, only one teaches mathematics at the Naval Academy; several of them are on duty at the Naval Observatory; two are librarians; one is engaged in ordinance work, and another in the bureau of yards and docks. They have no service at sea, and there is no more reason why hereafter the retired list should be open to a new appointee to the work now done by this corps than to any other employee in civil life. If this recommendation is adopted by Congress it will be necessary to provide for the appointment of astronomers at the Naval Observatory, to take the places, as they shall become vacant, of existing professors of mathematics who now serve in that capacity. There should be five astronomers, as at present, and the salary of those hereafter appointed should be sufficient to make up for the refusal to them of the privilege of retirement, and also to secure men of high scientific attainments, adequate to the demands of one of the most capable observatories of the world. As the above astronomical corps is now full, no appointment under the new statute proposed will be necessary till a vacancy occurs."

Nature states that a meeting will be held in Manchester on February 16th to take into consideration such steps as may seem desirable to assist the executive committee in making the Zoological Congress this year thoroughly successful.

THE Physical Society of Paris has undertaken the supervision of a 'Bibliographica Physica' and has appointed a commission to arrange a method of bibliographical classification. The Physical Society and the Institute of Electrical Engineers, of London, are arranging for the publication of abstracts and papers.

MESSRS. MUNN & Co. have issued a reference catalogue containing a classified index of more than 10,000 articles that have appeared in the *Scientific American Supplement* since its establishment in 1876. The publishers offer to send the catalogue without charge, and it will prove

of value to those who wish to consult any of the large number of valuable scientific articles that have been included in this publication.

UNIVERSITY AND EDUCATIONAL NEWS.

THE British government has expressed itself in favor of a Catholic University for Ireland, though it is not expected that any active steps towards its establishment will be undertaken during the present session of Parliament.

A BILL has been introduced in the lower house of the Prussian Diet giving the Minister of Education power to reprimand or withdraw the licenses of *Privatdozenten*. The bill is evidently intended to give the Government power to regulate the teaching of the lecturers, and has aroused much opposition, a protest against the measure having been signed by one-half of the professors in the University of Berlin.

THE Baldwin locomotive works of Philadelphia has presented the department of mechanical engineering of Columbia University with the locomotive exhibited at the World's Fair valued at about \$12,000. Within the past few months donations of machinery to this department have been made valued at \$60,000.

PROFESSOR LESTER F. WARD will give two courses of lectures, one on pure sociology and one on applied sociology, at the University of West Virginia during the summer quarter.

DR. KARL HÜRTLE has been promoted to a full professorship of physiology at the University of Breslau, and Dr. Anschütz to a full professorship of chemistry at the University of Bonn. Dr. Wiechert has been appointed associate professor of terrestrial magnetism in the University of Göttingen, and Dr. Eugen Meier, of the Polytechnic Institute of Hannover, professor of technical physics in the University of Göttingen.

DISCUSSION AND CORRESPONDENCE.

PRESIDENT MC'KINLEY'S APPOINTMENT OF A FISH COMMISSIONER.

TO THE EDITOR OF SCIENCE: Under the head of 'Scientific Notes and News,' the last number of SCIENCE contains remarks concerning the President of the United States which are unjust, untrue and malicious, and which as an associate

editor I disclaim. I beg, therefore, that you publish this letter in the next issue.

J. W. POWELL.

BUREAU OF AMERICAN ETHNOLOGY,
WASHINGTON, D. C.

[In view of this letter and of others that have been received it is to be regretted that the note in question was admitted, especially without the signature of the writer. Leading newspapers that have supported President McKinley, such as the *Philadelphia Ledger*, the *New York Evening Post* and the *Boston Transcript*, have characterized his action in the appointment of a Fish Commissioner as weak and illegal, and it was supposed that this point of view would be shared by all men of science, however fully they might in other respects support the present administration.—ED. SCIENCE.]

A CHARACTER REGULARLY ACQUIRED BUT NEVER INHERITED.

ONE cause of the conflicting testimony concerning the inheritance of acquired characters is the difficulty of deciding whether a new or abnormal structure appeared in the individual after birth through a somatogenic change, or whether it was due to a prenatal or blastogenic variation. Whatever value we may attach to the present case, it is certainly interesting and avoids any difficulty of this kind.

The sternum of heavy perching birds belonging to the order Gallinacei, which includes the domestic fowl, the turkey and their wild ancestors, as well as the grouse, has the well-known keel shape, and for some months after birth is semi-cartilaginous, and therefore soft and yielding. The keel is applied like a blunt knife edge to the hard perch. The transverse line of pressure caused by the weight of the body not supported by the legs soon produces a deformity which lasts for life. A cushion-shaped enlargement may be formed, or the keel may be bent or twisted in a variety of ways. Some such deformity is inevitable from the mechanical conditions present. Moreover, this has been taking place not merely for a few generations, but during the whole course of the

later evolution of these animals. At the end of each generation the individual variations thus acquired are completely effaced, and the young always begin life with the sternum normal.

The keel of the sternum in carinate birds has apparently arisen in correlation with the pectoral muscles concerned in flight, and if we assume that the variations which led to the keel were of a blastogenic character the inheritance of somatogenic changes which deform this structure could not at the same time have occurred. The keel has attained its present form, that of a thin vertical plate, in spite of those somatogenic changes in the life of the individual which tended to flatten and deform it.

No direct evidence that mutilations or deformities of a somatogenic nature are inherited has yet been obtained, and the theoretical improbability of such occurrences is very great. The fact that many animals preserve a characteristic form and symmetry from age to age, and even from one geological epoch to another, is evidence that somatogenic characters are not inherited and cannot be. It is well known that certain decapod Crustacea, such as some of the common crabs and the lobster, practice self-mutilation or autotomy. Here a special mechanism has been developed in the large cheliped by the action of which it is cut off in a certain way and at a definite place. When the large claw is seized by an enemy it is quickly amputated by the twitching of certain muscles stimulated by reflex nervous impulses, and a new limb in time grows out in place of the one cast off. The Lamarckian principle does not help us much in this case, nor in supposing that the germ cells in some mysterious way register every somatogenic change, even if this is not exactly reproduced in succeeding generations.

FRANCIS H. HERRICK.

THE THIRD INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY.

TO THE EDITOR OF SCIENCE: The organization committee of the Third International Congress of Applied Chemistry, which is to be held in Vienna during the coming summer, has fixed the date of the meeting from the 28th of July to August 2, 1898. Some time during the month of February programs and announcements will