It is only by such means that biology is to maintain its place. The science has justified its existence, to be sure, in the unravelling of the complicated skein of genetics and sex. However, to eliminate criticism concerning the ability of zoologists to speak glibly of enzymes and catalyzers, or sex hormones and of chemical determiners, they should fortify themselves by a strong development of functional biology.

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SCIENTIFIC EVENTS

AURORA AND MAGNETIC STORM OF MARCH 7-8 IN ENGLAND

THE auroral display is said to have attracted much attention, partly because it coincided with an air-raid upon London. The northern sky was lighted up with a crimson glow both before and during the raid, which started shortly after 11 P.M.; and the appearance was thought by an observer at Folkstone to be due to a distant fire. Sir Napier Shaw informs *Nature* that the Meteorological Office has received reports of aurora observations from Lerwick, Stornoway, Eskdalemuir, Donaghadee, Liverpool, Clacton and Southend, and forwarded the following account, by Dr. C. Chree, of the large magnetic disturbance recorded at the Kew Observatory between 9 P.M. on Thursday and 5 A.M. on the following morning. Mr. A. Lander has sent *Nature* photographic traces of movements in declination recorded at Canterbury during Thursday and Friday. Thursday's trace was remarkably even until shortly after 9 P.M., when the magnetic storm began. *Nature* remarks that it is possible that the disturbance was a repetition, after three 27-day intervals, of the large magnetic storm of December 16–17, 1917. There was a very considerable disturbance on January 12 at the end of the first 27-day interval, and a minor disturbance at the end of the intermediate interval in February.

Dr. Chree wrote: "A magnetic storm of no great duration, but very considerable amplitude, was recorded at Kew Observatory on the night, March 7–8, 1918. It began with a 'sudden commencement' at about 9h. 10m. P.M. on March 7. The largest movements occurred in the early morning of March 8, between midnight and 5 A.M., but smaller oscillations persisted for some time after the latter hour. The 'sudden commencement' was especially prominent in horizontal force (H); after a small, sudden fall there was a sharp rise of fully 60γ. The corresponding movements in declination (D) consisted of an oscillation of about 4′, the first movement being to the west. The range shown on the D trace was about 51′, the extreme easterly and westerly positions being reached at 2.20 A.M and 4.16 A.M. respectively on March 8. Between 1.11 A.M. and 2.20 A.M. of the same day there was a movement of 36′ to the east. The range on the H trace was about 240γ. A very rapid downward movement commenced about 2.3 A.M. on March 8, the fall during the next thirty minutes amounting to fully 185γ. After 5 A.M. on the same day there were only short-period oscillations in H of moderate size; but up to 10 A.M. the element remained depressed by fully 70γ as compared with its value on the previous day before the storm."

THE STEAM ENGINEERING TRAINING SCHOOL AT THE STEVENS INSTITUTE

THE Navy Department has designated the Stevens Institute of Technology, Hoboken, N. J., as the headquarters for the new United States Naval Steam Engineering School for the training of engineer officers for the U. S. Naval Auxiliary Reserve.

This school is the only one devoted to training engineer officers for *steam-engine service,* and is a branch of the large training school now located at Pelham Bay Park, New York. There is at Pelham, in addition to the school for general training of enlisted men, an Officers' Material School, Naval Auxiliary Reserve. Both the school at Pelham and the engineer officer school at Stevens are under the supervision of the Supervisor, Naval Auxiliary Reserve. The education of the engineer officers at Stevens is directed by Professor F. L. Pryor, of Stevens, who has been appointed

by the Navy Department, with the approval of President Humphreys, civilian director.

It is contemplated to make a five-month course for the training of an officer; one month to be devoted to military and ship duties training at Pelham; one month at Stevens to receive the preliminary requirements and duties of an engineer; one month in inspection and repair duties at local shipyards, machine shops and boiler shops; one month at sea in the engine room of different type boats; and one month subsequent training and examination at Stevens. It is expected to have about one hundred men in each of these divisions, or five hundred in all.

Three of the divisions will be quartered in barracks now in the course of construction on the college grounds at the corner of Sixth and Hudson Streets adjoining the Carnegie Laboratory of Engineering. The school divisions will attend classes in the lecture rooms of the college, and will take their meals at the college mess hall at Castle Stevens.

The instructors for the school, with the exception of the civilian director, will be regularly appointed commissioned officers of the United States Naval Auxiliary Reserve and will be selected particularly for their special work.

Quotas are furnished for this school by the various Naval Districts throughout the country as outlined by the Navy Department and are required to meet the following qualifications:

(*a*) Men of ability and officer material.
(*b*) Age 21 to 30 inclusive.
(*c*) Completed high-school course, and graduate of engineering course at a recognized technical school or an equivalent of the above.
(*d*) Must be regular Navy, N.N.V., or N.R.F. (any class) for general service.
(*e*) Physically qualified for line officer—standard of regular Navy.

ENGLISH MEDICAL STUDENTS AND MILITARY SERVICE

We learn from the *British Medical Journal* that the Minister of National Service has issued detailed directions with regard to the "protection from military service of medical students" now in civil life. These may be looked upon as the obverse of Army Council Instruction No. 153 of 1918, which governs the release of medical students from the ranks. (1) A medical student who on March 5, 1918, was a full-time student at a recognized medical school, and had at that date passed his professional examination in chemistry, physics and biology (or botany and zoology) for a medical degree or license is not (subject to paragraphs 5, 6, 7 and 8, below) to be called up, whatever his medical category or grade, so long as he remains a full-time medical student. (2) A medical student who on March 5, 1918, was a full-time student at a recognized medical school, and furnishes to the A.D.R. of his area a certificate from the dean, or corresponding official, of his medical school that he should be able to pass his first professional examination as above on or below July 31 next, is not to be called up before July 31 next, whatever his medical category or grade. If he passes that examination by July 31 next his case will thenceforward be treated as if covered by paragraph 1. If he does not pass by that date he will forthwith be called to the colors if otherwise available and required for service, unless he comes within the terms of paragraph 3. (3) A medical student (other than one whose case is covered, or is to be treated as if covered, by paragraph (1) who is or becomes a full-time student at a recognized medical school, and who is in Category B 2, B 3, C 2 or C 3, or is placed in Grade 3, is not (subject to paragraphs 4, 5, 6, 7 and 8) to be called up, so long as he remains a full-time student, without reference to the Director of National Service for the region. (4) A student protected under paragraph 3 who does not within twelve months of commencing his professional studies at a recognized medical school pass his first professional examination as above, will forthwith be called up if otherwise available and required for service. (5) A student protected under this instruction who fails to pass his professional examination in anatomy and physiology within thirty-six months of commencing his professional studies at a recognized medical school will similarly be called to the colors. (6) For protection