

Dr. J. H. Frazer (Johns Hopkins) has been appointed lecturer in mathematical physics.

ST. ANDREWS.—At the graduation ceremonial on Oct. 10, the honorary degree of LL.D. was conferred upon J. A. C. Kynoch, emeritus professor of midwifery, University College, Dundee.

APPLICATIONS are invited by the Zoological Society of London for an aquarium research fellowship for three years, of the annual value of £350. The successful applicant will be expected to do research in connexion with aquatic life, principally in the laboratory attached to the Society's aquarium, under the general advice of some naturalist appointed by the committee, and to report quarterly to the committee on the progress of the research. Applications should be addressed to Sir Peter Chalmers Mitchell, Zoological Society, Regent's Park, N.W.8, and received on or before Nov. 3.

An arrangement has existed for the past six years whereby, when a candidate for a Higher National Certificate in Mechanical Engineering at the termination of an advanced course includes a specialised automobile engineering subject in his final examination, the signature of the president of the Institution of Automobile Engineers can be added to any certificate awarded. This arrangement has now been extended to ordinary certificates awarded at the termination of senior part-time courses. Applications should be addressed in the first instance to the Board of Education.

THE following research fellowships are open to members of the British Federation of University Women:—A Senior International Fellowship (offered by the International Federation of University Women), value £250; an American International Fellowship (offered by the American Association of University Women), value approximately £300; a Caroline Spurgeon International Scholarship in Arts (offered by the Directors of the Crosby Hall Association), value £100 a year for two years; an International Residential Scholarship at Crosby Hall (offered by the British Federation of University Women), value £100; and a German International Fellowship (offered by the German Federation of University Women), value approximately £100. Application forms and regulations are obtainable from the Secretary, British Federation of University Women, Crosby Hall, Cheyne Walk, S.W.3.

FOR the tenth year in succession, Trinity College, Cambridge, announces the offer of a Research Studentship open to graduates of other universities who propose to go to Cambridge in October next as candidates for the degree of Ph.D. The value of the Studentship may be as much as £300 a year if the pecuniary circumstances of the successful candidate require so large a sum. Applications must reach the Senior Tutor not later than July 1, 1931. The same College offers, as usual, Dominion and Colonial Exhibitions to students of Dominion and Colonial universities. These Exhibitions are of the titular value of £40, but their actual value is such sum (if any) not exceeding the titular value as the College Council may from time to time hold to be justified by the exhibitor's financial circumstances, and the Council has power, if it sees fit and if funds are available, to award an additional payment. Candidates must apply through the principal authority of their university, and applications should reach the Senior Tutor (from whom further particulars may be obtained) by July 1, 1931.

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### Historic Natural Events.

Oct. 19, 1800. Hailstorm in Bedfordshire.—During a violent thunderstorm in Bedfordshire, hailstones fell, shaped like oblate spheroids, six to nine inches in circumference.

Oct. 19, 1917. Unexpected Upper Winds.—A fleet of thirteen Zeppelin airships attacked London on Oct. 19 in weather conditions which appeared settled. Owing to the unexpected development of a barometric depression, however, a very strong cold north-east wind sprang up at some height above the ground. Fog and cloud prevented the raiders from determining their position, and they were carried southward over France, where they were discovered. The motors being handicapped by the intense cold, the greater part of the Zeppelin fleet was destroyed.

Oct. 20, 1743. Hurricane at Port Royal.—A furious hurricane began at 6 P.M. at Port Royal, Jamaica. Many houses were blown down, but most of the damage was done by the sea, which rose many feet and destroyed all the wharves, while the streets were several feet under water. Out of 105 ships in the harbour only one rode out the storm, and a great number of marines were drowned. The hurricane was followed by a pestilence which caused still greater loss of life.

Oct. 22–25, 1805. Trafalgar Gales.—After the battle of Trafalgar violent south-westerly gales blew on the south-west coast of Spain, and it proved impossible to get the majority of the captured French and Spanish ships into Gibraltar.

Oct. 23–24, 1924. Typhoon off Coast of Annam.—A typhoon of exceptional violence, accompanied by torrential rains and a storm wave, travelled along the coast of Annam, causing floods, loss of harvests, and great damage to buildings, roads, bridges, railways, and telegraph lines. The regions which suffered most were the provinces of Kinhoa and Song Ba.

Oct. 24, 1847. Aurora Borealis.—A brilliant display was observed from London on the night of Oct. 24–25. As described by J. Glaisher, it began with a bright red streamer in the north-west at 6.30 P.M., but was not well developed until 9.55 P.M., when a pyramid of red and orange light appeared in the north-west, 5° in diameter at the base, and resembling the glow from an immense conflagration. At 10 P.M. this had become deep crimson, and a similar one had formed to the east-north-east, these two pyramids forming the boundaries of a fan-shaped mass of vibrating silvery columns converging to a point a few degrees south of the zenith. About 10.20 P.M. the moon, which had been shining from a cloudless sky, was suddenly surrounded for a few minutes by a fine corona, with concentric circles of grey, violet, green, and red. Soon after 11.15 a bright arch appeared extending from north-west to south-east, with flickering streamers both above it and below it. This continued until 1 A.M. There were magnetic disturbances at Greenwich on Oct. 22 and 24.

Oct. 25, 1665. Gale in London.—There was a violent gale in London with much rain. It is stated in the *Philosophical Transactions* that during this storm the barometer stood at 28½ in., and that on the evening of Oct. 26 it descended nearly to 27½ in.

Oct. 25, 1859. Royal Charter Storm.—During a terrible storm the *Royal Charter* was wrecked on the coast of Anglesea, with the loss of nearly five hundred lives. This disaster led directly to the establishment of a meteorological service in England and to the issue of gale warnings by Admiral FitzRoy. In the same storm the *Great Eastern* narrowly escaped destruction at Holyhead, while Stephenson's viaduct at Penmaenmawr was carried away, the old Chain Pier at Brighton was destroyed, and great damage was done to the railway on the beach below the cliffs at Dover.