Météorologique Militaire, Paris; Professor F. Eredia, Ufficio Central di Meteorologia, Rome; Professor E. van Everdingen, Meteorologisch Institut, De Bilt, Holland; General Ferrié, Minister of War, Paris; Captain Franck, Service de la Navigation Aérienne, Paris; Señor José Galbis, Sericio Meteorologico Español, Madrid; Lieutenant H. D. Grant, Meteorological Office, Aor Ministry; Dr. Hesselberg, Meteorologiske Instituut, Christiana; Colonel Matteuzzi, Servizio Aerologico, Rome; Professor A. de Quervain, Central Meteorological Office, Zurich; M. Rey, Ministère de l'Agriculture, Paris; Captain C. Ryder, Meteorologische Institut, Copenhagen; Mr. T. Thorkelsson, Meteorological Service, Reykjavik; and Dr. A. Wallén, Meteorologiske Hydrografiske Anstalt, Stockholm. Since the war much progress has been made in different countries in the development of codes for telegraphic reports of the meteorological information which experience in the war and the needs of aerial navigation indicated as necessary. The main object of the commission is to coordinate these devlopments in the revision and extension of the codes prepared at the last meeting of the commission, which was held in London in September, 1912.

The Civil Service Commission announces an examination for ordnance research engineer at $2,000 to $5,000 a year, or higher or lower salaries. It also announces an examination for junior physicist in the Bureau of Mines, at $1,500 to $1,800 a year.

At the recent Chicago meeting of the American Mathematical Society the following resolution was passed: "The Society recommends for favorable consideration by the council applications for membership from advanced students and others interested in mathematics, whether engaged in teaching or not, when properly proposed by members of the Society."

Dr. Jonathan Dwight contributes the following note to the *Journal* of the New York Botanical Garden on the Linnaean Botanical Garden, at Upsala, Sweden: In the lower end of Svartbacksgatan at Upsala is the old botanical garden of Carl von Linné which has been nearly abandoned for about a century. This was the spot where the Flower-King spent most of his time among the plants, etc., where the grass throve and trees grew tall. The Egyptian Antiquities from the Victorian Museum have reposed there for some time in part in his hothouse and part in the Museum for Northern Antiquities. A change has of late taken place in the old garden. Some of the old trees have been cut down, the well cultivated lawns are elevated, and Linné's lily ponds (which are seen in old copperplate engravings of his "Hortus Upsaliensis") have been rebuilt in their location. The young men of the old Linnean Society have accomplished this change and renovation. Linné's greenhouse and the foreground have as yet not been restored. This fall, however, the Museum of Northern Antiquities will be moved to "Gustavianum" and then the house will be arranged for a Linnean Museum. Professor Svedelius informs the public that a large donation has been received by the Linnean Society for a new home for the director. As soon as it is ready the Linnean Society will take possession, and also of the Linné House, where the extensive collections of furniture, books, bric-a-brac, etc., which were the belongings of Linné will then be moved. The greater portion of these have been heretofore kept in the Linné house in Svartbacksgatan.

## UNIVERSITY AND EDUCATIONAL NEWS

The University of Cincinnati has received from the General Education Board of New York, an offer to contribute $700,000 to the Medical College. The gift is conditioned upon the raising of an additional $1,300,000 to complete the $2,000,000 endowment fund of the college; $900,000 of this amount has been subscribed.

We learn from *Nature* that Professor James Mark Baldwin, formerly professor of psychology in the Johns Hopkins University, has offered to pay for the present, in honor of his friend, Professor Poulton, an annual sum of £100 into a fund to be called "The Edward

Bagnall Poulton Fund," to be applied at the discretion of the Hope professor of zoology at the University of Oxford, in the promotion of the study of evolution, organic and social. Professor Baldwin has also announced his intention of leaving by will money for the sustentation of such a fund.

DR. D. A. ROTHROCK, professor of mathematics, has been elected dean of the college of liberal arts of Indiana University.

PROFESSOR H. E. HAYDEN, JR., formerly associate professor of biology in the A. & M. College of Texas, is now professor of biology in the University of Richmond, Va. Mr. Paul R. Merriman has recently been added to the staff as associate professor of botany.

DR. JOHN STEPHENSON, until recently professor of zoology in Government College, Lahore, has been appointed lecturer in zoology in the University of Edinburgh.

## DISCUSSION AND CORRESPONDENCE

### POSITIVE RAY ANALYSIS OF MAGNESIUM

USING the apparatus for positive ray analysis described in *The Physical Review* for April, 1918, I have recently succeeded in analyzing the element magnesium (atomic weight 24.36) into three isotopes of atomic weights 24, 25 and 26. The method is an adaptation to positive rays of a method previously used for measuring the ratio of charge to mass for electrons. The three components of magnesium appear suddenly together as the magnesium anode is heated to vaporize slightly. Their masses may be compared accurately with the molecule of mass 28 due either to occluded nitrogen or carbon monoxide, which is driven off at lower temperatures. The method also gives the relative amounts of the rays; the components at 25 and 26 are of about equal intensity, and that at 24 approximately six times as strong as the others. The average atomic weight 24.375 agrees as closely as is to be expected in these first experiments with the chemical atomic weight.

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### ON RECORDING APPARATUS FOR METEOROLOGICAL RESEARCH WITH ROCKETS

MR. S. P. FERGUSSON of the Weather Bureau has recently published several ingenious suggestions regarding the development of recording apparatus free from pivots, and hence useful in devices that are subject to jar. These suggestions are described in the *Monthly Weather Review* for June, 1920, pp. 321–322.

In this connection it is worth while remarking that tests with the model at present being made, using a mass carrying a recording pencil and held by a spring, show that the jar need at no time during the ascent be greater than would be experienced by a body striking the ground from a fall of 31 inches. This figure may be considered as representative of practical working conditons, but it is the jar, however, without any springs or shock-absorbing devices to protect the instruments.

Recording instruments for this particular work may be divided into two classes: First, instruments recording temperature, pressure and humidity by means other than the use of pivots, as already mentioned, the recording taking place both during ascent and descent. If records are to be had during the ascent, however, care must be taken so to support the various masses that there is no tendency to vibrate in a vertical plane. In general, this will not be a simple matter.

To the second class of instruments belong those involving the use of pivots which are kept separated from the bearings until automatically brought into contact when the descent begins, or at least after the propelling impulses have ceased. Instruments of this type need not differ fundamentally from devices at present in use, except that any considerable moments of force on delicate parts should be avoided.

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### THE HISTORY OF SCIENCE SECTION AND THE PROGRESS OF SCIENCE

TO THE EDITOR OF SCIENCE: In view of the approaching meeting of the American Asso-