Preliminary examination would indicate a new species of cordaites for which I propose the name *Cordaites Missouriense.*

The destruction of central pith preceding induration and subsequent compression have destroyed the structural evidence which would have otherwise been presented by the central elements of the stele. It is hoped that, preceding a more extensive description of this form which I will submit soon, evidence as to the nature of the primary wood and pith might be found.

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CLIMATIC CHANGE IN JAPAN

A PRELIMINARY report by Jimbo[1] indicates that recent changes in vegetation, and presumably in climate, near Mount Hakkôda in Japan correspond to those already established for Europe[2] and North America.[3] The results of stratigraphic studies of fossil pollen in peat are summarized by the author as follows:

> Pollen of *Abies,* which were found in a larger number in the upper layer, could scarcely be seen in the lower layers, while those of *Fagus* and of *Quercus* were abundant in the lowest layer, decreasing remarkably towards the surface. This fact may be considered as an evidence of predominant growth of *Fagus* and *Quercus* in older times, while *Abies* is dominant in the present time. It may be presumed, therefore, that deciduous forests in this region have been invaded by the montane conifer.

We have thus a new and important link in a chain of evidence almost girdling the northern hemisphere. Without serious exception this evidence points to a recent increase in coolness and humidity following a warm, dry period of three or four thousand years ago. It is interesting to note that on this point microstratigraphy has confirmed inferences based upon floristic study; for the value of floristics as a means of obtaining perspective in ecological work is perhaps not sufficiently appreciated.

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FALL OF A METEORITE IN SOUTH CAROLINA

A NEW meteorite has just come into my possession. The stone, which weighs about twelve pounds, fell July 1, 1933, within a few feet of a church at Cherokee Springs, South Carolina. The fall was very satisfactorily observed by two intelligent men, who state that the stone, which was picked up immediately, was too warm to hold comfortably in the hand, though not hot.

It is roughly rectangular in outline, bounded by rather flat surfaces showing a rather striking absence of the usual pitting. A considerable broken area at one end shows it to be apparently a light gray spherulitic chondrite, with very strongly developed chondrules and conspicuous inclusions of troilite. One or two smaller broken spots show traces of a secondary fusion crust. The primary crust is for the most part intact and more than ordinarily thick. I am proceeding with a full description, which will be completed as soon as practicable.

STUART H. PERRY

THE ADRIAN DAILY TELEGRAM
ADRIAN, MICHIGAN

SCIENTIFIC APPARATUS AND LABORATORY METHODS

AN APPARATUS FOR DEHYDRATING NEMATODES

THERE is in use at the biological laboratory at New York University an instrument designed by the writer for the purpose of dehydrating nematodes which possess very thick cuticula. This structure, characteristic of many species of nematodes, especially the free living types, is very impermeable to dehydrating fluids, and therefore, if the change from an alcohol of a given percentage to one of a higher percentage is not carried out gradually, the nematode collapses. The apparatus to be described carries out these changes very slowly and needs little of the worker's time.

As shown by the figure, it consists of a series of five tubes set at an angle of about 30° onto a piece of glass tubing T about 550 mm long and 4 mm in diameter. All the glass tubes reach a height of about 700 mm above the bend G in the tubing. Each of the tubes is sealed to the tubing T by means of a large bore capillary. The capillary bore from tube 1 to tube 5 becomes increasingly larger; that is, the capillary of tube 1 is smaller than that of tube 2 which is smaller than that of tube 3, etc. The capillary of tube 1 has such a diameter that when the tube which rests on it, if full of water, will deliver the liquid at a rate equal to the rate of flow of water through capillary 2 when tube 2 is filled with water. Similarly, capil-

[1] Tadao Jimbo, "Pollen-analytical Studies of Peat Formed on Volcanic Ash," *Sci. Rep. Tohoku Imp. Univ.* 4th Ser. (Biol.), VII, 1: 129–132, 1932.

[2] G. D. Fuller, "Pollen Analysis and Postglacial Vegetation," *Bot. Gaz.,* 83: 323–325, 1927.

[3] P. B. Sears, "Postglacial Climate in Eastern North America," *Ecol.,* 13, 1: 1–6, 1932.