BRIEFER ARTICLES.

A NEW STATION FOR THE GRAY POLYPODY.

The discovery by Mr. W. P. Hay, of Washington, of the gray polypody (*Polypodium polypodioides*), in considerable quantity at a station on the Maryland bank of the Potomac near Great Falls, adds several hundred miles to the northeastern range of this familiar little southern fern, while the conditions under which it grows are of more than usual biologic interest.

Mr. Hay first observed the fern during the past winter, and noticing how distinct it seemed from the common polypody, thrust a handful of plants into the pocket of his hunting jacket, where they remained, neglected and forgotten, until May 30th of the present year. On the latter date the jacket happened to be again called into service, and the fern was produced, to the amazement of all the botanists who saw it. The following day the writer was kindly conducted by Mr. Hay to the scene of his discovery.

The station lies south of the Chesapeake and Ohio Canal, some distance below Great Falls. The country is rugged, with numerous cliffs and boulders of the Archaean rock which covers this region, interspersed with a somewhat dwarfed forest growth of deciduous trees. Along one of the streams overflowing from the canal are found several masses of rock which support dense carpets of the fern, its fronds dry and curled from the effects of the scarcely shaded sunlight. Intermixed with these patches of fern is a moss (*Grimmia* sp.) and several lichens. Almost invariably the polypody occurs on the most exposed slopes and the steepest summits of the rocks, and the extent of some of the patches would indicate that it has always been at home. At the time of my observation the fronds were dry and curled, but immersion for a few hours in a pan of water wrought a surprising change in their appearance. The old fronds expanded and became fresh and green, while the young ones began to elongate and uncoil, showing the plant to be in perfect condition.

The growth of the gray polypody on rocks in the more southerly portions of its range is unusual. Its preference is for the trunks of trees or fallen logs; in fact, during my travels in the Gulf States, I have never yet seen this fern on rocks. By a curious coincidence, the other species of Polypodium (*P. vulgare*) which is almost universally a rock-loving plant, has been found by Professor Ward not far from this very locality

at Great Falls, growing on trees! It would seem as if the two ferns had changed habitats for the nonce, in order to interest the botanists!

CHARLES LOUIS POLLARD.

A GIGANTIC GRASS SEED.

At the meeting of the Linnean Society, in London, on March 20, Dr. Otto Stapf exhibited several seeds of *Melocanna bambusoides*, a species of bamboo, which completely upset the popular idea of grass seed dimensions, the giants of which are presumed to be represented by pedigree wheat and maize, in which latter the huge mass of seeds constitutes, it is true, a very substantial fruitage; the actual seeds, however, are comparatively small. In Melocanna, on the other hand, in lieu of a spike arm or cylindrical mass of associated small seeds, we have solitary ones, measuring no less than 5 in. in height by 3 in. in diameter, a massive pear-shaped body, the size and form of which are as utterly different from our usual idea of a grass seed as can well be conceived. By what evolutionary process this huge solitary fruit has been arrived at is not clear, but as might be expected, the great store of nutriment embodied in so large a fruit favors the development of the associated embryo plant to such an extent that the first product of germination is a robust growth, which practically secures establishment and continued existence. The single seed is thus fully as efficacious, if not more so, in securing reproductions than a very large number of small ones and by its greater individual vigor would probably have an infinitely better chance of survival in a dense, growing Bamboo jungle, where small weakly seedlings would be utterly incapable of reaching the light. This, indeed, is probably the key to its genesis.—*American Gardening.*

THE WILD FLOWER PRESERVATION SOCIETY.

LOCAL CHAPTERS.

The secretary has received inquiries as to the best methods of forming local chapters. Such bodies should be organized in much the same manner as any other society; the usual course of operations is for the person or persons taking the most active interest in the subject to call a preliminary meeting, inviting by letter, circular or any other means best suited to the local conditions, all those likely to take an isterest in the subject. Some chairman, previously selected, should call the meeting to order, explain its objects and introduce other speak-