

(31.) *P. VIRGINIANUM*, Linn.

All our specimens of this species were collected in Ontario. Reported from Nova Scotia and Quebec.

POLYGONELLA ARTICULATA, Meisn.

Polygonum articulatum, Willd ; Macoun, Cat. Can. Plants Vol. I., p. 409.

Sand dunes, Point Aux Pins, Lake Superior, 1869. (*John Macoun*.) Specimens collected by Dr. Richardson, and labelled "Arctic North America," are probably from the same locality.

A SATISFACTORY SULPHURETTED HYDROGEN GENERATOR.

NEVIL NORTON EVANS, M. A. SC.

To those who have much to do with general qualitative analysis or with the quantitative determination of metals, a sulphuretted hydrogen generator which is self-regulating, economical, and always ready for use is a desideratum. Of late years there have appeared in various chemical publications suggestions for the construction or improvement of such generators, but most if not all of these still possess one serious defect: when the generator is out of action, the separation of acid and sulphide is effected wholly or in part by the pressure of the gas; the gas, however, being soluble to a considerable extent in the dilute acid employed, slowly goes into solution and, by the diffusion of this solution through the mass of liquid, the gas finds its way to the air. Thus, there is a continuous though slow disappearance of sulphuretted hydrogen and a corresponding action of the acid on the sulphide. To prevent this, and have a generator which absolutely stops working when not in use, the separation of acid and sulphide must be effected in some other way than by the pressure of the sulphuretted hydrogen.

Many years ago an excellent apparatus was devised for this purpose by Prof. Clemens Winkler of the Royal Saxon