for loss during the next and most critical operation. Now held your slide over the spirit lamp (with the clip still holding the cover in position) until the jelly boils, and you hear a distinct "crack." Now withdraw it and allow it to cool, when all air bubbles will disappear, and when cleaned up and finished you will have a slide that is worth while. To make the dissections retain their position on the slide, they must all be in about the same plane, and are more or less in contact with both the slip and the cover glass. When cold remove the mounting clip, and the surplus jelly can be scraped off with a fine knife, and what remains can be washed away with brush and cold water. After this I give my slides a bath for 24 hours in a 10% solution of Formaldehyde. They can then be cleaned up and finished with some cement spun over the edge of the coverglass on a turntable. I have tried various cements for this purpose, but fine Goldsize, not too thin, gives the best results. I give three coats of this, allowing each one to thoroughly harden before adding the next. If appearance counts, a ring or two of Zinc-white cement, or Black Asphalt will improve their appearance. Finally, avoid dust and be careful with labelling. I commenced mounting slides in this way in 1919, and slides prepared then are as good today as when newly done, the cells and other parts showing with great clearness, even under very high powers. In storing it is best to keep the slides laying flat in trays and not on end or edge.

> 6 BURNSIDE ROAD, GRETNA, SCOTLAND

## PER DUSÉN: A BIOGRAPHICAL SKETCH

## H. W. Arnell

On the 22nd of January, 1926, P. Dusén died, a little over 70 years of age. He had devoted his whole life to the study of Nature without regard for the toil involved. The important scientific results of his life are to be attributed to an ardent interest and a never relaxing energy. Dusén was a polyhistor in natural history. In the many countries which he explored he considered not only the vegetation but the geography, meteorology, geology, and so forth. As an example of his method of work may be mentioned the chief results of his first exotic exploring expedition, that to Kamerun. He there drew a map of a vast district that before was a terra incognita, collected about 1500 specimens of vascular plants, about 30,000 specimens of mosses, made great collections of plant fossils, minerals, fungi, algae, mollusca, insects, ethnographnical material, etc. He was, as this enumeration shows, most interested in plants, especially the vascular plants and the mosses. He, himself, estimated that the collections that he had made during his life contained about 84,000 vascular plants and about 94.000 specimens of mosses. The fact that a majority of his collections were made n America, and that the majority of his collections consisted of mosses, appears to me to justify a short sketch of his life in THE BRYOLOGIST.

P. Dusén was born, in 1855, at Vimmenby in Sweden, to which country his natural history studies were restricted until 1890, in which year there began the traveling period of his life which lasted till 1916. During this period he explored Kamerun (Africa) 1890–1893; large parts of South America (Tierra del Fuego, 1895–1896; Chile, 1896–1897; Rio de Janeiro, and its environs, 1901–1904; Patagonia, 1904–1905; and Paraná, 1908–1916); and East Greenland, 1899. In Rio de Janeiro he was entrusted with the task of bringing into order the herbarium of the National Museum.

Dusén worked indefatigably in preparing accounts of his travels and describing the collections made, or with trying to get them described by specialists. During the last period of his life, after 1916, he was busy with the description of the vascular plants that he had collected in Paraná. His great posthumous manuscript on this part of his collections will probably soon be printed in Sweden. His interest was by degrees concentrated upon the study of the vascular plants of South America, which fact prevented him from further continuing his work on mosses.

P. Dusén was a sympathetic person with but small pretensions for the commodities of life or for pecuniary profit. He was contented if he could assure himself a small income which would enable him to devote his time undisturbed to the pursuit of his scientific labors. Before 1890, he was a teacher; after this time he had classes for only short periods (in Rio de Janeiro and Stockholm) for which he received a regular salary.

List of Publications on Mosses by Dr. P. Dusén

Bryologiska notiser från Östergötland (Botaniska Notiser, 1895).

Über das Austreuer der Sporen bei Arten der Moosgattung Calymperes (Botaniska Notiser, 1895).

New and some little known Mosses from the west coast of Africa. (Svenska Vet. Ak:s Handlingen, 1896.)

Patagonian and Fuegian Mosses. (Reports of the Princeton University Expeditions to Patagonia, 1903.)

Sur la flore de la Sierra des Itataia. (Arkiv för botanik, Upsala, 1903.)

Beiträge zum Bryologie du Magellansländer, von Westpatagonia und Südchile, 1–5. (Arkiv för botanik, Upsala, 1903–1906.)

Musci nonnuli e Fuegia et Patagonia reportati. (Bot. Not., 1905.)

Beiträge zur Laubmossflora Ostgrönlands und der Insel Jan Mayen. (Bihand till K. Svenska Vet.-Akad. Handl., 1901.)

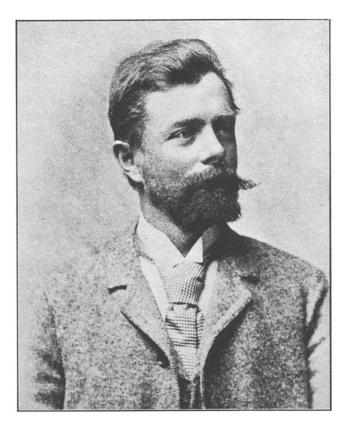
Based on collections made by P. Dusén are, further:

F. STAPHANI. Beiträge zum Lebermoosflora Westpatagoniens und des südlichen Chile und Lebermoose der Magellanländen. (P. A. Nordstedt, 1900–1901.)

C. JENSEN. Enumeratio hepaticarum insulae Jan Meyan et Groenlandiae orientalis a cl. P. Dusen initinere groenlandica Suecorum anno 1899 collectarum. (Svenska Vet.-Akad. Ofvers., 1900.)

Upsala,

Sweden



P. Duten.