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gray, unsized paper (to be had in every "venda" in Brazil), which are firmly held together between two pieces of stout pasteboard by means of a strap. Then the bundle is set upright into a tin box, and strong sugar cane brandy or common alcohol is poured on the sheets from above, until the paper and the plants are thoroughly moistened and the liquid begins to run off below. The bundle, or bundles, are kept in the tightly covered tin box until a quantity of them has accumulated. Then the straps and boards are removed, the single packages are wrapped up in paper and packed as closely and firmly as possible into a tin box about 60 cm. high, which, finally, is tightly closed by soldering a flat cover to it. Several such boxes are packed into a wooden case for shipping. Some small tin boxes ought to be taken along on more extended excursions.

The preservation of plants after this method requires very little time (an advantage of the utmost importance for a traveler), for it is not necessary to arrange the specimens carefully between the sheets. The plants stay in good order, soft, pliable and moist, for years, and may be dried for the herbarium at the collector's convenience, after his return from his travels. They also remain in good condition for anatomical examination, and all kinds of flowers, as well as thick-leaved plants—like many species of Orchids, Cactaceæ, etc.—will arrive at home in excellent order. Besides, plants may be collected and placed between the sheets in rainy weather.

J. SCHRENK.

On two Species of Gramineæ.

SPOROBOLUS CONFUSUS (Fourn.). That species of *Sporobolus* which has been, with us, called *S. ramulosus*, very common at the West, is not the species of Kunth, which is described and figured in Humboldt and Bonpland's "New Genera and Species of Plants," as *Vilfa ramulosa*. This fact is observed in Fournier's Mexican Gramineæ, page 101, where he mentions our plant and calls it *Vilfa confusa*, and, remarks correctly, that it differs from *Vilfa ramulosa* in its long, linear, flexuous pedicels, with an obconic thickening under the flower; not with short, rigid, divaricate, equally thickened pedicels. As the genus *Vilfa* is now conjoined with *Sporobolus*, our species must be called *S.*

confusus. The true *Sporobolus ramulosus* has not yet been collected within our limits, but it is probably identical with *S. racemosus*, Vasey, collected by Dr. Palmer, and No. 1425 of Pringle, both from Chihuahua, Mexico.

MELICA SMITHII (Porter). I recently received from Prof. W. J. Beal, specimens of *Avena Smithii*, Porter, collected in Northern Michigan. I had long suspected the proper reference of this grass to *Avena*; and these specimens enabled me to make a satisfactory examination, which resulted in the opinion that it should be placed in the genus *Melica*, and therefore *M. Smithii*. It will be observed that in Prof. Porter's description it is stated that the flowers are not hairy-tufted at the base, and the awn is straight, characters which chiefly distinguish *Melica* from *Avena*. The species is very near *Melica aristata*, Thurb.

GEO. VASEY.

Notes on Some Rare Grasses.

The writer, on a recent visit to the West, spent some time at Garden City, in western Kansas. This place is located on the north bank of the Arkansas River. On the south side of the river is a range of sand hills which, the people say, were some years ago bare of vegetation and composed of loose and shifting sand, but which of late years have been gradually acquiring a covering of grass. I went to investigate these ridges or hills and found that the principal vegetation was made up of two kinds of grass, which were deeply rooted in the sand.

One of these was *Andropogon Hallii*, very similar to *A. provincialis*, but with thicker spikes and culms, and more succulent, bluish-green leaves. The other grass was, to my great gratification, *Redfieldia flexuosa*, growing rather sparsely from deep rooted creeping rhizomas, and serving to bind the sand together in the same way that *Ammophila longifolia* binds the sand dunes on the lake shore near Chicago. The history of this grass is interesting. It appears to have been first collected by Dr. J. M. Bigelow on the Canadian River. Next it was collected by Mr. Elisha Hall, in 1862, probably on the Republican River, although the locality is not recorded. The grasses of Mr. Hall's collection were elaborated by Prof. Thurber, and this grass was then