synonym *Dactylis cynosuroides* L., we must consider this as primarily a change of name, although the plant he describes comes from Hudson Bay, and probably is *Spartina cynosuroides* as generally understood, that is, the plant from the interior, with few spikes.

Spartina cynosuroides Willd. Enum. 1: 80. 1809, must also be considered as a typonym of *Dactylis cynosuroides* L., since it is primarily a change of name. The description also applies. The two synonyms cited are *D. cynosuroides* Willd. Sp. 1: 40, which is based on Ait. Hort. Kew. 1: 103, which in its turn is based on *Dactylis cynosuroides* L. sp. 2d Ed. 104, and secondly upon *Trachynotia cynosuroides* Michx.

It is evident that Michaux took up Linnæus' name for the wrong plant, and his two species *T. cynosuroides* and *T. polystachya* must stand as synonyms. This leaves without a name the plant which Michaux describes under *T. cynosuroides*.

It is not best to be too arbitrary in deciding such cases and thus be led into an absurdity. This is particularly true for Linnæan species, as the conditions are unusual. Linnæus is introducing a new system and gives specific names to a large number of plants already well known. Judgment should be used so that a blind following of rules will not lead us into untenable positions. The American species are quite likely to be based upon type specimens which agree with his description. If there is no specimen in the Linnæan Herbarium the type should be traced, if possible, to a definite plate. If there are no plates and there is a conflict of cited descriptions, much care and study may be necessary in deciding upon what shall be a substitute for the type.

It is to be noted that there are many species of plants for which there are no nomenclatorial types. Only a few of Walter's grasses described in his 'Flora Caroliniana' are preserved in his herbarium now deposited in the British Museum. Names of species not represented in this collection are based upon descriptions and one can only say there is no type specimen. It may be that there is not in existence the type specimen of a species, according to the rules quoted, yet there may be other specimens which for practical purposes may take the place of the type. Many type specimens were lost at the time Professor Scribner's herbarium was destroyed by fire. Where there are duplicate types (specimens of a set or series bearing the same number or other data to show that they are a part of the same series) one of these may be chosen. It may be necessary to select a second or subsequently cited specimen to take the place of the type, when the latter is known to be lost. In all cases such a selection should be done by a monographer who has had opportunity to give the matter careful study.

A type specimen may consist of more than one individual plant. Consequently portions of the type specimen may be deposited in different places. In the National Herbarium are portions of the types of many species of grasses, such as those of Trinius, Muhlenberg and Elliott, sometimes consisting of an individual, more often of spikelets. These cases should not be confused with those mentioned above, where a description may have been drawn from all the specimens of a given number, one of which was retained in the author's herbarium and the remainder distributed. It would seem better, here, to distinguish the specimen or sheet of specimens in the author's herbarium as the type.

Finally, the following suggestions as to nomenclature are submitted:

Duplicate type: Specimens of the same series or set as the type as indicated by the number or other data.

Co-type: A specimen cited with the original description in addition to the type specimen.

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CURRENT NOTES ON METEOROLOGY.

Mountain Sickness in the Sikhim Himalaya.

Although much has been written about the physiological effects of high altitudes, every new contribution to the subject is of interest. In a recent account of 'The Sikhim Himalaya' (*Scot. Geogr. Mag.*, April, 1905), Mr. Douglas W. Freshfield gives the following summary of his party's experiences: Mountain

sickness was felt more at about 15,000 to 16,000 feet than at 5,000 feet higher, and it was felt in very different degrees by different individuals. Most of the party suffered from lassitude and fatigue after making slight exertion; some were wholly prostrated for a time, and one coolie died. Other persons were entirely free from any perceptible inconvenience. Among the latter was a Goorkha, who *ran* back over a 20,000-foot pass to hurry up the loiterers. Another member of the party, an Englishman, experienced an increased appetite and gained in weight during the journey. Mr. Freshfield believes that the intense glare and heat on the snow had much to do with the sickness of some of the party at 15,000 feet.

THE KALAHARI DESERT.

A RECENT book on the Kalahari Desert ('Die Kalahari,' by Dr. Siegfried Passarge, Berlin, Reimer, 1904) contains a discussion of many interesting matters of a meteorological and climatological nature. Among these topics the following call for special mention: the climate of South Africa and of the Kalahari, with notes on the progressive desiccation of the country, based on comparisons of the observations of earlier and later explorers (Chap. V.); the orographic and hydrographic conditions of the Kalahari, with the evidence for the desiccation (Chap. XXXI.); the effects of rock-weathering under different climates, especially with reference to deserts (Chap. XXXV.), and the geological effects of wind action. Dr. Passarge's book, based on his own study of the Kalahari region during the years 1896–98, will be found to contain much of interest, especially to geologists, zoologists, botanists and meteorologists.

METEOROLOGICAL OBSERVATORY, NEW YEAR ISLAND.

IN the March number of the *Geographical Journal* Captain H. L. Crosthwait describes a recent journey in Patagonia, and also calls attention to the Argentine meteorological observatory, established in 1902, on New Year Island, in lat. 54°59′ S., about five miles off the north coast of Staten Island. Four Argentine naval officers man the station. Since the observations were begun the maximum temperature recorded is 55.4° F.; the minimum, 16.4°; the annual mean, 41°.

NOTES.

THE International Bureau of the South American Republics has recently issued a report upon 'Bolivia,' in which the climate of that country is discussed in a general way.

A HIGHLY mathematical discussion, by Max Margules, entitled 'Ueber die Energie der Stürme,' appears in the *Jahrbuch* of the Austrian Central Meteorological Institute, volume for 1903 (1905). R. DEC. WARD.

NOTES ON ENTOMOLOGY.

THE varying positions in which insects rest have been but little investigated by entomologists. It is now known that in many groups the position of repose is constant, and of importance to the insect. In the Lepidoptera it often has a direct bearing on the color pattern, and on the question of protective resemblance. Dr. J. T. Oudemans has recently studied the subject and furnishes* many interesting observations on positions adopted, the arrangement of colors, the parts of the color-pattern exposed or hidden, and the cryptic value of the position and color. The photographs furnish many striking examples of protective resemblance, most of which are familiar to the American collector.

MR. PERGANDE'S revision of our phylloxeras, after much delay, has at last been issued.† The species affecting the hickory (being most numerous) are classed by themselves, and arranged in four groups according to the nature and position of the gall. Thirty species and several varieties are recorded from this genus of trees. Descriptions of the gall, stem-mother and larva are given for all species,

* 'Étude sur la position de repos chez des Lepidoptères,' *Verhdl. Konink. Akad. Wetensch. Amsterdam*, X., no. 1, pp. 90, 11 pls., 1903 (1904).

† 'North American Phylloxerinæ affecting *Hicoria* (*Carya*) and other trees,' *Proc. Davenport Acad. Sci.*, Vol. IX., pp. 185–273, 22 pls., 1904.