

nounce 'we produce all the plays of Shakespeare,' wholly omitting to mention the names of the actors!

Within the last few days I have learned that Mr. Geo. B. King, janitor of the courthouse at Lawrence, Mass., for seventeen years, has been reduced to the position of assistant janitor. Over him has been put a political favorite. Mr. King is poorly educated, and is surrounded by persons who do not believe in scientific janitors; yet he has been able to discover many new Coccidæ in Massachusetts, and his writings on this group are known to entomologists all over the world. Thus does the *man* come to the front, though everything is against him. Yet it is not always so, and for every one having inborn talent who succeeds, no doubt many fail. Mr. King will have to give up all his work in science, if the new conditions are not altered.

It is to the credit and glory of our universities that they can help men to success; can give the conditions which make success in science possible and easy—*given the men*. But after all, the men are everything.

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ARCTIC NOMENCLATURE.

TO THE EDITOR OF SCIENCE: The president of the Royal Geographical Society, Sir Clements R. Markham, in the *Geographical Journal* for July, 1903, Vol. XXII., page 7, note, says: "The land which is divided from Greenland by Smith Sound forms a long island, and as many as seven names have been given to various parts of it—1. North Lincoln, 2. Ellesmere Land, 3. King Oscar Land, 4. Schley Land, 5. Arthur Land, 6. Grinnell Land, 7. Grant Land. It is a geographical necessity that, for purposes of description, there should be a name for the whole island. It was first discovered by Baffin in 1616, and first named Ellesmere by Inglefield in 1853. Its name should, therefore, be Ellesmere Island." A map on page 57 of the same volume shows 'Ellesmere Island' and omits 'Grinnell Land' and 'Grant Land.'

It seems desirable to call the attention of American scientists and geographers to this

curious proposition, which, without the slightest notice to American geographers, eliminates the American names given to the most important discoveries by Americans in the Arctic, and minimizes as much as possible any recognition of the work of Kane, Hayes, Hall, Greely and Peary.

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PHILADELPHIA,

October 6, 1903.

GONIONEMUS VERSUS 'GONIONEMA.'

DR. MURBACH (SCIENCE, September 18, 1903, 373) has forgotten to add to his letter the following—*Moral*: when proposing a new name give its derivation. F. A. B.

SHORTER ARTICLES.

NEW HORTICULTURAL AND AGRICULTURAL TERMS.

THE extension of horticultural and agricultural knowledge and the extensive literature that is appearing on such topics render it necessary that new words and expressions be coined in many places to give more exact expression to our thoughts. The writer is very much opposed to the wholesale introduction of new terms, as they seldom find use outside of an individual writer's papers. In some cases, however, it is absolutely necessary. Terms for scientific usage are ordinarily derived from Greek or Latin and are seldom fitted for the general use of the masses of the people. Words that we expect to be generally used, the writer believes, should, regardless of derivation, be short, euphonious, phonetically spelled, easily pronounced and different from any other word in ordinary use, so that it will not suggest any other meaning than the one desired. If no word fulfilling these requirements and having the proper signification can be derived from classical sources, the writer strongly favors the policy of inventing a short and convenient term with no meaning other than that given it and without reference to derivation classical or otherwise. By using this policy, short euphonious terms can be secured. Why concede to the Greeks and Latins the sole right of coining words and burden ourselves with inadequate, poorly-

suit, classical or foreign terms when much simpler and better terms could easily be formed with half the effort, if we could be freed from the shackles of philology and feel free to make meaningless terms without a pedigree!

The above sentences are thrown in simply to relieve the writer's feelings. For over two years he has been searching for, and asking friends to suggest, a suitable term to apply to those plants that are propagated vegetatively by buds, grafts, cuttings, suckers, runners, slips, bulbs, tubers, etc. The plants grown from such vegetative parts are not individuals in the ordinary sense, but are simply transplanted parts of the same individual, and in heredity and in all biological and physiological senses such plants are the same individual. The word *variety* is a generic term which may be used to refer to the races of peas, beans, corn, wheat, etc.; to the strains of these or other plants; and to natural varieties of scientific botanists as well as to those sorts where parts of the same individual are separated and grown; but for special reference to the class of plants propagated by relative parts it becomes very necessary to have a particular designation.

Last year the writer suggested the word *strace* to use for such varieties and the term was referred to a committee of the Association of Agricultural Colleges and Experiment Stations for consideration. The term *strace* is a combination of the words 'strain' and 'race,' already in use. Recently Mr. O. F. Cook, of the Department of Agriculture, has called the writer's attention to the Greek word *clon* (κλών) meaning a twig, spray, or slip, such as is broken off for propagation, which could be used in the connection desired. After careful consideration the writer believes this word much better suited to the purpose than the word *strace* which he previously suggested. The Greek words *clados* (κλαδος) and *clema* (κλημα) have practically the same meaning and could be used, but are hardly as suitable. *Clados*, shortened to *clad*, becomes a frequently used English term. *Clema* is one letter longer than *clon*. All in all, the term *clon* seems

well adapted to the purpose, and as such a word is urgently demanded for general use the writer would suggest its general adoption.

We have then the generic term *variety*, including groups in cultivation known as *races*, *strains* and *clons*.

Variety	{	Races,
		Strains,
		Clons.

Races in a strict sense are those groups of cultivated plants which have well-marked, differentiating characters, and which propagate themselves true to seed except for slight individual variations.

Strains are groups of cultivated plants derived from races from which they do not differ in visible, taxonomic characters in the ordinary sense, but into which has been bred some intrinsic quality such as a tendency to yield heavily, or a better adaptability to a certain environment. When, for instance, a breeder, by the careful selection of Blue Stem wheat produces a sort of Blue Stem which differs from the original race only in its ability to give greater yields, it would be called a strain of Blue Stem wheat. If, however, he selects Jones Winter Fife and changes it from a velvet chaff to a glabrous chaff, he has produced a new race. It must be admitted that there is no very definite line of demarcation between strains and races.

Added to the above two divisions of varieties we should now have:

Clons, which are groups of plants that are propagated by the use of any form of vegetative parts such as bulbs, tubers, cuttings, grafts, buds, etc., and which are simply parts of the same individual seedling. We could then use such expressions as the following: 'The *clons* of apples, pears, strawberries, etc., are not propagated true to seed, while this is one of the important characters of races of wheat and corn,' and 'The differentiating *clonal* characters of chrysanthemums are mainly in the form and color of the flowers.'

Clon, plural *clons* (pronounced with long o), is a short word, easily pronounced, spelled phonetically and with a derivation which at least suggests its meaning. The writer would

urge it as a suitable term to adopt into general usage.

A second term or expression, to which the writer desires to call attention, is the phrase *transmitting power*, to apply to the faculty which an individual organism has of transmitting its individual peculiarities to its progeny. This expression the writer has used in his papers for several years past,* but is not aware that it has been used in this connection by other writers, although it may have been, as it is an expression that would naturally suggest itself to any one thinking on this subject. *Prepotency* has been generally used in this sense, but this word has three well-recognized different meanings, namely,

1. The faculty which an individual has of transmitting its individual qualities to its progeny without variation or reversion, meaning in this case the strength of its hereditary power.

2. The faculty which one species has of dominating another, with which it is crossed, in transmitting its characters.

3. The faculty which one kind of pollen sometimes possesses in being more potent in producing fecundation and offspring than another.

The first of these meanings is that for which the writer uses the expression *transmitting power*. Professor Hays, of the University of Minnesota, uses the expression (*centgener*) power in a similar manner, but this expression seems hardly applicable for use in any case other than where breeding is being conducted according to the centgener system used by him.

In pedigree and grade breeding the transmitting power of the individual is the factor of prime importance that must be discovered by carefully following the performance of each individual in its progeny.

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A NEW SPHEROIDAL GRANITE.

GRANITES and diorites, among the deep seated rocks, occasionally develop spheroidal

* Yearbook, U. S. Department of Agriculture; 1902, p. 369.

or orbicular structures which are objects of considerable interest to petrographers, and which are exceptional and striking anomalies among the results of crystallization from fusion. Viewed merely as curiosities they would be of only moderate importance, but furnishing, as they do, an illustration of the order in which rock-making minerals separate from the molten magma and gather in aggregates of regular structure, they are the more worthy of attention. The best known of them have been met in Europe, notably at Fonni in Sardinia; Wirvik, Finland; Slätmossa in Sweden; and especially from Corsica, whose beautiful, spheroidal diorite has found a place in all the larger geological museums of the world. In America they are, if anything, less common. One granite, however, has been met in a boulder at Quonochontogue Beach, near Westerly, R. I., which compares favorably in perfection with those of Europe. A less perfect diorite has also been described from Rattlesnake Bar, El Dorado Co., California.

Last spring the writer came into possession of specimens of an exceedingly striking spheroidal rock, which had been discovered in a glacial boulder, by Mr. Horatio P. Parmelee, near Charlevoix, Mich., a town on Lake Michigan in the northwestern portion of the Lower Peninsula. The boulder was several feet in diameter and the largest piece in the possession of the writer is about fifteen inches wide by twenty inches long by eight inches thick. Through the middle runs a pegmatite vein five inches broad, but consisting of the same minerals as those in the spheroids. In fact, several of the spheroids pass imperceptibly into the pegmatite, their outer halves being normal and well-marked and their inner portions passing gradually into the latter.

The distinct spheroids are two to three inches across, and are usually ellipsoidal in shape, although nearly perfect spheres are not lacking. As is the general experience with these rocks the flattened ellipsoids suggest compression due either to flowing movements while the rock was yet plastic or else to dynamic crushes subsequent to consolidation,