

Howell because of illness; and Professor R. H. Chittenden read a paper upon 'Internal Secretions: Considered from a Chemico-physiological Standpoint.'

These addresses will appear in an early number of SCIENCE.

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THE INTRODUCTION OF NEW TERMS IN GEOLOGY.

THE third circular sent out this year by the Committee of the International Congress of Geologists makes this statement: "*L' inondation de nouveaux termes dans la science a atteint de telles dimensions, que bientôt aucune mémoire d'homme ne sera en état de retenir toute la masse des dénominations nouvelles et que la lecture de chaque mémoire nécessitera l'emploi d'un glossaire special.*" In another paragraph new terms are spoken of as 'evidently nothing more than a useless incumbrance to the science.'

Writers on scientific subjects have often heard complaints about their 'hard words,' but these complaints have generally come from laymen; we have not before had an uprising in our own ranks. In our opinion it has come none too soon. One can scarcely read a paper on geology nowadays without feeling thankful for what is not in it, if he reaches the end without running upon some new term or some new use of an old one. Indeed, we lately saw a review of a text-book which the writer ended with the remark that not the least of the book's many virtues was the fact that the author had avoided the introduction of new terms.

We Americans have contributed our big share to this 'inundation,' and have aggravated the case by the use of Indian words and place-names that are not familiar even in this country except locally. In order to get an idea as to how far some of these words are comprehended by the

common run of educated people in this country, we have inquired of many persons what idea the word 'Monadnock' conveyed to their minds. Most of them had seen the word, but knew nothing of its original meaning. One young man said he didn't know what it meant, but it was the name of a big office building in Chicago. Another one knew it only as a warship in the American Navy.

Such names are said to be used on account of their fastening in the mind certain series of facts. But where is this thing to end? We now have a bare hill protruding from the ice called a 'Nunatak,' and if one of our term-makers should visit Iceland we should soon have 'Jökul,' the name for a snow-capped peak.

A hill with one history is a 'Monadnock,' with another it is a 'Cotoctin,' and with another it is a 'Katahdin.' For as good reason we might call a synclinal valley a 'Lackawanna,' a synclinal mountain a 'Shickshinny,' a monoclinical ridge a 'Pindamonhangaba,' and an anticlinal ridge a 'Jacarepaguá.' And when the bewildered European geologist doesn't know what they all mean we act the part of one of Bret Harte's characters who inquired of the man who hadn't heard of his partner:

What? "Didn't know Flynn,
Flynn of Virginia?
Look 'ee here, stranger,
Whar hev you been?"

New terms are often defended on the ground of their being logical. A little thought will convince any one that geology—not an exact science—can never have a logical and precise system of terms. Besides, the logic of the names of rocks, minerals and relief features has nothing to do with the science of geology as a science, while the fixity of a nomenclature is of much more importance than any logic or special fitness of the words themselves.

Names are mere conveniences—museum

tags—that may be changed or taken away entirely without destroying the value or changing the nature of the thing. It is the thing itself that is important, not its name.

Sometimes the desire for innovations, when it can find no other changes to make, gives an old term a new meaning or substitutes a high-sounding word for a simple one. Occasionally these terms are poured fourth in such quantities that it looks as though their author had certainly invented a new science. Surely nothing can be more out of place than this cluttering up of scientific literature with verbiage that calls attention away from the subject under discussion.

Those who have done most for the spread of the knowledge of science have used the simplest language and, just so far as possible, have avoided technicalities. They have gone on the principle that what one has to say should be so said as to be understood by as many readers as possible, especially if the simplicity of the language makes clear rather than obscures the meaning.

It is earnestly to be hoped that the more sober-minded of our geologists, educational institutions and scientific societies will discourage the use of new terms when they are not absolutely necessary.

Since the above was written we have seen Dr. C. Hart Merriam's timely article in *SCIENCE* (May 7, 1897, p. 731) upon a 'useless and formidable,' 'disheartening and ever increasing mass of terminology.' We beg to commend it to geologists.

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STANFORD UNIVERSITY, CALIF., May 15, 1897.

CURRENT NOTES ON ANTHROPOLOGY.

SYSTEMATIC ANTHROPOLOGY.

SCHEMES, systems, plans, are of value in sciences as both indicating the directions in which investigations should be pursued and the convenient arrangements of ascertained

facts. Like definitions of scientific terms, they are only provisional, suited to the present sum of knowledge, but are none the less useful for that.

In the last number of the 'Centralblatt für Anthropologie' (Heft. 2, 1897) the well-known writer, Dr. Emil Schmidt, of Leipzig, proposes the following comprehensive scheme:

Anthropology, the Study of the Human Species.

I. Natural Historical Treatment.

A. Physical Anthropology.

a. Man as a zoological species.

b. The Races of Men.

1. Descriptive treatment, Phylography.

2. Investigation of physical principles, Phylogology.

B. Ethnic Anthropology.

a. Descriptions of Peoples, Ethnography.

b. Investigation of psychical principles, Ethnology.

II. Historical Anthropology or Prehistory; investigation of the earlier and lower stages of humanity.

The neologisms, phylogology and phylography he introduces from *Φύλη*, which he explains as the physical, while *ἔθνος* is the social and psychical group. His objections to previous schemes are also stated.

ABORIGINAL CULTIVATION OF MAIZE.

AGRICULTURE in primitive America is the more important as a cultural stage owing to the total absence of the pastoral life. Maize was usually the principal cultivated plant, and for that reason a study by Mr. Gardner P. Stickney on its use by the Wisconsin Indians (Parkman Club Publications, No. 13) merits especial attention. It is the result of close reading of the old authors and of local investigation. His conclusions are that the Wisconsin Indians raised it in large quantities, enough for their own wants, and an excess, which they used in trade; while even those tribes in the area of the State who dwelt so far north that it was an uncertain crop gave considerable attention to it, and sometimes raised it in abundant fields. These tribes belonged