brought from localities now known, and that there is still great uncertainty as to the original signification of the Hebrew and Greek names. Most of the specimens were precious stones brought from other lands. The amethyst, beryl, sardonyx, emerald, and agate can be identified. The sapphire appears to have been lapis lazuli. It is doubtful whether the diamond was known when the precious stones in the breastplate of the High Priest were enumerated. Alabaster was an onyx-marble (calcium carbonate), and the material termed brass was generally bronze.

CORRESPONDENCE.

DREIKANTER.

Sir,—Permit me to apologize without delay to Mr. Grabham for having suggested that he was wrong in writing 'a dreikanter'. Whether I was myself in the wrong is another matter. Before venturing on any allusion to other writers I looked the word up, and if I was wrong after all, that fact only strengthens my argument. Surely my point is clear. What I object to is the use of foreign words instead of English ones, especially when accompanied by an alteration in their meaning. The fact that some of us occasionally fall into error in using such words was mentioned incidentally as an additional reason for avoiding them.

Perhaps I should add that I am not responsible for the terms 'tripyramidal' and 'triquetral': they have often been used to express the form of true 'Dreikanter', and those who wish to use that term for facetted pebbles of other shape may be recommended to read Professor J. W. Gregory's address on "The Scientific Misappropriation of Popular Terms" reported in to-day's *Times*.

September 2, 1911. F. A. Bather.

P.S.—In his "Observations on the Magdalen Islands" (Bull. New York State Museum, 149) just to hand, that excellent German scholar, Dr. J. M. Clarke, twice uses yet another variant, namely 'dreikantner'.

September 23, 1911.

FORMATION OF LATERITE.

Sir,—After I forwarded to you Part II, "Microscopical Evidence," of my note on the "Formation of a Laterite from a practically Quartz-free Diabase", which was published in the August number of the Geological Magazine, pp. 353–6, I received from Messrs. Voigt and Hochgesang specially prepared sections cutting through both the diabase and its inner layer of laterite at their junctions.

The following is a short account of the contact between the diabase and its laterite crust:—

Nearing the margin of the undecomposed rock many of the cleavages and the lines of chemical weakness in the plates and prisms of felspar are seen to be filled with films of limonite and are bordered with minute scales of gibbsite.

These cleavage and other lines are still more clearly marked near to the margin, are eroded into and charged with decomposition-products, mainly scales of gibbsite, but with some opaque white and dust-like substances. As the junction is approached the larger felspar prisms and the aggregates of smaller ones gradually break up into small granular non-striated fragments lying in and surrounded by aggregates of scales of gibbsite, interspersed with more or less opaque dust-like substances. Many of the granules are eroded, and their contours remind one of those of sugar crystals dissolving in water. Here and there in the larger plates of felspar aggregates of scales of gibbsite form inlets.

The pyroxene masses in places are changed into aggregates of 'viridite' or of chlorite, but more often the cleavages of otherwise apparently unaltered augite are lined and filled with limonite. Nearer to the margin of the diabase this latter condition steadily increases until close to the contact of the rock and the laterite the masses of augite are changed into reticulations of limonitic products with small unaltered fragments of pyroxene.

Where the rock is actually changing to laterite, all the masses of its augite are altered into reticulations of limonitic oxides of iron with few remnants of more or less unchanged pyroxene, and with relatively few minute aggregates of scales of gibbsite and of dust-like opaque products.

The final change in the slices examined from felspars somewhat corroded to aggregates of gibbsite in parts of them occupied a breadth of less than ·2 of one millimetre, whilst in places, especially where the felspar lies in aggregates of small prisms, the change must be described as abrupt.

The distance between the apparently unaltered diabase and the lateritic aggregate of limonite and gibbsite with few minute fragments of unchanged felspar, some minute granules of secondary quartz, and grains of ilmenite varies in the specimens examined from 1·6 millimetres as a minimum to 3·9 millimetres, or to about one-seventh of an inch, as a maximum. Thus the actual change is mainly, although not entirely, a surface one, the alteration noticed along the cleavage and other lines in the inner parts of the diabase being of very subordinate importance to the superficial ones.

J. B. Harrison.

Science and Agriculture Department,
Georgetown, Demerara,
August 19, 1911.

OBITUARY.

SAMUEL CALVIN, M.A., LL.D.

Born February 2, 1840. Died April 17, 1911.

Samuel Calvin was born in Wigtonshire, Scotland, on February 2, 1840. He went with his parents to America when he was 11 years of age, and received his education at Lenox College, Iowa. When he was 24 years old he enlisted in the Army and served for a few months in the Civil War. He then became a teacher of science in