

having a direction different from that of the stars. The search was unsuccessful; and Pickering concludes from the results that the satellite, if existing at all, has a diameter of less than two hundred metres.

— Rudolf Clausius, the eminent physicist, died on Aug. 25 at Bonn. Clausius was born on Jan. 2, 1822, at Koeslin. In 1840 he commenced his studies at the University of Berlin. After having taken his degree, he became lecturer of physics at this university, holding at the same time the position of teacher at a military academy. In 1855 he was appointed professor of physics at Zürich, and in 1867 he was elected by the faculty of Würzburg, at which university he remained for two years. Since 1869 he has been professor of physics at the University of Bonn. His work on the theory of heat is so well known that we do not need to sum up his merits. His important researches on this subject were first published in *Poggendorff's Annalen*, and later on collected in a work of two volumes, the first of which treats of the theory of heat, while the second refers to the applications of the theory to electricity. With admirable modesty he termed his most important discovery 'the principle of Carnot,' as in following his line of research he was led to its discovery.

LETTERS TO THE EDITOR.

Mississagua Etymology.

A RECENT visit to the Mississaguas of Scugog Island (a remnant of a once powerful branch of the great Ojibwa confederacy) has enabled me to collect some interesting philological and folk-loristic information. Their language is nearly pure Ojibwa, and was in its uncorrupted form a purer dialect than that of Baraga's Dictionary. This conclusion is based upon a vocabulary of some five hundred words collected during my visit, and upon a manuscript French-Indian vocabulary of the region between York (Toronto) and Lake Simcoe of a date *circa* 1803. The words dealt with here were explained to me carefully by Mrs. Bolin, an aged member of the Scugog tribe, a very intelligent woman. Her Indian name is Nawigishcoké ('the sun in the centre of the sky'). She is about sixty-five years old.

Manitoominis ('bead') literally means 'mystery-seed.' The Indian was very much puzzled when he saw beads for the first time. *Musawkwodon* ('beard') literally means 'fuzzy-mouth.' *Musons* ('caterpillar'), the same word as that for 'nettle,' means 'fuzzy thing.' *Muskegamin* ('cranberry') means 'swamp-fruit.' *Shaganosh* ('Englishman') was explained as meaning 'sailing round the world.' The brother of the Mississagua chief at Scugog is called Shawanosh ('sailing from the south'). It is the termination of these words that gives the idea of sailing. *Wamitigoshi* ('Frenchman'), Mrs. Bolin explained to me as meaning 'he who carries a trunk.' She said that no doubt the first Frenchman with whom the Indians got acquainted carried, for some purpose or other, a trunk or box, hence the name. *Shabomin* ('gooseberry') is 'the transparent fruit.' *Pajicogoshi* ('horse') is 'the animal with one hoof.' *Piwabik* ('iron') is 'the metal that crumbles off.' *Oshkikwomin* ('lead') is 'that which can be cut with a knife.' *Wabimojichagwan* ('looking-glass') is a most interesting word. Mrs. Bolin explained it as meaning 'where ghosts are seen.' When the Indians first became acquainted with looking-glasses, they imagined that in them they saw their ghosts or spirits (*ojichag*). *Ashebojanak* ('oar') is from *ashebojan* ('to row'), the literal meaning of which is 'to sit backwards,' referring to the position assumed when rowing as opposed to paddling. *Pajicogoshinjin* ('oats') are literally 'horse's food.' *Ocadak* ('sarsaparilla') is 'the leg-root.' *Menagwacomis* ('sassafras') is 'the scented tree.' *Manitanis* ('sheep') is 'the animal that has the damaged hide,' or the hide that is not durable, as that of deer, etc. *Papakawaiyon* ('shirt') means literally 'thin wear.' *Shishibanwing* ('shot') is literally 'duck-stones.' *Muskeg* ('swamp') is a 'place which is full of sticks.' *Nibanakwanisitan* ('toes') are so named from their running in rotation. *Pakweshikanusk* ('wheat') literally means 'bread-herb.' *Wasaijakon* ('window') is 'that by which the light (*wasaija*) comes in.'

A few other examples might also be given. *Miskotchies* ('beet') literally means 'lead turnip.' *Osawascopineshi* ('bluebird') means

the same as in English. *Osawatchies* ('carrot') is 'the yellow turnip.' *Eshkon* ('chisel') means literally 'horn,' showing of what material these implements were made in the past. *Papiga omukaki* ('toad') is literally 'the rough frog.' *Papassa* ('woodpecker') means literally 'the pecker.'

At Scugog, English is fast superseding the native Indian language, and soon one of the most interesting and most constructive of American aboriginal tongues will have ceased to exist upon the island.

A. F. CHAMBERLAIN.

Toronto, Aug. 15.

The Limit of Drift.

MAPS showing the drift-limit fix the boundary in Kansas a few miles south of Lawrence and Topeka. These are possibly correct so far as the drift-sheet is concerned, but erratic boulders have strayed from their native ledges about Lake Superior to a greater distance. One of granite, weighing over 360 pounds, was found by the writer near the summit of a divide thirteen miles east-north-east of Eureka, and seventy-five miles south of Topeka, Kan. The elevation is about 1,160 feet above the ocean. It lay nearly buried in the soil near the head of a draw tributary to West Creek, a tributary of the Verdigris River. The draw trended south-south-west; and the configuration of the country immediately northward, on the opposite side of West Creek, lends weight to the supposition that that was the direction the emigrant travelled when he entered southern Kansas.

No other boulders have been found in the neighborhood. This one has five planed faces, and bears other marks of having travelled, part of the way at least, at the bottom of a glacier. The country immediately north has never been visited by the writer, and so it is possible that other drift-material lies in that quarter, but none exists here.

If the attenuated margin of the glacier stopped some miles to the northward, and this country was flooded with water, it seems strange that so few boulders floated away in bergs or floes. If this country was flooded to a sufficient depth to float bergs with boulders, the eastern margin of this State must have been occupied by a river of extraordinary dimensions, emptying southward, etc. The find is very suggestive of questions. L. C. WOOSTER.

Eureka, Kan., Sept. 5.

A Brilliant Meteor.

ON Sunday evening last a meteor was seen by several people in and around this city, but, so far as I can learn, Mr. J. C. Mayo was the only one who made reliable time-observations of its appearance and disappearance.

Mr. Mayo is the telegraph-operator and stenographer of the Blue Bird Mining Company, Limited, and resides at the Blue Bird Mine, about three miles west of Butte City.

At 6.30 P.M. by Mr. Mayo's watch, which was five minutes slow of local time, a meteor burst into view in the southern heavens, and moved in an apparent downward and north-easterly direction. About two seconds (estimated) after its appearance the meteor burst, first into two parts, and then into fragments which immediately disappeared. Mr. Mayo, having his watch in hand, noted the time at which the meteor burst, and then listened for a report. At the expiration of five minutes and thirty seconds two loud reports, nearly simultaneous, were heard. These reports were like the explosions of heavy blasts of powder, and were followed by a rumbling like near thunder, lasting about ten seconds.

The place in the sky where the meteor was first seen, as pointed out to me, was S. 60° E. from the Blue Bird Mine, at an elevation of 50° from the horizon. The place where it burst was due east and at an elevation of 25°.

Mr. Mayo describes the meteor as having a well-defined body, egg-shaped, with the smaller end foremost. This body was distinctly visible, "resembling white-hot iron," giving off a pure white light, and was followed by a "bright blaze," which shaded into a dense white, "sulphurous" smoke. The trail of smoke left behind remained visible for fully ten minutes.

The sky was clear and the sun shining brightly; but the meteor apparently emitted as much light as the sun, and lighted up its shadows.

A. B. KNIGHT.

Butte City, Montana, Aug. 22.