due to the Canadians" (p. viii.), are as follows: "Mit-ass, n. Cree, Mitas (Anderson). Leggings. A word imported by the Canadian French (p. 17). Sis'-ki you, n. Cree (Anderson). A bob-tailed horse (p. 23). Totoosh, or Tatoosh, n. Chippeway, totosh (Schoolcraft). The breasts of a female, milk. Totoosh lakles [la graisse], butter."

The other words, the second of which is clearly Algonkian, Gibbs thus describes: "Moos-moos n. Klikatat músmus; Chinook, emúsmus. Buffalo, horned cattle. The word, slightly varied, is common to several languages. Mr. Anderson derives it from the Cree word moostoos, a buffalo, and supposes it to have been imported by the Canadians; but Father Pandosy makes músmus Yakama" (p. 17). "Wap pa-too, n. Quære, u. d. The root of the Sagittaria sagittifolia, which forms an article of food; the potato. The word is neither Chinook nor Chihalis, but is everywhere in common use" p. 28). "Le-pish'-e-mo, n. Quære, u. d. The saddle-blanket and housings" (p. 15).

The last of the above three words is most likely of mixed French and Algonkian etymology.

In the "Manual of the Oregon Trade Language, or Chinook Jargon," published by Mr. Horatio Hale in 1890, the following words occur without their Algonkian origin being indicated:

Lepishemo (lipishimo), saddle housing (p. 47).

Mitass, J [argon] (mitás), leggings (p. 48).

Totoosh, J [argon] (totúsh), breast, udder, milk (p. 52). And the English (hinook vocabulary yields the following, of which the origin is likewise not noted:

Breasts, totoosh (p. 54). Butter, totoosh lakles (la graisse, Fr.), p. 23. Leggings, mitass (p. 57). Milk, totoosh (p. 58). Potato, wappatoo (p. 59).

The word moosmoos also finds place in Professor Hale's vocabulary, with the meanings "buffalo, cattle, ox," and is set down as [Chinook] (p. 48). The words of Algonkian origin which are to be found in the vocabulary of Chinook, as given by the above authorities, are consequently: Kinni-kinnik, [le] pishemo, mitass, siskiyou, totoosh, wappatoo.

Regarding the etymology of these loan-words, the following may be said:

Kinni-kinnik. Derived directly or indirectly from Otcipwē. The cognates are Otcipwē (Baraga) kiniginige, "I am mixing together something of different kinds." (Cuoq) kinikinige, "mêler ensemble des choses de nature différente." The radical is seen in Algonkin (Cuoq) kinika, "pêle-mêle" = Cree kiyekaw.

Lepishimo. This word evidently consists of the French article le and a radical [a] pishemo. This latter corresponds to the Otcipwe (Baraga) apishamon, "anything to lie on; a bed; apishemo, "I am lying on something." Compare the western Americanism apishamore, which Bartlett (Dict. of Americanisms, 1877) thus defines: "Apishamore (Chippewa, apishamon). Anything to lie down on; a bed. A saddle-blanket made of buffalo-calf skins, much used on the prairies."

Mitass. Directly or indirectly (through French-Canadian) from Otcipwē or Cree. The cognate words are: Otcipwē (Baraga), midās; Algonkin (Cuoq), mitas; Cree (Lacombe), mitās. The word exists in Canadian-French in the form mitasse. Dr. Franz Boas kindly informs me that "legging" in Chinook and Clatsop is imētas.

Siskiyou. Though this word is assigned a Cree origin by Mr. Gibbs, its etymology is very uncertain. Blackfoot sakhsiu, "short," and Cree kiskikkuttew, "he cuts in two," offer themselves for comparison, but with no certainty.

Tatoosh, totoosh. From Cree or Otcipwē. The cognate words are: Cree (Lacombe), totosim, "mammelle, pis;" Otcipwē (Baraga), totosh, "breast, dug, udder;" Alkonkin (Cuoq), totoc, "mammelle."

Wappato, wappatoo. From Cree or Otcipwe. The cognate words are: Cree (Lacombe) wâpatow, "champignon blanc;" Otcipwe (Baraga), wâbado, "rhubarb;" Algonkin (Cuoq) wabato, "rhubarbe du Canada." It is in all probability a derivative from the root wap-(wab), "white."

Another word may be added to the list, viz., $p\bar{a}p\bar{u}s$ (papoose) =

child. This word is used by the speakers of Chinook in eastern British Columbia. The Algonkin origin of the word has been disputed by some, but there is every reason to believe that it is connected with the root seen in the Massachusetts papeississu (Eliot) = "he is very small;" peisses (Eliot), "child;" pe-u (Eliot), "it is small." From this root there seems little doubt that the word papoos or papoose found in Roger Williams, and in Wood ("New Engl. Prospect"), has been derived, as Dr. Trumbull points out.

It might be remarked that the words kinni-kinnik, lepishemo, mitas, totoosh, wapato, and papoose were all heard by the writer in western British Columbia in the summer of the present year, so they are still in use as part of the jargon. The word siskiyou was not heard and is probably obsolescent.

It is a remarkable and an interesting fact that the Algonkian family of languages has borne its part in the formation of the curious jargon of the Pacific coast of North America. The presence there of these words is due in part to isolated Otcipwes and Crees who have crossed the Rockies, and to the French-Canadian half-breeds in whose language these words are also to be found.

A. F. CHAMBERLAIN.

Worcester, Mass., Oct. 24.

Auroral Phenomena.

On Sept. 9 there was seen at Lyons, N.Y., a band of light narrower than the Milky Way, arising from the western horizon and passing nearly vertically through the constellations of the Northern Crown and Lyre, just south of the zenith, and thence downward at times to the eastern horizon. There was an aurora at the time in the northern sky, but this band maintained its position throughout the evening entirely independent of the display, although varying somewhat in brightness in sympathy with the aurora and evidently being itself of an auroral nature. On Sept. 10 and 11 an aurora was visible in Great Britain, and, as appears from descriptions in Nature for Sept. 17 (p. 475) and Sept. 24 (p. 494), a band of light similar to that which constituted such a remarkable feature in the display at Lyons was likewise seen in that locality also. Other instances have been noted by the writer in which some peculiarity of form or color has attended an outbreak of the aurora on both sides of the Atlantic.

There is this evening in the western sky a magnificent display of red light similar to the sunset glows which attracted so much attention a few years since. Three-quarters of an hour after sunset the entire western heavens are lurid red, resembling the reflection from a conflagration.

M. A. VEEDER.

Lyons, N.Y., Oct. 29.

Chautauqua and other Iroquois Names.

Mr. Albert S. Gatschet has kindly sent me his paper on the "Origin of the Name Chautauqua," of which he says, "All the information above was obtained from J. N. B. Hewitt, in Washington, D.C.," but I may be permitted to add a few words on this and other names. I may premise that I have a list of about 1,200 Indian names of places in New York, about half of which are either obsolete, or applied to places little known. Many local names can be obtained of the Indians on any reservation.

First, of pronunciation, in which Mr. Gatschet's informant differs from other authorities. It is a little too positive to say that "To spell it 'Chatakwa' would conform better to scientific orthography, for the first two syllables are both pronounced short." Having but accidentally used the name in conversation with my Onondaga friends, it is of little importance to say that they gave it the usual pronunciation, for I was simply trying to get its Others, who have given it attention, are quite decided on this point. Mr. O. H. Marshall was an acknowledged authority on local Indian names. In his "De Celoron's Expedition to the Ohio," he gives several forms. Among these, Alden wrote it as pronounced by the Seneca chief Cornplanter, "Chaud-daukwa." Mr. Marshall adds, "It is a Seneca name, and in the orthography of that nation, according to the system of the late Rev. Asher Wright, long a missionary among them, and a fluent speaker of their language, it would be written 'Jah-dah-gwah,' the first two vowels being long, and the last short." Mr. L. H.