earth and sky, the proposed plan of Mr. Jamin is the only logical one; and it deserves, and, coming from such a source, will no doubt receive, the thorough consideration of meteorologists. H. M. PAUL.

Washington, July 22.

INDIAN LANGUAGES OF SOUTH AMERICA.

THE Indian languages of South America certainly deserve to be investigated as thoroughly as any other languages of the globe; but, unfortunately, there are only a few men who make of them an object of research. Abstracts of their grammatic elements have been published, from earlier sources chiefly, by Professor Friedr. Müller in his 'Grundzüge der sprachwissenschaft,' and by Lucien Adam in his ' Examen grammatical de seize langues Américaines' (Paris, 1882). The following treatises, published of late, have come to our notice, and have added considerably to our knowledge of these curious forms of human speech: 1º. Dr. Julius Platzmann's ' Glossar der feuerländischen sprache.' This is an attempt to present the Yahgan dialect of the Fuegian Islands in lexical form, and is chiefly based upon a Fuegian translation of the Gospel of St. Luke. It is preceded by four historical and topographical articles, composed by Dr. Karl Whistling, enlarging upon physical peculiarities of these islands. 2°. The first results of a scientific exploration of the Fuegian Islands by Bove, aided by the government of Italy, have been made public by Giacomo Bove, in his 'I Fuegini, secondo l'ultimo suo viaggio' (Parte prima, Genova, 1883). Extensive vocabularies of the language are published in this volume. 3°. A manuscript of 1818, by John Luccok, containing grammatical elements and a vocabulary of the Tupi language or lingoa geral of Brazil, was published at Rio de Janeiro by H. Laemmert & Co., 1882. Curiously enough, the titlepage contains the statement that the material is 'badly arranged.' 4°. Dr. Julius Platzmann's facsimile edition of Havestadt's book on Chilidúgu, which has been previously referred to in Science, iii. 550. 5°. A short ethnographic and linguistic article on the Indians of Antioquia and of the Cauca valley, Columbian Union, was published by R. B. White, F. G. S., in the Journal of the anthropological institute of Great Britain and Ireland, 1884. It contains vocabularies of the Noánama and Tadó dialects of the Chocó linguistic family. 6°. In the form of vocabularies of about two hundred terms each, seven Bolivian languages are given by Dr. Edwin R. Heath in the April number (1883) of the Kansas city review. These languages are the Canichána, Cayuába, Mobíma, Moseténa, Pacavára, Marópa, and Tacána. The author has given a graphic account of his travels through that deserted and malarial country in the Transactions of the American geographical society of New York, 1883. 7°. The foreign and Indian words introduced into the Portuguese of Brazil were collected by Braz da Costa Rabim in the Rivista trimensal of Rio Janeiro, vol. xlv., under the title 'Vocabulos indigenas e outros introduzidos no uzo vulgar.' 8°. An array of notices of former travellers upon the Aimorés has been gathered by A. H. Keane, professor at the London university, partly anthropological, partly ethnographical, with a short linguistic appendix, and published with his own remarks in the *Journal of the anthropological institute*, November, 1883 (15 pages, 8°), under the superscription 'On the Botocudos.' The tribal name, Aimorés ('vagrant enemies'), is preferable to and much older than Botocudos ('the ones wearing the lip-ornament'), which applies to many other South-American tribes just as well. Another name, the one by which they call themselves, is Nkrä/kmun (or 'men, people').

THE NEW BOGOSLOFF VOLCANO.

THE Grewingk or New Bogosloff volcano, described in Science (Jan. 25, 1884) from observations made last fall by Capts. Hague and Anderson, was visited by the revenue-cutter Thomas Corwin on the 20th of last May. Photographs and reports have been received at the treasury department which add considerably to our knowledge of its condition. It appears that the two peaks are united by a low dry spit, or bar, of sand and gravel which has doubtless been thrown up by the sea; and Ship Rock now rises from this bar nearly midway between the two peaks. Ship Rock, which is a nearly perpendicular pillar, seems, from the position of the barnacles on its base, to have been raised about twenty feet above its old level. The Bogosloff peak seems to have suffered by the commotion attending the eruption, as the Corwin party estimates its height to be about five hundred feet, while observations in 1873 by the U.S. coast survey gave it a height of over eight hundred feet, the upper third of which was composed of extremely acute, inaccessible pinnacles. As this determination was dependent upon a base-line measured by a patent log, which might have been put considerably in error by currents, too much dependence must not be placed on the discrepancy; nevertheless, as older observations all gave a greater height still, it is probable that a considerable change has taken place, if the Corwin's estimate be correct. The Grewingk cone was stated to be eight hundred or a thousand feet in height, and three-quarters of a mile in diameter, by Capt. Hague. It is now reported to be nearly the same height as the Bogosloff peak, or some four hundred and fifty feet in height and half a mile in diameter. Until the details of the survey are received, no exact figures can be given. A convenient landing-place is formed by the bight on either side of the sand-spit above mentioned, where the shore is also bold, there being three fathoms under the stern, with the boat's head on the beach. Farther off, the soundings are regular for a short distance, and then drop to a considerable depth; north from the Grewingk peak, however, no bottom could be found close in with ninety fathoms of line. The observations for position do not seem to have been very good, owing to cloudy weather, but showed a close correspondence with earlier determinations.

The summit of Grewingk was generally invisible from the clouds of steam which issued from many points of its surface, but no crater seems to exist. A sort of fissure existed in the south-west side, and two or three different pinnacles could be seen at the top when the wind drifted the steam away for a moment. Some of the jets of vapor were steady, others intermittent. No noise accompanied the ejection of steam. The cone is composed of very differ-

ent materials, most of which to have seem been upheaved from the sea-bottom; such as large bowlders, blocks of sandstone, small pieces of shale, etc., all more or less covered with sand and fine pumice-ashes, into which one sank to the depth of a foot or more in attempting the ascent. No lava was seen, nor any cindery rock. The ascent was checked by the heat of the ashes, and the clouds of sulphurous steam, at a height of about two hundred feet. The stones about the jets exhibited incrustations of iron and sulphur; the latter forming large dendritic masses of a greenish color, which, at a little distance, looked like vegetation. The north-east

NOTES AND NEWS.

THE editor has received an acknowledgment from Dr. Anton Fritsch of the money forwarded to him, as already announced in *Science*, on behalf of American geologists toward a memorial tablet to Barrande. This tablet has been erected, at a cost of more than six hundred florins (of which 175.60 were sent from America), on a cliff at Kuchelbad, and is

represented in the accompanying illustration from a photograph sent by him. Dr. Fritsch returns his best thanks to the American donors in the name of the natural-history section of the Prague museum, and says that the publication of this proof of sympathy has made a deep impression upon his countrymen. The list of American subscribers was printed in Vesmír for July From the 1. same paper we learn that the Barrande fund for researches in the Silurian formation of Bohemia has reached 4.200 florins.

- Among the names of our scientific friends in Great Britain who have been mentioned as intending to visit America for the meetings of the

slope of the cone was steeper than the south-western one, but more regular.

The Bogosloff peak was alive with sea-fowl and sea-lions, but was destitute of vegetation. It showed no signs of volcanic activity. The volcanic ash exactly resembled that which fell at Unalashka Oct. 20, 1883, and the latter doubtless came from Bogosloff Island. The island, in its new form, is about a mile and a quarter in length, and half a mile in extreme width, trending north-west and south-east by compass. The Corwin will visit it again on her return from the north in the autumn. British and American associations, we find the following: Professor Adams, Mr. John Ball, Professor Robert Ball, Mr. C. S. Bate, Mr. R. M. Barrington, Prof. H. C. Bastian, Mr. A. W. Bennett, Mr. W. T. Blanford, Professor Bonney, Miss A. Buckland, Mr. W. L. Carpenter, Mr. W. Carruthers, Professor George Darwin, Mr. G. E. Dobson, Professor Jaues Geikie, Mr. J. Glaisher, Professor Haddon, Mr. E. de Hamel, Dr. G. Harley, Professor Lawson, Sir John Lubbock, Professor MacKendrick, Professor MacNab, Professor Milnes Marshall, Professor Moseley, Lord Rayleigh, Sir E. Roscoe, Sir E. Ommanney, Mr. H. Saunders,