brane by successive reflections. The power of the receiver is also increased by the introduction into the coil of several rods of iron; the sound originally somewhat snuffling, thus acquires a more agreeable tone.

M. Reuss calls the attention of physicists to the experiment; we think, with him, that there is here the germ of notable improvements to be made on the electric telegraph.

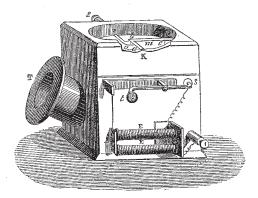


Fig. 4.—Sending apparatus.—K, box to collect the vibrations; m, caout—chouc membrane closing the box; o, platinum disc fixed to the membrane;  $a \delta c$ , movable lever, supported by the point on the membrane; t s, manipulating keys for correspondence; EE, receiving electromagnet for correspondence; 2-t, screws to attach the communicating wires to the pile and with the line.

We do not, however, believe that in its present state, the invention is so complete that we can, at a distance, repeat on one or more pianos the air played by a similar instrument at the point of departure. There is a possibility here, we must admit, of a curious use of electricity. When we are going to have a dancing-party, there will

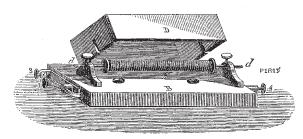


Fig. 5.—Receiving apparatus.—B, box to strengthen the vibrations; p, lid of this box; d, from wise vibrating by the passage of the current; g, coil through which the current passes;  $\ell$ 's', manipulating key for correspondence; r, r, s, screws to attach the communicating wires to the pile and to the line.

be no need to provide a musician. By paying a subscription to some enterprising individual, who will, no doubt, come forward to work this vein, we can have from him, a waltz, a quadrille, or a galop, just as we may desire. Simply turn a bell-handle, as we do the cock of a water or gas-pipe, and we shall be supplied with what we want. Perhaps our children may find the thing simple enough.

## INTERNATIONAL CONGRESS OF AME-RICANISTS.

L AST July there met in the city of Nancy a congress of a somewhat novel kind (NATURE, vol. xii. p. 319) which, at the time, did not attract very much attention, but which, during its four days' sitting, did a considerable amount of work of varied value. This was the International Congress of Americanists, organised by a society recently formed in France under the designation "La Société Americaine de France." The society itself appears

to be French, though the congresses are intended to be international in their character, and among those who were members of the last congress (though not necessarily present) were many eminent men belonging to all parts of the world. Among English names we notice those of Dr. Birch, Mr. Charles Darwin, Mr. Franks, Sir John Lubbock, Mr. R. H. Major, Prof. Max Müller, Sir Henry Rawlinson, Sir Charles Trevelyan, Mr. Trübner, and others. Delegates from various countries were present at the congress, and although most of the papers were by Frenchmen, still a fair proportion were by foreigners, chiefly Americans and Scandinavians. Two thick octavo volumes contain the proceedings of the congress.

The object of this French society in holding these congresses is to contribute to the progress of ethnographical, linguistic, and historical studies relative to the two Americas, especially for the times anterior to Christopher Columbus, and to bring into connection with each other persons who are interested in these studies. The subscription is only twelve francs, and the council is composed of a certain proportion of French and of foreign members. The president of the Nancy congress was the Baron de Dumast, but at each of the lour séances for the reading of papers he very gracefully called to the chair a distinguished foreign member to preside over the day's proceedings. During the congress an interesting exhibition of objects relating to American ethnography and antiquities was held.

The subjects with which the congress dealt were divided into three sections—History, Ethnography, and Linguistics and Palæography, though, as might be surmised, many of the papers bore on all these subjects. Though the subjects were thus divided, the congress met as one body each day.

Such an international congress as this, it will be admitted, might do great service to science. The ethnography and prehistoric archæology of America are of the highest importance; they are a prime factor in the great problem of the world's ethnography. If, then, an international American congress were based on well-defined principles, and if its work were conducted in accordance with the universally recognised rules of scientific method, it might give a powerful impulse to the progress of American ethnology in particular, and to ethnography in general. We shall briefly endeavour to give the reader an idea of the value of the contents of the two volumes before us.

Among the first papers is one of considerable length, by M. E. Beauvois, the purpose of which is to prove that the "Irland it mikla," or "Hvitramannaland" of the early Icelandic chroniclers was a colony founded by Irish m ssionaries, apparently near the mouth of the St. Lawrence, long before even the Norseman knew anything of America. One cannot but admire the learning, ingenuity, and enthusiasm of M. Beauvois, but the verdict must be the Scotch one of "not proven," with a note that it was scarcely worth while calling together an international congress to listen to a paper of this kind.

This may be regarded as a type, and rather a favourable one, of a large number of the papers read at the Nancy congress, papers whose object was to show the intimate connection which in prehistoric times existed between the peoples of the Old World and those of the New. A paper by Prof. Paul Gaffarel of Dijon, for example, had for its object to show the great probability that the Phœnicians had found their way across the Atlantic to America, North and South, and that in various ways they left traces of their presence behind. This is a somewhat more sober paper than that of M. Beauvois, still the verdict must be essentially the same.

Of course the questions of Buddhists in America and of "Fu-Sang" got their share of attention, with the usual

<sup>1</sup> Congrès International des Américanistes. Compte Rendu de la Premère Session, Nancy, 1875. (Paris, Maisonneuve et Cie.)

unsatisfactory result. Fortunately there were some solid men at the congress who were able to perceive the utter futility of discussions of this kind. M. de Rosny, for example, had frequent occasion to recall the attention of the congress to its main purpose, and to remind the members that while we knew comparatively so little of the American aborigines and of their remains, it was a waste of time and energy to discuss the civilisa-tion of any other country. "Our duty," he said, "is to establish formally, against all the crotchets which have hitherto infested the domain of Americanism, a method. Every hypothesis which is not based on certain proofs is of no scientific value;" and Dr. Dally justly remarked that there is no special "Americanist method," but that there is a scientific method, whose rules are quite sufficient for this new department of science. "No documents," Dr. Dally continued, "are adduced in support of these connections between the Old and the New Worlds; we must, therefore, provisionally consider them as nonexistent. All the alleged analogies are only vain appearances. The presumptions are, on the contrary, against the hypotheses of an analogy or a filiation between the religions of Mexico or of Peru and those of Fastern Asia. The solution of the question is that the Americans are neither Indians, Phœnicians, Chinese, nor Europeans; they are Americans." "All these hypotheses," Rosny remarked again, "of Asiatic influences in America are very piquant: it is the proof which is always wanting." What a pity a few men like M. de Rosny and Dr. Dally were not appointed beforehand to decide on what papers were deserving of the serious attention of the congress! However, wisdom comes by experience. The fairly moderate paper on Fu-Sang, by M. Lucien Adam, might have been admitted, as might also that of M. Gravier on the Deighton Rock inscription, but we are sure that all the papers thus admitted could have been published in onethird of the space of these two volumes.

M. Lévy-Bing brought much learning to bear on the Grave Creek inscription for the purpose of proving it to be Prænician, with the usual unsatisfactory result, we are sure, on all unbiased listeners. Perhaps the most deliberate and cold-blooded attempt to prove an intimate connection between America and Old World civilisation was made by Prof. Campbell, of the Theological College, Montreal, in his paper, "The Traditions of the Ancient Races of Peru and Mexico identified with those of the Historical Peoples of the Old World." His object is to prove that the Peruvians and Mexicans had "their original home on the banks of the Nile, and that their tradititions relate primarily to an early national existence either in Egypt or the neighbouring region of Palestine;" and besides various other conclusions, "that there is the strongest reason for finding the affinities of the civilised races of ancient America, not among the Turanian or Semitic, but among the Aryan or Indo-European families of the world." This is rushing to a conclusion with a vengeance, and some of the more sober members of the congress had good reason to animadvert on the "haste to conclude" manifested by many of the Americanists, and the want of patience to wait for more light. An idea of the value of the "facts" on which Prof. Campbell builds his sweeping conclusions may be gathered from the following extracts:—"Animal worship prevailed in Peru, and it is worthy of note that flies, called cuspi (a word of the same origin as the Semitic zebub, the Latin vespa, and the English wasp) were offered in sacrifice, thus recalling the Baal-zebub of the Phili-sheth." "In Manco I find the first monarch of universal history, the Egyptian Menes, the Indian Menu, the Greek Minos, the Phrygian Manis, the Lydian Macon, the German Mannus, the Welsh Menev, the Chinese Ming-ti, and the Algonquin Manitou"—and so on through endless ingenuities. Is not this comparative philology playing at "high jinks?" and is it not one more striking proof that to trust to lan-

guage alone in questions of ethnography is to trust to a chain of sand?

While the Baron de Bretton's paper on the Origins of the Peoples of America contains some suggestions of value, it also, like the one just mentioned, is disfigured by many etymological fantasies. It is quite legitimate to try to show that America may have been in part peopled from Europe, but to base such a theory on arguments like the following makes one almost despair of the progress of scientific method:—"The first invaders from whom, according to the tradition of the Toltecs, that people were descended, were called Tans, Dans (Danes!). Their god, Teoti, strongly resembles linguistically the Greek theos, Latin deus," &c. The temples of this god were called tescabli, "a word which comes from Greek theos and Celtic ca-cas, house." A god, Votan, is probably Wodin, and Thara, Thor-as Asa-thor. Azlan, the supposed original home of the Aztecs, is, according to Baron de Bretton, evidently Scandinavian Asaland, country of the Ases, of the Asiatics, of the Aztecs themselves. What answer can be made to such etymological leger-demain?

The Abbé Petitot has been for many years a zealous missionary in the Athabasca-Mackenzie region of North America, and has made some valuable contributions to a knowledge of the geography of that region; not content with this, however, he is eager through the medium of language to prove the unity of origin of the human race. He argues that because certain North American Indian words have a more or less distant resemblance to Chinese, Malay, Tamul, Hebrew, Greek, Latin, Japanese, German, English, &c., therefore all these are descended from one common stock. We shall give only one specimen of the Abbé's easy-going comparisons: English each, he tells us, is the same word as Hebrew isch. He gives pages of this sort of thing. It is easily done; any ignoramus with the dictionary of a dozen different languages before him could do it. The "Tower of Babel" is the Abbé's starting-point in tracing the diversities of human speech.

It seems to us a pity that the reputation of an international congress that might do much good should be endangered by puerilities such as those we have referred to. We hope that in this their first meeting the froth has come to the surface, and that in future meetings means will be taken to prevent middle-age word-puzzles being foisted on the congress.

The two volumes, however, contain some papers of real value; these we have space only to name. Prof. Luciano Cordeiro's (of Coimbra) paper on the part taken by the Portuguese in the discovery of America is of considerable interest, and shows great research. A paper by M. Paul Broca on two series of crania from ancient Indian sepulchres in the neighbourhood of Bogota is a model of careful observation and reasoning. M. J. Ballet, of Guadaloupe, has a long memoir on the Caribs, full of information. A paper by M. Julien Vinson on the Basque language and the American languages is able and scholarly and cautious. He shows that in structure and grammar they have many points of resemblance, but that on this ground there is no reason whatever for concluding that they or their speakers have a common origin. Other papers of value are Dr. Cornilliac's on the Anthropology of the Antilles, Mr. Francis A. Allen's on the Origin of the Primitive Civilisation of the New World, an elaborate paper, the result of great research, and M. Oscar Comettant's paper on music in America before the discovery of Columbus.

On the whole, we cannot think that these two volumes show that this International Congress of Americanists has done much in furtherance of the object for which it met, and we shall look with interest for the results of the second congress, which will meet at Luxembourg in September, 1877.