

of teachers to the board and elementary schools, the society would have accomplished much. It was perhaps characteristic of the absence of theory in the proceedings of the practically minded average Briton, that they who had done more as a nation to explore and colonize the distant parts of the world than any six other nations should have at home less instruction given in our schools on the subject of geography than was enjoyed by the youth of most of the European peoples.

The belief was expressed that the work of discovery had recently been aided by the Indian army in Burmah, and by the impulse given by Australia to the exploration of New Guinea.

The death of the British commissioner might have temporarily checked measures that would lead to the investigation of this latter country; but they might trust to the enterprise of Ford and other explorers, and to the activity with which Australasian commercial interests were pushed, for additions to our knowledge of an island of which it must with some shame be said that a few birds of paradise had hitherto represented its available export trade. With Baron von Müller as president of the Melbourne branch of the Australasian geographical society, they might be sure that the scientific aspects of the investigation of this magnificent new field would not be overlooked.

In Canada, again, Selwyn and Dawson and Macoun had been engaged in marking the value to science of the recent discoveries in geology, mineralogy, and meteorology made possible by the rapid completion of the Pacific railway across hitherto unknown mountain-ranges, whose ridges were the birthplaces of waters flowing into the Arctic, into Hudson's Bay, and the Gulf of Mexico. So valuable were the storm-signals to be derived from stations in the far north-west, that the American government had gladly placed the observations of nearly ninety stations at the disposal of the Canadian government, in return for those from about twenty in the British dominions.

The messages flashed from Toronto and Washington over the American continent and across the Atlantic had already been the means of saving many thousands of lives, and afforded the most practical recent proof of the immediate utility of scientific induction. The western points at which records were kept were spots wholly unknown to the geographer a century and a half ago.

There are few among our race, whether belonging to the nation of their gold medallist, Greely, or to their own, who would not place a higher value on the discoveries in that north-western

land than on those which should open to them access to the torrid zones. They gladly recognized the gallant efforts made by other races, notably by the Italians; and, while they gave the gold medal to him whom they might almost call their countryman, they were glad to recognize the aid given to their science by Signor Cora, and they condoled with Italy in the recent loss of the leader and members of the expedition recently massacred near Aden.

Having briefly reviewed the chief geographical events of the year, the Marquis of Lorne concluded by saying that the mere string of notes, telling of what in a twelvemonth had been accomplished, showed how quick was now the invading march of knowledge.

A FINAL BUFFALO-HUNT.

THE National museum has sent its chief taxidermist, Mr. William T. Hornaday, on a hunting-tour through the far west, for the purpose of obtaining specimens of the buffalo, before this animal becomes extinct in this country. Mr. Hornaday took with him as an assistant Mr. A. H. Forney, an attaché of the museum. The party reached Miles City, Montana, May 12. Some Crow Indians are said to have killed four buffaloes on the Mussel-shell River about six weeks ago. It is firmly believed by many good authorities that there are not now more than from fifty to one hundred buffaloes in the whole of Montana, outside of the National park, where there are probably from two hundred to three hundred head. Hunters lie in wait outside the limits of the National park, waiting for these animals to cross the line, when they lose no time in despatching them as soon as possible. A stampede may occur at any time, which may result in all the buffaloes now in the park leaving; and if such were the case, very few, if any, would escape.

Mr. Hornaday and his party were received by the commanding officer at Fort Keogh, and furnished with a six-mule team, a driver, and escort. The plan of route is to cross the Yellowstone at Miles City, proceeding up Sunday Creek and Hunter's Creek to its source; thence across to Big Dry River, following it down to the Big Bend; thence across and westward up Big Timber Creek; and eventually across to the Mussel-shell River, which it is proposed to explore almost its entire length. This route probably covers every chance for finding buffaloes in Montana or elsewhere. There is said to be a small herd of from eight to twelve buffaloes in south-western Dakota. This region is a vast, level, treeless prairie utterly

destitute of wood, and it is Mr. Hornaday's opinion that an attempt to find these few would be hopeless. Skins of buffalo-heads are now valued by taxidermists in Dakota at fifty dollars each, from which it may be assumed that they have given up all hope of procuring any more.

Should this endeavor be fruitless, the suggestion has been made that buffaloes may still be obtained in the British possessions.

PARIS LETTER.

THE town of Montdidier (department of Somme), in the north of France, has recently held a series of festivals in honor of Parmentier, who, as is well known, was the first who brought that humble but useful vegetable, the potato, into France. It was in 1786, or thereabout, that Parmentier obtained from Louis XVI. permission to cultivate potatoes in the Plaine des Sablons, near Paris, to show what service could be expected from the new food. The festival of Montdidier consisted of an agricultural exhibition, an exhibition of horses and dogs, and of farming implements, and also of a meeting at which were discussed the names by which the different varieties of potatoes are to be designated hereafter. M. Chevreul was to preside, but could not attend. He wrote a letter, in which he said that Montdidier was for him a second birthplace, "because there was born Mlle. Sophie Davalette, whom I married in 1818, and who made the happiness of my life during nearly half a century." This is certainly a very interesting fact, but has not much to do with Parmentier.

Some days ago there was held in the palace of the Trocadero a festival for the benefit of the Pasteur institute. The very first artists, dramatic and musical, offered their time and talents: and the meeting was a success. The house, which is enormous, was crowded, although prices were high; and after the recital by Coquelin, of some verses of E. Manuel, a very fine ovation was given to Pasteur. He was very pale and much overcome. The whole audience rose, and cheered with all their might. This festival was got up under the direction of Scientia, a young scientific society founded by Charles Richet, G. Tissandier, and Max de Nansouty.

Dr. Lagneau has recently presented his report on the principal epidemics of Paris during 1884. (This is an annual report sent to the Conseil d'hygiene.) Some interesting facts are to be noticed in it. It has long been thought and said that typhoid-fever is the most prevalent and most fatal of Parisian epidemics. This, however, is quite untrue: diphtheria is entitled to the first place in the scale. Typhoid-fever, small-pox, and whoop-

ing-cough are becoming more rare than formerly. In 1884 there were 2,592 deaths from diphtheria. Dr. Lagneau's report is a very interesting and useful one, and indicates great progress in the hygienic and sanitary conditions of Paris.

A few days ago I was present at the inauguration of the Exposition d'hygiene urbaine, a very interesting display indeed. I specially noticed a hot-air room for the disinfection of mattresses and clothing (for military and colonial purposes), Redard's method for disinfecting wagons and railway-cars by over-heated steam, etc. The number of implements exhibited is very great, and one might spend many hours in the exhibition without feeling a decrease in interest. It is impossible to enumerate the useful and ingenious apparatus to be seen, and I shall not attempt it.

There has been a very sharp discussion in the Academy of medicine between Pasteur and Béchamp. It is pretty well known that Béchamp has got up a theory on microzymas, which nobody save himself well understands. Microzymas, according to his idea, are molecular granulations which have existed since the beginning of the world,—he does not say which day of creation,—and are possessed of eternal life. But what is the rôle of these microzymas, what is their influence on health and disease, what is their use and their *modus vivendi*, nobody knows. In short, M. Béchamp having attacked Pasteur's experiments with unusual fury, Pasteur arose and said that such discussions were entirely useless, and that the only thing to do was to begin experimenting again, and that M. Béchamp would surely recognize his errors if he only took care to experiment seriously. Pasteur contested every result of Béchamp's experiments, and asked for the appointment of a commission to examine the facts and arguments on both sides: he wants to have done with the microzymas, and to show where the errors lie. We shall certainly have some very interesting discussions soon. The commission has been appointed on Professor Trélat's proposal; and it is believed that M. Béchamp's last idea, viz., that microzymas transform themselves into bacteria, bacilli, and other pathogenetic organisms, will not live much longer.

The statistics concerning rabies in animals during 1885 have just been published. They show that in Paris, or rather in the department of the Seine, the number of rabid animals was 518. Of these animals, 503 were dogs; 13, cats; and 2, horses. Nineteen persons have died of rabies. It should be remarked that the number of cases of rabies in animals was much larger in 1885 than in 1884, — 518 instead of 301, an increase that is not easily accounted for.