

quick growth, are all in favour of operations. The following are the results of his experiments on the cerebral hemispheres:—"Very convincing facts are obtained by removing the cerebral hemispheres in new-born animals, and allowing them to grow up. The result is idiotismus. There is also reason to locate the organic conditions of voluntary movements in the cortical substance of the brain, but there is no reason to accept the corpus striatum as a motor ganglion. The hemiplegion following the destruction of the nucleus lenticularis can be satisfactorily explained by the rupture of fibres passing through the internal capsule. But admitting the cerebral cortex as the organ for voluntary movements, there is no necessity to have another motor ganglion. Indeed, Gudden's experiments on new-born rabbits, by removing portions of the hemispheres, have demonstrated that the organ of voluntary motion is located in the frontal part of the cerebral cortex."

Dr. Ferrier, whose results are referred to in another column, is working in a similar field of observation, with the view of elucidating the relations between certain convolution centres, and definite sets of muscles at the periphery.

FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE second meeting of the French Association for the Advancement of Science was held at Lyons from the 21st to the 28th of August, under the Presidency of Prof. Quatrefages. This Association bids fair to become as popular in France as the British Association in this country. The work done in the sections which I visited, those of Anthropology and Geology, was, to say the very least, as valuable as that done by our own sections. Among the papers brought before the former, the pleistocene station of Solutr  excited considerable interest, and was subsequently visited by the section. The site has been used by man for habitation and burial, as late as the Merovingian times, in which it was a cemetery, and the strata are to a considerable extent *romani *. The association of remains on that spot of varying age, Pal olithic, Neolithic, and Frar-kish, seems to throw a doubt on the precise date of the human skeletons, buried at full length, and generally believed to be of the same age as the associated implements of reindeer, and bones of mammoth. Dr. Gosse also read a paper on the reindeer-cave of Veyriers, Switzerland, and exhibited carved implements of reindeer antler, usually called "batons de commandement," which are of the same form as the arrow-straighteners of the Eskimos. Here, as in the caves of Belgium explored by M. Dupont, they presented but one perforation. The debates were very animated, and drew out many valuable remarks from the eminent anthropologist, Dr. Paul Broca.

In the Geological section, papers were contributed by the Comte de Saporta, M. Dumortier, Bebout, and others, and in the debates Prof. Carl Vogt of Geneva took a prominent part. M. Falsan and Chantre exhibited and described an elaborate map of the glacial phenomena of the middle basin of the Rhone, drawn on a large scale. They traced the glaciers of the Alps, and of the Jura, as far to the west as the Sa ne, and as far to the south as Valence; and they proved that there were two epochs of glaciation, the one during which the area in question was covered by a great ice-sheet, conveying Alpine blocks over the Jura into the valley of the Sa ne and middle basin of the Rhone, and the other during which the glaciers were isolated, and local moraines accumulated in the river valleys. These two periods correspond with those which have been noted in Great Britain and Ireland, by Prof. Ramsay, Hull, and others. The map presented a combination of artistic skill, with careful work in the field, which is very rarely met with.

In the evening three popular lectures were given to the public, one of which, by M. Janssen, on the Constitution of the Sun, was admirably illustrated.

The times of meeting of the sections differ from ours, the programme of the day being, first, a morning sitting from 8.30, or 9 to 11 A.M.,—*d jeuner*; and, an afternoon sitting from 3 to 5 P.M.—then dinner; and sometimes an evening sitting commencing at eight, when there were no lectures going on. The sections were 15 in number, and comprised Agriculture and Medicine, as well as those represented in the British Association. There were excursions down the Rhone, and to Geneva; a grand *fete* given by one of the merchants, and a magnificent entertainment given by the City of Lyons in the Town Hall.

In writing this short notice the extreme courtesy and consideration of the French Association to the strangers should not be omitted. Their hospitality to the only English guest present was too great to flow from any personal motive, and evidently was intended as a mark of respect to the British Association. W. B. D.

THE METEOROLOGICAL CONGRESS AT VIENNA

THE Meteorological Congress which met at Vienna during the past month worked very hard amid many difficulties, and we believe will have good results. The Congress sat from Sept. 2 to Sept. 16. The protocols and appendices are in the press, and will appear officially in French and German; while Mr. R. H. Scott has undertaken an English translation, which will appear as soon as possible. The following is a list of the delegates from the various countries:—Antonio Aguilar, Spain; H. Buys-Ballot, Netherlands; Carl Br hns, Germany; Alexander Buchan, Great Britain and Ireland; I. D. Campbell, China; Giov. Cantoni, Italy; Aristide Combarry, Turkey; v. Czelechowsky, Austria; F. Doergens, Germany; Prof. Ebermayer, Bavaria; Fradesso da Silveira, Portugal; M. Gloesener, Belgium; Julius Hann, Austria; Hofmeyer, Denmark; Carl Jelinek, Austria; Josef Lorenz, Austria; Heinrich Mohn, Norway; Robert M ller, Austrian-Hungary; Albert Myer, United States; Georg Neumayer, Germany; E. Plantamour, Switzerland; Ernst Quetelet, Belgium; R. Rubenson, Sweden; Guido Schenzl, Hungary; Julius Schmidt, Greece; H. Schoder, Germany; Robert H. Scott, Great Britain and Ireland; Carl Sohncke, Germany; H. Wild, Russia; F. Winnecke, Germany; A. Zamara, Austria. The following is the programme of subjects discussed:—

1. *Instruments*.—1. What is the construction of the barometer most suitable for stations of the second order? Is the use of aneroids at such stations advisable? 2. What mode of exposure of thermometers for the observation of air temperature is the best and most suitable for general adoption? 3. What is the best construction for maximum and minimum thermometers? 4. What instruments should be used for determining intensity of radiation, and in what way can the comparison of the results obtained be secured? 5. What is the best apparatus for observing earth temperatures? At what depths ought they to be made, in order that the desired agreement may be attained? 6. What instruments should be used for ascertaining the state of moisture of the atmosphere? Does the psychrometer suffice for this purpose? Can the hair hygrometer be made applicable, and with what limitations? 7. In what way can an agreement in the signs for the directions of the wind be attained? Is the deduction of the mean direction of the wind according to Lambert's formula desirable? Is it desirable or not to include very light winds (force 0) in constructing wind roses for the direction of the wind? 8. What scale is to be used for the force of wind where it has to be estimated without the aid of an instrument? 9. Is the