

The spherical copper caps of the equatorials were perforated by many holes from Versailles' rifles, and the equatorials themselves were slightly hurt. But altogether the damage done is nothing in comparison with the harm which was contemplated.—Dr. Guyot sent a paper on Dynamite, and the means of protecting storehouses from spontaneous explosion. Dynamite is known to be a mixture of sand and nitro-glycerine. When it is wrapped in a cartridge, made as usual with paper, the capillary attraction works on the nitro-glycerine, which is slowly separated from the sand, and impregnates the protecting matter. In this new form nitro-glycerine is almost as explosive as in its ordinary liquid state, which may very easily be proved.—M. Elie de Beaumont read a circular, noticing that the next session for the British Association will be held this summer at Edinburgh. The learned perpetual secretary expects that many members will try to attend it, so that French science may have a fair representation, which is seldom the case on these occasions.

June 12.—M. Delaunay in the chair. The greater part of the members, who were obliged to escape from Paris, have resumed their seats. M. Leverrier was congratulated on having resumed his professorial duties at the Sorbonne, where he has opened this very morning his regular course of lectures on Mathematical Astronomy. Almost every scientific editor of the Parisian papers has returned also to his seat.—M. Serret presented a memoir on the principle of least action, economy of mechanical work by natural forces acting from certain centres by attraction. Euler and Lagrange had confined their exertions to show that the first differential was always zero. This was not sufficient, as such a differential may belong to a maximum if the second differential becomes negative, which was left to be demonstrated by Euler and Lagrange. The work was very difficult indeed.—M. Becquerel read a very long paper on atmospheric electricity. It was worked by himself as well as by his son, as the first part of a theory which can be reviewed only when completed. M. Becquerel, advocating the opinions started by Pelletier, thinks that the electricity of the upper regions is positive, and he says, moreover, that it comes from the sun, which is a focus of positive force. The electrical connection from the sun to our upper atmosphere is maintained through celestial space, which is not an absolute vacuum, but is filled with gases at a low pressure. The electricity of the earth is negative, and every thunder clap is a discharge between the earth and the upper regions through the air.—M. W. de Fonvielle sent a note reviewing the organisation of the Postal Telegraphic service in England, and showing that the French Government is wrong in maintaining two different administrations. The case of the French Government is very bad, as the two administrations were amalgamated during the war by the Tours delegation, under M. Steenackers, and ultimately separated. M. Buys Ballot, the celebrated director of the Utrecht Meteorological Observatory, asked from the Portuguese Government the establishment of a Meteorological station, or rather system, in the Azores Archipelago. This will result in the issuing of regular reports when the south-western gales are on their way to visit the British Islands and Western Europe. M. Delaunay, who read over the note at full length in the name of M. Buys Ballot, strongly advocated the proposition of his learned colleague. It is greatly to be hoped that the Portuguese Government will yield very shortly to the suggestion.

Academy of Inscriptions and Belles Letters, June 9.—The first sitting for a long period, as almost every member had been a refugee outside Paris, except a few officials. M. Haureau, director of the National Printing Office, explained that nothing was disturbed at this establishment. The Oriental Department is in excellent working order. The manuscripts of several members, which are kept there as well as valuable documents, are safe, owing to the mild rule of M. Debock, a working compositor, who was appointed a delegate by the Commune, and who protected also the National Archives, which are located in an adjoining building.—M. Alfred Maury, who had been left as Director of Archives by the Commune, had much trouble in protecting it against Communist fury, even with an order signed by Debock. M. Maury was praised for the energy exhibited and the courage shown in remaining at his post, running the risk of being taken as a hostage. He was much assisted in his work of protection by the gate-keeper, who severally turned out small parties of incendiaries coming with petroleum to execute their infamous orders. M. Leon Renier said that the stock of Borghesi works printed by the Academy, has perished at the same time as the Louvre Library. But the

Borghesi manuscripts are safe. The 7th volume had not been distributed, and it will be necessary to print it again at the expense of the Academy, which had a limited credit for the whole edition. M. Leopold Delisle said that the manuscripts of the National Library, which had been concealed in the Archives, are safe. A few shelves had been slightly attacked by damp, but the real damage amounts to very little. There are seven nominations required in order to fill up the vacancies; death has removed four members, two ordinary members and one foreign associate. The Academy has adopted a proposition of M. Renan to fill up the vacancies gradually. On the 16th the Academy will appoint a commission for reporting upon the respective merits of candidates as foreign associate members. On the 23rd the Academy will examine the titles of the candidates for filling the seats of MM. Villemain and Alexander, whom the Academy lost before the Prussian siege. On the 30th the Academy will appoint a committee for reporting upon the candidates to two honorary memberships; but the nomination for the last two ordinary memberships will be postponed till next winter.

BOOKS RECEIVED

ENGLISH.—Scrambles among the Alps, 1860-1869: E. Whymper (Murray).—The Antiseptic System: Dr. A. Sansom (H. Gillman).—Introductory Text-book of Meteorology: Dr. A. Buchan (Blackwood and Sons).—Manual of Modern Geography: Rev. A. Mackay, 2nd edition (Blackwood and Sons). FOREIGN.—(Through Williams and Norgate)—Die Grundzüge des graphischen Rechnens u. der graphischen Statik: K. von Ott.—Der Seidenspinner des Maulbeerbaumes: F. Haberlandt.

PAMPHLETS RECEIVED

ENGLISH.—Chemical Phenomena of the Blast Furnace, Pt. II.: J. Lowthian Bell.—Annual Address by the President of the Royal Geographical Society.—Practical and Experimental Philosophy, Pt. II.: R. Willis.—Report of the Winchester College Natural History Society.—Vaccination viewed politically: F. W. Newman.—An Essay on Unsolved Ethical Questions: D. Rowland.—Transactions of the Northumberland and Durham Natural History Society.—On Barometric Differences and Fluctuations: J. K. Loughton.—Thirty-eighth Annual Report of the Royal Cornwall Polytechnic Society.—A Catalogue of Hardy Perennials, &c.: W. Robinson.—British Statesman and Churchman, No. 10.—Will the Earth become a Sun-Spot?: R. Holmes.

AMERICAN AND COLONIAL.—Australasian Medical Gazette, No. 37.—Catalogue of the Iowa University, 1870-71.—Lectures delivered at the Industrial and Technological Museum, Melbourne, during the Spring Session of 1870.—Population: its Law of Increase: N. Allen.—The Physiological Laws of Human Increase: N. Allen.

FOREIGN.—Ueber einige Trematoden und Nemathelminther: R. von W. Sakow.—Oversigt af kongl. V. Akademie, Forhandlingene.—Die Geographische Verbreitung der See-gräser.

DIARY

FRIDAY, JUNE 23.
QUEKETT MICROSCOPICAL CLUB, at 8.
MONDAY, JUNE 26.
ROYAL GEOGRAPHICAL SOCIETY, at 8.30.
WEDNESDAY, JUNE 28.
SOCIETY OF ARTS, at 8.—Anniversary Meeting.

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