

naked, the Mashonas are well clothed, and practise the art of smelting and working iron in great perfection. He exhibited a specimen of gold, weighing 27 ounces, extracted by his men from the quartz reefs. Mr. Galton spoke of the great additions made by Mr. Baines, in this journey, to our topographical knowledge of Africa; and Mr. Dunlop stated that quartz had now been found in the country yielding eight and ten ounces of gold to the ton, and that the country was a suitable field for British enterprise.

Linnean Society, March 16.—Mr. G. Bentham, president, in the chair. Col. Grant was elected a fellow.—Prof. Oliver exhibited specimens of *Cupania cinerea*, Poepp. belonging to the order Sapindaceæ, from the Kew Herbarium, in which the seed, partially surrounded by an arillus, splits open, and the exalbuminous embryo falls out, leaving the testa and arillus on the tree, the only instance known of such dehiscence of the seed itself.—An extract was read from a letter from General Munro to Dr. Hooker, describing the vegetation of a little known part of the island of St. Vincent, in the West Indies.—Mr. Henry Reeks exhibited a series of forms of *Aspidium* from Woodhay in Hampshire, which he considered showed a regular gradation between *A. aculeatum* and *A. angulare* of authors.—Notes on *Capparis galeata* and *C. Murrayii*, by Mr. N. A. Dalzell, who believes that these two perfectly distinct species have generally been confounded with one another.—Dr. B. Seemann exhibited a lamellicorn beetle from Nicaragua, one of the largest Coleoptera yet found in America.

PARIS

Academy of Sciences, March 13.—A sharp discussion arose on reading the *procès verbal* of the last sitting. General Morin complained that it was stated by M. Sainte Claire Deville that science had not received proper application in warfare. He was obliged to confess that the French artillery was not up to the times, since they had no steel guns. Steel guns had been condemned as useless by the committee because His Majesty was a great artillerist.—The report of the death of M. Becquerel, sen., during the investment of Paris was stated to be incorrect. It was really M. Dumeril, the son of the celebrated electrician, who had died; M. Becquerel, sen., was not present at the sitting.—M. Leverrier was present at the sitting. M. Dumas read for the learned astronomer a long memoir on the Defence of the Rhone Valley, to which M. Leverrier was attached during the investment of Paris. He resided at Nîmes and not at Marseilles, as had been said. The principal feature of this work is the construction of an apparatus for optical signalling. This apparatus can be used during day-time, and signals can be seen at a distance of eight miles by day with the naked eye.—M. Serret, President of the Scientific Delegated Commission at Tours and then at Bordeaux, read over a reclamation on behalf of M. Bouccarut, who claims a right to the invention of the instrument manufactured by M. Janssen for guiding aëronauts. M. Serret gave a certificate testifying that M. Bouccarut in the month of September communicated an instrument similar to M. Janssen's compass. If so why did the Delegated Scientific Commission keep the communication without warning the Government of National Defence at Paris, where the instrument was much wanted, as not less than ten balloons were lost, five of them in the sea, because aëronauts were unable to see their way? M. Delaunay read a declaration stating that he acknowledged that Mr. Hennessy had used the same arguments as himself against Mr. Hopkins' theory relative to the fluidity of the interior parts of the earth. But the adhesion given by Sir W. Thomson and other learned men to Mr. Hopkins' views is the reason why he did not regret having again raised this much controverted question.—M. de Fonvielle presented a paper explaining why the gas inside an aërostat very often suddenly increases in density. The phenomenon is common in warm weather when the gas is saturated with vapour from the water of the gasometer, and also when the balloon is rising at a quick rate. The increased density is owing to a quick refrigeration corresponding to the dilatation of the gas when the balloon is ascending to a higher level. It is an illustration of the law of equivalence of force and heat. It is the same experiment as is noted in Tyndall's special treatise on that subject, when damp air is placed under an air-pump worked at a certain rate. The movements of the balloon being able to be controlled, it is possible, through an aëronautical ascent, to come to a numerical conclusion.—M. Bouley delivered an interesting lecture on the cattle plague, which is one of the most important topics of the moment. He gave conclusive evidence

that it was imported by the Prussian armies. The plague has had really terrific effects in the provinces. On a sea coast the carcasses of infected animals were so numerous that it was impossible to bury them. The authorities were obliged to fill with the putrid cargo old hulks, which were sunk by cannon balls from a distance. He said that infected animals were not unwholesome in their flesh. A secret committee was opened on the question, proposed by M. Sainte Claire Deville.

DIARY

THURSDAY, MARCH 23.

ROYAL SOCIETY, at 8.30.—Experiments on the Successive Polarisation of Light, with the Description of a New Polarising Apparatus: Sir Charles Wheatstone, F.R.S.—On an Approximately Decennial Variation of the Temperature at the Observatory Cape of Good Hope, viewed in connection with the Variation of the Solar Spots: E. J. Stone, F.R.S.
SOCIETY OF ANTIQUARIES, at 8.30.—On Flint Implements and other Antiquities from Kent: J. Brent, F.S.A.—On Miscellaneous Antiquities from Leicestershire: Rev. Assheton Pownall, F.S.A.
ROYAL INSTITUTION, at 3.—Davy's Discoveries: Dr. Odling.
LONDON INSTITUTION, at 7.30.—On the Colonial Question: Prof. J. E. Thorold Rogers, M.A.

FRIDAY, MARCH 24.

QUEKETT MICROSCOPICAL CLUB, at 8.
ROYAL INSTITUTION, at 9.—Colour: Prof. Clerk Maxwell.
ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

SATURDAY, MARCH 25.

ROYAL INSTITUTION, at 3.—Spirit of the Age: Mr. O'Neil.
ROYAL SCHOOL OF MINES, at 8.—Geology: Dr. Cobbold.

MONDAY, MARCH 27.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.
INSTITUTE OF ACTUARIES, at 7.—On the Equitable Appointment of a Fund between the Life-tenant and the Reversioner: Andrew Baden.
LONDON INSTITUTION, at 4.—On Astronomy: R. A. Proctor. (Educational Course.)
ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

TUESDAY, MARCH 28.

ROYAL INSTITUTION, at 3.—Nutrition of Animals: Dr. M. Foster.

WEDNESDAY, MARCH 29.

SOCIETY OF ARTS, at 8.—On Woman's Work, with Special Reference to Industrial Employments: Miss Emily Faithfull.
ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

THURSDAY, MARCH 30.

ROYAL SOCIETY, at 8.30.
SOCIETY OF ANTIQUARIES, at 8.30.
ROYAL INSTITUTION, at 3.—Davy's Discoveries: Dr. Odling.
LONDON INSTITUTION, 7.30.—On Economic Botany: Prof. Bentley.
CHEMICAL SOCIETY, at 8.—Anniversary Meeting.

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