

gons and one is a square. (See *Phil. Mag.*, vol. xxiv., 1887, p. 503.)

Model of maximum pressure anemometer, designed by Mr. Whipple, Superintendent of Kew Observatory, exhibited by the Kew Committee. In this instrument eight small metal disks, each of 0.01 foot in area, are supported vertically against the wind by levers weighted in accordance with the various pressures of the wind on Beaufort's, or some other accepted scale of force. A vane keeps their surfaces normal to the wind's direction. By their displacement the maximum wind pressure during any desired period is registered. The large perforated disk against which they are pressed serves the purpose of removing the indicating disks beyond the action of the eddies of the wind playing round the edges of the plate.

Specimens of gold showing the effect of small quantities of impurity on the fracture of the metal, exhibited by Mr. W. C. Roberts-Austen, F.R.S.

Miners' electric safety-lamps, exhibited by the Schanschiff Electric Light and Power Company. (1) A three-cell lamp capable of giving  $1\frac{1}{2}$  candle-power for 9 hours. Each cell contains 5 fluid ounces of solution, and consumes  $\frac{3}{8}$  pound of zinc in 48 hours. The light is more than four times more powerful than that of the Clanny oil lamp, and its working cost is  $\frac{1}{2}d.$  per shift of 9 hours, or  $3\frac{3}{4}d.$  per week. The weight when fully charged is about  $3\frac{1}{4}$  pounds. The elements consist of carbon and zinc, and the excitant is a mercurial solution of Mr. Schanschiff's invention. (2 and 3) Four-cell batteries, one round and one square. Each cell contains 5 fluid ounces of solution, and at a cost of  $1d.$  furnishes a light of nearly 2 candle-power for 9 hours. The weight when fully charged is  $4\frac{1}{2}$  pounds. (4) A four-cell reversible battery, *i.e.* put in or out of action by reversing it. The charge consists of 24 ounces of solution, and giving a light of 2 candle-power will burn from 10 to 12 hours at a cost of  $1d.$  The batteries can be used for many purposes other than mining-lamps, *viz.* for microscopical purposes, house-lighting, photography, diving, railway-lighting, gun-firing, gas-works, &c.

#### THE ZOOLOGICAL SOCIETY OF AMSTERDAM.

THE celebration of the jubilee of the Zoological Society of Amsterdam (*Natura Artis Magistra*), on Tuesday and Wednesday, May 1 and 2, passed off with great *éclat*. Dr. Westerman, who has been Director of the Gardens for more than fifty years, may well be congratulated on the success of the jubilee *fêtes*; and the vigour with which he spoke at the banquet on May 1, and again at the distribution of honours on Wednesday, shows that his eighty years sit lightly upon him. One of the most interesting features of the jubilee commemoration was the performance of a festival cantata, specially composed for the occasion by Mr. De Langa, and this had to be repeated on Thursday for the benefit of half the members of the Society, for whose accommodation the enormous concert-room proved insufficient on the opening day. All the streets in the vicinity of the Zoological Gardens were gaily decorated with flags, and the rooms of the Society were ornamented in the day-time by a mass of gorgeous flowers and at night with brilliant illuminations. After the reception of the guests by the Committee on Tuesday morning, an adjournment was made to the King's Saloon, which was densely crowded, to hear an address from Prof. Stockvis. Luncheon followed, and then the cantata was given in the concert hall, and in the afternoon the new Ethnographical Museum was formally opened. The excellent way in which the collections had been arranged was generally remarked, and the Curator, Mr. Pleyte, was warmly congratulated. The public spirit which characterizes modern Amsterdam will doubtless soon cause this

new Museum to become famous, as there is a vast field for research among the Netherland possessions in the East Indies. At the banquet in the evening, covers were laid for nearly 200 persons, and after the usual toasts, the health of the Queen of England was drunk by the assembled company with the greatest enthusiasm, and was responded to by Mr. Bowdler Sharpe, of the British Museum, who spoke in English, and took the opportunity of thanking the Dutch nation for the hospitality which he and his countrymen always received from the Netherlanders, to which he could testify from an experience of over twenty years. Speeches were also given by the Ministers of Finance and of the Interior, the Burgomaster of Amsterdam, and others; and the company then adjourned to witness a torchlight procession of students, who sent a deputation of their Senate to congratulate the venerable Director and the Committee of the Society. The young President of the Students' Senate, Mr. Van Schevichaven, made a most eloquent address, and was enthusiastically received. On Wednesday, May 2, a special reception of the Committee was held to confer diplomas on the new honorary members, and Prof. Hubrecht, of Utrecht, Dr. Jentink, the Director of the Royal Museum of Natural History at Leyden, and Mr. Büttikofer, of the same Museum, were the first recipients; being followed by Mr. A. D. Bartlett, the Superintendent of our Zoological Gardens in the Regent's Park, and Mr. Bowdler Sharpe. Amongst those who were unable to be present, but to whom the honorary membership of the Society was given, were Prof. Flowers, Dr. A. B. Meyer, &c. The large bronze medal of the Society was conferred on Mr. Charles Jamrach and Mr. G. A. Frank for services rendered in the formation of zoological collections, as well as on several other well-known zoologists. Mr. Jansen, the Librarian of the Society, and Mr. F. E. Blaauw, the Secretary, also received medals and diplomas. The latter gentleman has a large private menagerie, and is an enthusiastic supporter of the Society. Simultaneously with the festival celebration, the Society has issued a jubilee number of its *Bijdragen tot de Dierkunde*, containing several important memoirs, of which the following is a list:—(1) The opening address of Prof. Stockvis. (2) Mr. Maitland's review of the Society and its work, with a plan of the Gardens. (3) An account of the aquarium with 2 plates, by Dr. C. Kerbert, the Curator. (4) A list of all the animals which have lived in the Gardens from 1838 to 1888 by Mr. K. N. Swierstra. (5) A list of the birds of the Netherlands, by Mr. H. Koller, with an enumeration of the specimens in the Society's collection. (6) Description of a new species of *Proechidna* (*P. villosissima*) and an account of *Canis jubata*, by Prof. Max Weber: this article is illustrated by 2 plates. (7) A list of the *Macrolepidoptera* of Holland, by Dr. J. T. Oudemans. The Gardens of the Society seemed to be in flourishing condition, and the collections of Cranes and Antelopes were as remarkable as ever.

#### NOTES.

THE ceremony at Utrecht on May 28 to celebrate the seventieth birthday of Prof. Donders, and his consequent retirement from his Professorship, will comprise a formal presentation, at 1.30 p.m., of the sum collected, together with the roll of subscribers, and a public dinner at 5.30 p.m. After the ceremony of presentation the Professor will name the scientific purpose to which he proposes that the fund shall be applied. The complete list of subscribers from this country is to be seen in our advertising columns on page xviii. Any subscriber may verify the amount of his subscription by applying to Mr. Brailey, 11 Old Burlington Street, where the audited list may be seen. The total amount collected here is £280 11s. 10d. Prof. Humphry, Dr. Hughlings