first discovered several years ago, the report affirms, it was nearly a mile in length, and at the bottom of the "gulch" presented a sheer precipice of ice about 150 feet in height. Later in the season it had been considerably reduced both in length and bulk; but earlier in the following year it had regained first dimensions. The rocks on the sides of this immense mass of moving ice are said to show all the characteristic signs of glacier action. The location of this interesting natural curiosity is said to be in the Mosquito Range, about fifteen miles north of the Pass; and, being very inaccessible and out of the ordinary line of travel, the fact of its being discovered at this late day is accounted for.

THE experiment of sending up three connected balloons will be tried in Lille at the end of next May. The balloons are now fitting in the vestibule of the Palais de l'Industrie of the Champ de Mars, Paris; there will at the same time be a descent in a parachute by M. Tavis.

M. YON, one of the administrators of the Paris Captive Balloon, is publishing a pamphlet on the construction of a new directing balloon, devised on the plan worked out by M. Giffard in his great experiment executed at Paris in 1852. The only difference is that the motive screws are two, and placed laterally and attached to the ring. A captive balloon fitted up according to the principles practised so successfully by M. Giffard in Paris and in London is being constructed now at Brussels, in the vicinity of the next national exhibition, which will be opened on June 19 to celebrate the fiftieth anniversary of Belgian independence. The number of exhibitors amounts to 6,000, so that an exceedingly fair specimen will be offered to the world of Belgian resources and industry.

THE additions to the Zoological Society's Gardens during the past week include a Vervet Monkey (*Cercopithecus lalandii*) from West Africa, presented by Mr. L. Samuel; a Garnett's Galago (*Galago garnetti*) from East Africa, a Marsh Ichneumon (*Herpestes paludosus*) from South Africa, presented by Mr. A. Chirnside; an African Civet Cat (*Viverra civetta*) from Africa, presented by Mr. P. Lembery; a Banded Ichneumon (*Herpestes fasciatus*) from West Africa, presented by Mr. A. Ferris; a Common Jay (*Garrulus glandarius*), British, presented by Mrs. A. Dutton; two Graceful Ground Doves (*Geopelia cuneata*) from Australia, deposited; a Black Saki (*Pithecia satanas*) from the Lower Amazons, a Cape Hyrax (*Hyrax capensis*), a Robben Island Snake (*Coronella phocarum*) from South Africa, a Great-billed Rhea (*Rhea macrorhyncha*) from South America, purchased; an Amherst Pheasant (*Thaumalea amherstiæ*) from Szechuen, China, received in exchange.

OUR ASTRONOMICAL COLUMN

THE SOUTHERN COMET.—Dr. Gould, Director of the Observatory at Cordoba, has addressed to Prof. Peters of Kiel an interesting letter with observations of the great southern comet. The tail was seen at Cordoba on January 31. Two evenings later, when Dr. Gould first perceived it, the length was certainly 35°. Careful drawings of its position amongst the stars were made independently by two observers until February 14, after which it had not been distinguishable; it was then not less than 37° in length, but was seen with difficulty, and was scarcely brighter near the head than at its extremity. Even at greatest brilliancy about February 7, its light was nowhere superior to that of the Milky Way in Taurus. Dr. Gould states that from the first no nucleus had been discernible in the telescope, the head always appearing "cloud-like and filmy, and elongated in the direction of the tail, which it did not very much surpass in brilliancy;" indeed "the inordinate length of the tail and the great faintness of both tail and head" were very remarkable features in the appearance of the comet. Observations for position were obtained on six evenings between February 6 and 15, which have enabled Dr. Gould to claim priority in pointing out the probable identity of this comet with the great comet of 1843. Calculating from the observations on February 6, 9, and 12, he deduced the following first approximation to the elements:—

Perihelion passage, January 27·4185 M.T. at Washington.

Longitude of perihelion	280° 26′ 59″
,, ascending node	7 50 28
Inclination	35 5 30
Logarithm of perihelion distance	7·719160

Motion—retrograde.

So that, he remarks, the perihelion distance given by this first rough approximation is such that the comet's centre of gravity would have passed at a distance from the solar surface equal to only one-eighth of the sun's own radius.

Dr. Gould also refers to the discussion which took place in 1843 as to the possible identity of the comet of that year with the one observed in southern latitudes in 1668, and concludes:—"Although Hubbard's discussion shows that the observations of 1843 can be best represented by an ellipse of more than 500 years, and although the intervals of 175 years between 1668 and and 1843, and 37 years from the perihelion of 1843 to the present time, are not commensurable, still this argument against identity does not seem very forcible."

The "*Argus* Summary for Europe," published at Melbourne on February 19, contains three positions of the comet, communicated from the Observatory, which are as follow:—

	Right Ascension. h. m. s.	Declination. ° ′ ″
Feb. 9 at 9 p.m. ...	23 41 14·5 ...	− 33 43 52
10 at 9 p.m. ...	23 58 23·0 ...	− 33 44 58
14 at 9 p.m. ...	1 2 15·6 ...	− 33 21 7

These places are termed approximate, and on comparing with the positions received from Dr. Gould and Mr. Gill's rough ones, it is evident that the declination of February 14 has been misprinted, and should be − 32° 21′ 7″. It is stated that on this date the nucleus had become very faint, and "even with the great telescope the tail could only be seen as a thin wisp extending eastwards from the head for a couple of degrees. The head itself appeared simply as a faint nebulous mass with a slight central condensation." Beyond the fact that the comet had passed the perihelion and was rapidly receding from us, nothing definite appears to have been known of the orbit at Melbourne up to February 19, and it is clear that at the Cape up to February 24 its similarity to that of the comet of 1843 had not been remarked, the elements which we have published from Mr. Finlay being entirely different. So that, as we have remarked, it is probable that Dr. Gould has priority in drawing attention to one of the most striking facts connected with the periodicity of comets.

From the first approximate position determined at Cordoba, and the Melbourne observations of February 9 and 14, Mr. Hind has calculated the following orbit, which still further adds to the probability of the identity of the great comets of 1843 and 1880:—

Perihelion passage, January 27·5272, M.T. at Greenwich.

Longitude of perihelion	278° 3·7
,, ascending node...	0 5·7
Inclination	36 9·3
Logarithm of perihelion distance	7·81749

Motion—retrograde.

Prof. Winnecke also has found that the elements of 1843 represent, with very trifling differences, Dr. Gould's place of February 4 and Mr. Gill's rough positions of February 10–15, and thinks there can hardly be a doubt that the bodies are identical.

PHYSICAL NOTES

M. PAUL BERT lately described a tele-microphone to the Académie des Sciences of Paris. The instrument thus denominated differs only in detail of construction from a form of microphone publicly described eighteen months ago in England. The transmitter of the telemicrophone consists of a tolerably thick disk of ebonised rubber, suitably mounted, to the centre of which one of the carbons is attached; the other carbon is kept lightly in contact with it with a pressure which can be adjusted by magnetic means, a small armature of iron being affixed to it, to which