

A NEW edition of Dr. Oliver Lodge's "Elementary Mechanics, including Hydrostatics and Pneumatics" has just reached us from Messrs. W. and R. Chambers, Ltd. It has been completely revised by the author and by Prof. Alfred Lodge.

MESSRS. TAYLOR BROTHERS, Leeds, have sent us the second edition of "The Collector's Manual of British Land and Freshwater Shells," by L. E. Adams. The preface states that the book has been re-written and brought up to date.

THE additions to the Zoological Society's Gardens during the past week include two Bonnet Monkeys (*Macacus sinicus*, ♂ ♀) from India, presented respectively by Mr. John Hart and Mr. E. E. Hodgskins; a Rhesus Monkey (*Macacus rhesus*, ♀) from India, presented by Mr. Frederick Tomlin; a Mozambique (*Cercopithecus pygerythrus*, ♂) from South-east Africa, presented by Mr. A. C. Jackson; two Lanner Falcons (*Falco lanarius*), South European, presented by Mr. W. Glynes Bruty; a Glaucous Gull (*Larus glaucus*) from Franz Josef Land, presented by the Jackson-Harmsworth Polar Expedition; a Raven (*Corvus corax*), British, presented by Mr. O. L. Pegler; an Egyptian Jerboa (*Dipus aegyptius*) from North Africa, a Rat-tailed Serpent (*Trionocephalus lanceolatus*) from St. Lucia, W.L., deposited; a Diana Monkey (*Cercopithecus diana*, ♀) from West Africa, three Capceira Partridges (*Odontophorus dentatus*) from Brazil, purchased; a Red Deer (*Cervus elaphus*, ♀) from Scotland, received in exchange; two Triangular-spotted Pigeons (*Columba guinea*), a White-backed Pigeon (*Columba leuconota*), two Half-collared Doves (*Turtur semitorquatus*) bred in the Gardens.

OUR ASTRONOMICAL COLUMN.

THE RECENT SOLAR ECLIPSE.—M. Tisserand furnishes a few details on the results obtained by the Russian astronomers during the eclipse of August last, which were communicated to him through M. Backlund, Director of the Observatory of Pulkowa. M. Backlund's station was situated in Novaya Zemlya, where he landed three weeks before the day of the eclipse. During this period the sky remained constantly cloudy, the temperature varying from 0° to 3° C. During some occasionally bright moments altitudes of the sun were obtained to check their chronometers and determine their rates. M. Galitzine made a series of magnetic observations. At four o'clock on the morning of the eclipse the sky was still overcast, but the weather cleared up somewhat, and the observers were able to observe the four contacts under good conditions. Clouds, however, were not entirely absent; but successful observations and photographs of the corona were taken.

M. Eugène-M. Antoniadi, in the September number of the *Bulletin de la Société Astronomique de France*, gives an account of his trip in the *Norse King* to Vadsö. The article in question is illustrated, and contains, among others, a drawing of the region in and about Vadsö, and an excellent photogravure of the town of Hammerfest.

COMET BROOKS.—A Centralstelle Circular, dated September 10, gives an ephemeris, with elements, of this comet computed by Prof. E. Lamp from observations made on September 7, 8, and 9. They are as follows:—

Elements.

$$\begin{aligned} T &= 1896 \text{ July } 7^{\text{h}} 27^{\text{m}} 28^{\text{s}} \text{ Berlin M.T.} \\ \omega &= 38^{\circ} 22' \\ \Omega &= 149^{\circ} 22' \\ i &= 88^{\circ} 16' \end{aligned} \left. \vphantom{\begin{aligned} T \\ \omega \\ \Omega \\ i \end{aligned}} \right\} 1896^{\circ} 0$$

$$\log q = 0^{\circ} 06497.$$

Ephemeris 12h. Berlin M.T.

1896.		h.	m.			log Δ	B.		
Sept.	16	...	14 55.9	...	+ 53 15	...	0.2405	...	0.9
	20	...	15 21.0	...	51 53	...	0.2428	...	0.8
	24	...	15 44.7	...	50 16	...	0.2463	...	0.8
	28	...	16 6.9	...	48 26	...	0.2512	...	0.7
Oct.	2	...	16 27.6	...	46 29	...	0.2574	...	0.7
	6	...	16 46.7	...	44 25	...	0.2650	...	0.6

The unit of brightness occurred on September 4.

NO. 1403, VOL. 54]

COMET GIACOBINI.—A circular from Kiel, dated September 9, gives the elements and ephemeris of this comet calculated by Dr. H. Kreutz from observations on September 5, 6, and 7.

Elements.

$$\begin{aligned} T &= 1896 \text{ October } 8^{\text{h}} 00^{\text{m}} 3^{\text{s}} \text{ Berlin M.T.} \\ \omega &= 155^{\circ} 2' 1'' \\ \Omega &= 195^{\circ} 39' 5'' \\ i &= 8^{\circ} 45' 2'' \end{aligned} \left. \vphantom{\begin{aligned} T \\ \omega \\ \Omega \\ i \end{aligned}} \right\} 1896^{\circ} 0$$

$$\log q = 0^{\circ} 04004$$

These elements are stated to be somewhat uncertain. The orbit is probably an ellipse.

Ephemeris 12h. Berlin M.T.

1896.		h.	m.			log Δ	B.		
Sept.	7	...	17 16.5	...	- 8 01	...	9.785	...	1.1
	11	...	17 25.1	...	- 8 4	...	9.772	...	1.2
	15	...	17 35.0	...	- 9 24	...	9.757	...	1.3
	19	...	17 46.4	...	- 10 10	...	9.742	...	1.4
	23	...	17 59.3	...	- 10 58	...	9.050	...	1.6
	27	...	18 13.9	...	- 11 47	...	9.709	...	1.8

NEW FEATURE ON MARS.—With reference to the recent observation of bright light on the terminator of Mars, referred to on September 3, we may state that the bright prominences (mountains?) on the terminator of Mars were first seen by the astronomers of the Lick Observatory in 1890, and have been regularly observed (measured) at subsequent oppositions by the observers at Mount Hamilton, Nice, and Flagstaff.

Prof. Hussey observed their first appearance in 1896 on August 28, oh. 45m. Greenwich mean time, in the *Chersonesus* region of Mars.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

It is announced that a sum of between £15,000 and £17,000 is to be spent in providing buildings and fixtures for the Sunderland Technical College.

AMONG recent appointments we notice the following:—Mr. Lake becomes Principal of the Technical and University Extension College, Colchester; and Mr. J. W. B. Adams, Head-master of the Tenby and Intermediate and Technical Schools.

MR. A. M. DRENNAN, of the Burnley Grammar School, has been appointed Head-master of the Banbury Municipal Secondary and Technical School.

AMONG recent appointments abroad may be mentioned:—Prof. W. Dames to succeed the late Prof. Beyrich in the chair of Geology and Palaeontology at Berlin; and Dr. W. Wien, to be Associate Professor of Physics at Berlin.

THE Chemical Laboratory of the University of Illinois has been destroyed by fire. It is reported to have been one of the largest and best-appointed of its kind in the country, and was erected at a cost of about £8000. Its fittings, apparatus, &c., are said to have added to this amount about £7000.

THE Syllabus of the Municipal Technical School and Municipal School of Art, Manchester, for the forthcoming session is now ready. It is issued by Mr. John Heywood, Manchester. The Calendar for the twelfth session of the Merchant Venturers' Technical College, Bristol, is also ready, and may be had, at a small charge, of Mr. H. Y. Hill, Bristol. We have also had sent to us the prospectus of day and evening classes to be conducted at the Battersea Polytechnic Institute. Copies may be obtained on application to the Secretary.

THE fifth annual report of the Department of Agriculture of the Yorkshire College, Leeds, is a record betokening much activity. Most of the lecture courses appear to have been well attended, though in the teachers' agricultural classes the attendance fell off so considerably that it was found impossible to hold a summer vacation course. In the winter courses the same difficulty was experienced, and though attempts were made to form classes at five centres, it was only possible to obtain sufficient students to form one class. At the request of the West Riding County Council, the department formulated a scheme for the institution of gardens for instruction in horticulture in connection with evening continuation schools. The scheme has been adopted by the West Riding County Council, and grants have been promised by them provided certain regulations are complied with.