

Although these remarkable mice are commonly called either Japanese or Chinese, it appears that their real home is China, since they are known in Japan as Nanking mice. In Japan, where there were originally a grey and a white breed, these mice are kept in cages on account of their well-known dancing propensities. After an exhaustive examination of their internal auditory organs, the author comes to the conclusion that the dancing of these mice is not due, as commonly supposed, to disease of the labyrinth, but to the effect of confinement for untold centuries in small cages.

THE German scientific periodical *Die Natur* has been discontinued as a separate publication, and is now combined with the *Naturwissenschaftliche Wochenschrift*, edited by Prof. H. Potonié and Dr. F. Koerber and published by Gustav Fischer, Jena.

MR. F. HOWARD COLLINS has compiled from Admiralty sources a collection of tables showing "the magnetic direction and neap and spring rates for every hour of the tidal streams at forty-eight localities alphabetically arranged between the Nore and Scilly Isles." The latitude, longitude and characteristics of each light are stated, and under them are given particulars as to directions and rates of neap and spring tides. The tables are published by Mr. J. D. Potter at two shillings.

THE simple experiments in "Mensuration, Hydrostatics and Heat" given by Mr. G. H. Wyatt in the little book published under that title as one of Messrs. Rivingtons' Handbooks of Practical Science, should be familiar to every schoolboy. The book has now reached a third edition, and contains a course of practical work which can be done with profit by boys in the lower forms of schools. Not only do exercises of this kind develop delicacy of manipulation and minute attention to details in the pupils, but they are also of decided value in connection with other branches of school work.

THE additions to the Zoological Society's Gardens during the past week include a Chimpanzee (*Anthropopithecus troglodytes*) from the Gold Coast, presented by Captain Daniel A. Donovan; an Illiger's Macaw (*Ara maracana*) from Brazil, presented by the Countess of Malmesbury; a Common Kingfisher (*Alcedo ispida*) British, presented by Mr. J. F. Smith; a Hocheur Monkey (*Cercopithecus nictitans*) from West Africa, deposited; three White-throated Capuchins (*Cebus hypoleucus*) from Central America, a Humboldt's Lagotrix (*Lagotrix humboldti*) from the Upper Amazons, purchased; a Burrhel Wild Sheep (*Ovis burrhel*), a Japanese Deer (*Cervus sika*) born in the Gardens.

### OUR ASTRONOMICAL COLUMN.

#### ASTRONOMICAL OCCURRENCES IN JUNE:—

- June 2. 15h. 1m. to 15h. 54m. Moon occults 54 Ceti (mag. 5.8).  
 2. 19h. 0m. Venus in conjunction with moon. Venus  $2^{\circ} 44' S$ .  
 5. 11h. 58m. to 15h. 40m. Transit of Jupiter's Sat. III.  
 9. Saturn. Outer minor axis of outer ring =  $15'' 41$ .  
 10. 16h. 0m. Uranus in opposition to the sun.  
 12. 15h. 37m. to 19h. 20m. Transit of Jupiter's Sat. III.  
 14. 23h. 36m. Moon in conjunction with  $\alpha$  Virginis (mag. 1.2).  
 15. 10h. 15m. to 11h. 31m. Moon occults 86 Virginis (mag. 6.0).  
 15. Venus. Illuminated portion of disc = 0.711. Mars = 0.989.  
 18. 9h. 37m. to 10h. 59m. Moon occults  $\nu$  Scorpii (mag. 4.5).  
 22. 23h. Saturn in conjunction with moon. Saturn  $5^{\circ} 11' S$ .

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- June 24. Vesta situated  $21'$  south of Saturn.  
 24. 17h. Jupiter in conjunction with moon. Jupiter  $5^{\circ} 54' S$ .  
 26. 12h. 25m. Minimum of Algol ( $\beta$  Persei).  
 29. 9h. 14m. Minimum of Algol ( $\beta$  Persei).

NEW ALGOL VARIABLE.—*Circular* No. 65 from the Harvard College Observatory announces the detection of a new variable on the photographs obtained there. An examination of a plate taken on April 3, 1902, for the possible presence of comet  $\alpha$  1902 showed that as compared with a plate of the same region obtained on March 7, 1900, the star +  $43^{\circ} 41' 01$  was abnormally bright. This star is a double, and it is the north preceding component which shows the variability. The position is

$$\left. \begin{array}{l} \text{R. A.} = 21\text{h. } 55\text{m. } 2 \\ \text{Decl.} = + 43^{\circ} 52' \end{array} \right\} (1900).$$

More detailed examination showed that the star was generally bright and constant in light, so that it must be of the Algol type. It is not very distant from the remarkable variable SS Cygni, which precedes it 16m. and is  $44'$  south.

The variable is shown at full brightness (about 8.9 magnitude) on 388 plates taken between 1889 and 1902, and on 19 it is shown as fainter than 9.3 mag. The period appears to be about 31.304 days. On plotting the light curve from the data obtained it appears that the star retains its full brightness for 28 days. About one day before the minimum it commences to diminish, attaining the magnitude 11.5 at od. 43 before minimum. The light then remains constant for more than half a day, with the minimum magnitude 11.6. The time of increase is more uncertain, but apparently is nearly the same as that of decrease. The times of the last minimum, with predicted future ones, are as below:—

		Minima.		
		h.	m.	
1902	April 28	21	33	G.M.T.
	May 30	4	51	
	June 30	12	8	
	July 31	19	26	
	Sept. 1	2	44	
	Oct. 2	10	2	

### COAST FOG SIGNALS.

WHEN lighthouse lights and all other seamarks are obscured by fog, sound is the only medium by which warning signals can be conveyed to mariners. It has been thought that it might be possible to transmit such signals by means of etheric vibrations; but assuming such intercommunication were established, it would fail in two most essential requirements for assisting the mariner in foggy weather, as it would not give him any information as to the direction from which the warning message came, nor would it tell him how far distant the signalling station was. Further developments may in the course of time remedy these defects, but from present-day knowledge and experience it cannot be said that etheric vibrations are available for fog-signal purposes at sea. In a paper recently read before the Society of Arts, Mr. E. Price Edwards discusses the present position of this question of sound signals and gives some interesting particulars of the trials carried out at St. Catherine's Point, in the Isle of Wight, last summer. From this it appears that for many years past sound-producing instruments of various kinds have been employed for uttering warning sounds at points of danger on our coasts, and that constant efforts have been made to develop instruments yielding sounds of great loudness and penetrating power, so as to overcome the numerous obstructive influences affecting the propagation of sound through the atmosphere. The instrument which has proved most effectual for this purpose is the siren, sounded by means of air forced through it at a pressure of about 40 lb. on the square inch. It is used in the form of a double cylinder, one cylinder fixed, the other (inside it) rotating, each cylinder having longitudinal slits corresponding in number and area, through which, as often as they coincide, the air passes. In the trials at St. Catherine's, two flat circular discs with radial slits were tried, with very satisfactory results; but this arrangement involves a separate motor to rotate the movable disc, whereas the rotation of the cylinder siren is effected by the air pressure which produces the sound. It is considered that some loss of power and a more or less defective blast result from the