

exclusively scientific. The meteorological record is as exhaustive as ever, and some reproduced photographs included in the report show that the photographic section is doing good work.

THE Cambridge University Press has published a third edition of "Hydrodynamics," by Prof. Horace Lamb, F.R.S. The second edition of this standard work was reviewed at length in NATURE of November 21, 1895 (vol. liii., p. 49). In the present issue no further change has been made in the general plan and arrangement of the first edition, but the work has been carefully revised, occasional passages have been re-written, and many interpolations and additions have been made, amounting in all to about one-fifth of the whole.

MR. S. HIRZEL, Leipzig, has commenced the publication of a new and elaborate work entitled "Handbuch der anorganischen Chemie," edited by Dr. R. Abegg, assisted by many leading workers in chemistry—particularly physical chemistry—in Germany and elsewhere. The second part of vol. ii. has recently been issued, the title being "Die Elemente der zweiten Gruppe des periodischen Systems." The first part of this volume has not yet appeared, but the first part of the third volume will be published in the spring of this year. We propose to notice the work when the volumes have been completed.

OUR ASTRONOMICAL COLUMN.

ASTRONOMICAL OCCURRENCES IN MARCH:—

- March 1. 6h. 14m. to 7h. 9m. Moon occults ϵ Tauri (mag. 4.3).
- „ 2. 6h. 41m. to 7h. 45m. Moon occults γ Tauri (mag. 3.9).
- „ „ 8h. 5m. Minimum of Algol (β Persei).
- „ „ 11h. 51m. to 12h. 40m. Moon occults θ^1 Tauri (mag. 3.9).
- „ „ 12h. 3m. to 12h. 31m. Moon occults θ^2 Tauri (mag. 3.6).
- „ 11. 16h. 11m. to 16h. 59m. Moon occults γ Virginis (mag. 3.0).
- „ 12. 6h. 21m. to 8h. 31m. Transit of Jupiter's Satellite III. (Ganymede).
- „ 14. 17h. 22m. to 18h. 23m. Moon occults γ Libræ (mag. 4.1).
- „ 15. Venus. Illuminated portion of disc=0.993; of Mars=0.962.
- „ 18. 5h. Mercury at greatest elongation ($18^\circ 31'$ E.).
- „ „ 10h. 34m. Transit (ingress) of Jupiter's Satellite III. (Ganymede).
- „ 19. 12h. 58m. Minimum of Algol (β Persei).
- „ 21. 1h. Sun enters Aries. Spring commences.
- „ 22. 9h. 47m. Minimum of Algol (β Persei).
- „ 29. 10h. Jupiter in conjunction with Moon (Jupiter $4^\circ 32'$ N.).
- „ „ 20h. 56m. to 21h. 35m. Moon occults α Tauri (Aldebaran, mag. 1.1).

COMET 1906a (BROOKS).—A further extract from Herr M. Ebell's ephemeris for comet 1906a, as published in No. 4075 of the *Astronomische Nachrichten*, is given below:—

Ephemeris 12h. M.T. Berlin.

1906	α (true) h. m. s.	δ (true)	$\log r$	$\log \Delta$	Bright- ness
Mar. 6 ...	5 46 7 ...	+60 47 ...	0.2329 ...	0.0909 ...	0.48
8 ...	5 44 18 ...	+58 26 ...	0.2376 ...	0.1072 ...	0.43
10 ...	5 43 6 ...	+56 15 ...	0.2423 ...	0.1236 ...	0.39
12 ...	5 42 22 ...	+54 13 ...	0.2470 ...	0.1398 ...	0.36
14 ...	5 42 2 ...	+52 20 ...	0.2517 ...	0.1559 ...	0.33
16 ...	5 41 58 ...	+50 35 ...	0.2564 ...	0.1718 ...	0.30

This comet is now travelling nearly due south towards the constellation Auriga, and will apparently pass between Capella and β Aurigæ, nearer to the latter, on about March 21.

COMET 1905c (GIACOBINI).—Comet 1905c has now become so faint as to be beyond the reach of the naked-eye observer. On March 3 it will be only a little brighter than at the time of discovery, and will set just before 9 p.m., or about three hours after sunset, slightly to the south of west.

An extract from Herr A. Wedemeyer's daily ephemeris, as published in No. 4074 of the *Astronomische Nachrichten*, is given below:—

Ephemeris 12h. M.T. Berlin.

1906	α (true) h. m. s.	δ (true)	$\log r$	$\log \Delta$	Bright- ness
Mar. 2 ...	1 53 41 ...	-5 10 ...	0.0384 ...	0.1855 ...	1.20
4 ...	2 2 13 ...	-4 0 ...	0.0546 ...	0.1983 ...	1.05
6 ...	2 10 16 ...	-2 54 ...	0.0700 ...	0.2109 ...	0.92
8 ...	2 17 55 ...	-1 51 ...	0.0846 ...	0.2234 ...	0.81
10 ...	2 25 11 ...	0 52 ...	0.0986 ...	0.2358 ...	0.72
12 ...	2 32 6 ...	+0 4 ...	0.1120 ...	0.2480 ...	0.64
14 ...	2 38 42 ...	+0 58 ...	0.1248 ...	0.2600 ...	0.57

From this it will be seen that the comet is now apparently traversing the constellation Cetus, and will be about 1° due north of the wonderful variable Mira on the evening of March 7.

A number of full notes of the observation of this comet at the Arcetri Observatory, between December 11 and 31, 1905, are given by Signor A. Abetti in No. 4073 of the *Astronomische Nachrichten*.

LIFE OF PIETRO TACCHINI.—We have received an interesting short biography of Prof. Tacchini, written in Italian by Signor L. Palazzo, who evidently knew the great Italian astronomer intimately, and appreciated his works. The brochure contains nine pages of text and a fine reproduction of Tacchini's portrait; it is published by the Typographical Society of Modena.

SUN-SPOT SPECTRA.—A valuable paper on the spectra of sun-spots is published in No. 1, vol. xxiii., of the *Astrophysical Journal* by Profs. Hale and Adams. The "widened lines" given in the table accompanying the paper number 345, and were measured on ten photographs—including three separate spots—taken with a grating spectrograph in connection with the Snow telescope of the Mount Wilson Solar Observatory.

The region measured was from λ 5000 to λ 5853, and, in a second table, the wave-lengths of a number of "bands" shown in the spot spectrum are also given.

The discussion of the results is extremely interesting, but is too lengthy to be even summarised here. It may be remarked, however, that the lines of titanium showed the greatest mean change of intensity, and that all the silicon lines in the region considered were much weakened.

Reproductions of some of the photographs obtained accompany the paper, and show the widened lines very clearly.

"THE HEAVENS AT A GLANCE."—This well known card calendar reaches its tenth year of issue with the present (1906) copy, which contains the usual data and notes. As in former years, we can only remark that it will be found to be a very handy and useful source of reference to everyone engaged in observational astronomy.

The calendar may be obtained from its author, Mr. A. Mee, Tremynfa, Llanishen (near Cardiff), for sevenpence, post free.

THE LANDSLIDE IN THE RHYMNEY VALLEY.

THE principal source of the Rhymney River is a copious spring in which the rain-water that has disappeared into numerous swallow-holes, and flowed for some distance underground in the Mountain Limestone, again rises to the surface near the edge of the Millstone Grit. From this point the incipient river flows in the direct line of dip of the strata, that is, in a south-south-easterly direction, across the outcrops of the Millstone Grit, the Lower Shale series, and the Pennant Sandstone series of the South Wales Coalfield. The length of its course on the Millstone Grit is nearly two miles, and on the Lower Shale series five miles.