includes more than 150 titles of books, above 30 of which are in the chemical, engineering, and electrical departments of the library.

THE "Writers' and Artists' Year-book" for 1906 has now been published by Messrs. A. and C. Black. It contains much information likely to be of assistance to writers on all subjects. The list of papers and magazines, good though it is, is by no means complete; for though details concerning *Science Siftings* are supplied, we have been unable to find any mention of the *Chemical News*, the *Entomologist*, the *Irish Naturalist*, and the *Zoologist*. The price of the year-book is 1*s*. net.

MESSRS. ARCHIBALD CONSTABLE AND CO., LTD., have ready for publication immediately the following books of scientific interest:—"Motor Vehicles and Motors," vol. ii., by W. Worby Beaumont; "Tunnel Shields and the Use of Compressed Air in Subaqueous Works," by W. C. Copperthwaite; "Modern Turbine Practice and Water Power Plant," by J. W. Thurso; "The Seven Follies of Science," by J. Phin; "Experimental Electrochemistry," by N. Monroe Hopkins; "Gas, Gasolene, and Oil Engines" (new edition), by G. D. Hiscox; and "Practical Electro-chemistry" (second edition), by B. Blount.

THE twenty-sixth issue of the "Englishwoman's Year-book and Directory," that for 1906, has been published by Messrs. A. and C. Black. It maintains the high level of usefulness to which attention has on previous occasions been directed in these columns. Englishwomen anxious to take part in the useful work of the world owe a debt of gratitude to Miss Emily Janes, who edits the volume. Great prominence is, as usual, given to education, and the information given concerning the higher education of women is exhaustive and interesting. An alphabetical list of some distinguished women with their contributions to science and education should serve to encourage others to assist in the spread of knowledge.

OUR ASTRONOMICAL COLUMN.

ASTRONOMICAL OCCURRENCES IN FEBRUARY:—

Feb. 2. 5h. Jupiter in conjunction with the Moon. Jupiter 4° 39′ N.
,, 3. 5h. 23m. to 6h. 28m. Moon occults α Tauri (mag. 1·1).
,, 4. 10h. 6m. to 12h. 6m. Transit of Jupiter's Sat. III. (Ganymede).
,, 5. Juno (mag. 8·7) in opposition to the Sun.
,, 7. 7h. 7m. to 8h. 4m. Moon occults ζ Cancri (mag. 4·7).
,, 7. 9h. 33m. Minimum of Algol (β Persei).
,, 8. Total eclipse of the Moon.
17h. 57m. First contact with the shadow.
18h. 58m. Beginning of total phase.
19h. 47m. Middle of the eclipse.
20h. 36m. End of total phase.
21h. 37m. Last contact with the shadow.
19h. 30m. Moon sets at Greenwich.
Magnitude of the eclipse = 1·632.
,, 10. 6h. 22m. Minimum of Algol (β Persei).
,, 10. 11h. 7m. to 12h. 12m. Moon occults χ Leonis (mag. 4·7).
,, 14. Venus. Illuminated portion of disc = 1·000. Of Mars = 0·944.
,, 16. Juno ½° S. of ζ Hydræ (mag. 3·3).
,, 22. 19h. 43m. Partial eclipse of the Sun, invisible at Greenwich.
,, 24. 11h. Saturn in conjunction with the Sun.
,, 28. 7h. 0m. to 8h. 9m. Moon occults μ Ceti (mag. 4·4).

DISCOVERY OF A NEW COMET.—A telegram from the Kiel Centralstelle announces the discovery of a new comet by M. Brooks at Geneva on January 26. Its position at 10h. (Geneva M.T.) on that date was

R.A. = 16h. 19m. 28s., dec. = +47° 10′,

which is near to τ Herculis.

The object is said to be a bright one, and to be moving in a north-westerly direction. Being the first comet to be discovered during the year, it will take the designation 1906*a*. At 9 p.m. τ Herculis is fairly low down, near to the N.N.E. horizon, and does not "south" until about 7.30 a.m.

A second telegram from Kiel states that the comet was observed by Dr. Palisa at Vienna on January 28. Its position at 15h. 13·3m. (Vienna M.T.) was

R.A. = 16h. 18m. 16·4s., dec. = +50° 4′ 45″.

From this it appears that the comet is at present travelling nearly due north towards the constellations Draco and Ursa Minor.

COMET 1905*c* (GIACOBINI).—As comet 1905*c* is now emerging from the immediate neighbourhood of the sun and is fairly bright, it should soon become visible in the evening sky, immediately after sunset, and in the south-west. The following is an extract from a daily ephemeris published by Herr A. Wedemeyer in No. 4067 of the *Astronomische Nachrichten*:—

Ephemeris 12h. M.T. Berlin.

1906	α (true) h. m. s.	δ (true) ° ′	log r	log Δ
Feb 1 ...	22 18 6 ...	−25 9 ...	9·6110 ...	0·0616
3 ...	22 40 39 ...	−24 17 ...	9·6634 ...	0·0616
5 ...	23 1 53 ...	−23 9 ...	9·7099 ...	0·0633
7 ...	23 21 49 ...	−21 50 ...	— ...	—
9 ...	23 40 24 ...	−20 25 ...	— ...	—

OBSERVATIONS OF STANDARD VELOCITY STARS.—In accordance with the international cooperative scheme for the regular determination of the radial velocities of ten standard stars, Mr. Slipher, using the Lowell spectrograph, observed the following stars during the summer and autumn of 1905. γ Cephei was substituted for α Crateris—the tenth star of the standard list—because the latter was too near the sun during the period covered by the observations. The mean velocity obtained by Mr. Slipher for each star is also given below:—

Star	No. of plates	Velocity
α Arietis ...	3	−14·3 km.
α Persei ...	5	− 2·5 ,,
β Leporis	3	−13·0 ,,
β Geminorum	3	+ 3·3 ,,
α Boötis ...	5	− 4·7 ,,
β Ophiuchi	3	−11·3 ,,
γ Aquilæ ...	3	− 2·1 ,,
ε Pegasi ...	4	+ 6·1 ,,
γ Piscium	3	−11·3 ,,
γ Cephei	3	−41·9 ,,

Mr. Slipher describes the equipment and the method of working, and directs attention to the fact that the high altitude of the Lowell Observatory and the prevalent transparency of the sky contribute greatly to the light-power of the equipment. Satisfactory spectrograms of α Persei were obtained in 15 minutes, whereas with the Yerkes equipment the shortest exposure on this star was 30 minutes (*Astrophysical Journal*, No. 5, vol. xxii.).

A FIRE NEAR THE MOUNT WILSON OBSERVATORY.—From No. 1, vol. xiv., of *Popular Astronomy*, we learn that a serious fire took place on Mount Lowe, near to Mount Wilson, on December 9, 1905. Fortunately, no damage appears to have been done to the observatory equipment, but the heat was so intense that Prof. Hale, fearing that some of the more delicate parts of the apparatus might be injured thereby, had them removed and sunk in the observatory reservoir until the danger was past.