

Millais, with sixteen full-page illustrations; "Ships' Boats: Their Qualities, Construction, Equipment, and Launching Appliances," E. W. Blocksidge; and a new and revised edition of "Recent Advances in Physical and Inorganic Chemistry," Dr. A. W. Stewart, with an introduction by the late Sir William Ramsay, K.C.B., F.R.S., illustrated.

MR. F. EDWARDS, of 83 High Street, Marylebone, has just issued Catalogue No. 384 of books dealing with a variety of subjects, but mainly architecture, printing and bibliography, and bookbinding. The sections appealing more especially to readers of NATURE are those relating to archæology, gardens, and the proceedings of many provincial scientific societies.

MESSRS. J. M. DENT AND SONS, LTD., have received a licence from the Controller of Patents to publish a translation of "The Biology of War," by Prof. G. F. Nicholai, the former holder of the chair of physiology in Berlin University, who, after imprisonment in Germany for his opinions, escaped to Denmark by aeroplane.

OUR ASTRONOMICAL COLUMN.

BORRELLY'S COMET.—L. v. Tolnay gives the following elements of this comet in *Astr. Nach.* (No. 4961); he has computed planetary perturbations, including those of Mars, to which the comet made a near approach at the beginning of 1912:—

$$\begin{aligned} T &= 1918 \text{ Nov. } 16.6818 \text{ G.M.T.} \\ \omega &= 352^\circ 23' 07.3'' \\ \Omega &= 77^\circ 1' 47.71'' \\ i &= 30^\circ 29' 29.01'' \\ \phi &= 37^\circ 57' 20.77'' \\ \mu &= 513.90816'' \end{aligned} \Bigg\} 1925.0$$

The following ephemeris is from a Marseilles Circular (for Greenwich midnight):—

	R.A.	N. Decl.	Log r	Log Δ
	h. m. s.	° ' "		
Nov. 2	6 33 30	2 20	0.1478	9.7978
6	6 38 58	4 52	0.1463	9.7766
10	6 44 1	7 44	0.1454	9.7561
14	6 48 35	10 57	0.1449	9.7367
18	6 52 37	14 30	0.1449	9.7190
22	6 56 3	18 24	0.1453	9.7035
26	6 58 49	22 36	0.1462	9.6910
30	7 0 49	27 2	0.1476	9.6822

Harvard Bulletin (No. 669) gives the following observations made at the Yerkes Observatory by Mr. Van Biesbroeck:—

G.M.T.	R.A.	S. Decl.
	h. m. s.	° ' "
Aug. 31.89146	4 39 10.15	14 1 50.0
Sept. 5.91563	4 45 18.78	13 29 47.4

The comet had a diffused elongated nucleus in P.A. 95°, a tail 40" long in the same direction; its magnitude was 13; it may rise to the 9th magnitude in November, being fairly near the earth.

WOLF'S COMET.—The following is a continuation of M. Kamensky's ephemeris for Greenwich midnight:—

	R.A.	Decl.	Log r	Log Δ
	h. m. s.	° ' "		
Nov. 2	21 4 59	2 50 N.	0.2138	0.0608
6	21 13 52	1 48	0.2112	0.0677
10	21 23 8	0 51 N.	0.2088	0.0749
14	21 32 46	0 1 S.	0.2066	0.0824
18	21 42 42	0 49	0.2048	0.0904
22	21 52 56	1 31	0.2032	0.0986
26	22 3 24	2 8	0.2018	0.1072
30	22 14 3	2 40 S.	0.2008	0.1159

The comet is likely to be of the 10th or 11th magnitude.

SOLAR-LINE DISPLACEMENTS AND RELATIVITY.—A further contribution to the study of solar-line displacements in connection with Einstein's theory of relativity has been made by Mr. J. Evershed (*The Observatory*, vol. xli., p. 371). Thirty of the lines composing the cyanogen band $\lambda 388$ were carefully selected for observation, and their displacements determined by comparison with the corresponding lines in the carbon arc. The provisional mean values for the shifts are +0.004 Å at the centre of the disc, and +0.006 Å at the polar limbs. There appears to be a curious systematic difference in the results for the north and south polar limbs, the former agreeing approximately with the centre of the disc, while the latter consistently showed the much larger displacement of +0.008 Å. The displacements as a whole are larger than those found by Dr. St. John, but they are still, on the average, not much more than half the predicted gravitational effect, whilst for iron lines the shifts are in many cases twice as great at the limb as is required on the relativity hypothesis. In explanation of the limb displacements Mr. Evershed suggests that the effect may possibly be due to the unsymmetrical shading towards the red of the majority of the Fraunhofer lines, which would be emphasised at the limb in consequence of the longer path of the photospheric light through the absorbing vapours. A large proportion of iron lines have, in fact, been found to be very slightly shaded towards the red in the laboratory spectrum. In agreement with Dr. St. John, Mr. Evershed considers his results unfavourable to the theory of relativity.

SCIENTIFIC AND PRACTICAL METRIC UNITS.

WE have received a communication from Dr. John Satterley, of the University of Toronto, with reference to Sir Napier Shaw's article on "Units and Unity" in NATURE for June 27, in which he complains of "the bewildering array of powers of ten" that hamper the C.G.S. system of electro-magnetic units and the practical units of electricity. Dr. Satterley makes the same complaint of other measures based on the metric system, which he admits is admirable for purposes of scientific measurement, but not for everyday use until it is simplified and the names of its units are shortened. He cites the milliwatt as representing a complication so intricate that nobody but a professional metricist knows what it is.

The communication represents the impossible position which some teachers of science practically take up consciously or unconsciously. The introduction of C.G.S. units into scientific measurement is an accomplished fact; and if scientific measurement is to be the headlight of practical life, it is absurd for the ordinary sensible man to be kept in ignorance of the units with which scientific men work. It has been remarked in some quarters that Sir Napier Shaw's article should have been addressed to the uninformed and unconverted: that readers of NATURE were all agreed upon the question. But if the agreement is only with the reservation that the organised system of physical units as it exists is reserved for the inner circles of scientific society, while the inch and the English system are good enough for the ordinary dealings of everyday life, it is obvious that the practical applications of science in this country must continue to be crippled as heretofore.

The beginning of Dr. Satterley's complaint is that "metricists are continually inventing new units—practical units (so-called) which are multiples of the centimetre, the gram, and the dyne." Who are the