the pressure at any chosen position. The search-tube has already given excellent results in the hands of Prof. Stodola, but the method of analysis adopted in the present series is believed to be new. The results are exhibited in the form of curves, and the following are some of the author's deductions:—The purely convergent form of nozzle operates very much in accordance with theoretical ideas; it has a smooth expansion line in agreement with its well-rounded form, and a maximum range approximately in line with the theoretical critical drop. The convergent-parallel type scarcely acts in keeping with preconceived ideas; this form of nozzle should be considered one of extended convergence only. In both the above types theory demands a maximum range limited to a pressure ratio of 0·55; the actual ranges have only rough agreement with this figure. The convergent-divergent type has one over-all range in which the fall of pressure is continuous, but the throat pressure seems always to be below the theoretical. Sharp-entranced nozzles were also experimented with.

WITH reference to the letter published in NATURE of February 3 discussing coloured thinking and thought-forms, Mr. G. Stridsberg, of Stockholm, wishes to direct attention to a communication by Prof. H. Mygind, of Copenhagen, which appeared in the Danish review *Tilskueren* for 1884 (pp. 361–78) entitled "Om Erinring og Fantasi aforistiske Betragtninger" ("Aphorisms on Memory and Imagination").

A LENGTHY catalogue (No. 197) of scientific books and publications of learned societies, consisting of upwards of 2000 items, has reached us from Messrs. W. Heffer and Sons, Ltd., Cambridge. As will be seen by the following table of contents, it contains titles of works in most of the sciences. It should therefore appeal to many readers of NATURE, who can obtain the catalogue upon request. The list is classified as follows:—Mathematics, Physics, Astronomy, and Early Philosophy; Engineering; Agriculture, Husbandry, and Farriery; Anthropology and Ethnology; Botany; Chemistry, Chemical Technology, and Metallurgy; Geology, Mineralogy, and Palæontology; Zoology and Biology; Physiology, Anatomy, and Medicine; Portraits of Men of Science; Psychology and Psycho-Analysis; and Addenda.

A CATALOGUE (No. 410) of antiquarian and bibliographic interest has just been issued by Mr. F. Edwards, 83 High Street, Marylebone, W.1. It gives particulars of some 300 books, maps, plans, and engravings relating to London and its vicinity, and will be sent free upon application.

THE Smithsonian Institution issues a classified list of its publications available for distribution to scientific workers either gratis or at the prices indicated. Publications of the United States National Museum and of the Bureau of American Ethnology are not included. The list before us, which is Publication 2585, is brought down to August 21, 1920.

Our Astronomical Column.

LARGE METEORS ON MARCH 1 AND 2.—Mr. W. F. Denning, of Bristol, writes:—"On the evening of Tuesday, March 1, two large meteors were observed, and on the following night three others were recorded. The most brilliant of them all appeared on March 2, at 10 p.m. It was seen at Bristol, at Dunton Green, Kent, at Holt, Norfolk, and at other places. It was a very fine object, and gave a flash which lit up the sky. Its radiant point was a few degrees east of δ Leonis, and the path of the meteor was over the English Channel approximately from Dieppe, France, towards the Isle of Wight, but reaching only about half that distance. Observations are still coming to hand, and the real path will be calculated from them. It has been several times pointed out that the first few nights of March are specially distinguished by apparitions of bright meteors, although no periodic shower is known to occur on those dates. There appear, however, to be several fairly active displays in progress, and from the evidence obtained this year we may be enabled to determine their radiant points accurately."

PONS-WINNECKE'S COMET.—This comet has not yet been detected—which is a matter for surprise. In 1915 it was photographed five months before perihelion, and it should now be within the reach of moderate instruments, especially as it is very favourably placed in the morning sky. The following elements are likely to be near the truth:—ω 174°, Ω 96°, i 19·5°, q 1·01, log a 0·509, e 0·687. The most uncertain element is the date of perihelion. The following ephemerides for Greenwich midnight are based on the assumed dates:—1921 June 13·5 and June 21·5. The uncertainty is considerably greater than eight days, so the search should extend beyond the limits of the ephemerides; these, however, should define the line on which it lies with tolerable precision:

$T = 1921$ *June* 13·5.

		R.A. h. m. s.	N. Decl. ° ′	log r	log Δ
March	7	14 47 44	25 58	0·2126	9·9291
	15	15 1 16	28 42	0·1932	9·8785
	23	15 15 48	31 39	0·1729	9·8269
	31	15 30 23	34 51	0·1519	9·7731

$T = 1921$ *June* 21·5.

March	7	14 13 18	29 31	0·2317	9·9453
	15	14 21 12	32 35	0·2126	9·8984
	23	14 27 8	35 58	0·1932	9·8522
	31	14 32 23	39 26	0·1729	9·8064

The search should be carried on assiduously up to March 20, after which the moon will interfere.

TWO NEBULÆ WITH UNPARALLELED VELOCITIES.—Prof. V. M. Slipher announces that the spiral nebulæ N.G.C. 584 (R.A. 1h. 27·3m., declination −7° 16′) and N.G.C. 936 (R.A. 2h. 23m., declination −1° 33′) have extremely high recessional velocities, which are 1800 and 1300 km./sec. respectively. There is a decided preponderance of recessional motion indicated for the spiral nebulæ.

Prof. Eddington ("Report on the Relativity Theory of Gravitation," p. 89) suggested that these high velocities may not be real, but a result of the curvature of space in Einstein's system, according to which very distant objects would have their spectral lines shifted towards the red.