

OUR ASTRONOMICAL COLUMN.

COMET MOREHOUSE, 1908c.—Numerous results of observations, appearing in several journals, indicate that in comet 1908c we have one of the most interesting cometary visitors that has been discovered of late years.

In the *Comptes rendus* for October 26 (p. 730, No. 17) M. Borrelly describes the observations made at the Marseilles Observatory between September 12 and October 3, and states that his photographs bear evidence of striking changes in the form and extent of the tail system. On September 20 two branches of the tail were shown, one rectilinear, the other curved, and the general appearance resembled that of Donati's 1858 comet; on September 28 the double tail was 5° in length, but on October 2, although triple, it was much shorter. Five tails were shown on the plate of October 3, and the trail of an occulted star indicates a slight absorption effect.

According to M. L. Rabourdin, observing at Meudon, great changes took place from one day to the next, and obvious changes were observed even during the course of an hour; on several plates the tail has an undulating appearance.

Changes, similar to those recorded above, are described by M. Gautier in No. 4278 of the *Astronomische Nachrichten* (p. 97, October 29). The observations were made at the Geneva Observatory during the period October 14–18.

According to a letter to Mr. H. C. Plummer, which appears in the *Observatory* (No. 402, p. 423, November), Prof. Barnard followed the comet closely from September 2 to October 13, and got one or more photographs on each of thirty nights during that period. He states that the photographs of September 30 are unique, whilst the transformation, which took place between the taking of them and the taking of his next one on October 1, was very wonderful. Fortunately there is a Greenwich photograph taken during the interval.

We give below a further extract from Prof. Kobold's ephemeris:—

Ephemeris 12h. M.T. Berlin.

1908			1908		
	a (true)	δ (true)		a (true)	δ (true)
	h. m.			h. m.	
Nov. 12 ...	18 52'5 ...	+8 46'3	Nov. 22 ...	18 50'8 ...	-0 21'2
14 ...	18 52'0 ...	+6 45'0	24 ...	18 50'7 ...	-1 55'0
16 ...	18 51'6 ...	+4 50'0	26 ...	18 50'5 ...	-3 24'7
18 ...	18 51'3 ...	+3 0'8	28 ...	18 50'4 ...	-4 50'3
20 ...	18 51'0 ...	+1 17'3	30 ...	18 50'4 ...	-6 12'6

DONATI'S COMET AND THE COMET OF 69 B.C.—Following up the suggestion that Donati's comet (1858 VI.), of which the period is probably something like 2000 years, was identical with the great comet recorded in the Chinese annals as having appeared in 69 B.C., Herr Kritzingher has compared the available data, and finds that the elements differ so much, especially in the inclination of the orbit plane, that the identity cannot be maintained. In fact, the Chinese comet cannot be identified with any later bright comet. Of all the earlier comets, it appears that the one recorded in China in 146 B.C. is the most likely to correspond with Donati's, but the identity is, at the best, very uncertain (*Astronomische Nachrichten*, No. 4277, p. 65, October 20).

TERRESTRIAL ELECTRICITY AND SOLAR ACTIVITY.—In No. 15 of the *Comptes rendus* Dr. A. Nodon reports that on October 2 his instruments at the Bordeaux Observatory indicated a violent change in the terrestrial electrical charge, and states that this change coincided with the passage of an area of solar activity. He further directs attention to the fact that the changes preceded a violent cyclone, which devastated Guadeloupe, and a magnetic storm, which was registered strongly at the Parc Saint-Maur Observatory.

THE "ASTRONOMISCHEN GESELLSCHAFT" AT VIENNA.—The twenty-second general meeting of the "Astronomischen Gesellschaft" was held at Vienna on September 15–18, and a report of the proceedings, contributed by Prof. Kobold, appears in No. 4277 of the *Astronomische Nachrichten* (p. 71). A proposal to hold the 1910 meeting either in America or at Breslau was discussed, the assembly deciding in favour of the latter.

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NEW CATALOGUES OF PROPER MOTIONS.—In No. 4276 of the *Astronomische Nachrichten* (p. 49, October 9) Dr. Ristenpart publishes a second list giving the proper motions, in R.A. and dec., of some 150 stars. The usual designation, the position for 1900, the magnitude, and the precession correction for each object are also given.

The first fascicule of vol. iv. of the "Annales de l'Observatoire astronomique de Tokyo" is also devoted to a catalogue of proper motions. In it Mr. K. Hirayama gives the declinations and proper motions of 246 stars employed in the Tokyo latitude observations, and discusses at length the processes by which they have been determined; the present discussion only includes stars not given in the *Jahrbuch*. In the first table the designation and the particulars of each star as they appear in the various catalogues employed are given, whilst the second table includes the resulting declinations and proper motions.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT WASHINGTON.

EVEN in these days of crowded congresses the International Congress on Tuberculosis, held in the last week of September and the first week of October in Washington, must stand out as a most remarkable meeting, especially in point of numbers, and were it not that the work there attempted was largely "educational" in character, and that the arguments and appeals for better methods of combating tuberculosis were directed to a much wider circle than that gathered in Washington, the promoters might well feel that they had undertaken a task for which the return could not be commensurate with the energy they had to expend. There can be no doubt that the congress was far too large to allow of careful and dispassionate discussion of many of the points that were raised in the different sections, but equally there can be no doubt that the moral and educational effect of such a meeting as that held at Washington must be enormous, not only in the United States and Canada, but in every part of the civilised world.

The keynote of the whole meeting was enthusiasm and earnestness combined with thoroughness. Following the lead offered by the British Association in the meetings in South Africa, the congress was divided into a series of peripatetic bands, which, as they made their way to Philadelphia, Washington, and New York, gave addresses and demonstrations on the special topics on which they were authorities. When the congress was over there were innumerable demands (most of which could not be met owing to the fact that the meetings were held so late, and that most of the delegates hastened home to their respective work as quickly as possible) for lecturers to tarry and give addresses in the various eastern towns of the States and Canada. As soon as a number of the French and English delegates arrived in Quebec, Montreal, and Toronto, they were first feasted, and then asked to address municipal bodies, chambers of commerce, boards of trade, and the like, and Dr. R. W. Philip caught the public ear at once by his terse and lucid statement of the Calmette-Philip dispensary system, which has been attended with such marked success in reducing the death-rate from tuberculosis in Edinburgh. At Montreal the way was thus prepared for a great autumn anti-tuberculosis campaign and exhibition, organised by Prof. Adami and his colleagues. Invitations were received from Chicago, Detroit and elsewhere, but the time before the congress was so limited that many of these had to be refused. Exceedingly convenient was the arrangement to hold a meeting of the International Association for the Prevention of Tuberculosis at Philadelphia a week before the actual discussions were to come on in Washington, and great credit must be given to the president, Dr. Lawrence Flick, to Prof. Pannwitz, the secretary, and to the organising committee in Berlin for the excellent programme there presented to the members.

Of course, much time and energy were devoted to the presentation and discussion of reports on sanatoria, on isolation, disinfection, immunisation against, and treatment of, tuberculosis, and it was interesting to note what