

MESSRS. GEORGE ALLEN AND CO., LTD., are about to publish a work on "Bushman Folk Lore," by W. I. Bleek and L. C. Lloyd. The volume will be fully illustrated with numerous specimens of Bushman drawings, and will contain a preface by Dr. G. McCall Theal.

OUR ASTRONOMICAL COLUMN.

COMET 1911*b* (KIESS).—The numerous observations of Kiess's comet which appear in Nos. 4513-5 of the *Astronomische Nachrichten* agree in describing it as a nebulous mass some 2.5' to 5' in diameter, with a condensation some 40" to 50" across, but no definite nucleus. The estimates of the magnitude, as one would expect of such an object, vary considerably, but about July 10 the magnitude was approximately 8.0.

A forty-two minutes' exposure, made in a slit spectrograph attached to the reflector of the Königstuhl Observatory, on July 11, showed 390  $\mu\mu$  to be the brightest band. The radiation 388  $\mu\mu$  was fainter, and its companion of shorter wave-length fainter still. While the 390  $\mu\mu$  line extended to a distance of 1½' from the condensed centre, the much fainter line 467-476  $\mu\mu$ , with a maximum at 472  $\mu\mu$ , extended only to about ¾'. The bands 398-410  $\mu\mu$  and 423  $\mu\mu$  were extremely faint, and no continuous spectrum was shown on the plate.

Dr. Wolf adds that, as seen in the 12-inch refractor on

roughly corresponding to the mean horizon for London; after August 17 the distance from the earth begins to increase, and the comet also becomes invisible in these latitudes, its declination on August 18 being 35° S.

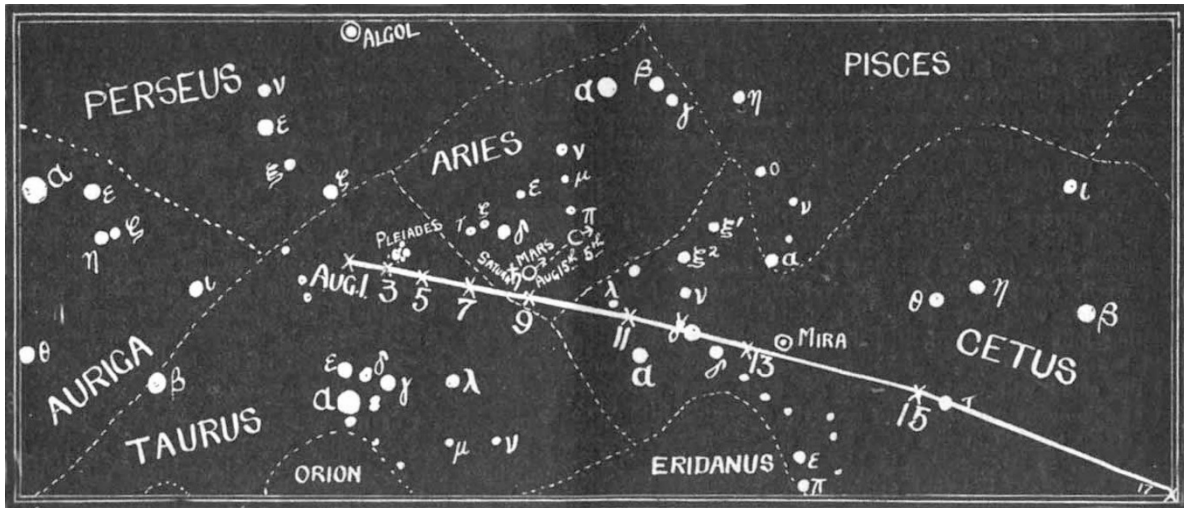
BROOKS'S COMET, 1911*c*.—Numerous observations recorded in No. 4515 of the *Astronomische Nachrichten* show that the magnitude of comet 1911*c*, during July 20-23, was about 10 or 11. Dr. Hartwig reports it, on July 22, as an irregular mass 2.5' in diameter, with a faint 0.5' condensation of the eleventh magnitude.

In the supplement Dr. Ebell gives provisional elements and a daily ephemeris extending to August 24. The elements give the time of perihelion as November 11, 1911, so that for some weeks we may expect the comet to brighten up, on account of both its decreasing distance and its increasing activity.

Ephemeris (12h. M.T. Berlin).

1911	$\alpha$ (true) h. m.	$\delta$ (true)	$\log r$	$\log \Delta$	mag.
Aug. 4	21 56.4	+29 42.0	0.2760	0.0264	9.4
" 8	21 48.8	+32 21.2	0.2632	0.0020	9.2
" 12	21 39.7	+35 6.7	0.2500	9.9783	9.1
" 16	21 28.7	+37 56.6	0.2363	9.9557	8.9
" 20	21 15.6	+40 48.2	0.2221	9.9345	8.7
" 24	21 0.2	+43 37.8	0.2074	9.9151	8.5

Not only is this comet becoming brighter, its position for observation in these latitudes is improving. Its apparent path is from Pegasus towards  $\alpha$  Cygni, and the



Apparent Path of Comet 1911*b*. August 1-17, 1911.

July 8, the head showed a distinct dark space behind its centre, and a cone of matter was seen to be streaming out from the front of the coma. A brief observation by Herren Helffrich and Massinger showed a curved tail at least 1° long, but very faint.

Elements computed by Messrs. Einarsson and Meyer agree well with the corrected elements published by Dr. Kobold, and, with an ephemeris, appear in No. 4515. The following ephemeris is abstracted from that given by Dr. Kobold in No. 4514:—

1911	$\alpha$ (true) h. m.	$\delta$ (true)	$\log r$	$\log \Delta$	mag.
Aug. 3	3 49.7	+24 5.6			
" 5	3 40.1	+21 29.4	9.9993	9.6711	5.0
" 7	3 28.2	+18 6.0			
" 9	3 13.0	+13 29.3	0.0226	9.5442	4.5
" 11	2 52.8	+7 2.7			
" 13	2 25.2	-2 1.6	0.0452	9.4013	3.9
" 14	2 7.2	-7 43.6		9.3708	
" 15	1 46.9	-14 15.8		9.3439	
" 16	1 22.5	-21 16.9		9.3267	
" 17	0 54.0	-28 26.1	0.0670	9.3212	3.6

The positions in regard to the surrounding stars are shown approximately on the accompanying chart, the bottom line

last position given here is very near  $\xi$  Cygni; thus for some time it will transit, with a small zenith distance, not far from midnight.

HORARY NUMBER OF METEORS VISIBLE.—Mr. Denning's publication, in No. 4515 of the *Astronomische Nachrichten*, of the horary number of meteors visible for every night in the year comes at an opportune moment, for the outstanding feature of his comprehensive table is the heavy preponderance of meteors per hour in late July and early August. The numbers are deduced from the Bristol observations made during 1866-1911, and give the horary number for one observer watching a clear, moonless sky uninterruptedly. From a glance at the table the average number per hour for the first six months of the year would not exceed six; but early in July an increase sets in, which culminates in sixty-nine per hour on August 10, and averages nearly twenty-four per hour for the whole month.

CHARTS FOR THE SOUTHERN HEAVENS.—Dr. Ristenpart announces in No. 4514 of the *Astronomische Nachrichten* the publication of charts of the southern heavens by the Santiago Observatory. Five series, including fifty charts, will cover the sky between the south pole and declination 19° S., and series 1 and 2 (30° to 67° south) are now ready.