The means for the parallaxes thus obtained for the four independent sets of measures of 61^1 and 61^2 Cygni respectively are as follows :—

For 61^1 Cygni, 0″·438 ; for 61^2 Cygni, 0″·441.

Prof. Pritchard explains that this determination is to be regarded as provisional only, and that the work will be continued to the end of the annual cycle. The method certainly appears to be a most promising one, and the publication of the full details of the Oxford researches will be awaited with interest.

Observations of Variable Stars in 1885.—No. 151 of Gould's *Astronomical Journal* contains Mr. Edward Sawyer's observations of variable stars made in 1885. The following epochs of maximum brightness were observed :—R Andromedæ, 1885 January 10 ; R Leonis, about 1884 December 24 ; R Leo. Min., 1885 June 26 ; R Boötis, 1885 May 16 ; R Ursæ Majoris, July 1 ; S Ursæ Majoris, May 7 ; U Herculis, July 8 ; *g* Herculis, June 4, August 2 (?), October 16 ; S Coronæ, May 11 ; χ Cygni, 1886, January 10 ; R Scuti, 1885 June 17, August 10 (?), and November 16 ; Mira Ceti, February 10 ; R Aquarii, January 4. β Pegasi and α Cassiopeiæ appeared constant, and ρ Persei nearly so, during the observations. R Coronæ was well observed, and showed numerous but slight fluctuations of light. An unusually bright phase, 6·2 m., occurred on August 15, followed by a rather faint minimum, 7·4 m., on October 13. T Monocerotis was well observed : last minimum, April 20, 15h. 26m. Camb. M.T. ; last maximum, April 27, 15h. 55m. U Monocerotis was observed at minimum on April 1, and at maximum on April 14. W Cygni was observed at maximum on August 20 and December 16, giving a period of 118 ± days, and at minimum on October 30.

The Alleged Ancient Red Colour of Sirius.—Mr. Lynn, in the current number of the *Observatory*, shows that the evidence for this star having formerly been of a red colour is much less strong than has frequently been supposed. Prof. Schjellerup had pointed out in his notes on his translation of Sûfi, that the designation ὑπόκιρρος applied to the star in our editions of Ptolemy was probably an error of transcription for σείριος ; whilst it had been suggested long ago that, for the word "rubor" which we find used in reference to it by Seneca, we should really read "fulgor." It certainly has always seemed improbable that a star of such vast dimensions as Sirius must be should have so entirely changed its colour in less than 2000 years.

Bright Lines in Stellar Spectra.—Mr. O. T. Sherman, in No. 149 of Gould's *Astronomical Journal*, brings together various observations of the bright lines which have been observed by Vogel or Copeland in the spectra of β Lyræ, γ Argûs, R Geminorum, and some smaller stars, and compares them with Hasselberg's observations of the low-temperature spectrum of hydrogen and the high-temperature spectrum of oxygen, and draws the inference that the stellar bright lines belong to these spectra. The inference seems scarcely warranted, however, for, on the one hand, the lines in the spectrum of hydrogen are so numerous that, wherever the star-lines lay, it would be easy to find lines near them, so that the accord would have to be very close for any such deduction to be safely based upon it ; and, on the other, the observations of the lines in the stellar spectra are less accurate than Mr. Sherman seems to think. The slight differences in the recorded positions of the bright lines as given by different stars are probably indications simply of a roughness in the readings, and the lines are most likely the same in general in the different spectra. The following may be taken as rough mean positions for the bright lines in these interesting spectra : 600 mm., 581, 568, 540, 466, together with the F line of hydrogen, and, in some cases, D_3 and the third line of hydrogen at 434, assuming that the lines are the same in the various spectra of the type. The close correspondence of the bright lines in R Geminorum to those observed by Cornu in Nova Cygni, 1876, indicates that we probably have there the coronal line 1474 K, the principal chromospheric lines, and the typical nebular line at about 500.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1887 FEBRUARY 20-26

(For the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on February 20

Sun rises, 7h. 6m. ; souths, 12h. 13m. 56·7s. ; sets, 17h. 21m. ; decl. on meridian, 10° 55′ S. : Sidereal Time at Sunset, 3h. 22m.

Moon (New on February 22) rises, 5h. 52m. ; souths, 10h. 25m. ; sets, 15h. 2m. ; decl. on meridian, 17° 6′ S.

Planet	Rises h. m.	Souths h. m.	Sets h. m.	Decl. on meridian ° ′
Mercury ...	7 33 ...	12 58 ...	18 23 ...	7 34 S.
Venus	7 49 ...	13 27 ...	19 5 ...	4 59 S.
Mars	7 38 ...	13 9 ...	18 40 ...	6 23 S.
Jupiter... ...	23 16* ...	4 17 ...	9 18 ...	12 11 S.
Saturn... ...	12 59 ...	21 8 ...	5 17* ...	22 23 N.

* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Feb. 20 ...	h. 2 ...	Jupiter stationary.
22 ...	— ...	Annular eclipse of the Sun ; visible only in parts of South America, Australia, and the South Pacific Ocean.
24 ...	17 ..	Venus in conjunction with and 1° 17′ north of the Moon.

Variable Stars

Star	R.A. h. m.	Decl. ° ′		h. m.	
U Cephei	0 52·3 ...	81 16 N. ...	Feb. 20,	20 38	*m*
			,, 25,	20 17	*m*
Algol	3 0·8 ...	40 31 N. ...	,, 25,	6 5	*m*
W Virginis	13 20·2 ...	2 48 S. ...	,, 22,	23 0	*M*
δ Libræ	14 54·9 ...	8 4 S. ...	,, 24,	0 31	*m*
U Coronæ	15 13·6 ...	32 4 N. ...	,, 20,	23 19	*m*
S Libræ	15 14·9 ...	19 59 S. ...	,, 21,		*m*
U Ophiuchi... ...	17 10·8 ...	1 20 N. ...	,, 20,	3 27	*m*
		and at intervals of		20 8	
β Lyræ...	18 45·9 ...	33 14 N. ...	Feb. 24,	4 0	*m*
W Cygni	21 31·8 ...	44 52 N. ...	,, 24,		*m*
T Pegasi	22 3·4 ...	11 59 N. ...	,, 20,		*M*
δ Cephei	22 25·0 ...	57 50 N. ...	,, 23,	21 0	*m*

M signifies maximum ; *m* minimum.

Meteor-Showers

February 23-25, near β Trianguli, R.A. 30°, Decl. 35° N
Also from Monoceros, R.A. 120°, Decl. 5° S.

GEOGRAPHICAL NOTES

It would seem that Dr. Oscar Lenz is only to leave Zanzibar this week. The *Times* Vienna Correspondent is mistaken in thinking that the Royal Geographical Society expects Dr. Lenz to come direct to London. He must, of course, first render his account to the Vienna Society, which sent him out ; but after that, it is hoped, he will come to London and tell his story. It is possible that before leaving Zanzibar he may have an opportunity of giving Mr. Stanley the benefit of his experience. Mr. Joseph Thomson, in a letter to the *Times*, endeavours to show that Mr. Stanley is taking a too rosy view of the prospects of his expedition. Mr. Thomson naturally insists on the superiority of the Masai Land route over all others. Certainly Mr. Stanley exaggerated the difficulties of this route, and we are inclined to believe that, had it been selected, the expedition might have reached Emin Pasha sooner than by the Congo. It should be remembered that, even if all the vessels on the Middle and Upper Congo are available, they could not possibly convey a thousand people in one journey—a good authority assures us that there must be at least three journeys ; so that, unless Mr. Stanley starts on his land journey with only one-third of his caravan, instead of 35 days after leaving Stanley Pool it will take 100 days to reach the mouth of the Aruwimi. At the same time we must believe that Mr. Stanley knows what he is about, and is not likely to lay himself open to the reproach of being so far out in his calculations.

In the official report, just issued, on the administration of Lower Burmah during 1885-86, and Upper Burmah during 1886, there are some interesting passages relating to the resources of the new British province. Agricultural products, such as rice, wheat, maize, and other cereals, are grown in large quantities. The country is believed to be rich in mineral resources, and the subject is at present under the examination of the Geological Survey. Meanwhile it is known that the country to the north-east of Mandalay is the richest, if not the only, ruby-