" An observation was taken as follows, at a little after seven p.m.,—

Green. M.T.	True Dist. for Sirius.	True Dist. for Castor.
h m s	o ′ ″	o ′ ″
11 9 37	34 43 50	58 22 33

" Both observations are corrected for refraction, they give a R.A. $4^h 22^m 20^s$, and Decl. $6° 45' 2''$ South.

" The evening of May 1 was cloudy, and only one observation could be obtained, at

Green. M.T.	True Dist. from Rigel.
h m s	o ′ ″
11 32 2	5 12 30

the comet being in a direct line with λ *Leporis* and *Rigel*.

" The mail leaves this evening, so I send these two ; in the event of obtaining any further observations to-night, I will send them. I believe you prefer to receive the observations themselves. I have therefore sent them corrected only for refraction.

" *H.M.S. Centaur, Buenos Ayres, Outer Anchorage,*
            May 2, 1853."

" Our position is four miles north-east of the fort of Buenos Ayres."

Remarks on Saturn as seen with the Madras .Equatoreal (by Lerebours and Secretan ; focus, 89 in., aperture, 6.2 in.) By W. S. Jacob, Esq., Director of the H. E. I. Co.'s Observatory, Madras.

The faint inner ring and the division in the outer ring were both seen with power 365, on 24th August, 1852, soon after the arrival of the new object-glass (the original one having been defective), and they have been viewed on various subsequent occasions with powers from 174 to 365 ; the fine outer division can, under favourable definition, be traced through more than one-half the circumference ; its breadth cannot be estimated at more than one-third or one-fourth of the large division, say $0''·1$. The faint ring as projected on the planet has a filmy appearance, and the planet is seen through it as through a film of smoke; it has an umber brown tint ; off the planet it has a slaty hue. The large division is also decidedly not black, but little, if at all, darker than the faint ring as seen on the planet, and of about the same tint; its inner edge is pretty sharp, but its outer edge seems rather shaded off. No belts were seen on *Saturn*, except the broad bright equatoreal one; the whole south hemisphere being shaded or mottled over not quite uniformly, but a little darker next the white belt, and also in slight cloudy patches here and there, especially towards the pole. The shadow of the planet on the ring is very black and sharp. An eclipse of *Tethys* is thought to have been seen on 5th January. The satellite had been tolerably conspicuous near the western ansa, but as *Saturn* neared the zenith, it was noticed as fainter, and on looking for it a few minutes later it could not be seen. The time of disappearance would be about $2^h 10^m$ Madras

sidereal time, but with an uncertainty of several minutes. The satellite was seen again at about 5^h, nearly opposite *Saturn's* north pole.

The following are the results of four nights' measures, reduced to *Saturn's* mean distance ($9 \cdot 5430$, according to Bouvard's tables), powers used 365, 365, 277, 277. Mean date of observation, $1853 \cdot 0123$, Greenwich mean time.

Outer Diameter of Outer Ring	39·91
Diameter of fine Division	38·09
Inner Diameter of Outer Ring	35·40
Outer Diameter of Inner Ring	34·67
Inner Diameter of Inner Ring	26·32
Inner Diameter of Faint Ring	22·19
Equatoreal Diameter of Saturn	17·86
Polar Diameter of Saturn	16·51
Breadth of large Division	0·37
Minor Axis of Outer Ring	14·33

Saturn's equatoreal diameter was corrected for phase ($0''\cdot04$.) The above measures agree moderately well with Struve's, as given in *Ast. Soc. Mem.* vol. iii. p. 299, but differ considerably from the values in the *Nautical Almanac.* My breadth of the interval between the rings is $0''\cdot04$ less than Struve's, and is decidedly too small (owing to the shading off of the outer edge noticed above), the apparent breadth being *estimated* at fully $0''\cdot5$, or little, if at all, less than the thickness of the micrometer wires which is $0''\cdot6$. I have not been able to make out any other marks or divisions in the ring than those mentioned above.

On the Parallax of α Herculis. By W. S. Jacob, Esq.
(*Extract of a Letter to the Rev. R. Sheepshanks.*)

" I write in haste to save a mail, and give you early notice of my observations of *α Herculis*, proving, as I think, the existence of a parallax of about $0''\cdot06$. I send only the mean results, and a rough tracing of the curve, as the details will appear in the forth-coming volume of our *Memoirs;* but it is desirable that the attention of astronomers should be called to the star, and that my results should if possible be confirmed by some one else. I am just leaving Madras for the hills on account of my health, so that my observations will be interrupted, but I hope to take the subject up again on my return.

" The following are my mean results. You see the course of the curve is pretty well represented, not only by the observations near the extreme points, but also by the intermediate ones. The observations of distance are, of course, not exact enough for detecting so small a quantity, but their evidence is at least not contradictory. The instrument used was the Lerebours' equatoreal (89 in. focus, $6\frac{1}{4}$ in. aperture), power in the two first sets 200, being