

XCVI. *Minutes of the Observation of the Transit of Venus over the Sun, the 6th of June 1761, taken at Calcutta in Bengal, Latitude 22° 30', Longitude East from London nearly 92° : communicated from the Court of Directors of the East India Company, by Charles Morton, M. D. F. R. S.*

Read Nov. 4, 1762.	THE appulse uncertain, } but very apparent at - }	h	'	"
		8	11	35
The center of Venus on the Sun's limb		8	16	35
The interior contact at the ingrefs - -		8	24	40
Interior contact at the egrfs - - -		2	15	55
Center of Venus on the Sun's limb at	} - - - - - }	2	24	0
the egrfs - - - - -				
Total egrfs - - - - -		2	32	0

The above observations were minuted from a stop-watch of Mr. Ellicott's, having no pendulum-clock or time-piece.

The weather being cloudy for several days before that of observation, there was no opportunity of ascertaining the error of the watch ; but, on the day of observation, I found, upon comparing the watch with a meridian line in the town-hall, that when the center of the Sun's image was on the meridian line, the time pointed by the watch was 4' 10'' past twelve.

Comparing the watch the 7th, 8th, and 9th June with the meridian line, I found it had gained nearly two minutes each day, the time pointed by the watch on the 9th June being 10' 5'', when the Sun was on the meridian.

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It took about 5'' to wind the watch up every day, which I carefully observed; from the foregoing remarks I have made the following corrections.

	h	'	''
Centre of Venus on the Sun's limb at	}	8	12 54
ingress - - - - -			
Interior contact at the ingress - - -		8	20 58
Interior contact at the egress - - -		2	11 34
Centre of Venus on the Sun's limb at	}	2	19 38
the egress - - - - -			
Total egress - - - - -		2	27 38
And if the same time be allowed for the	}	6	22 48
first semidiameter of the planet com-			
ing on as the other three, it must have			
commenced at 8 ^h 4' 50'', so that the			
total duration was - - - - -			

William Magee.