

THE ILLUSTRATED LONDON NEWS

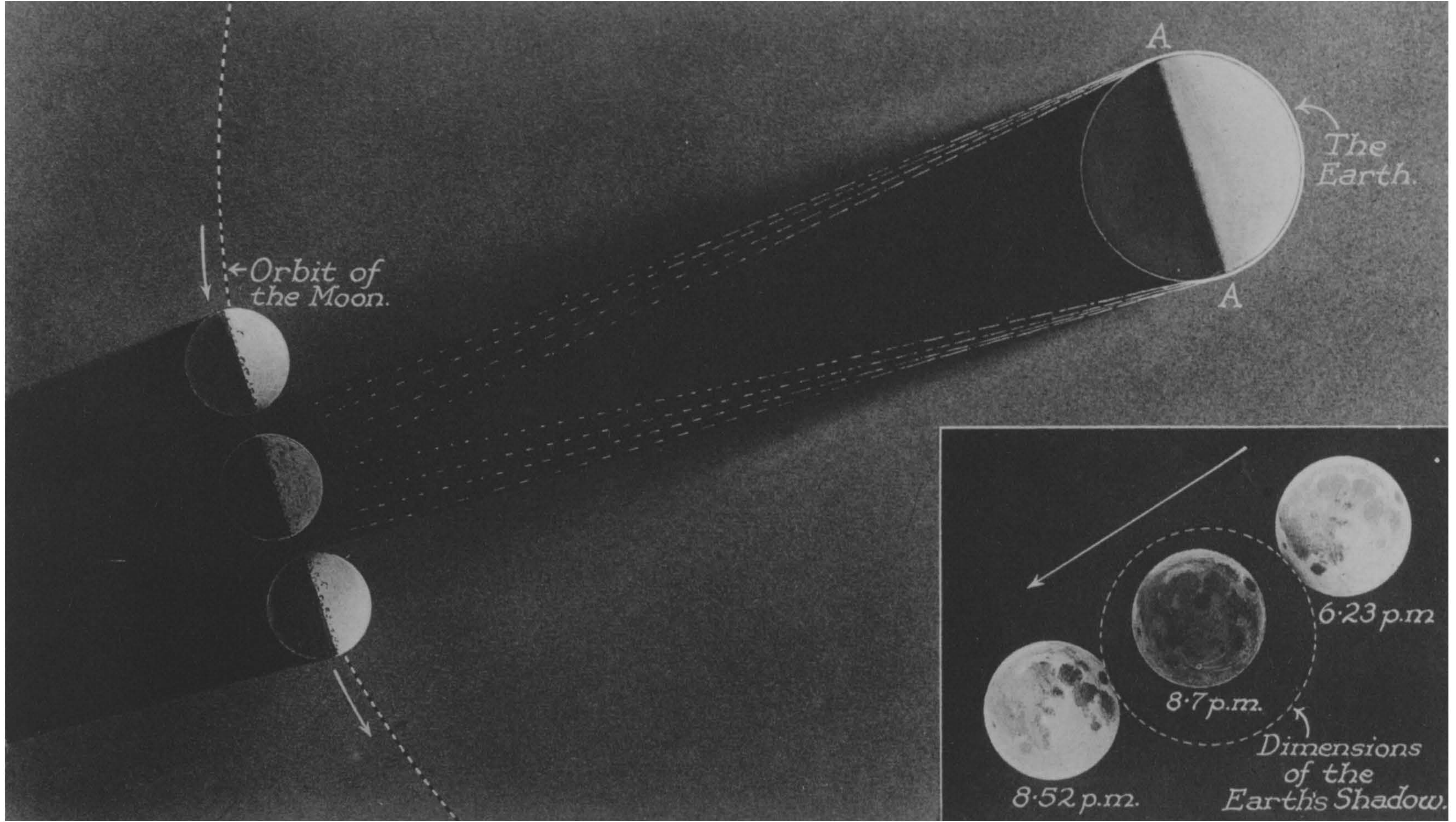


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SATURDAY, MARCH 28, 1931.

THE COMING ECLIPSE OF THE MOON: AN ASTRONOMER'S DRAWINGS.

FROM THE DRAWINGS BY LUCIEN RUDAUX.



PHASES OF THE ECLIPSE OF THE MOON OF APRIL 2: THE MOON (ON LEFT) ENTERING, TRAVERSING, AND LEAVING THE SHADOW OF THE EARTH (TOP RIGHT) COMING BETWEEN IT AND THE SUN; AND (LOWER RIGHT) A DIAGRAM SHOWING THE TIME OF THE PHENOMENON AND THE RELATIVE SIZES OF THE MOON AND OF THE EARTH'S SHADOW ENCIRCLING IT DURING THE ECLIPSE.



THE OTHER SIDE OF THE "MEDAL": OUR ECLIPSE OF THE MOON SEEN FROM THAT BODY AS AN ECLIPSE OF THE SUN—AN IMAGINARY DRAWING OF THE EARTH (TOP CENTRE) COMING BETWEEN THE SUN AND THE MOON, AS IT WOULD APPEAR SIMULTANEOUSLY TO AN OBSERVER ON THE LUNAR LANDSCAPE (SHOWN BELOW).

"The beautiful spectacle of a total eclipse of the Moon," writes M. Lucien Rudaux in explanation of his drawings, "will be visible on the evening of April 2. The phenomenon is due, of course, to the Moon passing into the shadow cast by the Earth on the side away from the Sun. The upper drawing, intended purely for demonstration, preserves neither proportions nor distances, and gives material form to what is invisible in space—the cone of the terrestrial shadow. It shows how the Moon first enters the penumbra, then the shadow itself, and the inverse phases of its emergence. The right-hand corner drawing represents the process in time. The Moon will enter the shadow at 6.23 p.m. and will be entirely enveloped at 7.22 p.m.—thus beginning the total eclipse, which will

attain its maximum at 8.7 p.m. and end at 8.52 p.m. The Moon will then gradually pass out of the shadow, being completely free at 9.51 p.m., but will remain in the penumbra until 10.47 p.m. Theoretically, the Moon ought to disappear altogether. It remains visible, however, adumbrated by a red or coppery hue. This peculiarity is due to the Earth's atmosphere (A.A) refracting some solar light within the shadow, as indicated by dotted lines. If we were on the Moon, we should see a total eclipse of the Sun by the Earth, which would appear (as shown in the lower illustration) projected before the Sun's luminous splendour, like a huge black disk encircled by a brilliant ring of orange-red, as of sunset, which would likewise tinge the Moon's landscape."