

THE ILLUSTRATED LONDON NEWS



REGISTERED AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM, AND TO CANADA AND NEWFOUNDLAND BY MAGAZINE POST.

No. 3905.— VOL. CXLIV.

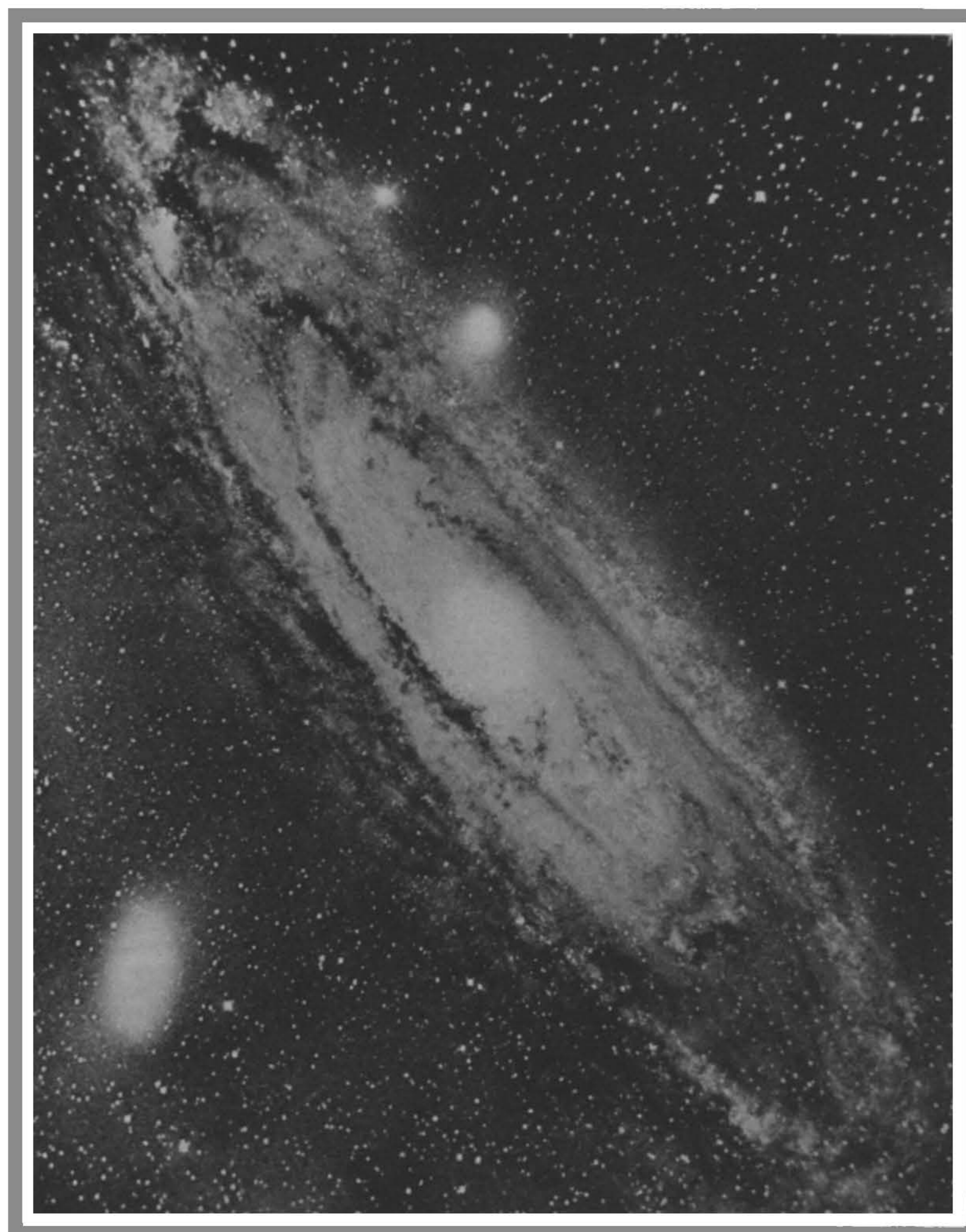
SATURDAY, FEBRUARY 21, 1914.

SIXPENCE.

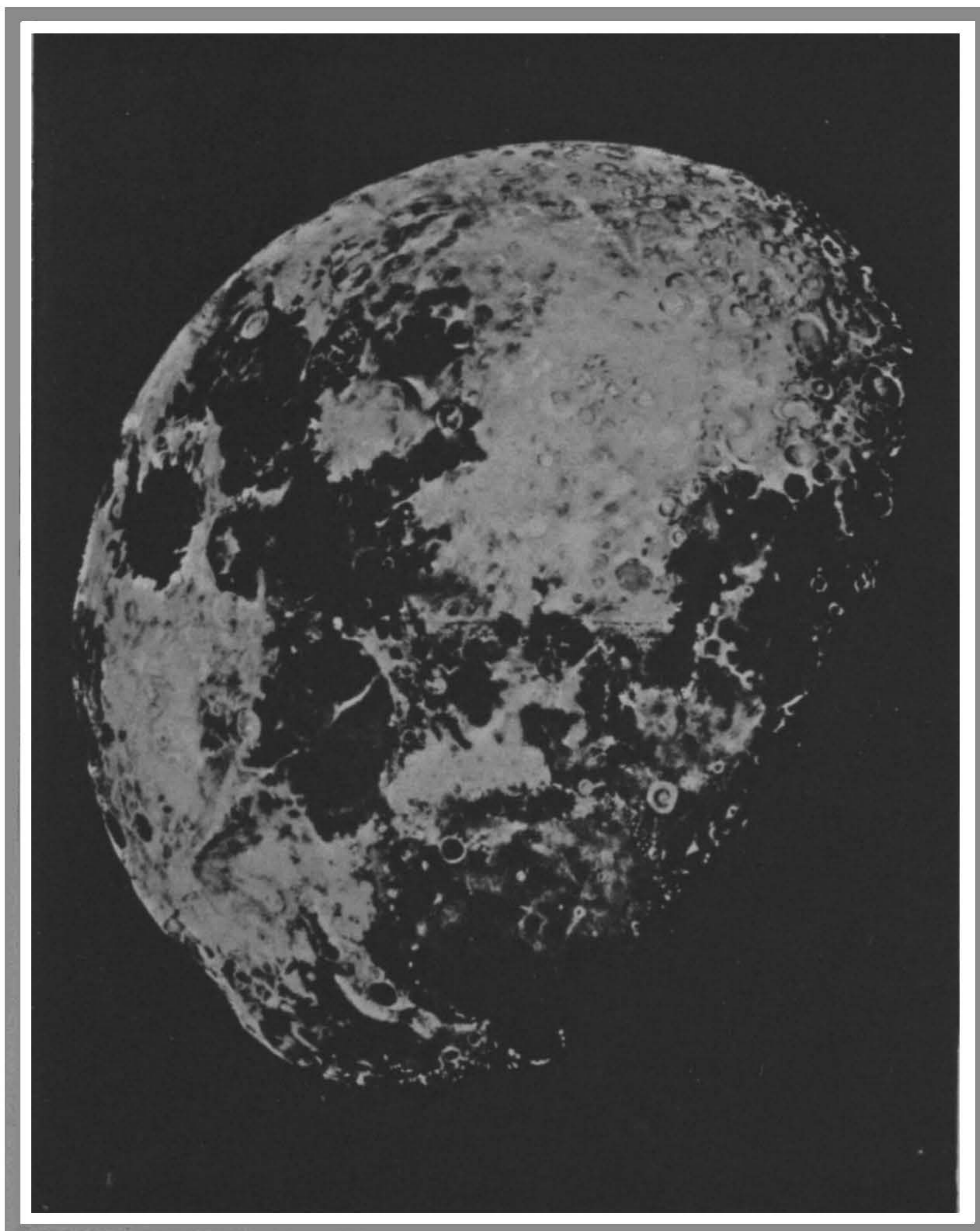
EIGHTEEN YEARS V. ONE SECOND! ARTIST AND CAMERA AS RIVALS.



AS PICTURED BY AN ARTIST: THE ANDROMEDA NEBULA DRAWN BY THE ASTRONOMER TROUVELOT.



AS PICTURED BY A CAMERA, IN 4½ HOURS: THE ANDROMEDA NEBULA PHOTOGRAPHED.



A DRAWING WHICH WAS EIGHTEEN YEARS IN THE MAKING: THE MOON; BY THE FAMOUS ARTIST, JOHN RUSSELL, R.A.

Trouvelot's drawing of the Andromeda Nebula shows how an artist-astronomer may attain nearly to a faithful picture, and yet miss the whole point of the structure. Trouvelot has drawn the two dark rifts as *straight lines*: they are really slightly curved, as seen in the photograph, and the curvature at once indicates the *whirling* nature of the rings or spirals round the central mass. The failure of the artist is simply due to the fact that he could only see at any one time a very small part of the Nebula; his complete drawing is the result of piecing together the various small views, and the slight, but vitally important, curvature of the rifts was lost in this



A PHOTOGRAPH TAKEN IN ONE SECOND: THE MOON IN ALMOST THE SAME PHASE AS IN JOHN RUSSELL'S DRAWING.

process. The photographic plate can receive simultaneous impressions from the whole structure.—The crayon drawing of the Moon is preserved at the Radcliffe Observatory, Oxford. It is 4 ft. 11 in. by 5 ft., and bears the date 1795; it was made by John Russell, R.A., who was supplied with a six-inch reflector by Sir William Herschel, and devoted to the work all the suitable nights he could spare during eighteen years. It is not too much to say that a better representation of the Moon's surface can now be obtained by photography with a large telescope in a second or two. Our illustrations were shown not long ago by Professor H. H. Turner.