were the Faculæ so well seen as yesterday—the Penumbra fainter to-day, probably on account of haze in the atmosphere.

January 22nd, 12°–20′, apparent time. Definition good, with a slight haze—Penumbra darker to-day—the Nucleus has broken up into four portions, with some smaller spots towards the limb and centre of the Sun—the general shade of the Southern part of the Penumbra darker than the Northern part—a faint Penumbra round small dark spot near the limb—very strongly defined Faculæ seen close to the opposite or north-western limb—observed granular appearance of the body of the Sun.

January 24th, 12°–15′, apparent time. Main body of Nucleus has nearly separated from the other parts, and formed a distinct spot surrounded by a Penumbra—there being three small Nuclei separating the larger spot from the other two—one of the spots seen on the 22nd having either disappeared or merged into the others—the Penumbra smaller at the part between the principal spot and the others, shewing a tendency to isolate the principal spot—Faculæ on opposite limb very brilliant and strongly defined—definition very good—Sun's disc granular—Penumbra generally darker than previously observed—no other spots visible on this or on previous days, besides those referred to.

January 25th. Cloudy, and no observation.

January 26th, 1°–30′ apparent time. The separation between the principal spot and the others complete—the Nucleus of the principal spot extending to the edge of the Penumbra, on the side towards the Sun's north-eastern limb—one portion of the Penumbra round the spots nearest the limb, very much more brilliant than the other parts—Penumbra much striated round Eastern spots—a small spot to the South of the ones nearest the limb, with cloudy looking streaks between it and the Penumbra, not exactly Penumbra, but more resembling cirrhous clouds—about ten or eleven new spots observed on the south-eastern limb, not far removed from the Equatorial regions of the Sun, a faint Penumbra apparently round one of them—strongly marked Faculæ around these new spots. The spots originally observed are approaching the western limb, having, I consider, passed the centre of the Sun about the 24th instant.

I may here observe that the Telescope used was an Equatorial Refractor of excellent quality, made by Henry Fitz of New York, of sixty-two and a half inches focal length, and a clear aperture of four and half inches, very firmly mounted, surrounded by a circular wooden building, with a revolving dome; the eye-piece used was a positive or