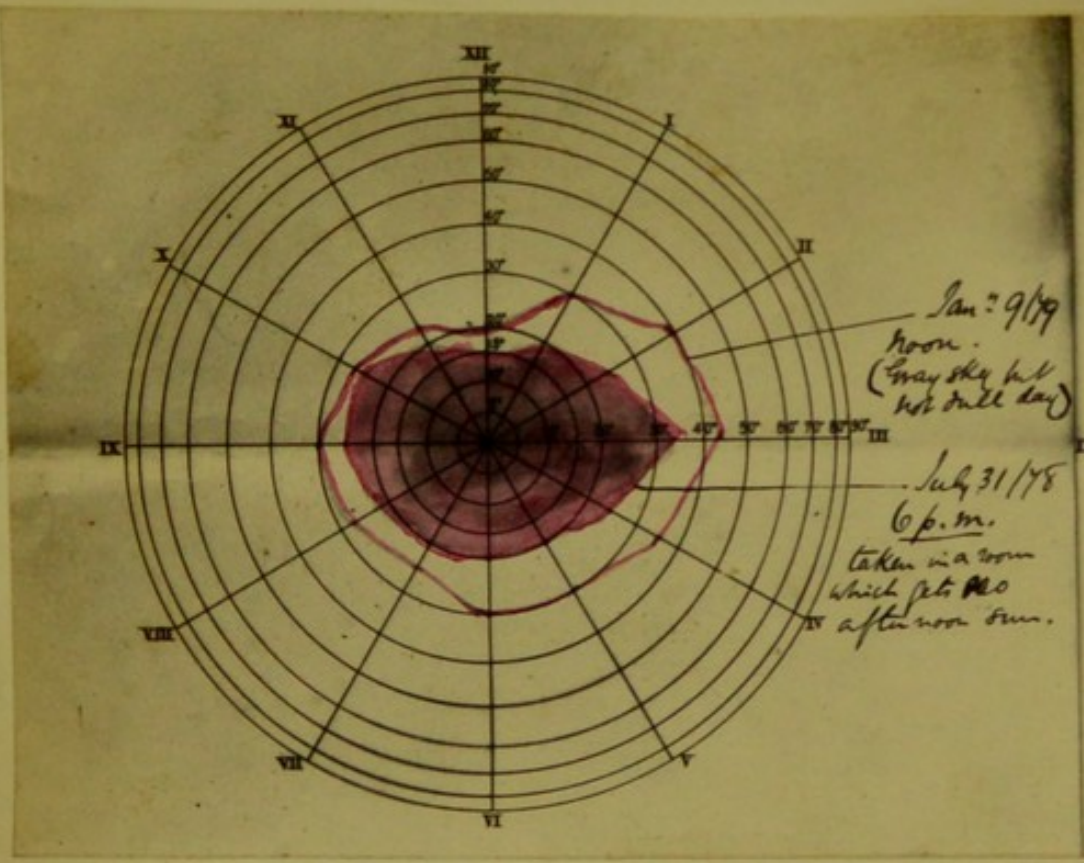
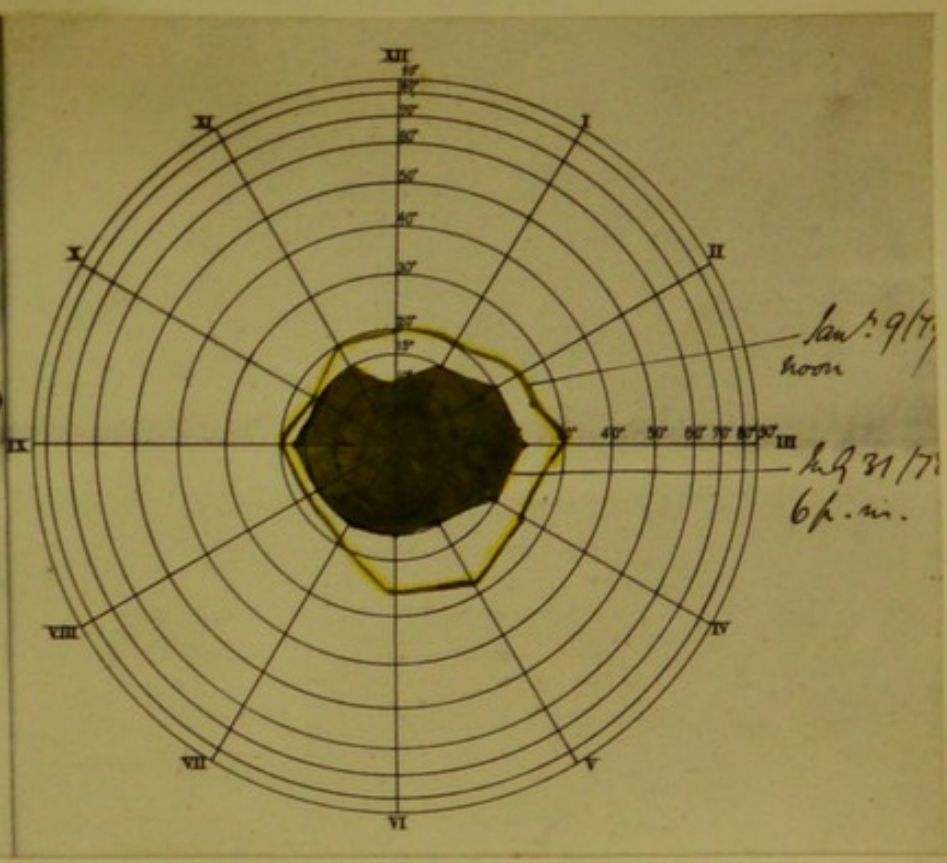
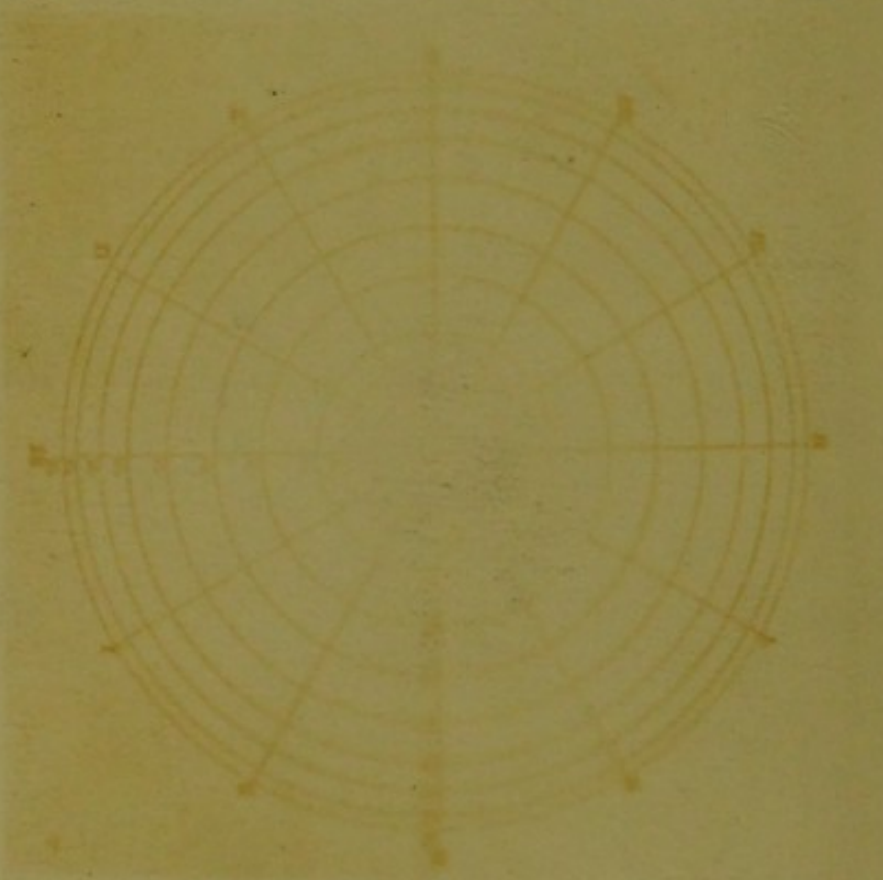
[Ten plates illustrative of tobacco amblyopia].



Normal field for Red.



Normal field for Green.

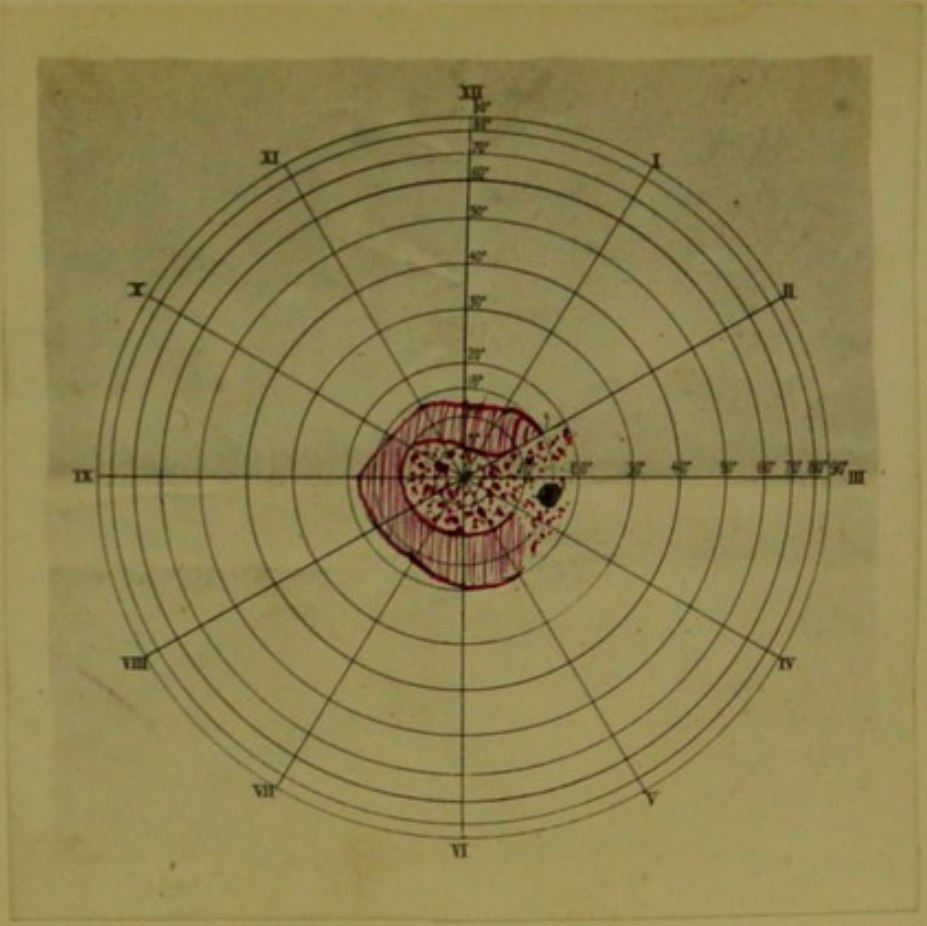


JOHN H. TOBACCO AMBLYOPIA.

(Note-book, p. 137.) Dec. 15th, 1878. 10–11 a.m. Field for Red.

Left Eye.
(V. 16 J. barely.)

Right Eye.
(V. 12 J. barely.)



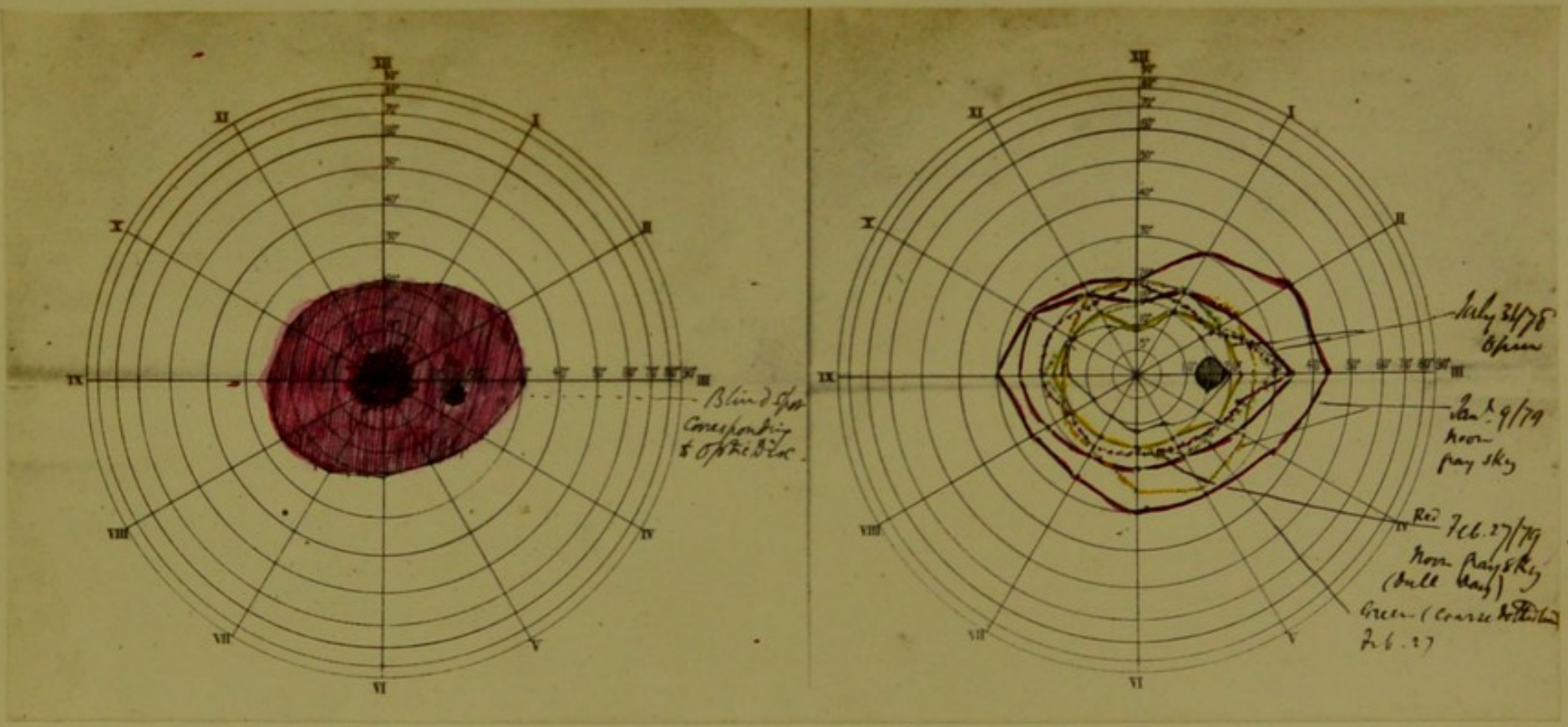
Marked central scotoma for red and green, and peripheral contraction of same colours. Patient irritable and difficult to test. Scotoma perhaps not really so large as shown. Shaded part = remains of red and green fields. Taken after some months of treatment, considerable improvement of V. having taken place under abstinence from tobacco.

E. N.

July 31st, 1878. 6 p.m.

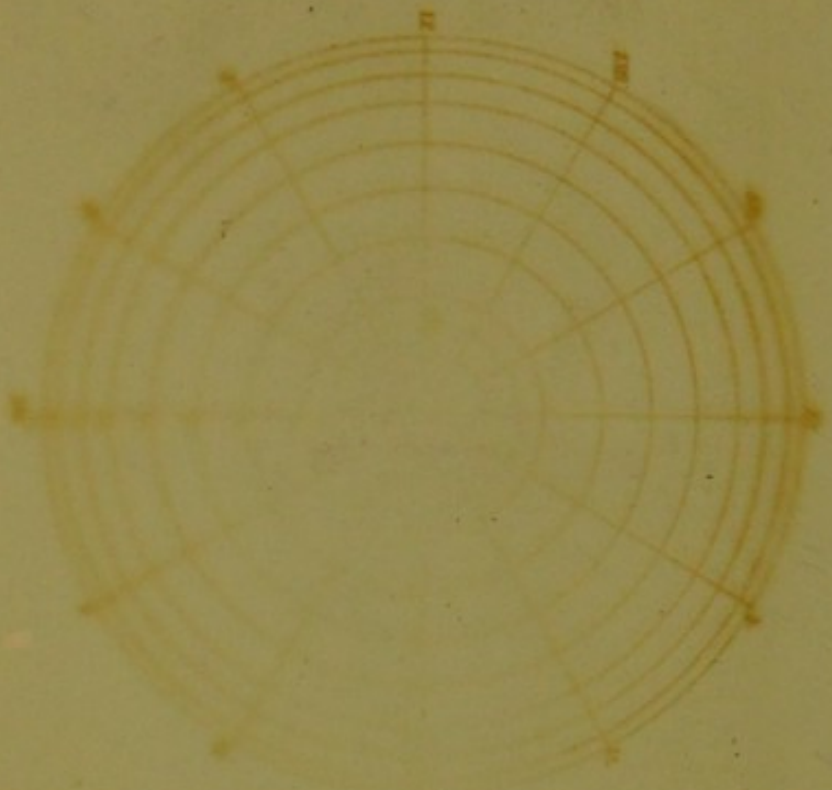
Left Eye.

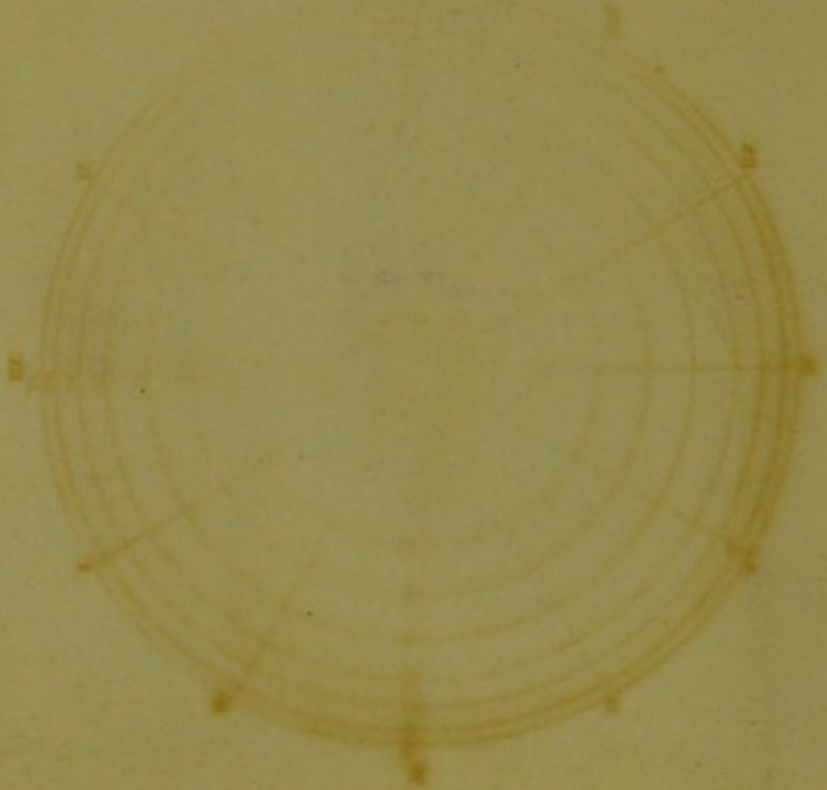
Right Eye.



My own red perceiving field for right eye. (*See* other Chart.)
Perception of red most acute at centre of field.

Innermost black line = violet.





W. G. Jenkins. 46.

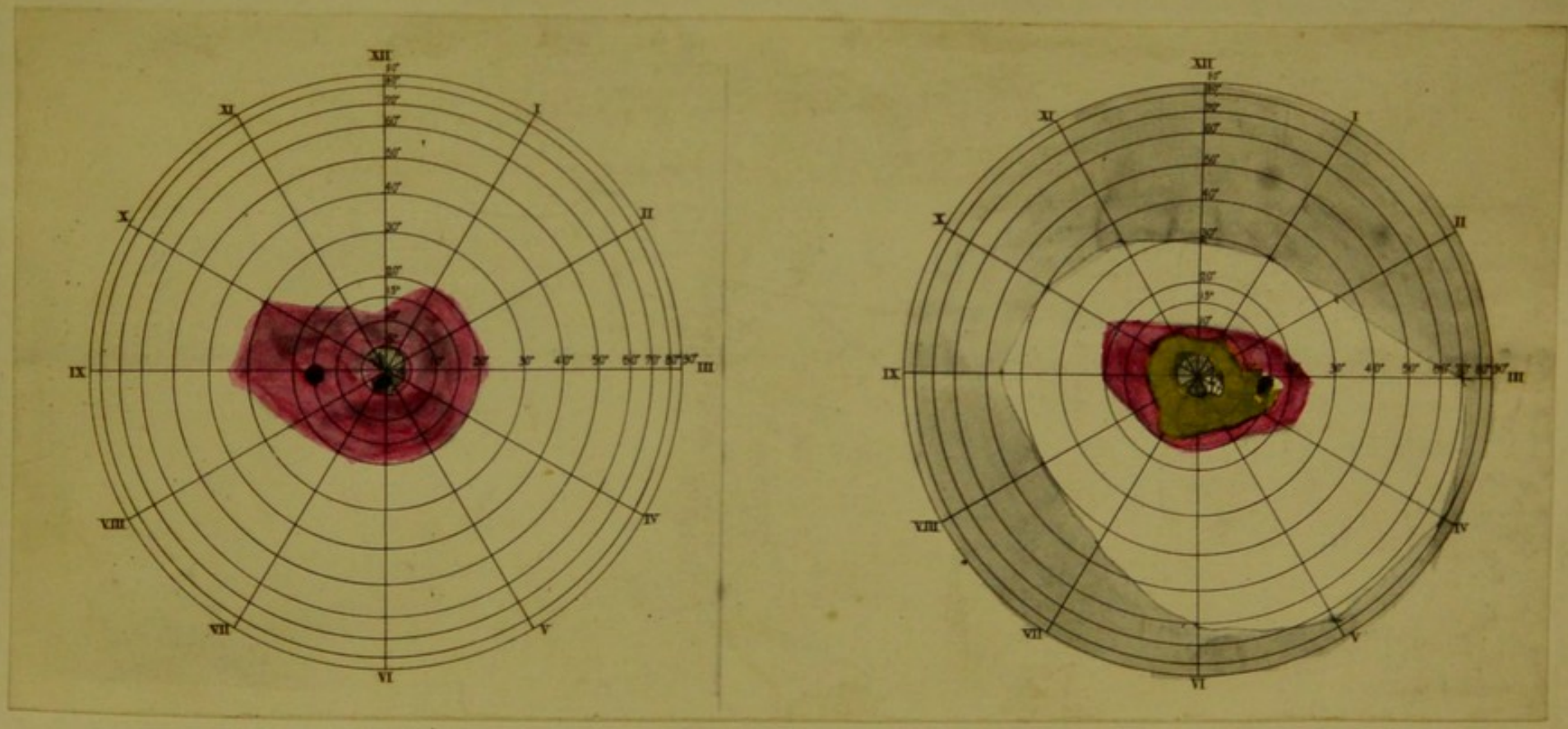
THOS. MANNINGTON. 47. TOBACCO AMBLYOPIA (? ALCOHOLIC).

Jan. 23rd, 1879. Dull sky. No fog. Jan. 9th, 1879.

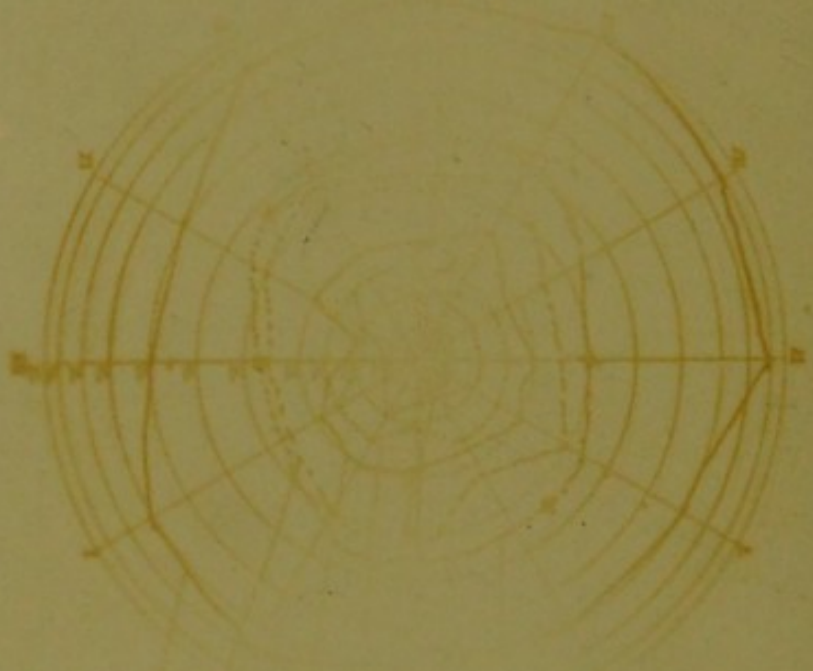
Left Eye. *Right Eye.*

(V. same as Right.) (V. $\frac{20}{30}$, and with + 10-inch lens, 6 or 8 J.)

B to improved from $\frac{20}{70}$ and 10 J. in Sept. /78, to $\frac{20}{40}$ and 4 or 1 J. in Jan. /79.



Small, nearly circular, central, scotoma in each eye, about 5° diameter; most dense just below centre, and, contrary to rule, not extending towards blind spot; indeed, colour-perception is good at outer side of scotoma (the place marked † on chart). The scotoma could only be detected by means of a spot 1·5 m.m. diameter (observe that the patient was a painter, and therefore accustomed to judge colours). The fields for red and green seem contracted in R., but the charts were taken on dull January days. Perception of yellow was good only upwards and inwards from centre; just below centre it was nearly white. At the sides it was usually "greenish." The blue spot was seen best just below centre where the other colours were worst, and worst at the spot marked † where the other colours were seen comparatively well. Field for white, normal.

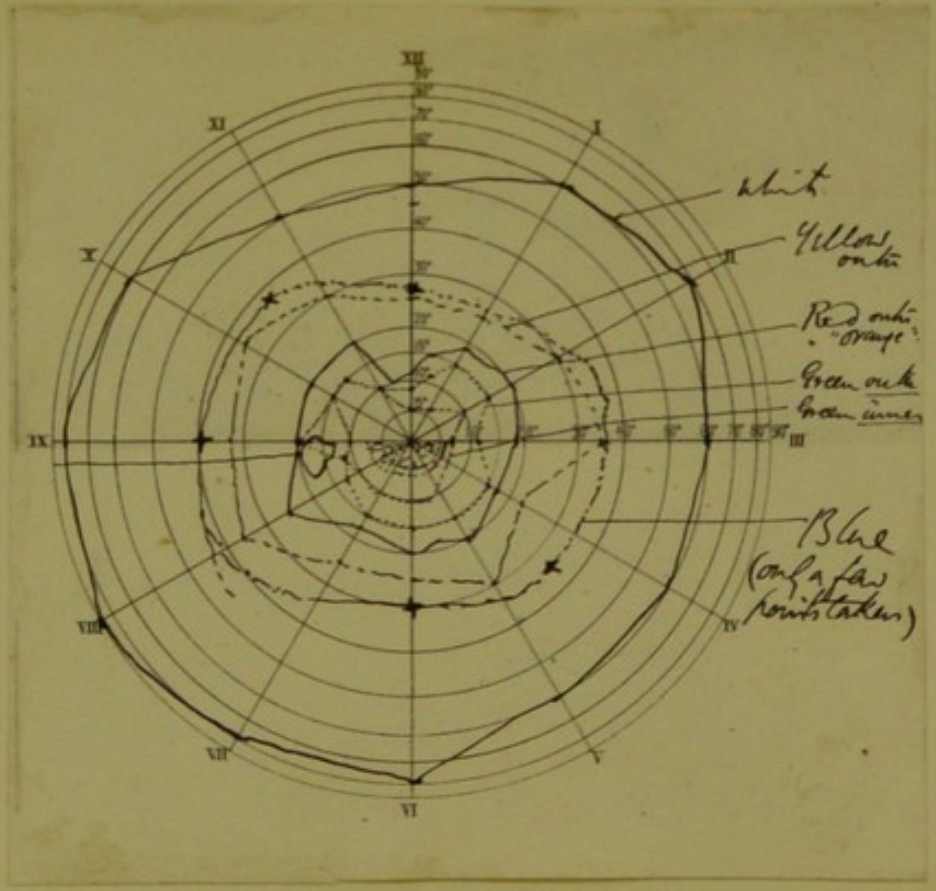


W. G. Jenkins. 46. TOBACCO AMBLYOPIA.

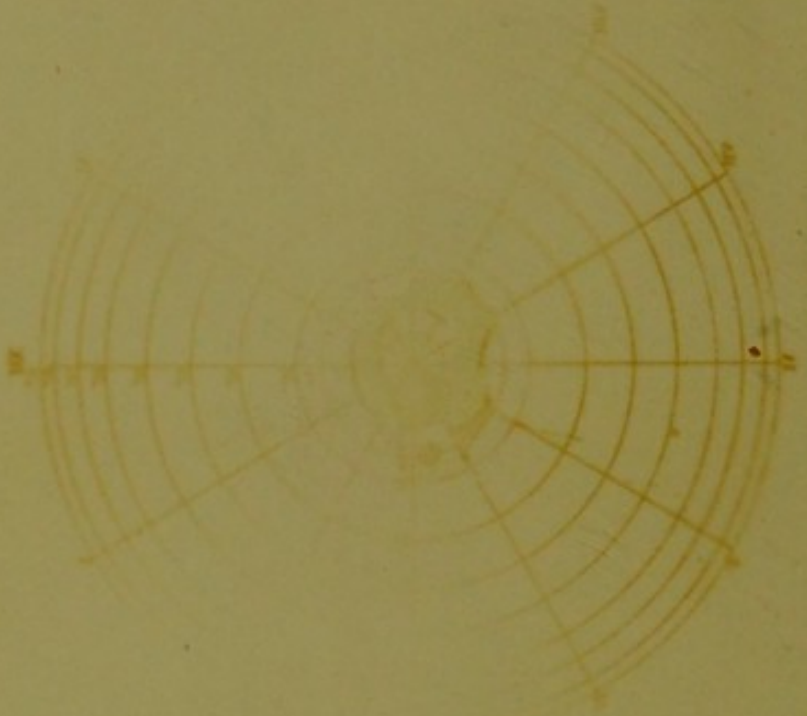
(Note-book, p. 113.) Jan. 23rd, 1879. 12 noon. Dull sky. No fog.

Left Eye.

V. 16 J. with + 16 inch lens (other eye affected by cataract). Ceased smoking entirely for two years, and improved greatly; then resumed smoking about a third of the original quantity. Seen 11 years after first admission (aged 57). V. had not deteriorated again, and was now very good, namely, $\frac{6}{12}$.



Fields for white, blue, yellow, red, green, eight months after commencement of failure, showing typical central scotoma, which reaches from about 8° on inner side of centre to 20° on outer side, and includes the blind spot; it is most dense just below the centre, the colour fields seem to be all somewhat contracted, but this may be due to the examination having been made with spots of only 5 m.m. diameter at noon in January, with a dull sky. The zone of green perception is very narrow, and the green is not well perceived on all parts even of this; towards the centre it becomes "almost white," and was whitest on the patch just below the centre. The colour of the red spot was imperfectly perceived more or less from the boundary of the scotoma to the line marked "red," but on the whole of this zone it was called orange; at and just below the centre it was nearly white. Yellow showed corresponding defects, being almost white just below the centre; it appeared a decided green in certain intermediate positions. Blue was well perceived everywhere, "the clearest colour I have seen yet," but was slightly paler just below the centre.



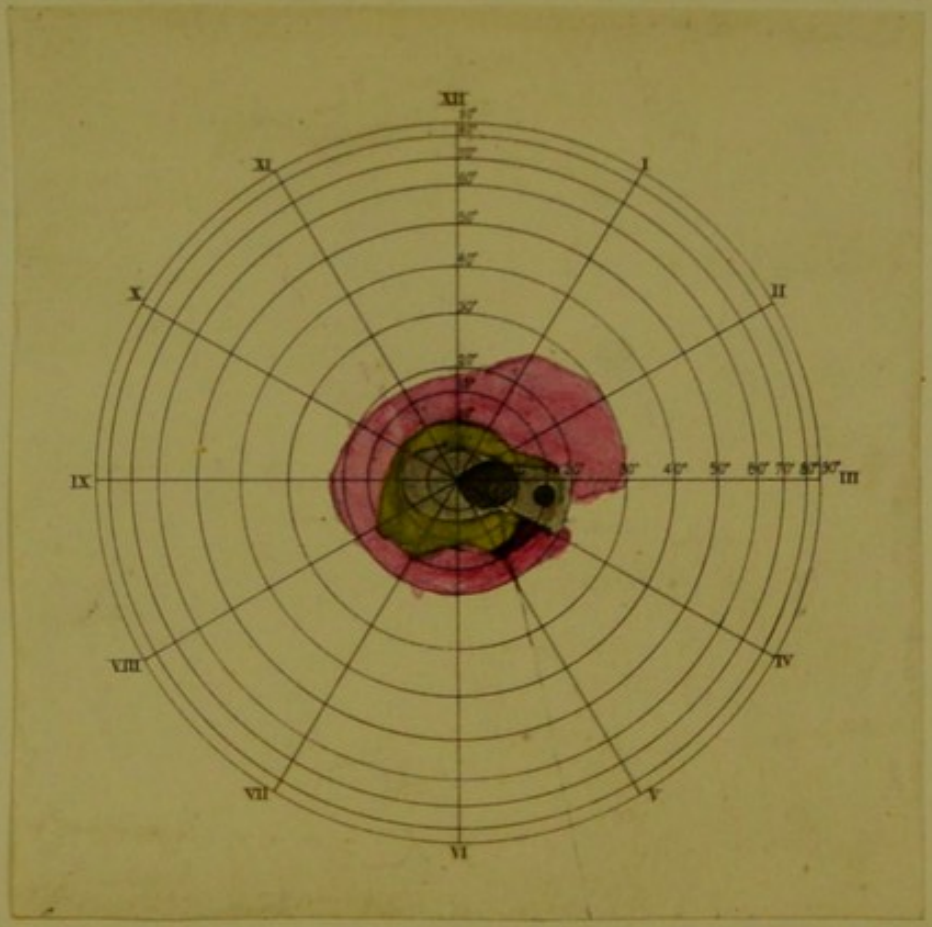
W. Stevens. 58.

Tobacco Amblyopia.

Feb. 6th, 1879.

Right Eye.

V. $\frac{20}{70}$ improved to $\frac{20}{50}$ by + 24-inch lens; reads 16 J. improved to 14 J. with + 18, and 6 J. slowly with + 8.
V. soon tired, and went down to 10 or 12 J. at end of trial; 3½ months previously V. was $\frac{20}{200}$ barely, and 19 J. with + 18-inch failure of V. 5 months before admission.



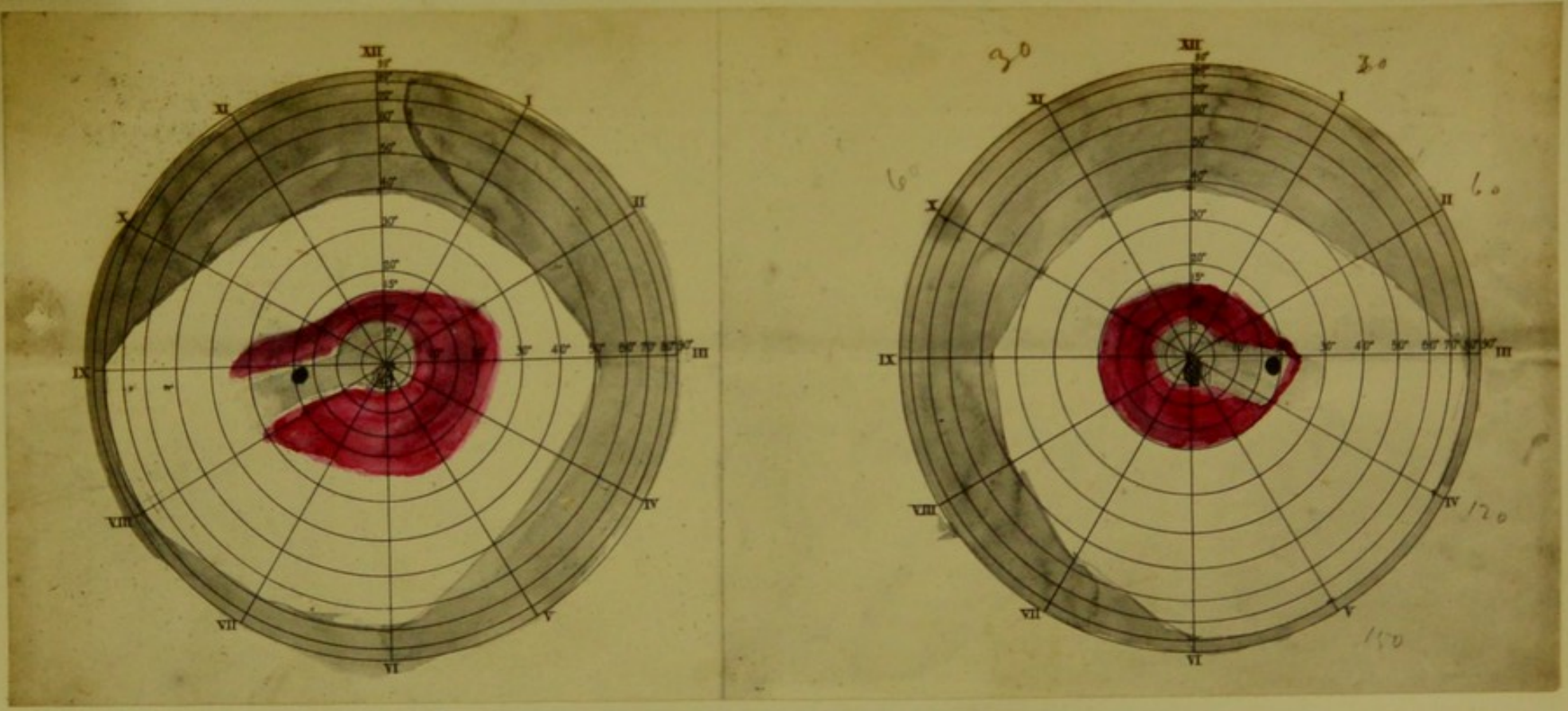
Scotoma most dense at patch most shaded. Size of test spot not noted.

Wm. Burgess. 42. Tobacco Amblyopia

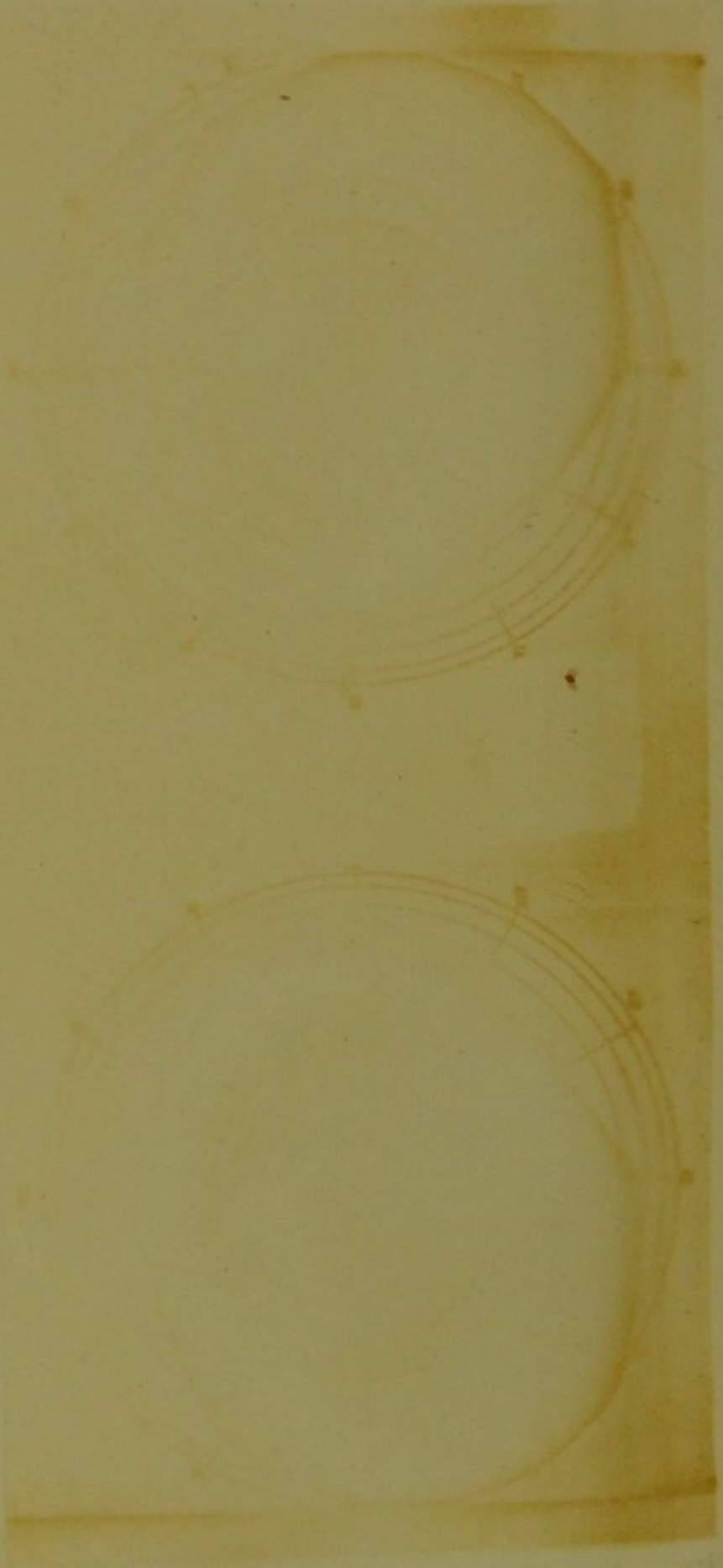
Feb. 13th, 1879. 10.30 a.m. Gray sky. Green not taken.

Left Eye. *Right Eye.*

V. each eye $\frac{22}{100}$ or $\frac{21}{100}$, and 10 J. with + 12 inch lens refraction; hypermetropic $\frac{1}{24}$; V. failing 3 months. No notes of progress.



Boundary for white is normal. Very marked scotoma for red spot, 5 m m. diameter; this is most dense on the small cross-shaded area just below centre, and on this area a white spot of 5 m.m. diameter is also very badly seen. Red is nowhere well seen until he compares its appearance on the scotoma area with that to inner side of fixing point, when he exclaims "It looks fiery red there," while on the scotoma it looks no colour. I am not at all sure that the scotoma is not enlarged above, as in other eye.



Wm. Bn. 36.
(Note-book II., 131.)

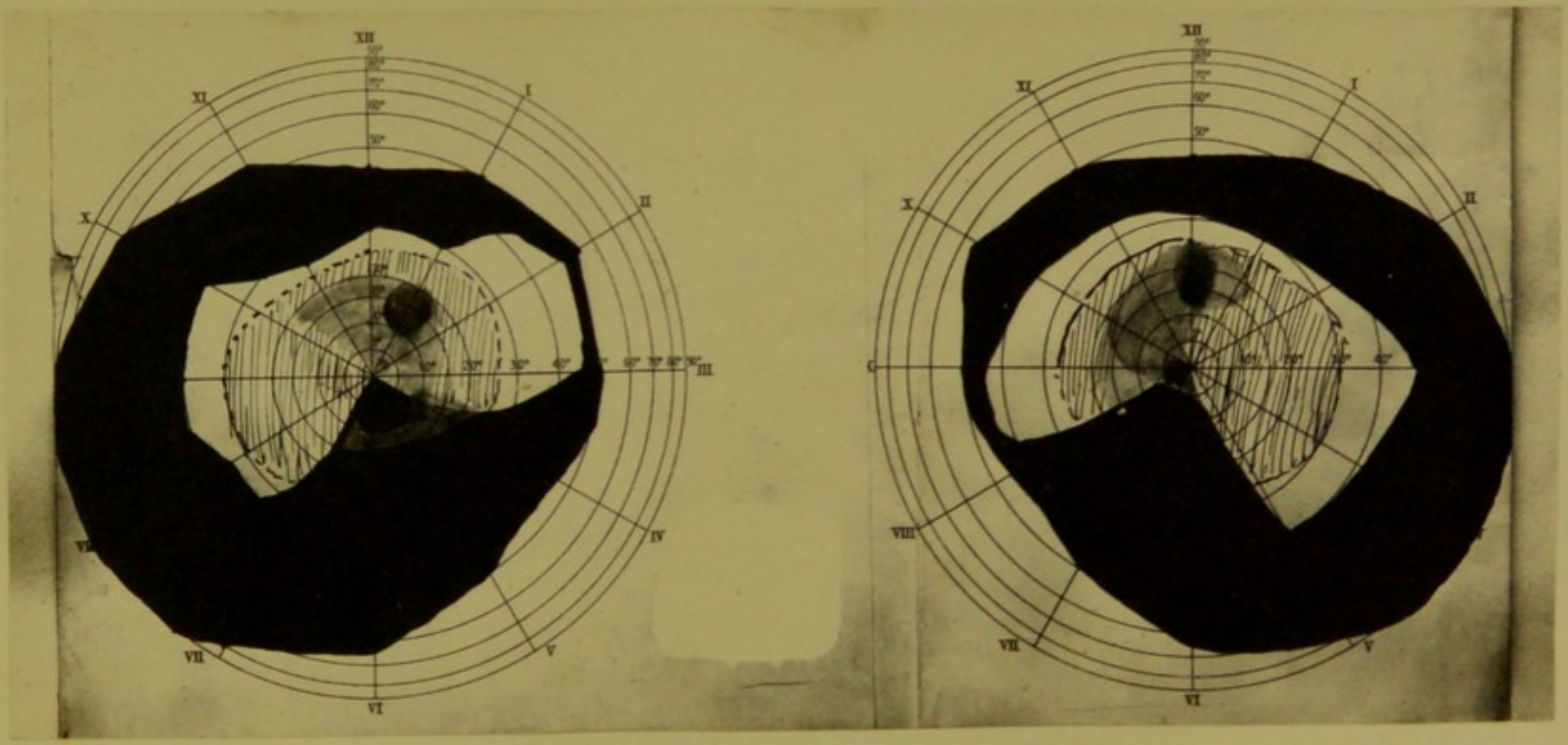
LOCOMOTER ATAXY.
Mar., 1879.

Left Eye.

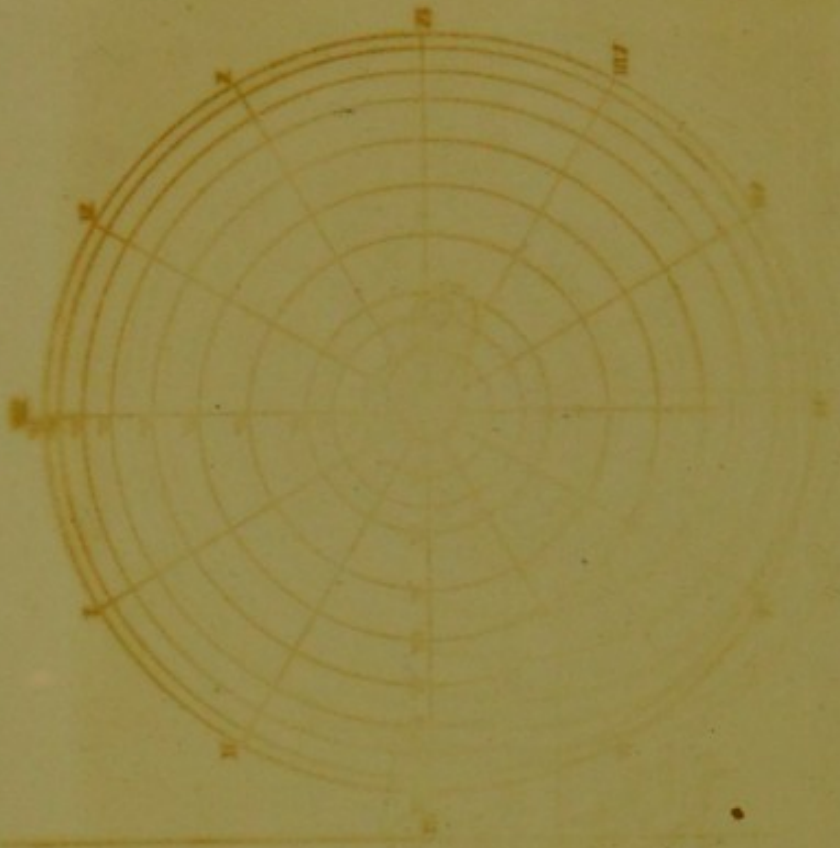
V. left eye with −20-inch lens, $\frac{20}{200}$; reads 6 J. badly.

Right Eye.

V. right eye less than $\frac{20}{200}$; reads 10 J. badly.



Symmetrical invasion of visual fields in progressive atrophy of optic nerves.

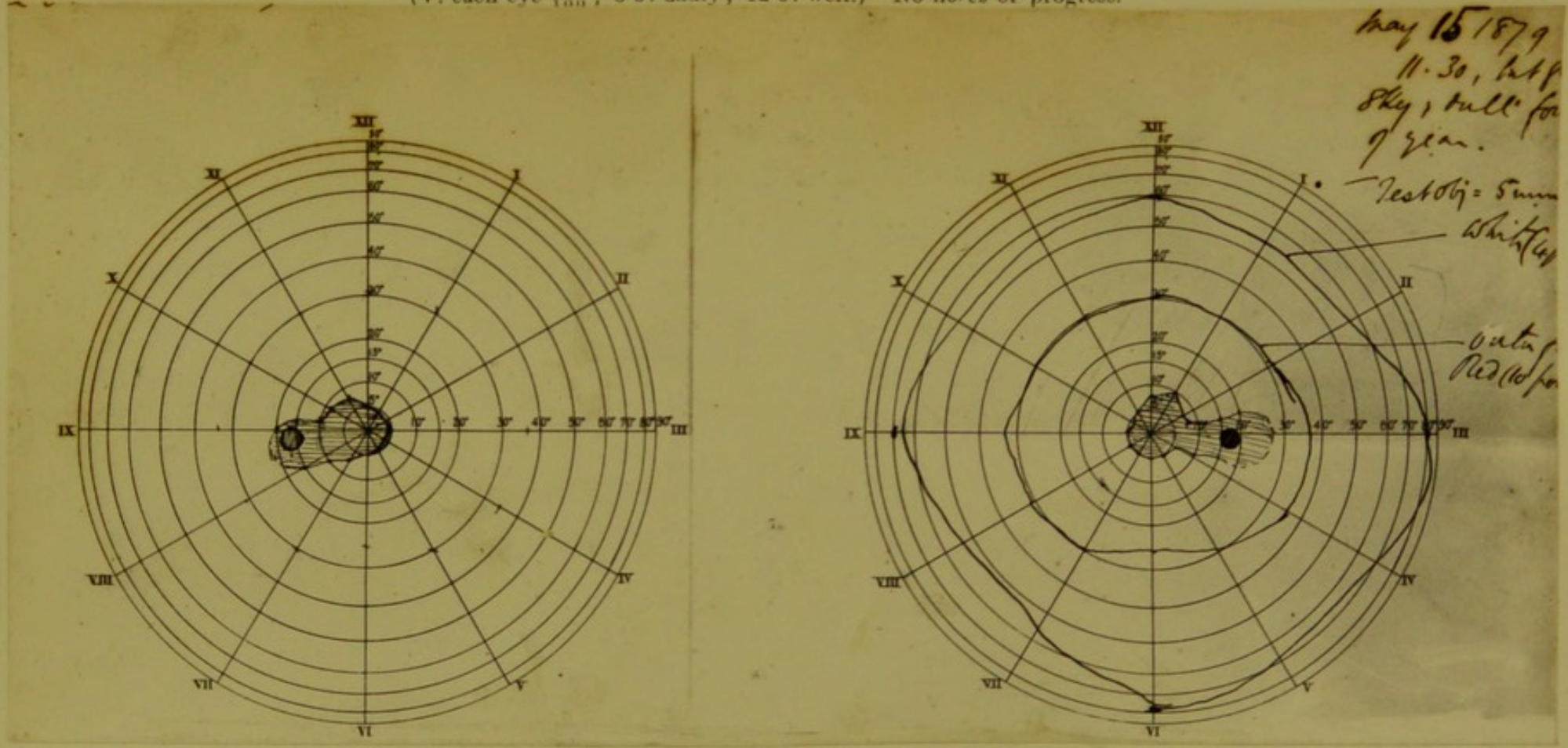


Mr. Packington. 32. Tobacco Amblyopia.

(Note-book II., 146.) May 15th, 1879. Noon.

Left Eye. *Right Eye.*

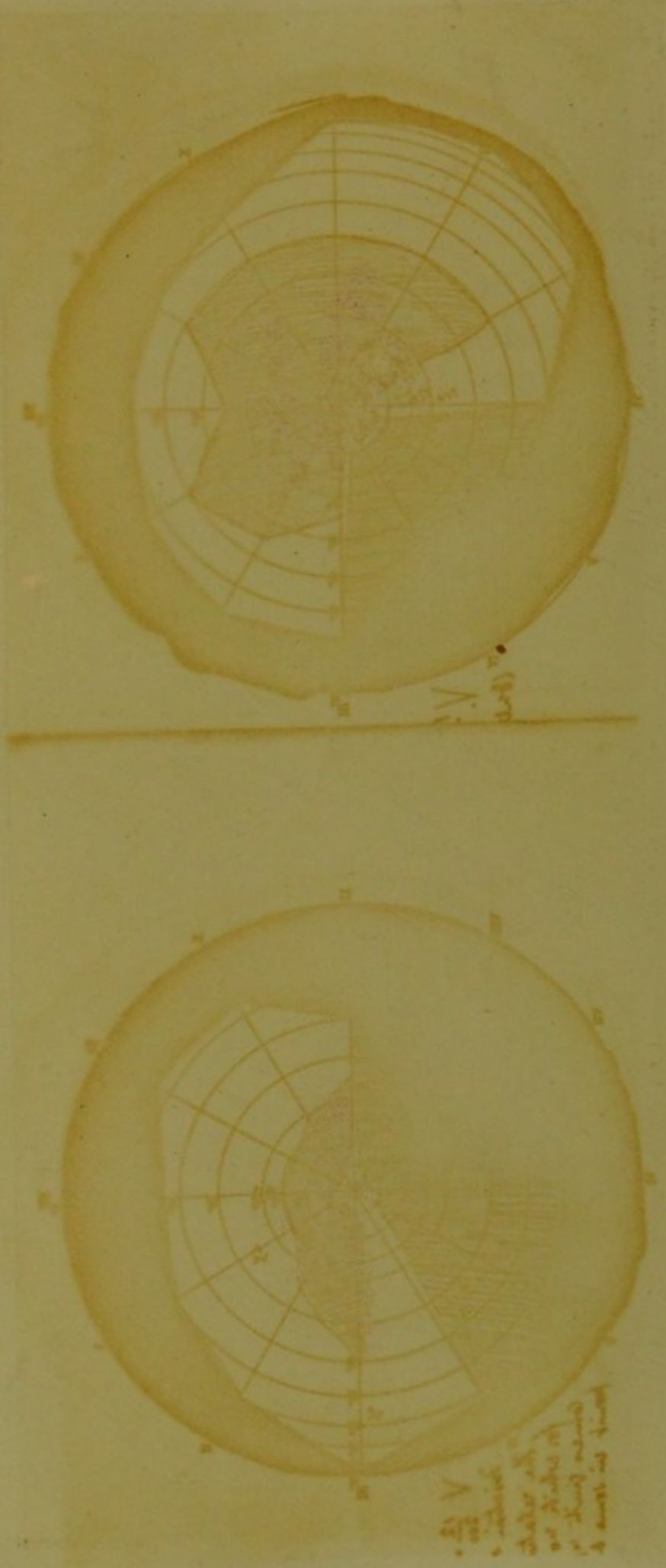
(V. each eye $\frac{20}{100}$; 6 J. badly; 12 J. well.) No notes of progress.



Scotoma for red exactly symmetrical with that in other eye. Outer boundary for red not taken. White not taken.

Central relative scotoma for red and green. The colours are recognized correctly, but look paler (*i.e.*, "less red" or "less green") than farther out. The scotoma mapped is for red; green quite similar, but not mapped, and perhaps not of quite same dimensions. Middle line = outer boundary for red, which is unusually large; here he recognizes the colour at once; it gets darker (*i.e.*, more red) on approaching centre, till the inner boundary, when it is at once paler. Verified carefully. Probably his outer "red" boundary corresponds to my orange. Outer line = boundary for white, which is normal.

The scotoma is as large as in more severe cases, but much less intense.



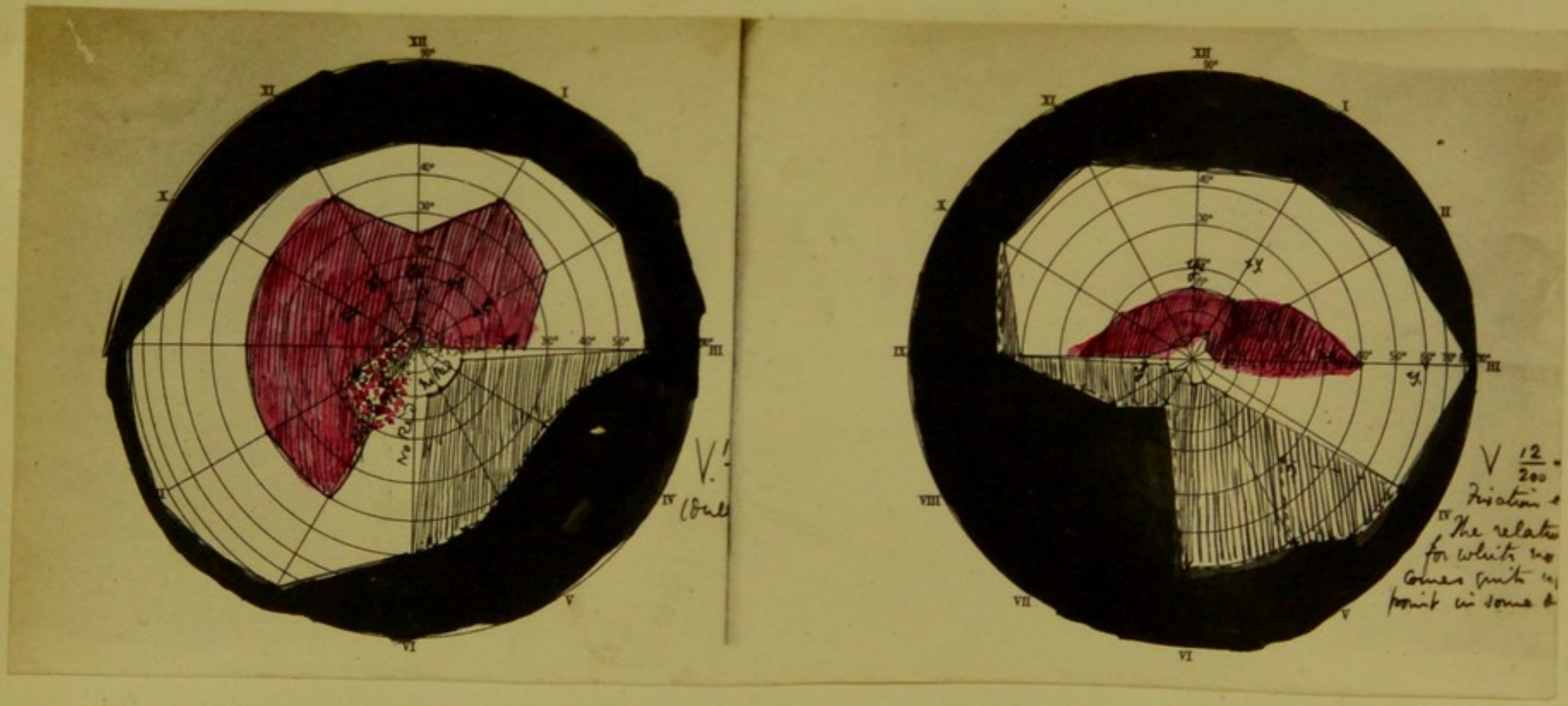
Mr. Arnton. 47.

Nov. 18th, 1880. (V. $\frac{12}{30}$ & 2) slowly. Dull day. Test objects of same size as for right eye (15 m.m.).

Left Eye.

Nov. 18th, 1880. Test objects for white, red, green, and yellow = 15 m.m. diameter; blue not tried. (V. $\frac{12}{200}$ & 114 J. barely; fixative excentric.) The relative defect for white no doubt comes quite up to fixation point in some degree.

Right Eye.



Mr. A., Note-book, p. 4, 211. Symmetrical alteration of visual fields in progressive atrophy of optic nerves, due to locomotor ataxy. The lower inner quadrant of each field is invaded, its periphery being entirely blind, its more central part (shown by black shading) damaged alike for white and colours; this partial loss doubtless extends up to the centre in each field, but, with the large white test object 15 m.m., the defect appeared to stop a few degrees short of the centre. The whole loss is larger in the right than in the left. The area coloured red in each figure shows the area of red perception for a spot 15 m.m. in diameter; in both perception of red was entirely lost in the lower and inner part, and this loss for red appears to be larger than the corresponding loss for white; in the right the residual part of the red field is much contracted, the dotted part of each red area shows where the colour perception is beginning to be lost. The field for green (G G in chart J) shows a corresponding loss, and it was the same in the right. The examination for yellow gave indefinite results, the sample used being too white.