was apparently due to laryngeal spasm. I am informed that it is not unusual for patients with disseminated sclerosis to die in this manner. The loss of the eye was undoubtedly due to trophic changes probably caused by a sclerotic area in the nucleus of the fifth nerve. I am not aware that such a case has been described before, and it must be very unusual.

COUNCIL OF BRITISH OPHTHALMOLOGISTS

Report on the Standardization of the Notation of the Axes of Cylinders

The Council is of the opinion that the absence of any agreed standard for the notation of the axes of cylinders is liable to give rise to mistakes in the making up of spectacle prescriptions. It finds that it is the practice of most opticians in this country to transcribe all prescriptions into a definite standard notation before sending them into the workshop. The Council considers that it is undesirable that the necessity for this should exist, for it is beyond doubt that when these prescriptions fall into the hands of less careful opticians, many mistakes arise, which would be avoided if ophthalmic surgeons adopted a standard notation.

FIG. 1.

The methods of notation in use may be grouped as follows:

(A) That in which angles only up to 45° are used.

In this method, a diagram is drawn indicating the axis and the nearest horizontal or vertical meridian. The value of the angle separating the lines is written between them.

(B) Those in which angles up to 90° are used:

(1) The horizontal meridian is taken as zero, and the angle is always read below. Thus “60° Down and In” means that the axis is separated from the horizontal by 60° and is pointing
downwards and inwards towards the nose. The other direction is described as "Down and Out," that is, downwards and outwards towards the cheek.

FIG. 2.

(2) The angle is reckoned from zero in the horizontal meridian on the nasal side of each eye, reading upwards or downwards to $90^\circ$ in the vertical meridian. The direction is described as "$40^\circ$ Up and In," "$60^\circ$ Down and In," or more briefly, $40^\circ$ Up, $60^\circ$ Down."

FIG. 3.

(3) Zero is at the lower end of the vertical meridian and the angle is measured inwards or outwards to $90^\circ$ in the horizontal meridian.

FIG. 4.

(C) Those in which angles up to $180^\circ$ are used. There are four varieties, and in each the scale may be read below or above
the horizontal. In all, the zero lies in the horizontal meridian. 1 and 2. Zero lies at the temporal side of each eye, the scale being read above the horizontal in No. 1 and below in No. 2. 3 and 4. Zero lies at the nasal side of each eye, No. 3 being read above and No. 4 below.

![Fig. 5](http://bjo.bmj.com/)

It will be observed that the numerical value obtained for the position of an axis is the same when employing either method 1 or 4, and similarly either method 2 or 3.

5 and 6. Zero lies at the right side of each eye from the point of view of the observer, No. 5 being read above and No. 6 below.

![Fig. 6](http://bjo.bmj.com/)

7 and 8. Zero lies at the left side of each eye, from the point of view of the observer, No. 7 being read above and No. 8 below. Again it will be observed that the same numerical value will be obtained when using 5 as 8 and 6 as 7.

Every mathematical science adopts one and the same notation (commonly called the "Standard Notation") of positive angles, by
means of a radius vector starting from the horizontal on the right of its centre of rotation, and rotating counter-clockwise to an angle of 180° degrees on the left. If this Standard Notation were universally employed for indicating the position of the cylinder axis, there would be no need for an ophthalmic surgeon to put anything more on his prescription than the angle. Thus 45° would mean an angle of 45° above the horizontal meridian on the nasal side in the right eye and on the temporal side in the left eye, the scale being invariably marked from the point of view of the observer facing the patient. In order to use this method it is unnecessary to have trial frames with their graduated arcs above the horizontal, as shown in Fig. 7(5), which are very inconvenient when changing the lenses. It is only required to have the usual trial frames graduated as below (Fig. 9), for this, as already pointed out, will give exactly the same numerical values for the angles as Fig. 7(5). With this standard notation, approved by the Optical Society in 1904, special prescription forms are unnecessary.
It will be noticed that the scale is the same for each eye. Such a method enables the optician to use a single machine for marking off the axes for the lenses of both eyes.

It is the standard notation of opticians in which all their machines are graduated, and it is into this notation that every prescription is translated by the optician before the order is passed on to his workshop.

All scientific optical and mathematical instruments are graduated in this notation.

**Fig. 9.**

The Council, therefore, recommends the general use of this system of cylinder notation, namely:

That in which a similar notation is employed for each eye, the zero lying at the observer's left side and the scale being read below the horizontal with 90° at the bottom and 180° at the right side.

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### ANNOTATIONS

#### Lectures on State Ophthalmology

A series of lectures on State Ophthalmology was given in connection with the Royal London Ophthalmic Hospital School during the last fortnight in May. The first four were delivered at Moorfields and the last seven at the Royal Society of Medicine. The first part was concerned with the question of ophthalmology in relation to education, the opening lecture being given by Sir William Lister, who dealt with the subject from a general point of view, and set the keynote at a high pitch which was consistently maintained throughout the whole course.

Mr. Bishop Harman followed on May 18 and 19 with two