Ministry of Transport - Motor Drivers' Vision Test

The question of being able to read a number plate at 25 yards has been agitating the public conscience for some little time.

With regard to the visual acuity required by the Ministry of Transport, the following simple calculation, though it has probably been made already by more than one ophthalmic surgeon, may be of use.

Measurement of the size of the numbers shows that they average 3½ inches in height by 2½ inches in width. The ordinary Snellen test type letters are squares, so we shall err on the side of safety if we work out the acuity required to see square letters 2½ inches by 2½ inches at a distance of 25 yards, or what is practically the same, 23 metres.

If the distance were taken as 24 metres, i.e., slightly increased, it would mean that at 6 metres the letters would have to be ½ size, i.e., ⅞ of an inch. The letters of 6/12 are ⅞ of an inch larger than ⅞ square, so that for all practical purposes, ability to pass the Ministry of Transport test demands a visual acuity in the region of 6/12.

The visual field, however, must surely be of more importance for safe motoring than the visual acuity. There are many cases of pigmentary degeneration of the retina with only 10—15° of field and a visual acuity of 6/12 or better. One of these is a patient of the writer and in spite of repeated warnings he insists on travelling about the country on a bicycle. So far he has met with no accident, but were he the possessor of a car one trembles to think what would happen to children suddenly rushing across the road, and to policemen holding up the traffic and standing perhaps more than 10° off the driver's visual axis.

Many other questions could be raised in a discussion of the visual requirements of motorists. Night blindness is a condition of obvious danger, but anyone so afflicted would probably know it and have the sense not to attempt night driving. Colour blindness would prevent the driver being able to interpret the coloured light signals so freely used now at important cross roads in large cities, but something could be done by the authorities erecting the lamps, the red for example might be made square and the green round.

In the advertisement pages of this number Theodore Hamblin, Limited, announce the production of a copy of the Motor Driver's vision test, designed to give at 6 metres the same visual effect as an actual number plate at 25 yards.