READING TYPES*

BY

FRANK W. LAW

London

In a previous communication (Law, 1951), the desirability of standardizing reading types was stated. The present confused situation was reviewed, and at the instigation of the Faculty of Ophthalmologists, various suggestions designed to clarify it were put forward and comments asked for. As a result suggestions were received from forty sources. These were all carefully studied and collated; they were considered by the Council of the Faculty, and many of them were adopted. The present writer has now been entrusted with the task of preparing a memorandum embodying the Council's final recommendations.

The investigation revealed that the main divergence of opinion arose from the question whether reading charts should be standardized on a strictly scientific basis, or whether they should consist merely of a non-scientific series of pleasing standard graduated types. The first is clearly desirable when an accurate relative assessment is being made for comparative purposes; the second is an obvious everyday need. The Council has accordingly decided to recommend the incorporation of both in a standard test of near vision.

The requirements of the first can be satisfactorily achieved by a photographic reduction of the Snellen type. If this type be reduced to 1/17 of its normal size, the letters in the 6/6 line subtend 5 minutes at a distance which very closely approximates to 35 cm. or 14 in., which is an average reading distance. An example of a Snellen distance chart thus reduced is shown in the Figure. This Figure has been printed from a reduced photographic reproduction. Careful attention will have to be paid to the reproduction to be used for the reading test, for it is obvious that the example given here leaves much to be desired. Reduction from a larger original would probably meet the case.

The two main objections to the second are that the deciphering of difficult words is helped by those which precede and follow, and that ascenders and descenders materially assist in the

FIGURE.— Snellen distance chart reduced to 1/17 usual

recognition of single words. The first objection may be largely met by ensuring that the selected passages shall not be of too simple a nature, in this sense: while it is not desirable that they should contain many difficult

^{*} Received for publication October 10, 1952.

individual words which the average patient can neither recognize nor understand, they should not be so simple that he is enabled to guess at the word sequence. The second objection may be met by including in all but the largest sizes a few isolated words consisting solely of lower case small letters without ascenders or descenders (e.g., arrow, crane, cocoa, ransom).

It was not thought desirable that reading types should be issued direct from the Faculty offices. Manufacturers should remain responsible for the "lay-out" of their own charts, but it is hoped that the criteria suggested by the Faculty will be generally adopted, and it is suggested that proofs should be submitted to the Faculty for official approval, which may then be recorded upon the finished charts.

The final recommendations of the Faculty are as follows:

- (1) "Times Roman" type face shall be used, with "standard" spacing.
- (2) Suitable passages of literature shall be selected, and a different passage used for each size of type.
- (3) Specimens of printing in sizes 5 pt., 6 pt., 8 pt., 10 pt., 12 pt., 14 pt., 18 pt., 24 pt., 36 pt., and 48 pt., shall be used, starting with the smallest.
- (4) A few isolated words consisting only of lower case small letters shall be printed in each size.
- (5) Near acuity shall be recorded by the letter N (near) followed by a number indicating type-face size, e.g., N.5., N.8., etc.
- (6) The test shall include a facsimile of a Snellen distance chart reduced to 1/17 of its normal size. This shall be used at 35 cm. distance. The result may be conveniently recorded as a "Snellen equivalent", e.g., $N \equiv 6/9$.
- (7) The test may also include, at the discretion of the tester, reproductions or actual portions of familiar types in everyday use, e.g., telephone directory, railway timetable, newspaper, music, longhand, shorthand, blue-print, etc.
- (8) Near Test Types should be produced on sheets about the size of the pages of an average book, *i.e.*, about 9 in. \times 6 in.
- (9) The print should be on dead-white matt-surface cartridge paper or cartridge boards, and the latter may be varnished to increase durability.

REFERENCE

LAW, F. W. (1951). British Journal of Ophthalmology, 35, 765.