Price Range of Four Specified Shoes.—The prices quoted by the managers had, of course, a wide range, but on analysis were found to fall into two groups. The more expensive were those of shoes with width-fittings, but the two price-ranges show an overlap, clearly demonstrating that all shoes for children could be multi-fitting and yet reasonably priced.

Fitting of Children's Shoes.—The fitting of any shoe is a skill requiring training and experience, and particularly is this true with children's shoes. Many firms have their own foot-gauges, which are very useful, but in addition a trained assistant should be able to fit by hand.

Table V shows that the training of shop assistants is not nearly good enough. Much selling of children's shoes takes place unfortunately on a Saturday, when the shops are very busy; some shops employ young unskilled girls on that day as a source of extra help. In fact, eight managers admitted that they allow untrained assistants to fit children's shoes in busy periods.

The training of assistants was found to be usually done by the managers themselves. Only four shops used training by a shoe firm, and none of the 25 shops sent their assistants to a training course in shoe-fitting. Less than half the shops allowed their assistants to attend a refresher course.

Only a third of the shops used x-ray machines, and all agreed that these machines were of little use in the fitting of children's shoes.

Summary

A survey of 25 shops selling children's shoes is described. All the shops were found to stock well-designed shoes for children. Very few shops, however, stocked a comprehensive range of half-sizes and three width-fittings in these shoes, and such a range is essential to fit the majority of children's feet. Only half the shops kept these shoes for children of 11–18 years. Stocks of larger shoes, of size 7 and over, were also limited.

Yet all 25 shops stocked the inferior-styled girls' shoe known as the "casual."

There was an unnecessary time-lag in obtaining shoes out of stock. Adequate training of shop assistants in the art of fitting children's shoes was lacking. The few shops that employed an x-ray machine found it of little value in shoe-fitting.

It was shown that all well-designed children's shoes could be multi-fitting and yet be reasonably priced.

The need to establish shops which sell only children's shoes is discussed.

I am indebted to Mrs. B. Murton, S.R.N., foot health nurse, for her help with the survey, and to Dr. W. G. Booth, joint area medical officer, Middlesex County Council Area No. 7, Ealing, for his encouragement and advice.

While permission for publication has been given, Middlesex County Council take no responsibility for the opinions expressed therein.

REFERENCES

- County Medical Officer, Somerset (1953). Annual Report. Craigmile, D. A. (1953). *Brit. med. J.*, 2, 749.
Haines, R. W., and McDougall, A. (1954). *Lancet*, 2, 1308.
Satra House Research Report (RR.98).

INVESTIGATION OF VISUAL ACUITY OF DRIVERS

BY

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This investigation was carried out in routine ophthalmic practice. Out of a total number of 4,422 patients, 1,011 were holders of current driving licences.

Ministry of Transport and Civil Aviation Regulations Governing Eyesight of Motor Drivers

The diseases and physical disabilities which are a bar to the granting of a driving licence are prescribed in the Motor Vehicles (Driving Licences) Regulations, 1950 (S.I. 1950. No. 333), and include: "Inability to read at a distance of 25 yards in good daylight (with the aid of glasses if worn) a series of six letters and figures in white on a black ground of the same size and arrangement as those prescribed for the identification mark of a motor-car."

The analysis of the visual acuity of these 1,011 patients is:

- 460 (45.5%) able to read a number-plate at 25 yards without the aid of glasses.
- 476 (47.1%) in possession of distance glasses and, with their aid, able to read a number-plate at 25 yards.
- 75 (7.5%) not in possession of distance glasses, not able to read a number plate at 25 yards.

The analysis of the age groups of the 75 patients with vision below the required standard is: 16–20, 4%; 21–30, 8%; 31–40, 8%; 41–50, 36%; 51–60, 22%; 61–70, 12%; over 70, 10%.

Fifty-two (69.3%) of these patients were unaware, or professed to be unaware, of the fact that their distance vision was defective. It will be noted that inadequate distance vision is the greatest in age-groups 41–60 (58%). This can be accounted for by the fact that most of them have only moderate errors of refraction for which previously, when they were younger, they had been able to compensate, and deterioration of vision was so gradual as to be unnoticeable.

There were four in those aged 61 to over 70, whose vision could not be improved with glasses. This was due to senile macular degeneration in two cases and two had immature cataracts. There was also one person aged 52, with congenital nystagmus, whose vision had obviously never been up to the required standard, and one aged 39 with optic atrophy. All these patients were advised to cease driving at once. Four agreed and two flatly refused.

Five of the cases seen had failed their driving test owing to alleged defective vision. Two of these were found to have normal vision; the other three required glasses. From this it is apparent that sometimes the examination of vision carried out on the occasion of a driving test is inadequate. Standard conditions are presumably, at these times, not available—for example, the number plate used may be dirty, the distance may not be correct, and the lighting conditions may be poor.

Ability to Read a Number Plate at 25 Yards.—It is suggested that the onus of proof in this matter should no longer rest with the applicant, but with the licensing authority. The reasons for this are: (1) the severe and

increasing accident rate; and (2) because a large number of drivers appear to be unaware of the fact that they are unable to see a number-plate at 25 yards—for example, according to Ministry of Transport regulations.

Suggested Scheme

All licensing authorities should set aside a room for a simple sight test, and applicants who choose can have their vision checked (with glasses, if worn). If the vision is found to be deficient, they should be given a small form which can be taken to an ophthalmic surgeon, their own doctor, or a sight-testing optician, and a licence should not be issued until this form is filled in to the effect that the vision has been improved to the required standard with glasses.

Applicants who do not wish to attend at the licensing department should be supplied with the above form, which can then be filled in, in the same manner.

If it has been proved that the applicant requires glasses for driving, then his driving licence should be stamped "With glasses."

A small, inexpensive sight-testing apparatus, as foolproof as possible, has been devised, which could be supplied to all licensing authorities, ophthalmic surgeons,

general practitioners, and sight-testing opticians. It consists of an illuminated facsimile of a number-plate (six different sets of plates available for each apparatus). The type can be used at 6 metres, or, with reversed lettering and a mirror, at 3 metres (see Diagram).

I am indebted to Theodore Hamblin Ltd. for their help and advice in the designing of the apparatus.

COLLEGE OF G.P.s' APPEAL

The following is the first list, issued by the College of General Practitioners, of individuals and organizations who have contributed to the £1m. appeal launched by the College (see also p. 716). Members of the College have subscribed about £10,000.

John Wyeth and Brother Ltd., £500; two anonymous donors, £1,000; Glaxo Charity Trust, £35,000; Allen and Hanburys, £14,000; Lord Woolton, £1,632; Paines and Byrne Ltd., £525; Beecham Group Ltd., £35,000; Crookes Laboratories Ltd., £50; Boots Pure Drug Co. Ltd., £10,000; Cyanamid of Great Britain Ltd., £7,000; James Capel and Co. Ltd., £15; Mrs. Christopher Soames, £1 ls.; G. D. Searle and Co. Ltd., £5,714; Wellcome Foundation, £35,000; Fisons Ltd., £7,000; Mrs. Mary Wilkinson, £5; Albright and Wilson Ltd., £700; Sir Harry Jephcott, £1,142; Pfizer Ltd., £14,000; Laporte Industries Ltd., £26; Lord Leathers, £100; Baring Bros. Ltd., £500; British Drug Houses Ltd., £2,100; Thomas Kerfoot and Co. Ltd., £105; Bowater Paper Corporation Ltd., £1,050; Kaylene (Chemicals) Ltd., £52; Lazard Bros. Ltd., £500; Smith Kline and French Labs. Ltd., £14,000; Eva Lady Buxton, £10; May and Baker Ltd., £14,000; M. G. A.

(Continued at foot of next column)

To-day's Drugs

With the help of expert contributors we publish below notes on a selection of drugs in common use.

"Anturan" (formerly G28 315) (Geigy).

Chemistry.—Anturan is a derivative of phenylbutazone and is 1,2-diphenyl-3,5-dioxo-4-(2'-phenyl-sulphinylethyl)-pyrazolidine. Structural formula:

Pharmacology.—Anturan differs from the parent substance phenylbutazone in having a much stronger uricosuric effect and much weaker analgesic and anti-inflammatory effects. The uricosuric action is effected by blocking the reabsorption of urates by the renal tubules. In this way the excretion of urates may be increased by up to 700%. Its action is opposed by the simultaneous administration of salicylates or citrates. The effect of the drug on electrolyte balance is trivial and much less than that of phenylbutazone.

Therapy.—Anturan is the most potent uricosuric agent available for the therapy of gout. Its effect is limited to enhancing excretion of urates; it has no direct effect on acute gout, for which phenylbutazone and colchicine remain the drugs of choice. The long-term effect of maintaining blood levels of uric acid at or near normal in gouty subjects reduces the frequency and severity of acute attacks, and tophi have been seen to diminish. Hyperuricaemia may, in addition, be harmful to kidneys and blood vessels. So far as is known, administration of anturan would have to be continued indefinitely, the dose being controlled by periodical estimations of uric acid in the serum.

Toxic Effects.—These are reported as being slight and limited to gastro-intestinal disturbances, but, as with all pyrazoles, blood dyscrasias should be watched for. Renal colic due to precipitation of urate in the renal tract can be avoided by giving adequate fluid, and by maintaining the urine alkaline with potassium acetate or sodium bicarbonate (not with citrate). Acute attacks may, as with other uricosuric agents, be precipitated during the early stages of treatment. The drug should therefore be given in small doses (200 mg. a day at first), the dose being gradually increased up to 800 mg. a day, depending on the clinical response and the level of uric acid in the blood.

Contraindications.—Patients known to be intolerant to phenylbutazone should be carefully observed. The presence of a peptic ulcer is a contraindication. Renal failure is not of itself a contraindication, though the effect on renal function will require study in each case.

N.H.S. Basic Price.—100 100-mg. tabs., 46s. 8d.

(Continued from preceding column)

Watson, £5; Charterhouse Group Ltd., £10; N. M. Rothschild Ltd., £100; Australian Mercantile Land and Finance Co. Ltd., £25; Abbott Laboratories Ltd., £1,142; Messrs. Coutts and Co. Ltd., £100; Mrs. Singer, £1,000; Council Members, £3,362; Amplivox Ltd., £105; Allied Laboratories Ltd., £1,000; Westminster Bank Ltd., £250; Barclays Bank Ltd., £250; National Provincial Bank Ltd., £250; Royal Exchange Assurance Co. Ltd., £25; Marlin Management Co. Ltd., £210; A. Wander Ltd., £1,050; Mayfair Manufacturing Co. Ltd., £180; Martins Bank Ltd., £50; Midland Bank Ltd., £250; Lloyds Bank Ltd., £250; Roche Products Ltd., £7,000; Mr. Basil Samuel, £52; Hoare's Bank Ltd., £50; Arthur Cox and Co. Ltd., £2 2s.; Joseph Rank Ltd., £1,000; H. K. Lewis and Co. Ltd., £100.