I should like to reiterate your motoring correspondent's plea for further development of these invaluable means of saving life and limb. And indeed "Try before you buy" should be everyone's motto.—I am, etc.,

KEITH E. JOLLES.

Birmingham 8.

SIR,—Mr. R. C. Peatfield (30 July, p. 305) points out that lap-belts are insufficient protection by themselves, and reports cases of rupture of the small intestine produced by them as a result of an accident. He suggests that safety-belts should include support to the shoulders. I am in full agreement with this, but would like to add a proviso that all safety-belts should be so designed that the lap portion holds down the hips and is not so loose that it slides up to lie across the abdomen. There are a number of designs on the market for car "safety"-belts which permit this, and in my opinion they add to the dangers of a car crash. It is scarcely credible, but is true, that some of them have the kite mark guarantee.—I am, etc.,

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Leeds.

M. HAMILTON.

Phenothiazines and Eye Complications

SIR,—Over the past two years several papers¹⁻⁷ have drawn attention to the occurrence of opacities of the lens and cornea in patients receiving high doses of phenothiazines over long periods of time. These changes have not been noted unless the total dosage exceeds 500 g., but they become more common as the total increases and are stated to reach an incidence of 90% at the total dosage level of 2,500 g.

We examined a series of 15 chronic disturbed schizophrenic patients by ophthalmoscopy and slit-lamp microscopy. The main drug in most cases was chlorpromazine, but when patients had been exposed to other phenothiazine preparations these doses were adjusted by a potency factor⁸ and the total dosage expressed in terms of chlorpromazine-equivalent. The group consisted of eight men and seven women, median age 36 years (range 27-63 years). They had been on medication for three to nine years (median seven years), and the total dosage ranged from 595 g. to 1,596 g., median 933 g. The only case which could not be passed as entirely normal on ophthalmological examination was a man of 42 who had absorbed a total of 1,008 g. of phenothiazines (chlorpromazine, trifluoperazine, and perphenazine) over a period of six years. He showed a few pigment granules on the anterior surface of each lens, but the deposits were slight, and as similar findings are made from time to time in normal subjects his condition could not definitely be attributed to medication.

The figures for the phenothiazine totals are conservative, representing the known amount of drugs administered in hospitals; the figures are unlikely to be artificially high due to patients not taking medication, and in fact may be artificially low because some patients had additional medication during periods of discharge from hospital, which have not been recorded. The patients were gathered from the disturbed population of two mental hospitals in an attempt to examine all those at maximum risk from possible phenothiazine complications.

There may be some assurance, therefore, in the fact that no definite ocular complications were found. Factors in pharmacological treatment which may be "protective" in this sense include: (1) avoidance of continuous high dosage and reduction of medication at all times to the minimum required for control of symptoms; (2) changes from one phenothiazine to another; (3) use of combinations of preparations—for example, chlorpromazine plus trifluoperazine, or perphenazine plus amitriptyline; (4) intervals of treatment by non-phenothiazine preparations. We are, etc.,

MAX VALENTINE.

PHILIP JARDINE.

Bristol 6.

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Compounds Containing Bromide

SIR,—The article on "Four Cases of Bromism" by Dr. G. Nuki and his colleagues (13 August, p. 390) confirms the continued occurrence of bromide intoxication despite the caveat concerning the prescription of bromides commonly propounded by experienced clinical teachers. I have previously drawn attention to the ready availability of bromide-containing tonics in the United States,¹ and also to the occurrence of bromism in the field of clinical psychiatry.²

As Dr. Nuki and his colleagues have pointed out, clinical danger arises owing to the existence of a number of bromide-containing preparations which are available without prescription. The time has surely come for consideration at administrative level as to whether the retention of bromides in our therapeutic armamentarium is worth while in view of the toxic hazards involved. There is need of a committee (like the Dunlop Committee), with executive powers, which would review the risks entailed by existing drugs—for example, bromide, phenacetin, aspirin, etc.—as well as by newly introduced drugs.—I am, etc.,

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- 1 Sclare, A. B., *J. ment. Sci.*, 1953, **99**, 572.
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SIR,—I read with interest the article "Four Cases of Bromism" by Dr. G. Nuki and others (13 August, p. 390).

Under the heading "Preparations Obtainable without Prescription" was listed Coneuro (Hewlett). This preparation was previously made by this company but was withdrawn from the market some time ago.—I am, etc.,

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Professional Services Department,
Astra-Hewlett Ltd.

Watford, Herts.

Nomenclature of Blood Groups

SIR,—In his review of my book with Dr. M. Shapiro, "Advances in Blood Grouping, Vol. II" (23 April, p. 1039), Dr. A. E. Mourant finds it "unfortunate" that I have included a chapter on modern blood group mythology, in which I "go on to question or even deny the validity of much work on blood groups done by statisticians and geneticists of the greatest competence and integrity—not only Fisher's CDE hypothesis, of which his (Wiener's) criticisms are well known, but virtually the whole of modern work (up to 1960) on genetic linkage in man, and on the well-established associations between blood groups and such diseases as duodenal ulcer and gastric carcinoma."

I agree with Dr. Mourant that it is regrettable that I had to include in my book a chapter on blood group mythology—I would have preferred to have expended the time and effort that the preparation of this chapter entailed on other endeavours. However, what really is unfortunate is that a situation prevails in the blood-grouping field at present that urgently requires correction, and the purpose of the chapter was to point this out. While there have been important advances in knowledge in the blood-grouping field, in which I believe I have played a role, at the same time a large body of misinformation and misconception has been built up, which is being taught and bids fair to become a permanent part of our scientific heritage, unless active steps are taken without delay to correct the situation.

What is being challenged in the chapter questioned by Dr. Mourant is not the "work" or the "competence and integrity" of statisticians and geneticists, but various theories which they have proposed and which are being promulgated as though they were established facts, in spite of numerous observations that refute their validity. One of the theories in question is the CDE hypothesis of Fisher and Race. Virtually the identical hypothesis had already been considered by me two years previously, when I made the first observations on the Rh-Hr types; but when I found the hypothesis was wrong I discarded it and substituted my present theory of Rh-Hr blood types. However, several observers, apparently anxious to be the first to confirm Fisher's predictions, reported the discovery of anti-d serum, but my own tests proved that the serum did not contain the claimed anti-d antibody. After long delay, my findings were finally reluctantly accepted, and it is now conceded that the anti-d predicted by Fisher was never actually found, and, even though more than 20 years have passed since the first report claiming anti-d, it still has not been found. Only one of the two sera predicted by Fisher has actually been found, while during the past 20 years more than 20 different Rh-Hr antisera have been found that were not predicted by him and do not fit with his CDE hypothesis.

My own theory rejects the concept of a one-to-one correspondence between gene, agglutino-gen, and antibody (or blood factor), and takes cognizance of the fact, amply confirmed by now, that every agglutino-gen has multiple corresponding blood factors (serological specificities of red cells) and antibodies. According to this hypothesis the number of Rh-Hr blood factors (and Rh-Hr antibodies) possible is theoretically unlimited, and obviously, therefore, the specificity of Rh-Hr antibodies still to be found would be largely unpredictable. To date, more than 25 distinct Rh-Hr antibodies have been found.

With regard to the reports claiming associations between the ABO blood groups (and other blood groups) and various diseases the