density of the latent roots can be applied; that is, this density is practically the same as that for the cyclic lattice.

The application of the method to the case of defects of the lattice (missing or wrong atoms) is obvious.

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Classification of Rheological Properties

I HAVE been interested by recent reports in NATURE, by the British Rheologists Club, relating to the classification of rheological properties. Since suggestions have been invited for improving the table of deformation, I put forward the following for consideration.

I believe that the table in NATURE of June 20, 1942 (p. 702), already an improved form of the earlier table shown in NATURE of February 14 (p. 197), can be made still clearer if the heading "Flow" is omitted and the first division made a three-fold one into "Elastic", "Plastic", and "Viscous". It may be natural to classify bodies according as they flow or do not flow under stress, but I suggest that this is as arbitrary a classification, scientifically, as some that have been adopted in other parts of the system, its main virtue being that it is based on phenomena readily appreciated by the non-scientific mind.

Further, the groups "Elastic" and "Plastic" overlap at the lower end of the table, and the groups "Elastic" and "Viscous" also overlap, whereas "Plastic" and "Viscous" remain distinct, although these actually have a common heading in the present table. This seems to me a little illogical.

If this step is allowed, then by setting out the three main headings with "Elastic" placed centrally, we can construct the table with less interference of the lines, and keep the three main groups separated. The balance of the table is also preserved. The accompanying diagram shows the arrangement that I propose.

I do not, of course, claim that I am making any addition to the system of rheological classification, but I think that it will be agreed that the proposed rearrangement has some points in its favour.

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Detection of Acid or Basic Substances in Damaged Fabrics

Feigl and Da Silva[1] have put forward methods for detecting basic and acid substances when present in many materials normally regarded as insoluble, when acidity or basicity cannot be detected in the normal manner, for example, by a *p*H determination.

We wish to direct attention to a possible use of these methods in the examination of faults in textile materials. It has long been known that acid or basic substances often damage textile fibres, but whereas certain methods of detection are available, there is plenty of room for a quick and reliable method. Feigl and Da Silva's work seems to make this possible.

If a solution of a nickel salt is incompletely precipitated with dimethyl glyoxime and filtered, one obtains a solution which on application to a fabric damaged by alkali (for example, caustic soda) causes the damaged fibres to take on a pink colour which is easily visible. This test has been tried with cotton and woollen fabrics.

Similarly, a saturated solution of silver chromate in ammonia (6*N*), when applied to fabrics damaged by acids, shows a dark red-brown colour. This test did not work so well with damage by hydrochloric