

Then comes the arch-conspiracy of writing in separate keys, when nothing you see on the paper is what you think it is. Who would ever have learnt to read an ordinary book if at the start of a chapter it was announced that it was a sad story and in a minor key, whereupon most of the letters of the alphabet were changed about, and then to find in the next chapter, when things brighten up a bit, that the letters have changed again in an entirely different way. Nobody but a thought-reader could have persevered, yet so it is with music; no one but a musician goes on with it. But the ordinary man reads his book with enjoyment, though not a student: so should an ordinary man enjoy playing the piano even if he be not a musician.

The first thing I plead for is that all music be written in a straightforward honest way, as if it were in the key of C, with all accidentals inserted. You could at least read it. You would find out later it was not in that key, but would that matter, as you would be playing it in the key desired and what more do you want? If we could get as far as that, it would be something, but I go further. I contend there are only twelve notes in an octave on the piano. All you want to know is which of the twelve to hit and in which octave. Surely not a very difficult problem in notation.

Here is really where a little organized common sense—sometimes called science—might bring great joy to millions. Surely such a thing is worth while trying and not beneath our dignity, but do not expect help from musicians; they revel in the mysticism of their trade union.

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Quality Control in Manufacture

THE note in NATURE of April 11, p. 408, on "Quality Control in Manufacture", repeats an error made in the article on which the note is based. Prof. R. A. Fisher has made many notable contributions to statistical theory and practice, and his elegant analysis of variance may possibly be considered the outstanding contribution of the century, but I think he would be the last to agree with the statement made in the opening phrases of the second sentence of the note. The theoretical foundations on which the control charts for averages of samples is based have been long known, and those for control charts for measures of variability have been laid by the work of British statisticians other than Prof. Fisher.

Apart from this error, I think that by not referring to the British Standards Institution publication of 1935 on this subject, the notes may leave the impression that the technique is only just receiving attention in Great Britain after many years practice in the United States. Dr. W. A. Shewhart's visit to England in 1932 focused attention on the work proceeding at that time in some British industrial organizations and stimulated interest in it. The formation of the British Standards Institution Committee in 1933, which led to the publication of B.S.S. 600 (1935) and the formation of the Industrial and Agricultural Section of the Royal Statistical Society, were some of the results of the increased interest in the subject.

The interested reader will find on close examination that the use of statistical methods has been growing

simultaneously in Great Britain and the United States, and that the development has differed in detail but not in principle. A careful study of the two documents to which reference is made (B.S. 600 R: 1942 and B.S.1008 : 1942) will reveal this.

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Education for Culture and Citizenship

THE conflict between subjective and objective biological teaching, referred to in the leading article on "Education for Culture and Citizenship"¹ and by Mr. L. J. F. Brimble² need not arise when the subjects of a school curriculum are more closely related, so that matters undesirable to teach from one angle can be taught from another. Such closer relationship could be obtained were education regarded as the fitting of man for his environment.

The subjects of the school curriculum would then fall into two groups: (1) man in relation to environment (the humanities), and (2) environment in relation to man (the sciences). Each group would dovetail into the other, and each subject be taught as part of a related whole, to the relief of overcrowded curricula. Environment for juniors would, of course, be the vicinity of the school, and syllabuses be based on its natural features and human activities. Even great cities provide a surprising amount of material for biological study and for that training in habits of observation and inquiry which is the root of true education. As the students get older, environment would broaden out to the whole world, and travel and research begin to play their part in education.

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¹ NATURE, 149, 447 (April 25, 1942).

² NATURE, 149, 457 (April 25, 1942).

First Publication of the Geological Society

IN reply to Mrs. Eyles's query¹, there is no reason to doubt that the pamphlet "Geological Inquiries" was issued in 1808, which is the date inscribed by Horner on his copy now in the library of the Sedgwick Museum. That it was published before the first volume of *Transactions of the Geological Society* is clear from the following extract from the Preface (*Transactions*, 1, June 28, 1811, p. v): "shortly after their establishment [Nov. 13, 1807] they [the founders of the Geological Society] drew up and distributed a series of inquiries."

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¹ NATURE, 149, 442 (1942).