In Leedal and Walker's map (p. 118) of transcurrent faults cutting the Barnesmore Granite in Donegal the average strike of the dextral faults is 086° and that of the sinistral faults 218°. If these faults were caused by the same stress conditions, the direction of the principal horizontal stress is $\frac{1}{2}$ (218° + 086°) = 152°, and the angle between the principal stress and the fault $\frac{1}{2}$ (218° − 086°) = 66°. Because this angle is greater than 45°, and without confirmatory evidence, Leedal and Walker concluded that the two sets of faults are of different ages.

A map presented by Auden (p. 98) shows dykes and two sets of shear (transcurrent) faults cutting Deccan lavas in Bombay State. If it is accepted with Anderson (p. 24) that the dykes lie in the general direction of the principal horizontal stress, then one of the sets can be distinguished as dextral and the other as sinistral, in spite of the fact that no displacements have been determined. The average strike of the dextral is 021° and that of the sinistral 141°. The direction of principal horizontal stress is $\frac{1}{2}$ (141° + 021°) = 081°, and the angle between the principal stress and the faults $\frac{1}{2}$ (141° − 021°) = 60°. The average strike of the dykes is 072°, 9° less than the strike of the horizontal principal stress determined from the faults.

The examples given have the disadvantage that being "fossil" faults it is difficult to prove that the dextral and sinistral members are parts of the same stress pattern. Active faults do not suffer from this disadvantage.

Two suitable pairs of active transcurrent faults are known in New Zealand—the Alpine and Moonlight faults (Wellman, 1953), and the Wellington and Baring Head faults—by a coincidence they give the same direction of stress and the same angle—112° and 57°.

The evidence from active major transcurrent faults in California is similar to that in New Zealand. The sinistral Big Pine and Garlock faults are intersected by the dextral San Andreas Fault (Hill and Dibblee, 1953), the stress directions being 354° and 356° and the angles 65° and 68°.

The angles between the principal stress and the transcurrent faults are remarkably consistent and considerably in excess of the maximum value of 45° suggested by Anderson from theory. It is suggested that observations be made over as wide a range of tectonic conditions as possible and an attempt then made to establish a more comprehensive theory.

H. W. Wellman.

Geological Survey,
156 The Terrace,
Wellington C. 1,
New Zealand.

15th July, 1954.

REFERENCES

Anderson, J. G. C., 1942. *The Dynamics of Faulting*. Edinburgh.

Auden, J. B., 1954. Erosional Patterns and Fracture Zones in Peninsular India. *Geol. Mag.*, xci, 116–128.

Leedal, G. P., and G. P. L. Walker, 1954. Tear Faults in the Barnesmore area, Donegal. *Geol. Mag.*, xci, 116–128.

Hill, M. L., and T. W. Dibblee, 1953. San Andreas, Garlock, and Big Pine Faults, California. *Bull. Geol. Soc. Amer.*, lxiv, 443–458.

Wellman, H. W., 1953. Data for the study of Recent and late Pleistocene Faulting in the South Island of New Zealand. *N.Z. Journ. Sci. & Tech.*, B, 34 (4), 271–288.

MINERALS FOR THE CHEMICAL AND ALLIED INDUSTRIES

Sir,—I deeply appreciate the general tenor of Professor Fearnsides's review (*Geol. Mag.*, xcl, 1954, p. 334), of my recently published book, *Minerals for the Chemical and Allied Industries*, but would like to correct a misunderstanding.

Professor Fearnsides states that: "A good many of the essays were written and published in a technical journal when the author was Principal of the Mineral Resources Department of the Imperial Institute, and Head of the Commodities Intelligence Section of the Ministry of Economic Warfare. The information selected from official files is tersely put . . ." This might be interpreted as meaning that while I occupied an official position I used official records for private purposes. This was not the case. Actually, none of the essays was written until after I retired from my official position in May, 1946, and the assistance I received later from the Mineral Resources Department of the Imperial Institute was such as is available to any member of the public wishing to use their Information Service, which includes a good technical index and reference library. I do not think that this Service is sufficiently well known.

As indicated in the Preface, all the articles as published between August, 1946, and February, 1949, were revised and considerably enlarged before publication in book form with additional chapters.

During my long association with mineral development work, however, I was fortunate to make contact with a large number of experts engaged in the chemical and mining industries who, after my retirement, kindly supplied much valuable up-to-date information for inclusion in my book. In fact, over thirty of the chapters were "vetted" by technical experts in this country and the U.S.A.

SYDNEY J. JOHNSTONE.

TECHNICAL SERVICES BUREAU,
17 CLIFFORD ROAD,
NEW BARNET,
HERTS.

2nd September, 1954.

PROPOSED NEOTYPE FOR *PLEUROTOMARIA ANGLICA* (J. SOWERBY)

SIR,—I should be glad if you would allow me to announce in your columns my intention (failing the receipt of information as to the whereabouts of the two figured syntypes) of designating and figuring a neotype of the species *Trochus similus* J. Sowerby (1816, *Mineral Conchology*, **2**, pl. 142), the name of which was altered to *Trochus anglicus* in the Corrigenda in the same volume; this species has long been referred to the genus *Pleurotomaria*. The syntypes are not in any institution known to me to possess Sowerby types, but could conceivably have found their way to a provincial museum or teaching collection. Sowerby did not state who sent them to him, or from which of four localities mentioned in his text they came, but it is most probable that the larger specimen (the other consisted merely of the external and internal moulds of a shell) came from the Middle Lias of White Lackington Park, near Ilminster; in which case it was presumably collected (as were other specimens from this locality described by Sowerby) by E. Strangewayes or Strangeways, after whom *Ammonites strangewaysi* was named. I cannot say if E. Strangeways was connected with the Fox-Strangways family.

I should be most grateful for any information about the missing specimens or the present whereabouts of the E. Strangeways Collection, as it is, of course, essential that every effort should be made to trace original types before having recourse to the procedure for designating neotypes decided upon at the 1953 International Congress of Zoology at Copenhagen.

L. R. COX.

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD,
LONDON, S.W. 7.