

## CORRESPONDENCE

GRAVITY STRATIFICATION IN THE CUILLIN GABBRO  
OF SKYE

SIR,—Rhythmic banding showing gravity stratification is well known from various overseas examples of basic plutonic rocks, but so far as we are aware it has only been recorded in Britain from the Belhelvie Gabbroic complex (Stewart, *Quart. Journ. Geol. Soc.*, cii 1947, 465–498). It is perhaps of interest, therefore, to record that gravity stratification is well developed in the Cuillin Gabbro in the area about Druim Hain (Druim an Eidhne). In this area, which Harker postulated as the centre of the original gabbro complex, some of the bands in the gabbro show a marked concentration of iron ore and ferromagnesian minerals at and near the base, while upwards, in the distance of a foot or so, there is a gradual passage into a leucocratic rock made up largely of felspar. Only certain bands show gravity stratification at all clearly; in other cases a fairly uniform band of one composition gives place abruptly to a band of another composition. The dip of the gravity stratified banding varies and is often high.

Geikie and Teall in their paper “On the Banded Structure of some Tertiary Gabbros in the Isle of Skye” (*Quart. Journ. Geol. Soc.*, 1, 1894, 645–659), described the banding but did not describe the peculiarity now called gravity stratification; nor did Harker in the memoir on the Tertiary Igneous Rocks of Skye. Subsequent to our first noticing the gravity stratification during recent field work, Geikie’s paper, “On the Basic and Acid Rocks of the Inner Hebrides” (*Quart. Journ. Geol. Soc.*, 1, 1894, 212–229) was consulted. In this, an example of banding on Druim Hain showing fine gravity stratification, is figured (*op. cit.*, plate 13), but again there is no comment on the feature. Since gravity stratification only occurs occasionally among the other types of banding these early observers, if they noticed it, may have considered it a freak structure of little significance, whereas recent work suggests that gravity stratification is a clue to the mechanism of solidification of those intrusions showing it.

F. H. STEWART.

L. R. WAGER.

4th September, 1947.