## 192 Correspondence—R. L. Sherlock—E. M. Anderson.

February 19, 1915, awarded him the Lyell Geological Fund in recognition of his valuable work on the fossils of the Derby and Nottinghamshire Coal-field, including his contribution to the recently published Geological Survey memoir on that district.

That so valuable a life as that of our friend Dr. Lewis Moysey should have been sacrificed in so sad and tragic a manner, though in the service of his country, only increases our sorrow for his premature loss to science and to his personal friends, by whom he was greatly valued.]

E. A. N. A.

## CORRESPONDENCE.

## "FLINT-MEAL" FROM THE BRITISH CHALK.

SIR,—I should be greatly obliged if any of your readers would send me properly localized samples of flint-meal from the British Chalk, other than the *B. mucronata* zone of Norfolk, of which I have plenty. Failing flint-meal, weathered chalk containing foraminifera is useful provided its horizon is known.

R. L. SHERLOCK.

GEOLOGICAL SURVEY, JERMYN STREET, S.W. 1. February 25, 1918.

## A NOTE ON ISOSTASY.

SIR,—A rather important consideration has, I think, been overlooked by Dr. A. Morley Davies (see GEOL. MAG. for March, p. 125). In estimating the amount of subsidence that must ensue "if the isostatic adjustment is perfect and immediate" after a sea of depth *d* has been filled to the surface with sediment, we must take into account not only the weight of sediment but also the weight of water which flows in over the sediment during the process of sinking. Allowing for this on the basis of Dr. Davies' figures, the downward movement becomes  $\frac{1\cdot36}{2}d$ . To secure equilibrium, with sedimenta-

movement becomes  $\frac{1}{2}d$ . To secure equilibrium, with sedimentation up to sea-level, we have the following equation, where x is the total subsidence :---

$$1 \cdot 36 d + 2 \cdot 36 x = 3x.$$
  
$$x = \frac{1 \cdot 36}{3 - 2 \cdot 36} d = 2 \cdot 12 d;$$

or the total thickness of sediment =  $3 \cdot 12 d$ , instead of  $1 \cdot 83 d$  as calculated by Dr. Davies. If we assume for the density of the substratum what we may agree is the rather unlikely figure of  $2 \cdot 7$ , the last result is altered to 5 d.

E. M. ANDERSON.

EDINBURGH. March 11, 1918.