Letters to the Editor.

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Anticipation of Wegener's Hypothesis.

THE question of the bodily displacement of continental masses on the earth's surface has been the subject of considerable discussion among geologists and geophysicists in recent years.

When first I heard this referred to as 'Wegener's Hypothesis', my memory went back to my schooldays and to a popular book on science which I then possessed entitled "The Playbook of Metals", by J. H. Pepper, the inventor of the optical illusion known as 'Pepper's

durch Zufall in die Hände fiel. Dies veranlasste mich, eine zunächst flüchtige Durchmusterung der für die Frage in Betracht kommenden Forschungsergebnisse auf geologischen und paläontologischem Gebiet vorzunehmen, wobei sich sogleich so wichtige Bestätigungen ergaben, dass die Überzeugung von der grundsätzlichen Richtigkeit bei mir Wurzel schlug. Am 6. Januar 1912 trat ich zum erstenmal mit der Idee in einem Vortrag in der Geologischen Vereinigung in Frankfurt a. M. hervor, der betitelt war 'Die Herausbildung der Grossformen der Erdrinde (Kontinente und Ozeane) auf geophysikalischer Grundlage'. Diesem Vortrag folgte am 10. Januar ein zweiter über 'Horizontalverschiebungen der Kontinente' in der Ges. z. Beförd. d. gesamten Naturwiss. zu Marburg. Im gleichen Jahre 1912 folgten auch die beiden ersten Veröffentlichungen."

We thus see that the hypothesis of continental displacement had been put forward a full half-century before it first occurred to Prof. Wegener.

FIG. 1.—The earth before the separation (Snider's diagram).

FIG. 2.—The earth after the separation (Snider's diagram).

Ghost'. The subject having recently come up again in the course of conversation, I took the opportunity of consulting the Library of the University of Cambridge, where I was fortunate enough to find a copy of this work, dated 1861. In it are to be found two diagrams, photographic reproductions of which were kindly made for me by Mr. W. H. Hayles, of the Cavendish Laboratory (Figs. 1 and 2). Pepper states that these diagrams are from a book entitled "La Création et ses mystères dévoilés", by A. Snider. It was necessary for me to go to the British Museum Library to find a copy of this latter work, the date of which I ascertained to be 1858.

It is interesting to compare these dates with those given by Prof. Wegener in his book, "Die Entstehung der Kontinente und Ozeane", where the following passage occurs (see p. 3):

"Die erste Idee der Kontinentalverschiebungen kam mir im Jahre 1910 bei der Betrachtung der Weltkarte unter dem unmittelbaren Eindruck von der Kongruenz der atlantischen Küsten, ich liess sie aber zunächst unbeachtet, weil ich sie für unwahrscheinlich hielt. Im Herbst 1911 wurde ich mit den mir bisher unbekannten paläontologischen Ergebnissen über die frühere Landverbindung zwischen Brasilien und Afrika durch ein Sammelreferat bekannt, das mir

On comparison of Snider's diagrams with those of Prof. Wegener, the essential similarity will at once be apparent; the main difference in detail being that Snider puts the junction of Australia with Africa somewhat farther north than does Prof. Wegener.

From the fact that it should have been mentioned in a popular book on science like Pepper's "Playbook of Metals", one would infer that the hypothesis must have been well known about this period, and it is highly probable that the pros and cons of it were pretty well discussed by scientific men.

I freely admit, from what I have seen of Snider's book, that I do not think it would be treated very seriously as a whole by men of science nowadays; but I need scarcely point out that a question of fact is quite distinct from any explanation thereof which may be put forward, and it seems quite clear that the hypothesis of continental displacement (be it true or false) dates at least so far back as 1858, if, indeed, it may not be possible to trace it still further. As regards evidence in favour, or otherwise, of the hypothesis (by whatever name it be called), we must still, of course, turn to the work of Prof. Wegener and other writers who have studied the subject in its various aspects.

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