Spelzenschluß des letzten Typus von demjenigen des gewöhnlichen Weizens genetisch unterscheidet.

5. Die Merkmalspaare Behaarung-Kahlheit, Begrannung-Grannenlosigkeit, loser-fester Spelzenschluß mendeln unabhängig voneinander.
6. Der Square-head-Typus ist gegen lockerere Ährentypen rezessiv.
7. Es gibt einen *compactum*-ähnlichen Ährentypus, der sich gegen lockerere Typen rezessiv verhält, während das eigentliche *compactum* über lockerere Ährentypen dominiert.
8. Für die Bereifung der Weizenähren sind mindestens zwei Gene anzunehmen.

Referent möchte mit Rücksicht auf seine eigenen Erfahrungen nicht allen diesen Schlußfolgerungen ohne jeden Vorbehalt zustimmen, sondern hat Grund zu der Überzeugung, die durch vorliegende verdienstliche Arbeit eher gestützt als beseitigt wird (vgl. die vielen Ausnahmen von den theoretisch geforderten Zahlenverhältnissen der Spaltungen), daß die Genetik des Weizens schwieriger aufzuklären ist, als nach den seitherigen Untersuchungen anzunehmen wäre.

L. Kießling.

Hamshaw, Thomas H. "The fossil Flora of the Cleveland District of Yorkshire: The flora of the Marske Quarry." Quart. Journ. Geol. Soc. 1913. 69, pp. 223—251, pls. XXIII—XXVI.

The coast of Yorkshire is classic ground for the palaeobotanist, and the numbers of good specimens found there have long attracted attention: some of the species were even described by Brongniart. Prof. SEWARD's Museum Catalogue of the Yorkshire Jurassic flora (publ. 1900) crystallised the work on these rich deposits up to that date. Since then much detailed collecting has been done, and thanks, principally to the work of Mr H. H. THOMAS, more detailed accounts of the distribution of the plants in the different beds, is being rendered available. The "Ecology" of fossil plants awaits the worker, and the Jurassic beds seem favourable ground. In the present paper a number of plants are described from Marske Quarry in Yorkshire, a spot near to, but not identical with the usually-worked localities. *Marattiopsis anglica* sp. nov. and *Pseudoclenis lanei* sp. nov. are described for the first time. In the geographical distribution of the plants it is noted that these two species as well as *Baiera longifolia* (Brongn.) and *Dictyosamites hawelli* Sew. are not found in the other localities in England.

M. C. STOPES.

Seward, A. C. "A Contribution to our Knowledge of Wealden floras, with especial reference to a Collection of Plants from Sussex." Quart. Journ. Geol. Soc. 1913. 69, pp. 85—116 and pls. XI—XIV.

The rich deposits of Wealden plants described by Prof. SEWARD in the British Museum Catalogue and elsewhere, have helped to render this flora one of the better known of fossil floras. SEWARD's "Catalogue" of Wealden Plants was published in 1894 however, and since then a number of further facts have come to light. The present paper both brings the whole subject more up to date and also describes several new specimens from Sussex which have been recently obtained by W. DAWSON and Fathers TEILHARD DE CHARDIN and FÉLIX PELLETIER. The following are the species described for the first time, or of which older descriptions are