

B. Filiciform leaves. The following may be mentioned as the principal varieties.

1. Martin, Tab. 10. Park. o. r. pl. 4. fig. 1. 2. Schlotheim, fig. 22; Pinnæ decurrent and alternate; by some considered as a Pteris, by Schlotheim an unknown species of Polypodium or Lonchitis.

2. ——— Schlotheim, fig. 7. 8. Pinnæ decurrent and alternate, supposed Pteris aquilina; fig. 8 is closely related to Parkinson's O. R. pl. 4. fig. 1. 2. there considered as an osmunda.

3. ——— Schlotheim, fig. 11. Pinnæ sessile, alternate; supposed Polypodium oreopteris; the other supposed Polypodia figured by Schlotheim fig. 9. 13. 14. 15. are likewise found in our coal-fields; fig. 9 agrees with Parkinson's O. R. pl. 4. fig. 7. and fig. 14 with pl. 5. fig. 9.

4. Osmunda gigantea. Sternberg, Tab. 22.

5. Parkinson figures a plant with five-lobed petiolate leaves, plate 4. fig. 5. and compares it with Dicksonia.

6. In plate 5. fig. 2. of the same work is a plant with three-lobed petiolate leaves compared to Adiantum.

7. Schlotheim, fig. 18. a. also compared to Adiantum, but widely different from the last.

C. Kidney-shaped leaves, figured by Martin, Pet. Der. T. 34. fig. 1. 2. are also common in the coal-fields; as they somewhat resemble the expanded wings of the papilionaceous tribe, they have given rise to a fanciful account of the discovery of fossil butterflies in Fletcher or Madeley's curious description of the great landslip in that neighbourhood.

D. Impressions resembling Confervæ, not figured.

*Pericarpial remains.*

Specimens referable to this class appear to be figured in Martin's Pet. Derb. T. 21. 51. 53; but we will not hazard any observations on them.

The greater abundance of these vegetable remains, and their importance in illustrating the probable history of the coal-formation, have induced us to depart from our usual arrangement, in giving the precedence to these before entering on the consideration of those derived from the animal kingdom, which are very rare and entirely confined to a few species of Testacea; excepting that, in one instance, a fragment supposed to have been part of the radius of a Balistes has been found.

About the middle of the coal-series in Derbyshire, however, and in the ninth bed of shale (reckoning in the ascending order) a bed of ironstone occurs, which is so full of different species of