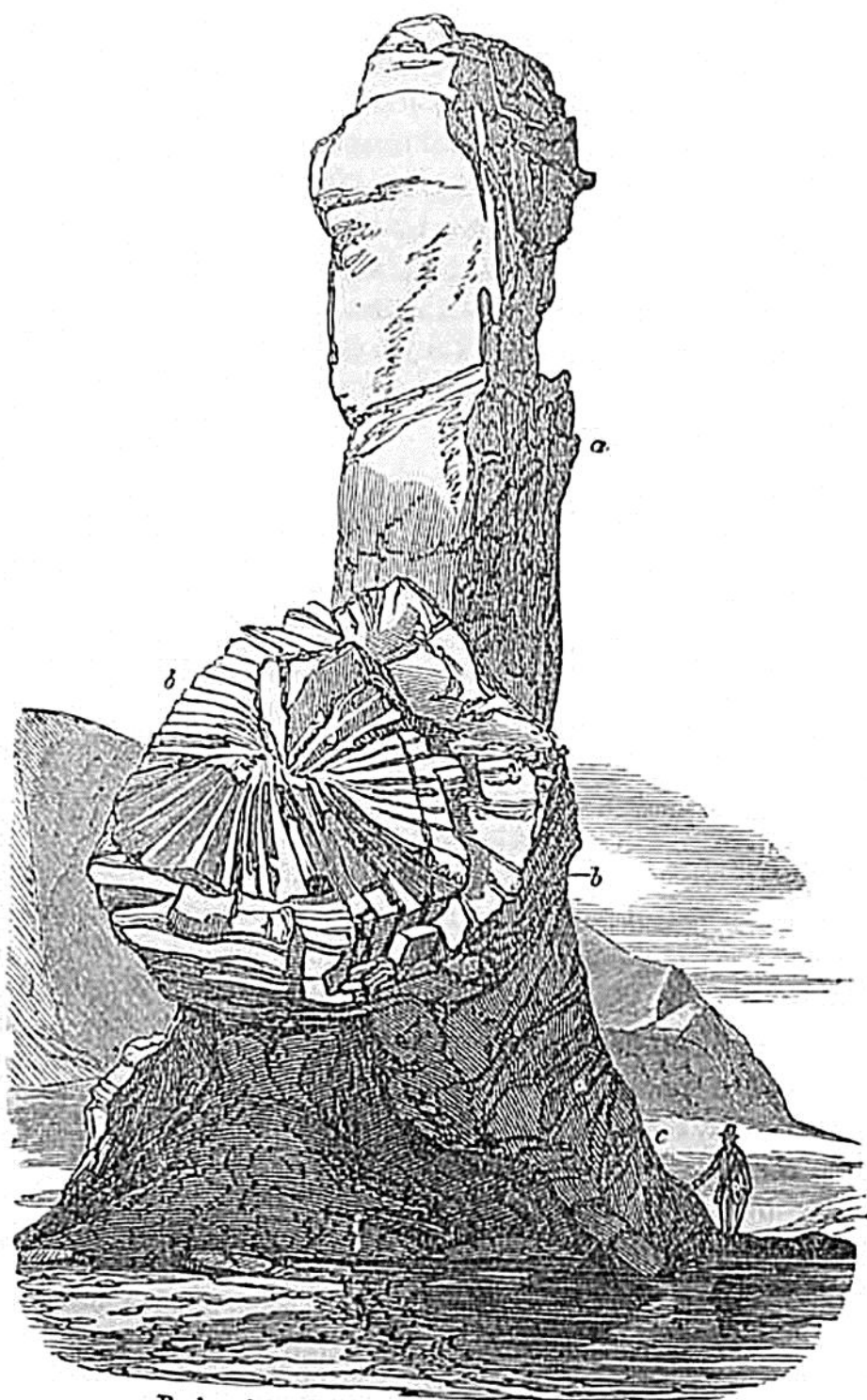


one or two tons in weight, intermingled with pebbles of other rocks. These angular fragments were probably thrown out from volcanic vents, and fell upon sedimentary matter then in the course of deposition.*

Carboniferous period.—Two classes of contemporaneous trap rocks have been ascertained by Dr. Fleming to occur in the coal-field of the Forth in Scotland. The newest of these, connected with the higher series of coal-measures, is well exhibited along the shores of the Forth, in Fifeshire, where they consist of basalt with olivine, amygdaloid, greenstone,

Fig. 679.



Rock and Spindle, St. Andrew's, as seen in 1838.

a. Unstratified tuff.

b. Columnar greenstone.

c. Stratified tuff.

* De la Beche, Geol. Proceedings, No. 41, p. 108.