

its double refracting property. Of the common metal, *Pyrites*, a few specimens should be preserved; this mineral, from its splendid yellow appearance, is often mistaken for gold; but a mere blow of the hammer will immediately detect it, for *Pyrites* is brittle, and readily cracks to pieces, while gold, as is well known, is remarkably ductile. If the collector be not satisfied with the fruits of his day's researches, he should look over the catalogue of Mr. Adams, and purchase such specimens as will render his collection sufficiently extensive, to present a full illustration of the geological character of the scenes he has this day visited.

There is a variety of sulphate of barytes from near Youlgreave, exhibited in the shops at Matlock, of which one or two examples should be obtained. The surface of the polished specimens much resembles the rich variegated appearance of dark tortoise-shell. This mineral has been formed, like the common calcareous stalactite, by infiltration through some porous rock; transverse sections exhibit concentric layers of various shades; while the longitudinal have the varied colours disposed like those in tortoise-shell.

NOTES FOR A GEOLOGICAL EXCURSION BY CROMFORD, UP BONSAL VALLEY, BY VIA GELLIA, TO MIDDLETON MOOR; RETURNING BY STONNIS.

This excursion will present many objects of interest, and one day at least should be devoted to the examination of the different localities pointed out in the following notes. *To Cromford, and then

* Benjamin Froggatt should be engaged to conduct the pedestrian; and a carriage party would also do well to place themselves under his guidance.