

7. A collecting-bag (canvas or leather).
8. A supply of nests of pill-boxes for more delicate specimens.
9. Brown and softer gray wrapping paper (old newspapers are serviceable).
10. Gummed labels, numbered to correspond with those in the collecting-book.
11. Note-book or collecting-book, in which, where practicable, each specimen is entered under its number, with all particulars of its exact locality, geological horizon, etc.
12. Fish-glue, a thin solution of which is useful to preserve specimens that may be liable to crack into pieces.

Weathered Shales.—The heaps of shale thrown out in quarrying operations afford excellent ground for fossil-hunting. It is best to begin at the bottom of a heap, and to creep slowly along the same level for a dozen yards or so, where the ground to be examined is extensive; then to return along a band slightly higher, and so on backward and forward until the top is reached, which may be searched in breadths of a yard at a time. In this way, the more prominent fossils may be obtained. Large and thin fossils, such as shells of *Pecten*, *Modiola*, etc., which break into fragments in weathering must be sought for in the less decayed parts of the shale. When found, the matrix around them should be reduced to the desired size by means of pincers. They should then be wrapped up in a box, or, at least, secured against injury in the homeward transport, and as soon as possible thereafter should be dipped in a thin solution of fish-glue and allowed to dry slowly in the air. As a rule, particularly where the structure of a fossil is well preserved, it is desirable to retain also the surface of rock containing its impression, which not infrequently affords evidence of structure that may be less distinctly preserved on the counterpart, or side to which the main portion of the fossil has adhered.

Some fossils of great delicacy, such as fronds of *Fenestella*, which go to pieces as the rock weathers, may be extracted by an ingenious process devised by Mr. John Young, Curator of the Hunterian Museum, Glasgow University. If the shale on which such organisms lie is liable to go to pieces, it may be sufficiently secured for transport by being coated with a thin solution of gum, which is allowed to dry