

PRACTICAL HINTS FOR THE SELECTION OF COALS FOR DOMESTIC AND OTHER USES.

From a late article in the Edinburgh Review, it appears to be a new idea in Great Britain that anthracite is preferable for all domestic purposes to any other fuel whatever. This idea the reviewer has, it appears, obtained from the elaborate and valuable work of R. C. Taylor, Esq., on the "Statistics of Coal." It is by no means new in this country, as the practice of all the Atlantic cities, and the multitudes of inventions designed to facilitate the application of anthracite to domestic purposes, fully attest. But not every variety of anthracite is equally adapted to all domestic purposes.

1. For open grates, where a lively fire with considerable flame is thought desirable, and where the moderate intensity of heat will not endanger the conversion of a great portion of the ashes into *clinker*, the *red ash* coals may be employed to advantage. A study of the Report on American coals will show that the more rapid and intense is the fire, during the combustion of any given coal, the greater will be the proportion of *clinker* it makes.

2. In furnaces for heating houses, and in general for close stoves having any considerable capacity, and liable to produce a very high white heat, the white or grey ash anthracites are preferable.

3. In the earlier use of anthracites, both red and white ash, an error was very generally committed in attempting to use them in too large lumps. As this fuel burns almost solely by the contact of air with the surface of the incandescent coal, it is essential to the attainment of its maximum effect that large vacant spaces should not be left between the lumps. As bituminous coal gives off large quantities of gas which fill up such open spaces, the evil is less liable to occur with that fuel.

In selecting coal for gas works, those varieties are to be chosen which possess large proportions of volatile matter and as little as possible of sulphur. The rich cannel coals are generally preferred for this purpose.

For smiths' work, coals are generally preferred which, in being heated to redness, agglutinate their lumps firmly together. When a hollow fire is not required, however, the coals of low bituminousness, and which have but little tendency to intumescence or cohesion of lumps, may be employed; and the higher heating power of such coals will always give them a preference where economy of fuel is an important consideration. Coals possessing a large portion of iron pyrites