

series of folds which increase in their sharpness toward the east. Three principal types of coal are distinguished as a result of the folding. Where the rocks have been but little disturbed the coal contains a high proportion of volatile gases, or less than 70 per cent of carbon. This coal, known as *bituminous coal*, is especially valuable for the manufacture of coke and gas. Where the rocks have been somewhat more disturbed, as along the northern and eastern edge of the Alleghany field in Pennsylvania, Maryland and West Virginia, the coal contains from 70 to 84 per cent of carbon. This is known as *semi-bituminous coal* and is superior to any other for generating steam. Where the coal-bearing slates are much more disturbed, as in eastern Pennsylvania, the amount of carbon exceeds 84 per cent and the coal is of a hard, glistening variety, called *anthracite*. This, on account of the cleanliness, is especially fitted for domestic use.

The Maryland coals belong entirely to the first two classes, and the only kind being worked to any extent is the latter or the semi-bituminous type. This coal basin is of comparatively small size, but constitutes by far the most important of the state's mineral resources. It is commonly called the "Cumberland basin," and sometimes also the "Frostburg" or "George's Creek" basin. It is situated in an elevated trough to the west of the city of Cumberland between two parallel ridges, known as Dan's and Savage Mountains, which are less than 4 miles apart. The most important coal seam in the Cumberland basin is known as the "Big Vein" or the "14-foot Vein," and belongs to the Elk garden formation, which is the uppermost member of the Carboniferous series. This bed is very limited in extent, but once covered the entire basin, the continuity of the formation having been greatly reduced by the natural processes of erosion. Below the 14-foot vein are several other workable seams, viz., the 18-inch vein of the Fairfax formation, the 4-foot vein and the 3-foot vein of the Bayard formation, and the 6-foot vein of the Savage formation. These lower veins have not been as yet fully exploited, although several companies are to-day removing more or less coal from them. These seams become very important farther south in West Virginia. The Maryland coal is unsurpassed in quality and has been proved by