

Among methods that have been used the following are the most important:

- (1) Valuation by empirical methods.
- (2) Valuation based on market value.
- (3) Valuation based on royalty value.
- (4) Valuation by capitalizing profits.
- (5) Valuation by estimation method.

(1) *Valuation by Empirical Methods.*—An important example of an empirical method is the so-called "foot-acre" valuation of coal measures. A certain value per foot-acre of coal has been established in a certain district and the value of any property is based on this unit disregarding the fact that thin beds of coal are not worth as much per acre-foot as thick beds.

Another empirical method is that under which a value is placed on a mineral property of so many times the annual proceeds or the annual profits regardless of the actual expectation of life of the mine. It is needless to say that this method is used only for taxation purposes.

(2) *Valuation based on Market Value.*—A method of valuation of coal lands based on the use of the results of sales of neighboring properties has been found acceptable to the courts. The attempt is made to fix the actual sale value of a coal property by examining the price at which other property similar to that under consideration has been sold. This method is derived from existing methods of real-estate valuation and from an engineer's standpoint is acceptable only when checked or supplemented by a valuation on some other basis. Such checks may demonstrate that recent sales were not made at the actual value of the properties sold. Further than this no recent sales of similar properties may be available for purposes of comparison.

(3) *Valuation Based on Royalty Value.*—The royalty value method of appraising the value of mining properties makes use of the established royalty value per ton. This method of