

system of weighting had to be applied. Each group was multiplied by an estimated figure intended to represent the approximate importance which each group had among all common stocks, whether included in the index or not. The value of outstanding stock was also used as a base for the group weights.

**Selection of Stocks.**—In order that the index number may achieve its purpose, a careful selection from available stocks must be made. Those selected must have some activity so that market quotations may be obtained. Only stocks listed on the exchanges were utilized because of the availability of quotations. A further limitation was placed upon the selection by the decision to construct an index based on the year 1913, which implied that only securities could be taken for which a 1913 base could be secured. In one or two instances an approximate figure had to be taken. These limitations naturally make the list of stocks included moderate in number, but it is believed that there are a sufficient number of representative securities to indicate the trend in a reliable fashion, particularly because each security is weighted according to its relative importance<sup>1</sup>.

**Advantages of the Bureau's Index.**—It cannot be claimed for this index number that it will meet all needs, but it has features which make it especially valuable for certain purposes. In the first place it is an index number and not an average of stock market prices. In the second place, since it has a fixed base—the year 1913—each index number not only shows a rise or fall as compared with a previous month, but also its relationship to pre-war conditions. In the third place, since it has been constructed on the same principle as the index number for wholesale prices, comparisons can be made between movements in the two index numbers; the index for industrial common stocks and that for wholesale prices furnish two useful barometers of business conditions.

In making an index number of security prices many difficulties are encountered which do not appertain to wholesale prices. The main difficulty is to maintain a list of stocks which are essentially the same stocks over a series of years. Reorganizations, amalgamations, and so forth are continually altering the character of the stocks quoted on the exchanges. In many cases careful adjustments can be made which enable continuity to be maintained, but in other cases adjustments introduce a margin of error into the calculation. For a period, however, of from 5 to 10 years, depending upon circumstances, satisfactory measurements can be made. For longer periods the best results are obtained by dividing the long period into smaller ones and constructing an index for each period.

**Security Prices in 1924.**—The index number for 31 industrial stocks commenced the year at 125.2 and rose to 127.2 in February. By June it had fallen to 119.8, but from then until the end of the year the movement was upward, with the exception of one month, until 128.2 had been attained in December. The decline after the first of the year and the recovery in the last half was general, except in the case of pulp and paper stocks. In that group the index rose from 173.8 in January to 177.7 in February, dropped to 161.0 in July, recovered to 165.2 in August, then dropped to 150.7 in November. There was a belated recovery to 154.3 in December. Milling stocks were 161.1 in January, 157.7 in June, and 182.7 in December, and textile and clothing 232.0 in January, 210.6 in May and 230.8 in December.

<sup>1</sup> The names of the common and preferred stocks and of the bonds used in calculating the index number are given on p. 120 of the report "Prices and Price Indexes, 1913-24," published by the Dominion Bureau of Statistics.