There is a wide range in the cost as between different collieries at the same time, the ratio of lowest to highest being not lower in any year after 1913 than 1 to 2½. The variation in the percentage increase over the period is accounted for by the fact that some companies had fortunately bought heavily for future delivery just before the outbreak of the war, or had heavy stocks on hand. The rise in the prices of materials used in mining has been very heavy. A table in Appendix C gives the prices of materials used at the State collieries from 1914 to 1918. These prices have increased 144 per cent. The prices paid for stores and materials for other large mines on the West Coast showed an increase of about 125 per cent., calculated on the cost at the central ports and not including the large rise in coastal freights and other final delivery charges. The prices quoted on the North and the South fields averaged about 200 per cent. increase. The range of change has been very wide, some materials in common use having quadrupled in price, others rising by as low as 25 per cent. The precise rise in cost per ton varies in part according to the degree to which the several mines had bought, whether heavily or not, just previous to the outbreak of war. The expenditure on stores and materials formed about 10 per cent. of the total mining-cost in the case of the mine with highest stores-cost per ton in 1913; in 1918 this expenditure at the same mine, still showing the highest figures in respect of this particular cost, was about 15 per cent. of total cost. The corresponding percentages in the case of the mine with lowest stores-cost are 4 and 2. Where materials have deteriorated in quality as well as risen in price, as in the case of explosives, the tendency to raise the cost of the coal produced per ton is increased. Some mines required a very much heavier expenditure on timber than others.

## (ii.) MAINTENANCE AND RENEWALS.

Table 20 gives similar information in regard to the cost of maintenance and renewals.

| TABLE 20.—Cost of | MAINTENANCE A | AND RENEWALS | PER TON OF | COAL-OUTPUT, 1 | 913-18. |
|-------------------|---------------|--------------|------------|----------------|---------|
|                   |               |              |            |                |         |

|                            | Mine.                |                      |             |   | 1913.   |                                    | 1914.     |   | 1915.                  |  | 1916.                     |  | 1917.                            |   | 1918.                     |   | Increase<br>or<br>Decrease.        |  |  |
|----------------------------|----------------------|----------------------|-------------|---|---------|------------------------------------|-----------|---|------------------------|--|---------------------------|--|----------------------------------|---|---------------------------|---|------------------------------------|--|--|
| A<br>B<br>C<br>D<br>E<br>F |                      |                      |             |   | 0 1 1 1 | d.<br>0·04<br>0·04<br>2·69<br>1·64 | 0 0 0     | d.<br>0.05<br>0.05<br>11.10<br>9.26<br>         | 8.<br>0<br>0<br>0<br>0 | d.<br>0·02<br>0·47<br>9·78<br>6·11<br><br>1·33<br>2·35 | s. 0<br>0 0<br>1 0<br>0 0 | d.<br>0·03<br>0·07<br>1·84<br>11·31<br>5·3<br>1·61<br>2·79 | 8.<br>0<br>0<br>1<br>0<br>0<br>0 | d.<br>0·09<br>0·13<br>9·45<br>4·33<br>8·5<br>1·99<br>2·21 | s. 0<br>0 0<br>3 0<br>1 0 | d.<br>0.06<br>0.03<br>0.13<br>2.80<br>5.7<br>2.38<br>1.97 | s. 0<br>0<br>0<br>1<br>0<br>1<br>0 | d.<br>0·02<br>0·01*<br>9·44<br>10·84*<br>0·4<br>0·47 |  |
|                            | neluding<br><br>nest | stores, for grailway | reights, &c | ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· | 1       | 1·21<br><br><br>2·69<br>0·04       | 0 1 0 0 0 | 0·24<br>·· 6·66<br>5<br>1·93<br>·· 6·66<br>0·05 |                        | 0·86<br><br>3·03<br>5·3<br>1·2<br><br>3·03<br>0·02     |                           | 3·97<br><br>9·99<br>4·9<br>1·38<br>                        | 0 0 0 0 1 0 0                    | 5·88<br>6·71<br>6<br>5·1<br>··<br>9·45<br>0·09            | 1<br>0<br>1<br>3<br>0     | 2·63<br>··<br>8·38<br>7<br>0<br>··<br>0·13<br>0·03        | 0 0 0                              | 9.44   |  |

<sup>\*</sup> Decrease.

There is a remarkably wide variation from mine to mine in maintenance and renewal cost per ton. The chief factors are the age of the mine and the general natural conditions, the latter exerting an even greater influence than the former. There has been on the whole a considerable increase in these costs over the period, due mainly to increased cost of materials and of labour. In the case of the mine with highest maintenance cost, the proportion which that cost formed of the total mining-costs in 1913 and 1918 was 10 per cent. and 18 per cent. respectively; in the case of the mine with lowest maintenance costs, the proportion is a very small fraction of 1 per cent. at each of these years.

## (iii.) RATES AND TAXES.

The variation in the ratio of taxation to amount of output is shown in the following table:—

TABLE 21.—EXPENDITURE PER TON OF OUTPUT ON RATES AND TAXES, 1913-18.

| Mine.                    |      |           |     | 1913. |    | 1914. |    | 1915. |    | 1916.        |     | 1917. |    | 1918. |    | Increase<br>or<br>Decrease. |     |                   |
|--------------------------|------|-----------|-----|-------|----|-------|----|-------|----|--------------|-----|-------|----|-------|----|-----------------------------|-----|-------------------|
|                          |      |           |     |       | 6. | d.    | 8. | d.    | 8. | d.           | 8.  | d.    | s. | d.    | s. | d.                          | s.  | d.                |
| A                        |      |           |     |       | 0  | 3.19  | 0  | 4.62  | 0  | 5.29         | 0   | 9.51  | 1  | 3.9   | 2  | 0.66                        | 1   | 9.47              |
| В                        |      |           |     |       | 0  | 3.39  | 0  | 1.98  | 0  | 3.87         | 0   | 2.62  | 0  | 8.94  | 0  | 8.15                        | 0   | 4.76              |
| $\bar{\mathbf{c}}$       |      |           |     |       | 0  | 1.6   | 0  | 1.47  | 0  | $2 \cdot 17$ | 0   | 3.12  | 0  | 6.51  | 0  | 7                           | 0   | 5.4               |
| Ď                        | • •  |           |     |       |    | !     |    |       |    |              | 0   | 0.5   | 0  | 0.5   | 0  | 0.4                         | 0   | 0.1†              |
| E*                       | • •  |           | • • | ٠.    |    |       |    |       | 0  | 2.37         | 0   | 2.31  | 0  | 2.09  | 0  | 2.27                        | 0   | 0.1+              |
| $\overline{\mathbf{F}}*$ | • •  |           |     |       | 0  | 2.15  | 0  | 2.18  | 0  | 2.33         | 0   | 1.89  | Ó  | 1.91  | Ō  | 1.95                        | 0   | 0.2               |
| Ġ                        |      |           |     |       | 0  | 0.56  | 0  | 0.67  | 0  | 0.76         | 0   | 0.9   | Ō  | 1.67  | Ō  | 1.33                        | Ŏ   | 0.77              |
|                          |      | g insuran |     |       | Ō  | 3.36  | Ō  | 5.37  | 0  | 7.06         | 0   | 3.71  | Õ  | 4.56  | ì  | 1.87                        | ő   | 10.51             |
| I                        |      |           | ••  |       | 0  | 6.875 | Ō  | 4.25  | 0  | 4.81         | 0   | 9.575 |    |       | _  |                             | ŏ   | 2.7               |
| Ĵ                        | ••   | • •       |     |       |    |       | ŏ  | 1.82  | ŏ  | 1.81         | ŏ   | 1.81  | 0  | 0.83  | 0  | 2.51                        | ŏ   | 0.69              |
| K                        | • •  | • •       | • • |       |    | :     | ·  |       |    |              | •   |       | •  |       | ĭ  | 6.9                         | -   |                   |
| L                        | • •  | • •       | • • |       |    | !     | 0  | 4.4   | 0  | 7.7          | 0   | 10.6  | 1  | 0.9   | ō  | 11.7                        |     | ·· <sub>7·3</sub> |
| M                        | • •  | • •       | • • | • •   |    | ••    | ŏ  | 0.56  | ľ  |              | "   |       | •  |       |    |                             |     |                   |
| N                        | • •  | • •       | • • | • •   | 0  | 2.59  | ŏ  | 3.17  | 0  | 5.61         | 0   | 8.79  | 0  | 8.8   | 1  | 1.48                        |     | 10.89             |
| Ö                        | • •  | • •       | ••  | • •   |    |       | U  |       | "  |              | "   |       | U  |       | 1  | 0                           |     |                   |
| U                        | • •  | • •       | • • | • •   |    | ••    |    | ••    |    | ••           |     | •••   |    | • •   |    | U                           |     | ••                |
| High                     | ogt. |           |     |       | 0  | 6.875 | 0  | 5.37  | 0  | 7.7          | n   | 10.6  | 1  | 3.9   | 1  | 6.9                         | . 1 | 9.47              |
| Lowe                     |      | ••        | ••  | • •   | ŏ  | 0.56  | ő  | 0.56  | ő  | 0.76         | 0   | 0.5   | ō  | 0.5   | ō  | 0.4                         | ō   | 0.2†              |
| 170 M                    | cav  | • • •     | • • | • •   | "  | 0.50  | U  | 0 00  | "  | 0 10         | į v |       | U  | 0.0   | "  | v · I                       | U   | 0.2               |

<sup>\*</sup> State mines.