(vi.) THE AMOUNT MINED.

In estimating the probable duration of the coal available for mining in the Dominion it is necessary to take account, among other factors, of the growth of the rate of production in the past in New Zealand. From the 1st January, 1853, to the 31st December, 1918, the quantity of coal mined in New Zealand amounted to about 48,000,000 tons, or nearly 5 per cent. of the total estimated proved coal. The following table shows the annual production of coal from 1878 to 1918 (inclusive):—

TABLE 3.—YEARLY OUTPUT OF COAL IN NEW ZEALAND.

| Year. Prior to 1878 | | Tons | Yearly Increase of Decrease. | Yes | Year. | | Yearly Increase or Decrease. | |
|------------------------|---|---------|------------------------------|--------------------|-------|------------|---------------------------------|--|
| | | | | 1898 | | 907,033 | Increase 66,320 | |
| 878 | | 162,218 | ,, | 1899 | | 975,234 | ,, 68,201 | |
| 879 | | 231,218 | Increase 69,00 | 0 1900 | | 1,093,990 | ,, 118,756 | |
| 880 | : | 299,923 | ,, 68,70 | 5 1901 | | 1,239,686 | ,, 145,696 | |
| 881 | : | 337,262 | ,, 37,33 | | | 1,365,040 | ,, 125,354 | |
| 882 | | 378,272 | ,, 41,01 | | ! | 1,420,229 | ,, 55,189 | |
| 883 | | 421,764 | ,, 43,49 | | | 1,537,838 | ., 117,609 | |
| 884 | | 480,831 | ,, 59,06 | | | 1,585,756 | ,, 47,918 | |
| 885 | | 511,063 | ,, 30,23 | 2 1906 | ; | 1,729,536 | ,, 143,780 | |
| 886 | | 534,353 | ,, 23,29 | | | 1,831,009 | ,, 101,473 | |
| .887 | | 558,620 | ,, 24,26 | | | 1,860,975 | ,, 29,966 | |
| .888 | | 613,895 | ,, 55,27 | | | 1,911,247 | ,, 50,272 | |
| .889 | | 586,445 | Decrease 27,45 | | | 2,197,362 | ,, 286,115 | |
| 890 | | 637,397 | Increase 50,95 | | | 2,066,073 | Decrease 131, 289 | |
| 891 | | 668,794 | ,, 31,39 | | | 2,177,615 | Increase 111,542 | |
| 892 | | 673,315 | ,, 4,52 | | | 1,888,005 | Decrease 289,610 | |
| .893 | | 691,548 | ,, 18,23 | | • • • | 2,275,614 | Increase 387,609 | |
| 894 | | 719,546 | ,, 27,99 | | | 2,208,624 | Decrease 66,990 | |
| 895 | ! | 726,654 | ,, 7,10 | | | 2,257,135 | Increase 48,511 | |
| 896 | | 792,851 | ,, 66,19 | | | 2,068,419 | Decrease 188,716 | |
| 897 | | 840,713 | ,, 47,86 | $2 \parallel 1918$ | | *2,034,250 | Decrease 34,169 | |

^{*} Approximate.

With the exception of one year (1889) there is a continuous growth in the annual production up to 1910. The rate of this growth remained fairly even for the two decades following 1880. The output of 1881 was doubled by the end of the following decade, and the output of 1902 was double that for 1892. The decade succeeding 1902 showed a falling-off in the rate at which production grew—indeed, an absolute decrease for the year 1911, since which date there has been an alternation of annual increase and decrease till the last two years, which both show a decrease. Table 4 shows the annual production since 1885 and the moving averages for five-yearly periods so as to bring out clearly the general trend of the movement, which is well depicted on the accompanying graphs.

TABLE 4.—PRODUCTION OF COAL, 1885-1918.

| | | | | | Annual 1 | Production. | Quinquennial | |
|------------|-------|-----|-----|-----|-----------|-------------------|--------------|------------|
| | Year. | | | | Quantity. | Log. of Quantity. | Period. | Average. |
| | | | | ļ | Tons. | Tons. | | Tons. |
| 885 | | | | ! | 511,063 | 5.70847 | 1885-89 | 560,875 |
| 886 | | | | | 534,353 | 5.72783 | 1886-90 | 586,142 |
| 887 | | | | | 558,620 | 5.74712 | 188791 | 613,030 |
| 388 | | | | | 613,895 | 5.78809 | 1888-92 | 635,969 |
| 389 | | | | | 586,445 | 5.76822 | 1889-93 | 651,500 |
| 390 | | | | | 637,397 | 5.80441 | 1890-94 | 678,120 |
| 391 | | | | | 668,794 | 5.82529 | 1891-95 | 695,971 |
| 392 | | | | | 673,315 | 5.82822 | 1892-96 | 720,783 |
| 393 | | | | | 691,548 | 5.83982 | 1893-97 | 754,262 |
| 894 | | | | | 719.546 | 5.85706 | 1894-98 | 797,359 |
| 895 | | | | | 726,654 | 5.86133 | 189599 | 848,497 |
| 396 | | | | | 792,851 | 5.89919 | 1896-1900 | 921,964 |
| 397 | | | | | 840,713 | 5.92465 | 1897-1 | 1,008,922 |
| 398 | • • | | | | 907,033 | 5.95762 | 1898-2 | 1,113,319 |
| 399 | | | | | 975,234 | 5.98915 | 18993 | 1,215,951 |
| 900 | | | | | 1,093,990 | 6.03902 | 1900-4 | 1,328,472 |
| 901 | | | | | 1,227,638 | 6.08906 | 1901-5 | 1,426,827 |
| 902 | • • | | | • | 1,362,702 | 6.13440 | 1902-6 | 1,527,207 |
| 903 | | | | • | 1,420,193 | 6.15235 | 1903-7 | 1,620,868 |
| 903 904 | • • | • • | | | 1,537,838 | 6.18690 | 1904-8 | 1,709,025 |
| | | • • | • • | • • | 1,585,765 | 6.20025 | 1905-9 | 1,783,706 |
| 905 | • • | • • | • • | • • | 1,729,536 | 6.23792 | 1906-10 | 1,906,026 |
| 906 | | | • • | •• | 1,831,009 | 6.26269 | 1907-11 | 1,973,333 |
| 907 | | | | ! | 1,860,975 | 6.26975 | 1908-12 | 2,042,654 |
| 908 | | • • | • • | • • | 1,911,247 | 6.28131 | 1909-13 | 2,042,054 |
| 903 | • • | | | ••• | 2,197,362 | 6.34191 | 1910-14 | 2,120,929 |
| 910 | | | • • | • • | | | | |
| 911 | | | | • • | 2,066,073 | 6.31515 | 1911-15 | 2,123,182 |
| 912 | | | | • • | 2,177,615 | 6.33798 | 1912–16 | 2,161,394 |
| 913 | | | • • | • • | 1,888,005 | 6.27600 | 1913–17 | 2,139,555 |
| 914 | | | | • • | 2,275,593 | 6.35710 | 1914-18 | *2,168,808 |
| 915 | | | | | 2,208,624 | 6.34412 | •• | |
| 916 | | | | | 2,257,135 | 6.35355 | | |
| 917 | | | | | 2,068,419 | 6.31563 | | |

^{*} Approximate.