

his estimate of the total thickness of coal measure strata at Sydney Harbour was 1,860 feet.

In this section there are 23 distinct coal seams aggregating 36'3" of coal, only four of which were then considered workable, viz., the Cranberry Head seam 3'8"; Lloyd's Cove seam 6'0"; Sydney main seam 6'00"; Indian Cove seam 4'8". Of the remaining 19 seams, four only are over a foot in thickness, one of these, the stony seam, having 3' of coal, but it was so split up by partings of clay and shale as to be considered valueless. All the remainder run from 2" to 1 foot only. Fourteen of the nineteen scarcely average 6" each.

From this it will be seen that the percentage of workable seams in Sydney is very small, and the average of coal to rock is about one foot of coal to every 51½ feet of strata.

So far as our investigations in the Bay St. George and Grand Lake coal areas have been prosecuted, the conditions and occurrence of coal in the series appear to be almost identical. In fact, the proportions of coal to strata in some cases would seem to be in our favour.

In Bay St. George section it has been shown that sixteen seams, aggregating 27 feet of coal altogether, have been located, and there is scarcely a doubt that others still exist which will require the use of the boring rod to locate. As stated already, no boring has yet been undertaken in this section.

According to the measurement of the sections in which coal occurs here, there is a thickness of some 2,963 feet, or about one foot of coal in every 110 feet of strata.

Of the sixteen seams mentioned, four are of the following dimensions: The Jukes', which averages 6'4"; Mur-

ray, 5"; Howley, 4'2", and Cleary seam, 2'00". It will thus be seen we have here at least four seams of workable dimensions, or the same number as at Sydney, but the latter are somewhat thicker, aggregating 20'4" for the four seams, whereas ours aggregate 17'7", the difference being only 2'10". Of the remaining 12 seams in this Bay St. George section, five are over one foot thick, being one more than the Sydney section shows.

When we turn to the Grand Lake area we find in the various sections measured, an even better showing.

On Aldery Brook there are 15 coal seams exposed in a vertical thickness of about 1,200 feet or one seam to every 80 feet of strata. Six of these again show 2'0", 2'6", 3' and 6'6"; 1'8" and 1'6", aggregating 17'2", or 1 foot of coal in 70' strata.

At Coal Brook, nine seams occur in a thickness of 720 feet, or one in 80' of strata, six of which aggregate 10'7", or 1' foot of coal to 68' feet of strata. Two of these show 2'4" and 3'5" respectively.

On Kelvin Brook in a section of 946' we have nine seams aggregating about 14'0", or one seam to about 105' of strata, or 1 foot of coal to 67 feet of strata. Three of these are of the following dimensions: 2'6", 3'8" and 6'2".

In the section near Goose Brook, 20 seams were located in about 1,000 feet of thickness, or one seam to 68 feet of strata. These twenty seams aggregate about 32 feet of coal, which gives an average of 1' of coal to every 40½ feet strata, being 10 feet less of rock to each foot of coal, than the Sydney section shows.

So you will see that the comparisons of actual coal contents do not differ so very much, and on the whole the resemblance is very striking.