

No. 15. My experience leads me to the conclusion that the Grey River coal is better adapted for gas purposes than Newcastle coal, giving as much as 11,600 feet to the ton, against 9,000 feet from Newcastle coal.

The Chairman, Native Fuel Committee,
House of Representatives.

I have, &c.,
J. I. HINDMARSH,
Manager.

Mr. ANDERSON to the CHAIRMAN of the NATIVE FUEL COMMITTEE.

SIR,— Canterbury Foundry, Christchurch, N.Z., 22nd August, 1876.

I have the honor to acknowledge receipt of your circular of the 4th instant, and beg to reply to your queries as follows:—

- No. 1. Grey River coal.
- No. 2. 35 tons; Kennedy's mine.
- No. 3. Grey River coal.
- No. 4. Nothing else but Grey River coal.
- No. 5. Grey River, almost entirely in this neighbourhood, from Kennedy's mine.
- No. 6. Coal could not be used with economy, but coke made from Grey River coal is very good.
- No. 7. The ordinary furnace is well adapted for Grey coal, but I consider the fire bars should be closer together than usual for brown coal. The pressure is 60 lbs. per square inch.
- No. 8. I believe the system now in use is the best for burning Grey coal, the fire bars to be closer for wood. The cost of the alteration required would be trifling.
- No. 9. By spark catchers.
- No. 10. None.
- No. 11. No.
- No. 12. Have made no difference.
- No. 13. Grey coal, at 35s.; brown coal, 15s.
- No. 14. Have no experience of trappen rost.
- No. 15. Consider it more economical to use Grey coal than English, Scotch, or Newcastle.

J. C. Wason, Esq., Chairman of Committee on
Brown Coal and other Native Fuel, Wellington.

I have, &c.,
JOHN ANDERSON.

Messrs. R. S. SPARROW and Co. to the CHAIRMAN of the NATIVE FUEL COMMITTEE.

SIR,— Willis Street, Dunedin, 18th August, 1876.

We have the honor to acknowledge receipt of your circular containing questions on the utility of using brown and Grey River coal on the New Zealand railways, also their relative value compared with Newcastle coal. The following is our answer to the various questions:—

- No. 1. Brown, Grey River, and Newcastle.
- No. 2. Brown coal, 30 tons per month; Newcastle coal, 15 tons per month; Grey River coal, 5 tons per month.
- No. 3. Brown coal.
- No. 4. Grey River coal; cannot use brown coal.
- No. 5. Do not know of brown coal being used. Grey River coal largely used; supply limited.
- No. 6. Brown coal not used in cupola. Grey River coal when coked equal to English and superior to Newcastle coke.
- No. 7. With land boiler in use and firing with brown coal, we work at a pressure of 60 lbs. per square inch. Grey River coal superior to Newcastle coal for steaming purposes in high and low pressure and compound engines. Low pressure from 12 lbs. to 25 lbs. High pressure from 45 lbs. to 75 lbs. per square inch.
- No. 8. The present locomotives require no alteration for using Grey River coal. Boilers and fire boxes would require to be specially constructed and of larger dimensions for burning brown coal and wood.
- No. 9. We do not know of any better method than the American double chimney now in use.
- No. 10. No difference.
- No. 11. No.
- No. 12. We make the spaces between the furnace bars closer for using brown coal.
- No. 13. Brown coal for stationary engines only 12s. per ton; Grey River for locomotives, 32s. per ton.
- No. 14. No practical experience.
- No. 15. We find it more economical to use brown coal for steaming purposes, Grey River for blacksmith purposes.

The brown coal we use is obtained from the Walton Park Coal Company, Green Island. We do not know what mine the Grey River coal comes from.

J. C. Wason, Esq., Chairman Native Fuel Committee.

We have, &c.,
R. S. SPARROW AND Co.

Mr. JULIUS VON HAAST to the CHAIRMAN of the NATIVE FUEL COMMITTEE.

Canterbury Museum, Christchurch, 11th August, 1876.

No. 6. Both Grey River coal and brown coal can be used for smelting pig iron and brass. I have compared carefully the analyses of Austrian brown coal with those of brown coal of the Malvern Hills (Dean's and Jebson's mines), and find that brown coals, which are of no better quality, or which are even inferior, are used in the large establishments of the Kaiserin Elisabeth Westbahn.