

## SASKATCHEWAN COAL.

THE HOME ARTICLE LIKELY TO TAKE THE PLACE OF AMERICAN COAL.  
 YESTERDAY'S TEST AT THE PENITENTIARY.

(*Times, 13th December, 1883.*)

Warden Bedson, of the Provincial Penitentiary, will soon be in a position to write a book of greater worth on what he knows about the fuel question than the work of the late lamented Greely on what he knew about farming. The warden has been experimenting on the subject in the institution over which he presides. The year before last he had wood burned. The next season he tried anthracite coal, which he found to be cheaper than wood. This year he began burning American soft coal. The latter article he found to be much cheaper than either wood or anthracite, but it had some very disagreeable drawbacks. In the first place it kept the institution very dirty, because of its being so dusty and smoky; secondly it makes clinkers very fast, and thirdly it was almost next to impossible to keep the boiler tubes clear—the engineer having to have them cleaned out every eight hours. Hearing so much about the success of the Saskatchewan coal the Warden decided to give it a trial, and a test was accordingly made at the Penitentiary yesterday—the President, the Vice-President and Mr. Luxton being present by invitation. The trial agreeably surprised the Warden, the coal burning much brighter than the American, making no clinkers and little ash or soot, and the engineer was well satisfied that it would not be necessary to have the boiler tubes cleaned more frequently than once in the 24 hours—a most important advantage over the American coal, which made it necessary to clean them every eight hours. The engineer, by request, prepared a written report on the test. We give it in full:—

“I have the honor to report that there were 4,000 lbs. of American coal used in twenty-four hours, beginning at 9 a.m., on the 1st inst. The average temperature of the atmosphere during the day was  $12\frac{1}{2}$  degrees above zero.

“During the following twenty-four hours there were 2,900 lbs. of Saskatchewan coal used. The average temperature of the atmosphere was five degrees above.

“The average pressure of steam whilst using American coal was 26 5-6 lbs., being a small fraction of a pound more than when using the Saskatchewan coal.

“While using American coal the wind was very high a good part of the time, which would drive the warm air out of the building, thus requiring more steam.

“There was also considerable steam required for heating water for bathing and scrubbing, which partly accounts for the amount used of American coal being so great.

“A more correct idea of the merits of the two kinds of coal would be got by finding the amount of water a ton of each kind of coal would convert into steam.”