

sections on opposite sides of the river may be totally unlike so far as regards the beds over and underlying the same coal seams.

"The shales show a variety of colours, and range from highly siliceous to those of very fine grain. Some of the beds evidently contain a large amount of colloidal material, and have to be dried very slowly to prevent cracking, but this cannot always be avoided. Some of them may be cured of cracking by pre-heating, and experiment- are now under way to determine this.

"Most of the shales of the Medicine Hat region are not refractory, and only one of the beds thus far opened up is claimed to be a good fireclay.

"The Belly River shales are now worked near Coleridge, and Red Cliff. At the former locality the shales outcrop on the slope of a steep ridge, and are said to have been tested by 80 ft. borings. The beds show the usual lenticular arrangement, and since the lenses vary in character, and are interbedded in places with sandstone, some selective mining and sorting is necessary. Among the types of clay thus far identified here by the owners are: sewerpipe, pressed brick, and fireclay.

"The shales are loaded on cars, which are run down a spur to the Canadian Pacific railway, and thence to Medicine Hat, where they are to be used at the new and extensive plant of the Alberta Clay Products Company.

"At Red Cliff, 6 miles up the Saskatchewan river from Medicine Hat, a somewhat deep section is exposed in a coulee running from the top of the cliff down to the river level. The shale bank has been opened up about half way down the coulee, and the section is somewhat as follows:—

Shales with sandstones.	50 feet.
Dark, chocolate clay, checks in drying.	3 "
Alternating shales, silts, and some lignite seams.	30 "
Lignite.	5 "
Sandy shales.	15 "
Lignite.	4-5 "
Carbonaceous shale.	2 "
To river level (concealed) about.	50 "

"The run of the bank is used for making a red, wire-cut brick, while one bed in the upper part of the bank is employed for dry press. All of the shales are red-burning, and it is not likely that any of them are refractory.

"The raw material is worked up in the recently established plant of the Red Cliff Brick Company.

"Directly across the river is another coulee, showing an equally deep section, but the beds are entirely different, and are mostly very sandy in character.