

	Acres reserved.	Acres patented.
Manitoba.		
Canadian Pacific Railway	690,000	1,939,844
Canadian Northern Railway	5,432,000	5,693
Manitoba & Northwestern Railway....	41,000	535,069
Manitoba Southwestern Railway	313,403	212,888
Great Northwest Central Railway	5,736
Total	6,476,403	2,699,230
Northwest Territory.		
Alberta Railway & Coal Co.	22,043	1,092,320
Calgary & Edmonton Railway.....	304,288	1,139,540
Canadian Pacific (main line)	8,615,738	8,645,614
Canadian Pacific (Souris branch).....	2,119,350
Canadian Pacific (Pipestone extension of Souris branch).....	200,320
Manitoba & Northwestern Ry.....	1,460,000	523,377
Manitoba Southwestern	1,044,685	72,188
Qu'Appelle, Long Lake & Saskatchewan	3,777,410	328,042
Red Deer Valley Railway.....	322,500
Great Northwest Central Railway	314,263
Canadian Northern	24,898,000
Total	42,764,339	12,115,374

Of the grant to the Canadian Northern in the Northwest Territory 2,000,000 acres are along the Manitoba & Hudson Bay Railway. As the companies follow the practice of patenting their lands only as they sell them, it may be taken for granted that the Canadian Pacific Railway has sold more than half of its original holdings. It has, however, secured the charters of branch lines like the Great Northwest Central and the Manitoba & Northwestern, to which land grants have been given. The fact that the Canadian Northern has over five million acres of land in Manitoba, of which less than 6,000 acres of land have been patented, will be learnt with general surprise.

Boiler Accidents. For month ending 15th March last there were 21 boiler explosions, killing 20 persons and injuring 9. The number killed was less than in previous month, but was very much greater than would have been the case had ordinary care been taken. In fact, boiler explosions are wholly avoidable by being placed in charge of competent engineers. A writer in "Power" considers such accidents due to those engaged in the operation, "mistaking the false or air pressure for steam and so opening the main connection at a time when there is practically no steam in the boiler, and the intruding steam, coming in contact with the comparatively cold water in the boiler, strikes a water-hammer blow that it cannot endure, and so rendering it unable to sustain the disruptive force within it. Under similar conditions some years ago I opened the air cocks when the gage registered a certain pressure, and it took half an hour longer for the "steam" to register the same pressure. In locomotives and boilers having their tubes entirely submerged in water, this element of danger would be minimized; as the heat has to pass through the water to reach the air, most of its units would be absorbed by the water. Even in those

cases the air pressure is noticeable. In boilers, however, that have super-heating surfaces directly exposed to the fire, more especially in uprights like the Hazelton and Morin, a very large heating surface filled with air is so exposed, and naturally the air will be expanded to gage pressure before the water is much more than warm, and it does not need a prophet to predict what would happen if the main connecting valve were opened just then. I may be wrong in my diagnosis of this case, but your patrons will escape the danger indicated and render the operation of "cutting in" safe if they follow these directions. Open, and keep open, your air cocks, soon after the fires are lit, and until the escaping steam becomes a nuisance. You will then know that the steam has excluded the air from the boiler; then watch your gages, and when the pressure in the boiler is slightly in excess of that in the main, gradually open your main valves and the trick is done. Don't go by sound, but sight, in this operation, for air will hiss as strenuously as steam under pressure. It goes without saying that an experienced man would never be fooled by the false pressure, as he would know that steam could never be raised in so short a time. It is also certain that too many employees would rather risk life and property than pay for experienced men. In conclusion, I would suggest that in an explosion from the above cause there would probably be two distinct reports, one due to the water hammer and the other to the explosion proper." No person should be allowed to have charge of a boiler who has not a certificate of competency, and the owners of boilers ought to be compelled to have them inspected and cleaned periodically.

PROPORTION OF BANK RESERVES, SECURITIES, DEPOSITS AND LOANS TO THE PAID-UP CAPITAL.

We present in this issue a table showing the proportion between the Reserve Fund, the Securities held, the Deposits in Canada, the Call and Short Loans in Canada, and the Current Loans and Discounts in Canada, and the paid-up capital of each one of the thirty-five chartered banks of the Dominion.

Taking the whole of the banks together those relative proportions show as follows, the paid capital being taken as at end of March last, viz., \$74,883,880:—

Call and Short Loans in Canada.		Current Loans in Canada.		Loans outside Canada.	
Total.	Ratio to Capital.	Total.	Ratio to Capital.	Total.	Ratio to Capital.
\$	Per cent.	\$	Per cent.	\$	Per cent.
48,404,884	64.64	346,292,550	462.44	69,272,093	92.54
Loans to Public of all Classes.		Deposits in Canada.		Deposits outside Canada.	
Total.	Ratio to Capital.	Total.	Ratio to Capital.	Total.	Ratio to Capital.
\$	Per cent.	\$	Per cent.	\$	Per cent.
463,969,527	619.59	372,055,591	496.80	34,877,935	46.63
Reserve Fund.		Securities Held.			
Total.	Ratio to Capital.	Total.	Ratio to Capital.	Total.	Ratio to Capital.
\$	Per cent.	\$	Per cent.	\$	Per cent.
406,933,546	543.42	45,371,899	60.59	63,599,309	84.93