

Threshing from the Stack

In the fall of 2014, Mr Bruce Black of the Brandon area let the Museum copy negatives of photographs taken on the Black farms in the Brandon area. The Museum was able to digitize the images taken from the negatives. The image here shows threshing from stacks on one of the Black Family's farms sometime around World War One and contains a wealth of details.

The separator has been pulled up between two stacks and is being fed from the two stacks. As well, there is third stack on the right hand side of the image with someone pitching sheaves off this stack onto the middle stack where they are then pitched into the separator. A sheaf is just visible in mid-air at the left hand side of the roof.

There is a building visible somewhat behind and to the right of the separator. This building has had an addition added, given the unequal height of the roof lines. The lower building appears to have been constructed out of logs with the logs chinked which would account for the horizontal streaks of alternate dark and light colors which are not equal in width. The building with the higher roof appears to be balloon frame construction sided with boards. The presence of buildings so close to sheaf or straw stacks is odd as fire was an ever present danger particularly with a steam engine operating. While the building could be a granary, it is thought not to be, due to the buildings size and the separator being some distance away from the building indicating the threshed grain is being dropped into a grain wagon. If the farmer was using a wagon to haul grain from the separator to the granary, then the granary might as well be located a safe distance away from the thresher and steam engine. The buildings are more likely barns of some sort which could use a supply of straw in the barn yard. It was a common practice in the Pioneer era to turn cattle and hogs into a straw stack in order to feed the animals. There are accounts of hogs living through the winter in straw stacks.

Given the heavy coat the young fireman is wearing they are threshing late in the fall however no snow is yet visible on the ground. The engine is being fueled by straw. In the very lefthand side of the image can be seen the corner of a straw rack which was used to carry straw to the engine. Also visible on the lefthand side of the image is a water wagon which appears to have a square wooden tank. Above the left rear wheel of the engine is a steam injector with a hose running to the water tank. When the boiler required more water, the steam injector was activated. The steam injector features a venturi which turns a low pressure, high volume flow of steam into a high pressure, low volume stream of water while pulling water into the venturi. As the stream of water coming out of an injector is at a higher pressure than the pressure in the boiler, the water is able to force its way into the boiler past a check valve. While many steam engines were fitted with high pressure pumps to feed water into a boiler, injectors were more common. However injectors needed clean water and worked better when using cold water.

The portable steam engine is thought to be an American Abell. The American Abell company had its roots in the John Abell company which was one of Canada's earliest farm machinery manufacturers. John Abell was born in England in 1822 and, some 20 years later, immigrated to Canada. By 1845 he was in Woodbridge, Ontario which was 20 miles north of Toronto working for a wagon factory. By 1847, Abell had set up an metal working shop. Abell had some mechanical aptitude and he soon built a lathe for his shop followed by his own steam engine to power the shop. He went on to build plows and later threshers. He began building portable steam engines in the 1870s followed by a cross compound steam engine in 1881. A traction engine followed in 1886.

In 1897 inspired by the heroism of a piper in the Gordon Highlanders during a military action on the Northern India frontier, John Abell named his new threshing machine line "Cock O' the North" for the tune the piper was playing. The trade mark of the company became a rooster on a stump and the Abell steam engines had a rooster cast into the smokebox door.

In 1902 with John Abell then in his 80s and no family, the Abel Company was sold to a joint company owned by the Advance Thresher Company and Minneapolis Threshing Machine Company. The John Abell company was renamed American Abell however the John Abell designs continued in production and the rooster trademark was retained. American Able was rolled into the Rumely Company in 1912 when Rumely purchased the Advance Thresher Company and bought the share in American Abell that was owned by the Minneapolis Threshing Machine Company. Production was ended in the American Abell plant and the company passed into history. Today Abell is one of the least known Canadian farm equipment manufacturers.

On Sunday July 31, 2016 the Canadian Foodgrains Bank and the Manitoba Agricultural Museum will host Harvesting Hope: a World Record to Help the Hungry. To help end global hunger, over 500 volunteers from 100 communities across Canada will operate 125 early 20th century threshing machines to harvest a 100 acre crop of wheat. When in operation, the equipment will require over four football fields of space. For more information on attending or how to participate please visit <http://www.harvestinghope.ca/> or follow us on twitter @harvesthope2016

The Manitoba Agricultural Museum is open year round and operates a website at <http://ag-museum.mb.ca/> which can provide visitors with information on Museum including location and hours of operation.



Given the heavy coat the young fireman is wearing, the Black Family is threshing late in the fall. More than likely the young fireman is being supervised by an older man as operation of a steam engine was taken seriously in the pioneer era between the expense of the engine and the dangers of steam which they were all aware of. However young the fireman was, he appears to be doing a good job as the stack is running "clear" with just the exhaust steam being visible. Black smoke was a sign of incomplete combustion which meant heat and money was escaping up the stack. Incomplete combustion was not such a big issue when burning straw, but if one was burning coal or wood, one could expect to hear from the boss!