



# SASKATCHEWAN RAILWAY MUSEUM NEWS

The Saskatchewan Railroad Historical Association Newsletter

Winter 2014

Volume 24, Issue #1

## Museum News:

### SRHA holds AGM

This year's SRHA Annual General Meeting was held at the Western Development Museum in the Palace Hotel in Saskatoon on January 25, 2014 at 2:00 p.m., with 14 members in attendance.

The first order of business was the presentation of awards. This year Gail Byrnes and Art Vessey received the Achievement award for their long and dedicated service to the SRHA.



*Gail Byrnes and Art Vessey receiving Achievement award from Chair, Cal Sexsmith*

Following the Award presentations, members were asked to review and adopt the minutes from the 2013 AGM.

Chairperson Cal Sexsmith then presented his Chairs report which highlighted 2013's accomplishments and some of the objectives for 2014.

Treasurer Lynda Thiesen reviewed the SRHA's 2013 finances, and presented a motion to waive the requirement for an audit following which a vote was held and carried.



The following Annual reports were made available to members at the AGM.

- Chair's – Cal Sexsmith
- Treasures – Lynda Thiesen
- Gift Shop – Lynda Thiesen
- Curatorial – Cal Sexsmith
- Streetcar – PJ Kennedy
- Planning – Terry Enns
- Employment – Terry Enns
- Publications – Fred Tatler
- Tours – Gail Byrnes
- Argo Station – Bill Rafoss
- Oban Tower – Keith Flory
- Stairs, Platforms & Handrail project – Keith Flory
- Attendance – Cal Sexsmith

Following the presentation of the Committee Reports Chair Sexsmith presented the proposed revision to the Bylaws by adding and revising 5.2.3 to Junior Membership, and as a result the existing Bylaw 5.2.3 Friend of the Museum and 5.2.4 Honourary Life Member would become 5.2.4 & 5.2.5 respectively.

After some discussion the draft proposal was amended to allow for the sponsor to designate another member to attend the Museum with the Junior Member if the sponsor is unavailable. It also stipulated that the Junior Member while unable to vote, would be encouraged to attend meetings and participate in any discussion that would take place.

The new SRHA Board of Directors for 2014 will consist of existing Directors Cal Sexsmith for another two year term, and Keith Flory, Fred Tatler and Bill Rafoss who have one year remaining in their two year terms.

*SRHA Board of Directors for 2014 (clockwise from upper left corner) Bill Rafoss, Keith Flory, Cal Sexsmith & Fred Tatler*



Stepping down from the Board of Directors in 2014 were Norm Dyck after serving a one year term, and Terry Enns who had served for a two years. For their service on the Board of Directors, both Norm and Terry were presented with an engraved tie spike acknowledging their contribution to the SRHA. Following the installation of Board members, Chair Sexsmith called for a motion to adjourn the AGM.



*Norm Dyck and Terry Enns receiving tie spike from Chair, Cal Sexsmith*

Following the AGM, a short membership meeting was held to review the new proposed meeting schedule for 2014.

Also on the agenda, were upcoming events that the SRHA will be participating in, and the membership was informed that Railway Heritage day will be held on July 6, 2014.



With no formal banquet again this year, members were invited to attend a no host supper at the Solonika Inn restaurant. 10 members were in attendance at this year's supper, and a good time was enjoyed by all.

## New Executive back on track for 2014:

Following the AGM it is a requirement that the Board of Director appoint from within, one member to chair the Board. Cal Sexsmith the outgoing Chairperson was acclaimed for 2014, having assumed that role of Chairperson midway through 2012

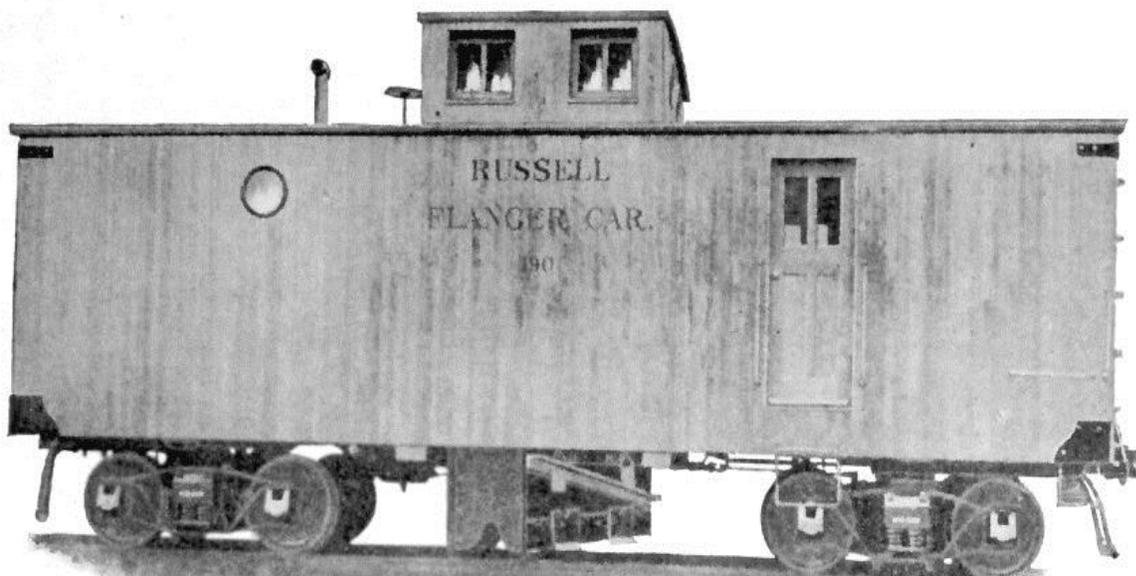
The first order of business for the new Board of Directors will be to set out the budget for 2014, so it can be brought to the membership for ratification as soon as possible. The BOD will also be assigned portfolio responsibilities, and will finalize a new meeting schedule to be brought to the general membership for ratification.

The Board also asked Terry Enns if he would assume the new role as Financial Administrative Officer (FAO). Terry will be responsible for researching, writing and submitting funding requests and grant applications.

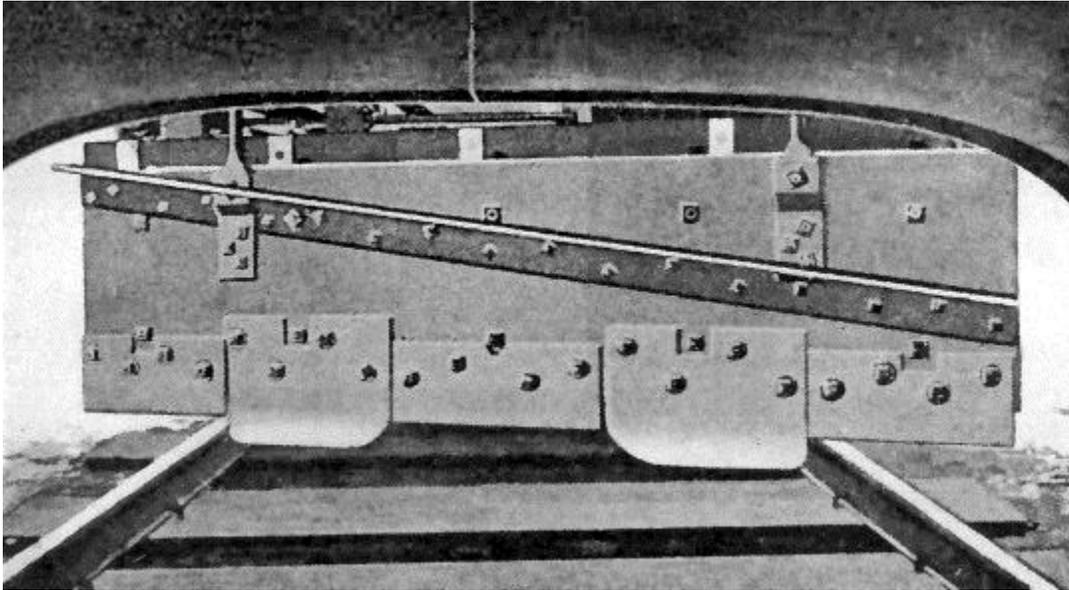
## The Railway Snow Plough:

part 2

## The Flanger



While this may look like any old caboose, you can see extra equipment mounted below the centre of the car. It is not a caboose; it is a 'Flanger' [car]. The reason for the 'caboose cupola' will become apparent in a minute. A tiny detail ... plows and flangers can come in 'single track' or 'double track' models. A 'V' nosed plow works OK on single track. For double track, you want to dump the snow only on ONE SIDE - like plowing a highway today.

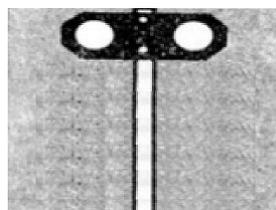


The flanger above dumps to the RIGHT side making it a double track model.

While the snow may have been plowed from above the rails so trains can run normally after a storm, an accumulation of snow and ice within the track structure will cause damage in the longer term, particularly with repeated freeze and thaw cycles.

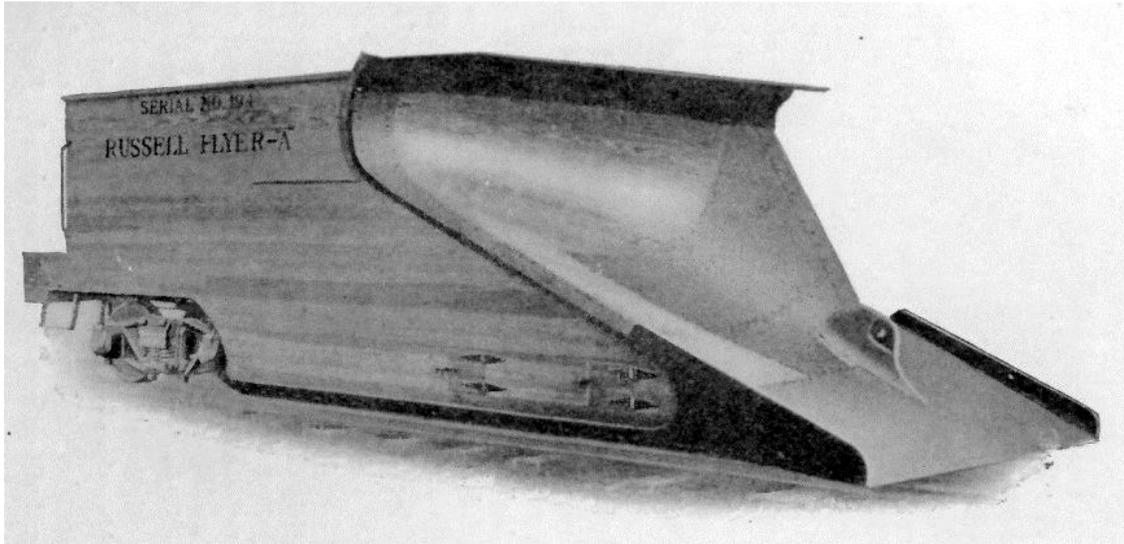
The metal flanger [assembly] above fits into the paths the wheel flanges will follow and also clears excess snow and ice from the ties and ballast. Usually the Flanger [car] was given additional weight with built-in scrap metal to ensure it didn't ride up on ice and derail. The flanger assembly is also very, very, good at removing everything else from between the rails. Timbers at level crossings, switch assemblies, 'guard rails' - the extra track rails laid on bridges and passenger platform crossings at stations. So ... you get someone up in that cupola who knows the road well, usually a senior maintenance of way person, to raise the flanger assembly before it removes the hardware which the railway would prefer to leave down there between the rails.

If you have ever noticed the black and white sign beside the tracks (two circles on a contrasting board) it is a Canadian style reminder to 'lift the flangers' and is often referred to as a 'snowplow target'.



## Plows Built as Separate Cars

Steam locomotives were designed to pull trains, not to plow with a 'destroyer ramming bow' attached to the cowcatcher. The railways started to operate larger specialized pieces of rolling stock which could be quickly coupled on the front of a locomotive or a regular train during a snow storm.



So here is an early version of a 'snow-plough'. The snow rides up the shovel nose. When you go faster, the momentum throws the snow clear of the right of way. Later, be sure to come back with your flanger to tidy up.

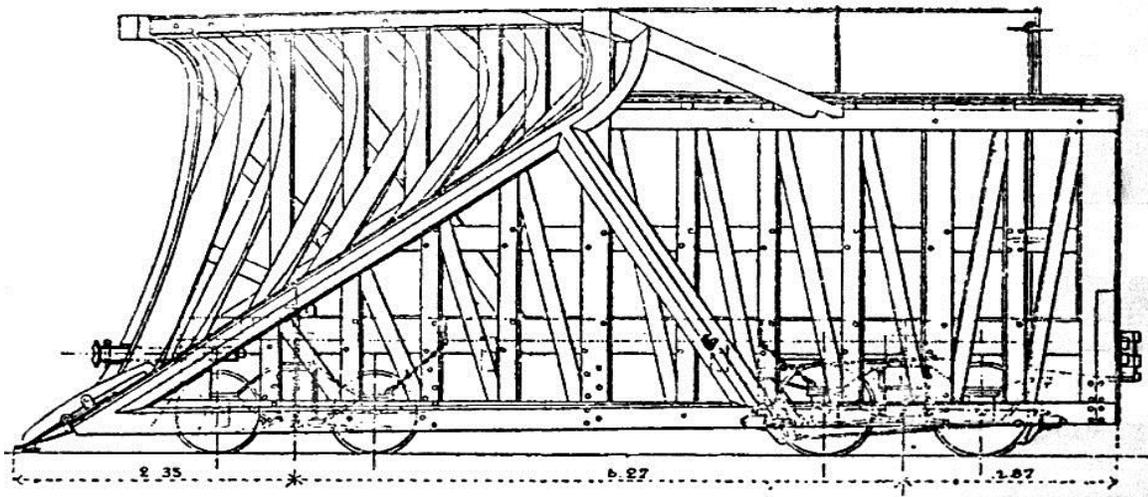


FIG. 303. — Chasse-neige sur véhicule.

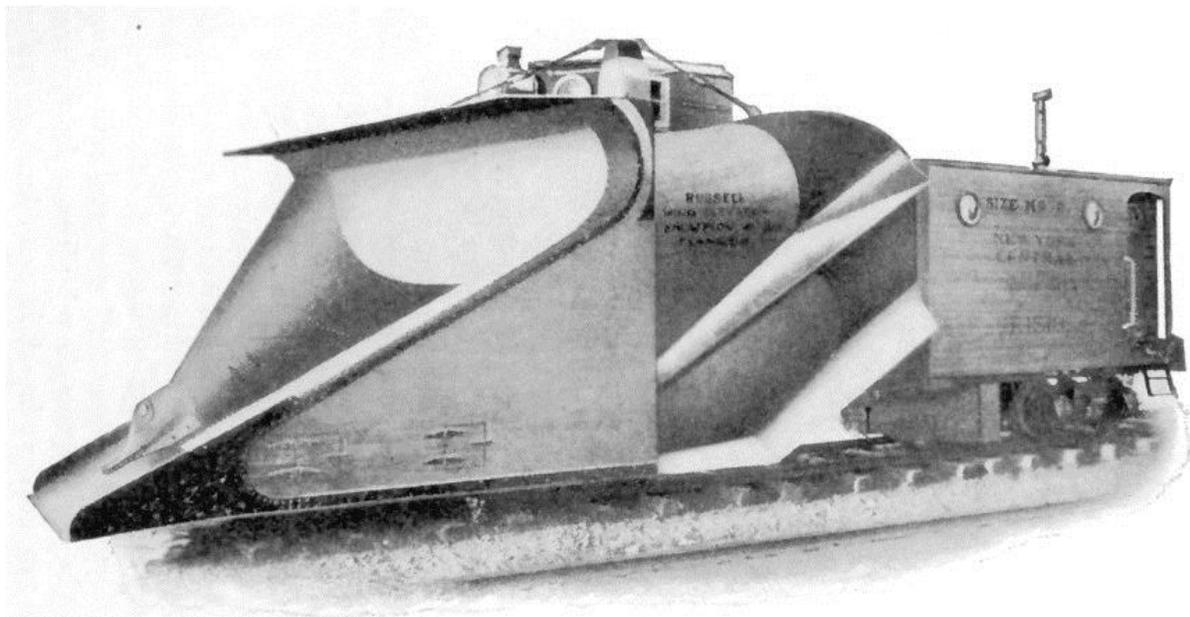
From a comprehensive 1907 railway textbook from France comes this nice view of the internal framework of a snowplow. It has a flanger and a hand brake acting on the rear truck to prevent the car from rolling away on you.

## ***The Russell Plow***

*The plow that has everything!*

*A 1915 textbook on winter track work gives some good detail on The Russell Plow.*

*"Probably the best known push plow is the Russell Plow, which was introduced in Canada in 1885 and used on the Intercolonial Railway for some years before it was used to any extent by the railways of the United States, where it is now operated over many lines. This plow is a large, well and strongly-built machine. It is designed for both single and double-track use, and is built on especially strong trucks and sills. The mid rib which forms the cutting edge starts 5 ft. or more back from the nose of the shovel. The weight of snow carried on top of the shovel is considerable and the weight of a drift when the shovel is pushed into and under it is so great that a special truck is used with journals on the inside and outside of each wheel to keep the wheels from running hot. This weight of snow, of course, also bears on the mid rib which must be made of a heavy beam of the toughest kind of wood. A special heavy middle beam or power bar is laid between the middle sills of the car from end to end, the draw bar being on the rear end and the front end framed against the mid rib of the nose of the plow.*



*"The rear part of the Russell plow is a little narrower than the front, so that the snow does not crowd so close as it otherwise would. The doors are at the sides and rear end, and open into a narrow end room. One inside door opens from this rear room into the main room where the wing gears and compressed air cylinders are set. There is a stove, fuel box and tool box in this room. A short stairway leads to the cupola or lookout, which has seats for two, one seat on each side behind a small lever which controls the movement of the wing. There are side windows and front port windows in this cupola. The nose of the shovel, the wings and all parts against which the snow presses are armored with steel plates, the outside surfaces being quite smooth. The outside of the car is made of dressed and matched lumber carefully planned and varnished so as to be as smooth as possible to slip through the snow.*

*"A Russell plow should throw average snow over a fence 50 ft. from the center line of track when going 50 miles an hour. Such speed is of course not always safe, especially in hard or old snow where ice may have formed over the rail. A Russell plow off the track is usually a serious proposition. In the first place the opening of the road for traffic depends on the plow's performance. If derailed, traffic may be held up and the track department may be powerless to help without the plow. Again, in snowy weather, re-railing any car is not easy. The re-railing frogs must be spiked to prevent slipping and snow must be brushed away at every move to see what is next to be done. Tools are easily lost in snow and slippery rails add to the trouble. The Russell plow sets close to the rail. It is very heavy in front and hard to get under or to see under unless one can look through the "peek" doors at the sides of the front truck. The wings are close to the rail and may be jammed or knocked loose when the plow is derailed. In fact, great care must be used when backing a Russell plow around a wye or over switches on curves to be sure that the heels of the closed wings do not strike guard rails, crossing plank or other objects outside the rails. The modern Russell plow is a big car. It is heavy and hard to re-rail. On the other hand, it is very strong, and will stand a lot of hard use without serious harm, if properly handled.*

*"The Russell plow is made for single-track and for double-track and in various sizes and styles, with and without compressed air for wings and flanges.*

*"The single track plow is made to throw snow each way from the center of the track. Right and left-hand double-track plows are also made, which throw to one side only. The power bar of the Russell plow and of all other first-class push plows has a side play of a few inches at the rear end to allow for free movement around curves, the amount depending on length of car and sharpness of curve. Wood alcohol for freeing window and port hole glass from frost should always be carried on a snow plow as well as flags, torpedoes, coal, bell cord, brooms, snow shovels, picks, axes, bars, spike mauls, track gage and rail fastenings, lanterns, wicks and matches."*

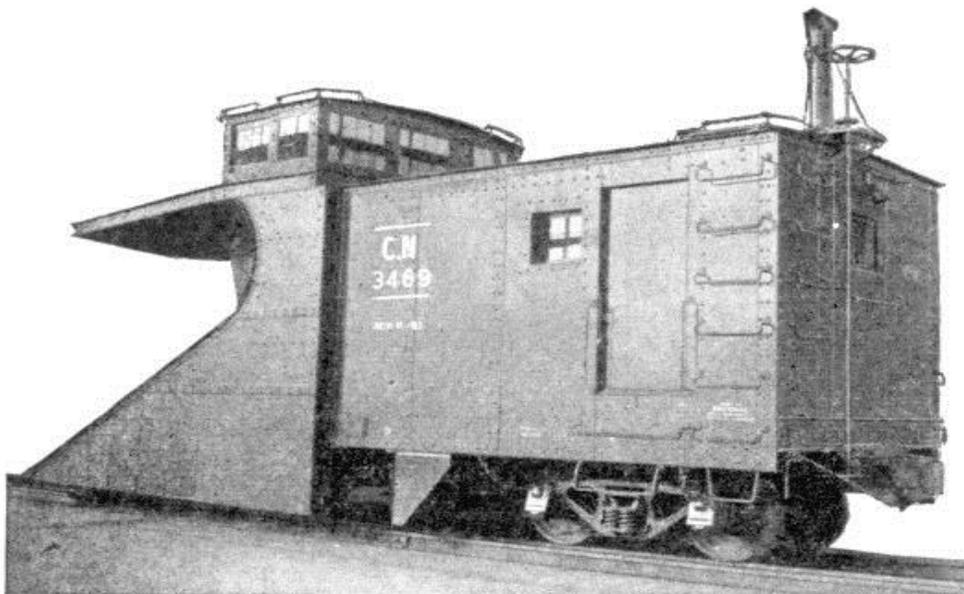
*Notice the extendable wings to throw the snow farther to the side, located beside the operator's cupola. A flanger assembly box hangs below the first porthole. Coal stove, recessed entrance door. In front of the cupola is the snow plow's headlight so you can work safely at night.*

## **Canadian Railway Plows**

Built by Angus Shops in 1931, this CPR plow has an 'all in one' flanger/plow arrangement. The lowered flangers at the front scrape right to the bottom of the snow mass and everything slides up the shovel nose. 'Canadian Pacific' is painted on the extendable wings and you can see the four hinges on which they'd swing out.



From a 1954 National Steel Car (Hamilton) advertisement ... *a new plow for the narrow gauge CNR in Newfoundland. No fancy wings for Newfoundland.* The flanger seems to be mid-plow. As part of CNR, just after joining Confederation in 1949, Newfoundland was early to dieselize. With diesel locomotives and new plows ... I wonder if this spelled the end for Newfoundland's steam rotary snowploughs.

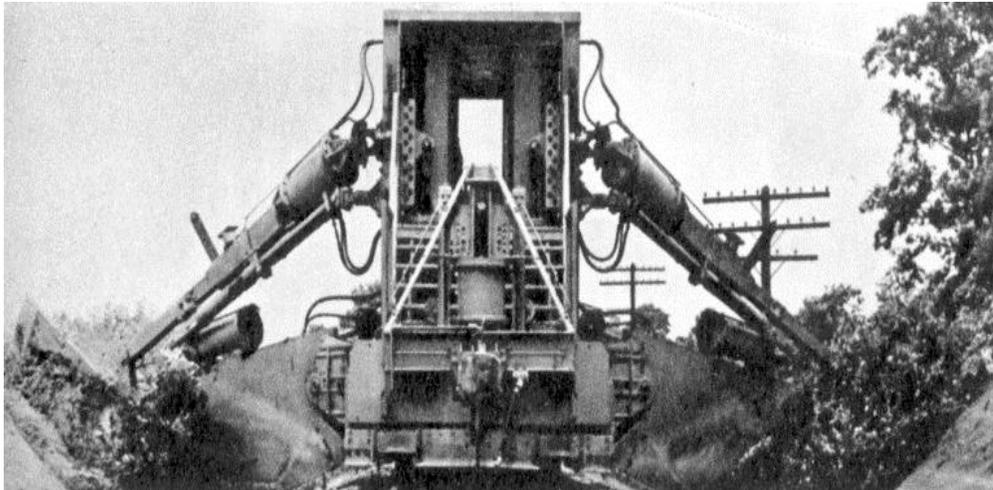


*Illustrated is one of 12 snow plows recently delivered to the Newfoundland Division of Canadian National Railways.*

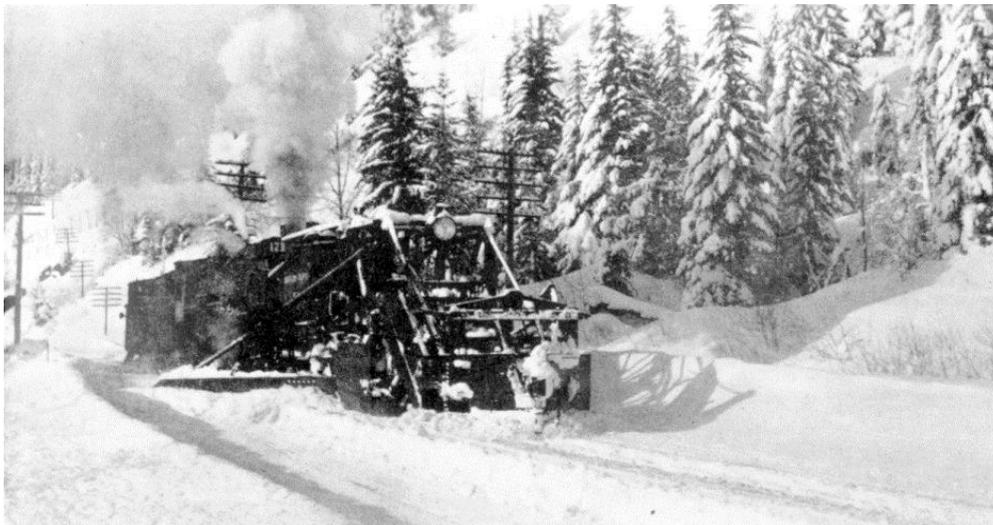
## The Spreader

*Often referred to as a 'Jordan Spreader' after one particular builder: O.F. Jordan Inc. of Chicago.*

Snowplows using wings can throw snow back quite a distance; however, the plow must be travelling fast enough to give the snow mass good momentum. You can't travel at high speed within yards or sidings ...you can't plow by passenger stations at high speed ... You need a plow which has the power to move the snow away without the speed.



A 'spreader' powered blades can be positioned to plow, or they can be moved against a load, with great flexibility for spreading fresh ballast, plowing snow, or clearing brush to show off. Like a snowplow, this equipment would be coupled to a locomotive - it is not self-propelled.



Circa 1930 or 1940 a Jordan Spreader on the Northern Pacific has its right wing extended, probably to 'spread' a siding. It is being propelled by a steam locomotive with a caboose behind - notice the marker on the tail end.

Excerpts from Railway snowplow and Flanger development.

## Museum Snow Ploughs

The Museum has three snow ploughs in its collection, two *Wedge type* “Prairie” ploughs and one Jordan Spreader.

### **Canadian Pacific #400657**

Built by Canadian Pacific Angus Shops Montreal in 1913, this snow plough was donated to the Museum by Canadian Pacific in 1995 along with Sleeping Car Kirkella and was one of the earlier acquisitions by the SRHA.

### **Canadian National #55229**

Newer than the Canadian Pacific plough, CN 55229 was built in 1928 by the Canadian Car and Foundry or CC&F, in Montreal. The SaskPower generator car was also built by the CC&F in their Montreal shops. 55229 was acquired from CN in 1999 for a tax receipt for the scrap value of \$13,000.00.



Canadian National #55229 and Canadian Pacific #400657

### **Canadian Pacific #402871**

The third plough in the Museum's collection is a Jordan Spreader, which like the Wedge type ploughs, were used in all Regions of the country. The Jordan Spreader; however, is not only used to clear snow from the right of way, but can also spread ballast, clean and dig ditches as well as trim embankments.

The type A series Jordan Spreader acquired by the Museum is a center cab, mid blade, broken wing type, and was primarily used on the CPR line south of Moose Jaw. Built by the O.F. Jordan Company in 1950 as Car # 836, it was donated to the Association by Canadian Pacific in 2002.



Canadian Pacific #402871

### **Did You Know?**

That Flanger boards on the Canadian Pacific Railway are black dots on a white background, while Canadian National Railway are white dots on a black background.

## Can you see a difference?

When referring to a “Prairie” or “Mountain type wedge ploughs, what is the difference?

As you can see in these photos, the “Prairie” ploughs at the Museum have an upper canopy or over hang that directs the snow to the side so it does not obscure the operator’s vision, and are designed for dry snow conditions.



This CP “Mountain” type plough 401027 on display at the Revelstoke Railway Museum, is designed for wet snow and has no canopy so that there is nothing for the snow to stick to. Snow is also directed in a more upward fashion rather than to the side like the Prairie plough.

Ploughs were also built to direct snow in one direction like CP 400798. These were generally used on sections where double tracking or sidings existed so snow being ploughed would not cover the second track.

And then there are the oddballs like CN 55697 pictured below. These double ended ploughs would have been used on branch lines with no turning facilities.



## Chair's AGM Report

I'd like to welcome everyone to the 2014 Annual General Meeting of the Saskatchewan Railroad Historical Association. The AGM is the time to reflect upon the previous year and to look forward to the coming season.

A number of significant projects were underway during 2013. Thanks to Keith Flory and the Wednesday crew the siding was replaced on the south side of the Oban Tower and the new stairs were installed, allowing this significant artefact to be re-opened to the public. Bill Rafoss completed the exterior painting of Argo Station and the interior of the freight shed, which has now become our on-site meeting room. Finally the roof of the Kopko Centre was replaced by a contractor. Annual donations by the Kopko family funded this project. Projects that didn't quite work out the way we planned was the work on the Trackmobile and Rettalack Station.

During the winter we participated in both the Saskatoon Heritage Fair and the Saskatoon Train Show. On June 22 we had an open house for prospective members and signed up four regular and four family members that day. Finally we held Railway Heritage Day a few weeks later than usual (Trying to outsmart the rain) on July 27 with 123 members of the public attending. We wrapped up the Museum season with a barbeque on Labour Day. Finally, on October 19 we held the AGM for the Canadian Council for Railway Heritage.

Looking forward to 2014 the Board will be presenting a budget to the membership this spring that will spell out our priorities for the year. In addition to increasing our membership we will also be proposing a number of restoration and maintenance projects. Although the list is not yet finalized some of the potential projects include: replacement of the second floor Argo Station windows, Installation of one or more semaphore signals at Oban Tower, Repair of the Trackmobile, Preservation of a portion of the Rettalack Boxcar in the Kopko Centre, repair of Kopko Centre windows, and restoration of the wood boxcar. Each of these projects will require three things to be successful: 1) A Project Leader to oversee the project, 2) funding, and 3) volunteers to carry out the work.

In closing I would like to thank the members and volunteers who made it possible to keep the Museum going, the summer staff who were our face to the public, the Treasurer and Secretary who kept the administrative wheels turning, and the Board of Directors who helped with all of the behind the scenes tasks.

Cal Sexsmith, Chair

## Upcoming Events:

Coop Brunch – Mother’s Day May 11, 2014 @ 33<sup>rd</sup> St & 8<sup>th</sup> St locations

Museum opens May 17, 2014

## Calendar of Upcoming Events:

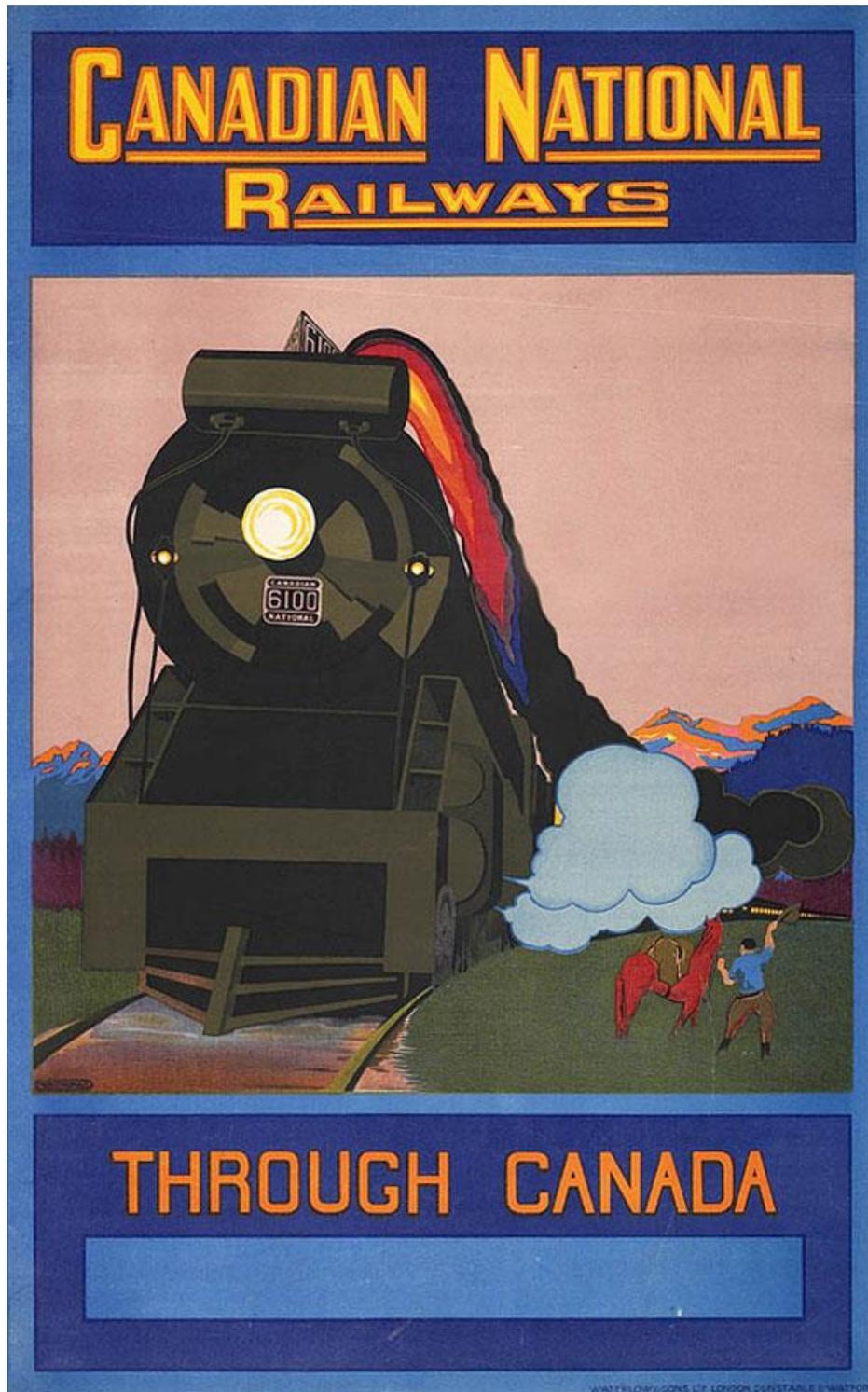
Date:	Event:	Location:	Time:
March 1, 2014	Board Meeting	Cal Sexsmith’s	10:00am to 12:00pm
March 15, 2014	Membership Meeting	WDM	10:00am to 12:00pm
April 5, 2014	Board Meeting	TBA	10:00am to 12:00pm
April 26, 2014	Work bee & BBQ	Museum	10:00am to 4:00pm
May 10, 2014	Board Meeting	Museum	10:00am to 12:00pm



If you have any comments or submissions please forward to the editors Fred Tatler and Terry Enns at [Newsletter@SRHA.org](mailto:Newsletter@SRHA.org)

Views expressed in the Newsletter are not necessarily those of the S.R.H.A. or the editors. Submissions of photographs and articles are actively encouraged and should be addressed to the editors. All other enquiries regarding the S.R.H.A. should be addressed to the Association.

Next Issue:



Canadian National promotional poster circa 1930