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NEXT ANNUAL MEETING at Hamilton, Ont., Oct. 10,
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Melinda Street, Toronto.

NEXT ANNUAL MEETING at Montreal, Oct. 16, 1900.

Another matter that does not appear to be
sufficiently dwelt upon in connection with
railways, is the almost absolute safety of rail-
way travel under present conditions. The
old stage coaches of England killed 1 in 1,000
of their passengers. The railway companies
of Canada kill only 1 in 1,000,000. This is
nearly as safe as the position of United States
generals in the Philippine war. But we kill
a great many walking on the track. Ninety
people lost their lives this way in Canada last
year, & 40 more were killed in jumping or
falling off the train whilst in motion. The
railway companies can hardly be blamed for
killing people of this description. If they
have not sense enough to get off the track
when the whistle blows, or to remain in their
seats till the train stops, they are evidently
out of place in this world of sin & misery, &
may possibly be happier somewhere else.

We often hear a good deal about the excel-
lencies of our Ontario system of education, &
due credit is given to the memory of Dr. Ryer-
son & other distinguished gentlemen concern-
ed in its development. But no credit is ever
given to the railway companies for the rev-
olution they have effected in the science of ge-
ography. In the old maps it was a laborious
process to trace the way from one point to an-
other. The surveyors seemed to have no
idea of order or system, but put the towns
& villages promiscuously all over the map
in a most disorderly & irregular man-
ner. But all this has been changed by
the railway companies, & now we have
the towns & cities in a straight line direct
from every man's doorstep to wherever he may
want to go. The value of this improvement
can scarcely be over-estimated, & I think it is
but fitting that at a meeting like this steps
should be taken to have the services of our
railway geographers properly recognized by
the Minister of Education.

Railway Cattle Guards in Ontario.

At the instigation of the municipal council
of North Dumfries, the various township coun-
cils in Ontario were invited to send delegates
to a meeting which was held in Galt recently,
the object as stated in the notice being "to
consider the best means of forcing the railway
companies to construct more effective cattle
guards than the new kind recently devised
and now being substituted for the old on
nearly all the lines of railway." Twenty-four
delegates were present. In the discussion
nearly all the speakers condemned the cattle
guards now in use, but did not suggest any-
thing better, though some of them expressed
a preference for the old pit guards. The
most practical remarks were made by J. D.
Moore, M.L.A., who said that before going
before the Railway Committee of the Privy
Council he advised that the deputation should
acquaint themselves with all the facts, for the
committee would be sure to be confronted
with such questions as—in what particular
are the present cattle guards ineffective? If
they are ineffective, why did the railway com-
panies, which usually move forward in im-
provements, change from the old style? Rail-
way companies are generally careful about
such matters, as one accident might cost them
more than the cost of all their cattle guards.
It was resolved, "that as it is clearly
manifest from the expressed views of the
delegates that the cattle guards now being

constructed by the railway companies are
grossly inefficient & totally unfit for the pur-
pose for which they are designed, freely
admitting cattle to the railway tracks as well
as constituting a grave source of danger to
the travelling public, that a committee be
appointed to convey the sentiments of the
meeting to the Railway Committee of the
Privy Council & urge the necessity for
compelling the railway companies to ob-
serve the Railway Act by building guards
that will effectively safeguard the interests of
the farmers & the travelling public."

The Railway Act 1888, sec. 194, &c., pro-
vides that when a municipal corporation for a
township has been organized, & the whole or
any portion of the township has been survey-
ed & divided into lots for settlement, fences
shall be erected & maintained on each side of
the railway with gates, &c., & cattle guards
shall be provided at all railway crossings, suit-
able & sufficient to prevent cattle & other ani-
mals from getting on the railway. In New
Brunswick, Nova Scotia, & P. E. Island, wher-
ever a county municipality has not been sub-
divided into local municipalities, each improved
or occupied lot of land is to be protected by
fences & cattle guards, &c. After such fences,
gates & guards have been provided, & while
they are duly maintained, no liability shall ac-
cure for any damages, unless the same are
caused wilfully or negligently by the company
or its employes.

Section 271 of the same act provides that
no horses, sheep, swine or other cattle shall
be permitted to be at large upon any highway
within $\frac{1}{2}$ a mile of its intersection by any rail-
way at rail level, unless such cattle are in
charge of some person to prevent their loiter-
ing or stopping on the highway at the inter-
section. If cattle at large contrary to the
provisions of this section are killed or injured
by any train at a crossing the owner shall not
have any right of action against any com-
pany in respect of the cattle being killed or
injured.

The pit cattle guards which were formerly
almost entirely in use were a menace to the
safety of every train, as in case of a wheel
getting off the track & running into the pit
a wreck would inevitably result. They are
also objectionable from a sanitary standpoint,
especially in and near towns & villages, ow-
ing to their holding stagnant water, dead
animals, etc., etc.

The surface cattle guard now used by the
G.T.R. is made of $1\frac{1}{4}$ inch dressed oak, 8 ft.
long, set on edge & kept in position by $3\frac{1}{2} \times 3\frac{1}{2}$
ins. oak blocks. We are informed that it is
of a pattern that has been generally adopted
by the trunk lines in the U.S., after inspec-
tion & approval by various state boards of
railway commissioners & that it is considered
just as effective for turning cattle as the old pit
guards, without the consequent danger to
trains.

The standard cattle guard now in use on
the C.P.R. lines east of Fort William is made
of wooden slats, cut in triangular shape, from
6x6 inch timber, the slats being laid on their
sides, paralld with the rails, and spiked to
the ties about 2 ins. apart. The management
is considering the use of a more effective
wooden surface cattle guard, or the adoption
of some metallic cattle guard.

The surface cattle guards now in use by the
G.T.R., the C.P.R. & other lines in Ontario
are undoubtedly quite sufficient to stop cattle
etc., which may be driven over the crossings.
Probably no guard is sufficient to prevent
stray animals determined to walk the track
from getting there. But these animals should
not be at large & before asking the railways
to provide more efficient guards the municipal
councils should enforce the statutory law pro-
hibiting animals from straying on the high-
ways. Going to the Railway Committee of the
Privy Council at this stage is starting at the
wrong end.