

CIVIC PUBLIC WORKS

SEPTEMBER 1989

\$4.75



COVER STORY

**Include a broom
in your snow-clearing
equipment inventory**

BUYERS GUIDE to products for
SEWERAGE AND WATERWORKS

Include a broom in your snow-clearing inventory

This winter, several Ontario municipalities will be using small tractors equipped with a power angle

sweeper to remove snow from sidewalks and parks instead of the usual snowthrower or plow.



A Trackless MT IV tractor sweeps snow from a subdivision street.



Another Trackless, in Ottawa, leaves Works yard to clear local streets.

One of the reasons public works departments are making the switch from plow to broom is the substantial increase in the number of inlaid brick walkways that have been put in place in city centres and parks during the last 10 years.

The broom, usually made of a poly-steel mixture, does not chip the brick. It gets right down to the surface, lifting snow and ice, even from the grooves. And if conditions are right, use of a broom can virtually eliminate or substantially cut the use of salt or sand.

There are several small tractors on the market that have been designed to take a variety of attachments for year-round municipal use, among them are Trackless, Holder and Boschung. The Trackless MT IV tractor, for example, features a scissor frame that automatically centres the sweeping pattern in front of the machines as it is angled. There is maximum maneuverability because of the combination of articulated steering and the self-centring sweeper head. The plow is hydraulically driven.

Some municipalities are using tractor-equipped sweepers on concrete sidewalks because they find it does a better job than a plow if the snow is not too deep, although in this application the broom works best if there is not a build-up along each side of the sidewalk.

The broom is very practical in areas of light snowfall. In areas where the snowfall is heavy, municipalities use the broom for the first two or three snowfalls and then the plow takes care of the additional accumulation until it is necessary to use a snow blower.

Oshawa, Ont., uses the broom to sweep its streets. Lionel Vincent, fleet supervisor says, "We bought two machines last fall and used the broom last winter and it worked quite well on the sidewalks. In our downtown area we have interlocking brick sidewalks and found that the brooms

work better than a plow.

Niagara Falls streets superintendent Joe Gruninger says, "We use the brooms a lot for snow removal. There is a limit to how far you can go with them but we found that dry powdery snow works best up to about 15 cm and that's about the maximum. Wet snow is a little harder because it tends to stick in the brooms, although it will still do the job. I would say the limit would be 5 to 8 cm at the most, when the snow conditions are such. When the snow is dry and powdery the broom does an excellent job. It cleans the snow right down to the bare concrete and makes it very safe to walk on. If you get out early enough before pedestrians get out on the sidewalk you don't need to spread any salt. The broom works well on inlaid brick and clears it right up. In fact with the amount of snow we've had in the last three years, we've probably used brooms more than anything else. It's also a much faster operation."

In Brantford, Ont., the sidewalks were widened in the downtown core and interlocking brick laid. That's when the city decided to purchase the

brooms. Equipment foreman, Fred Bradely says, "We go through our downtown with the brooms because we have an awful lot of interlocking brick. We use the poly-steel mixture brooms. Last winter our snowfalls were mostly one or two inches of snow and we swept our streets and sidewalks the whole season. I find the broom to be very efficient and reliable.

"So far we haven't had any problems with chipping the brick. The men like driving them and we've had no complaints from them. When the men like running the equipment they seem to run it better."

The city of Kitchener uses the broom as well. Foreman Bob Myers says, "We use the brooms every snowfall unless it's packed down or frozen. If it's really heavy and packed down before we get on it we go to the blades. But normally for the light dry snow, if we get on it right away, we use the brooms. Sand is not necessary as long as there isn't any ice.

"We run two brooms in tandem, one taking away from the side of the building towards the street and the other taking the second cut to take it

closer to the gutter.

"We've had a lot of use with the broom on brick sidewalks. You can catch brick with the blade, whereas the broom goes over the top. For the versatility of the machine and what we can do with the broom, the cost of replacing the broom is negligible."

In Peterborough, Ont., maintenance supervisor Bob McElroy says, "We have used the broom for sweeping snow on sidewalks but we found that only if we get the right temperature and the right depth of snow that the broom worked very well. We have a canal here in the city and we have used the broom for sweeping that for skating purposes. It is also used for sweeping ice rinkgs. The broom is cleaner."

Doug Cadman, president of Trackless Vehicles Ltd., Courtland, Ont., says that the maintenance of the sweeper involves periodic replacement of the brush. The seasonal maintenance cost should be less than the cost of replacing plow cutting edges and skid shoes. He says, however, that maintenance on the sweeper can be higher than the plow if it is mechanically driven. ■



Today's Trackless MT7 with a Power Angle Sweeper, also made by Trackless Vehicles.