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ELECTRIC SNOW SWEEPER.

In our cities and large villages, where getting about depends almost entirely upon street cars, every one knows how vexatious travel is made by a little snow. When horses are used as the motive power the extra resistance offered by a few inches of snow on the track necessitates the use of one or more additional pairs of horses to each car: and when, as in the case of a heavier fall of snow, it becomes necessary to bring out the snow plow, it is not uncommon to see eight or ten pairs of horses working hard to clear the track. Under conditions like these, the electric railway has peculiar advantages in having a large surplus of propelling power, as well as almost unlimited power for direct application to the work of clearing away the snow.

We give an engraving of a snow sweeper which can move along the track at any desired rate of speed, and at the same time, with an independent set of motors, drive a set of rotary steel brushes with any amount of power and without being dependent in any manner upon the motion of the sweeper along the track. The machine which we illustrate was used during last winter in Duluth, Minnesota, Spokane Falls, Washington, and West Superior, Wisconsin, keeping the tracks clear, and permitting of uninterrupted travel.

The experience of last winter has dictated but one or two improvements, which are being applied to the new machines now being built. One of these improvements

consists in projecting the steel brushes, or fliers, farther beyond the steel plates, and providing an adjustable snow deflector for preventing the snow from being thrown too high in the air.

Our illustration, which is from a photograph, shows what street railways often have to contend with. Our readers know very well how long it has taken for the first street car to work its way through after a storm. These sweepers, as already intimated, possess plenty of power to rapidly dispose of the snow and keep the tracks free and clear for continuous traffic. Our engraving shows in a general way the construction of the improved sweeper. It is provided with two diagonally arranged rotary steel brushes, one at either end. The one at the advancing end of the machine is the one used, the other remaining at rest until the sweeper moves in the opposite direction. The motors used for driving the machine forward on the track are of the usual waterproof type; and those used for driving the rotary brushes are similar to those used for driving the machine forward, except that they are wound to secure a normal speed of 1,200 revolutions of the armature per minute instead of 620. The brush or flier is driven from the motor through gears, all of which are inclosed. The flier motors are provided with rheostats by means of which the speed of the brushes is controlled.

These machines, which are built for strength and

durability, have great power and are indispensable to electric street railways. They are made by the General Electric Company, of Boston, who will furnish to any one interested in the subject a fully illustrated bulletin of information.

Indian Temples Chiseled from Solid Stone.

Mayalipuram, India, is graced with seven of the most remarkable temples in the world, each of these unique places of worship having been fashioned from solid granite boulders. Some idea of their size may be gleaned from the fact that the smallest of the seven is twenty-four feet high, seventeen feet long, and twelve feet wide, and is divided into upper and lower stories.

The "Hevasa-Goda-Cla," the largest of the seven, is three and a half stories high, its outlines resembling those of an Atlantic steamship. The inside of the boulder has been chiseled away until the walls do not exceed eight inches in thickness. The two floors above that of the foundation are each about a foot in thickness, and seem as solid as the rock of ages. The upper stories are reached by a spiral stairway carved from the same piece of granite.

The second largest of these single stone temples has a portico eleven feet wide and seventeen feet long, ornamented with four crouching lions and two elephants, all carved from the same boulder which goes to make up the main building.



COMBINED ELECTRIC SNOW SWEEPER.