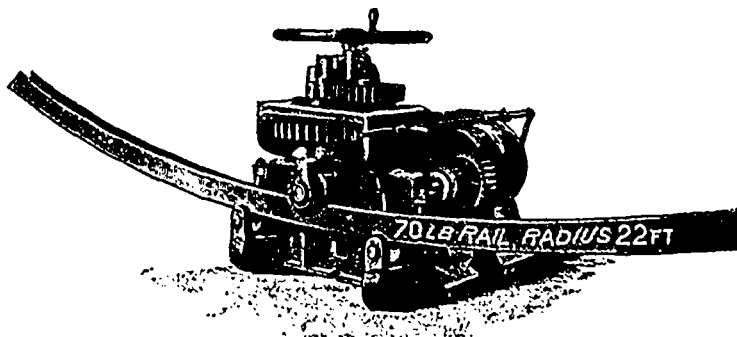
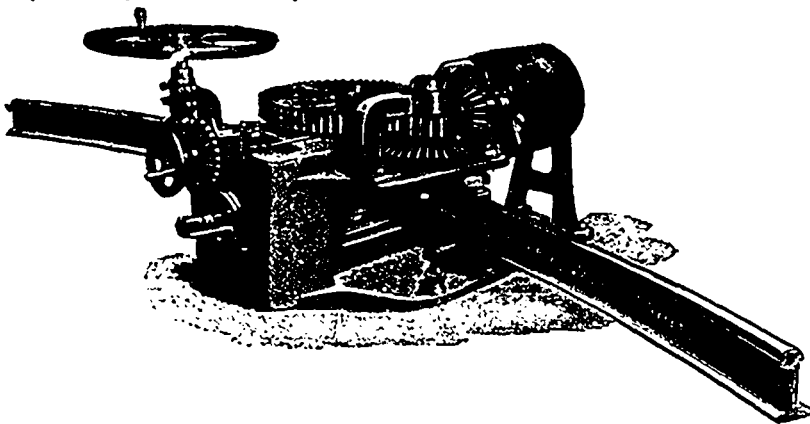


POWER RAIL-BENDING MACHINES.

The accompanying illustration is that of a rail-bending machine made by George E. Smith, of Sherbrooke, Que., and recently used in the construction of the Quebec Central Railroad. It may be used for any kind of rail-bending or for the structural iron work of bridges, etc., and can be worked by steam or any other power. The frame work and bed are solidly built, and, when placed on a suitable foundation, the machine will feed the rail through and at the same time impart a perfectly uniform curvature. This curvature can be regulated by increasing or decreasing the pressure of the middle roller, and, where necessary, in any part of the rail. By shifting the roller pins it is possible to obtain a curvature on either 13 or 17-inch centres. The machine can generally be managed by one man.



The weight of this machine, as shown in the above cut, is about 3,400 pounds. A lighter kind is made for railroad rails only, and can be mounted on a platform car and connected by a six-inch belt with any seven or eight horse-power engine resting on the same car and fed from the locomotive. The rails can be fed from a car in the rear, through the bending machine, on to another car in front, where they are ready for the track layer. These machines are built also



with steam cylinders or motors, and with hydraulic jacks instead of the compound gear and screw, and will impart an even curvature, without twist or kink, at the rate of one rail per minute. The weight of this machine, complete, as shown in the above cut, is about 2,400 pounds. In ordering these machines, send a full size cross section of the rail to be bent.

CANADIAN ASSOCIATION OF STATIONARY ENGINEERS.

The ninth annual banquet of the Hamilton Branch No. 2 of the Canadian Association of Stationary Engineers was held at the Commercial Hotel, April 2nd. Past President R. Mackie was in the chair; Mayor Tuckett, of Hamilton, Ald. McKeown; W. G. Blackgrove, of Toronto, president of the executive council; A. E. Edkins, Toronto, past president; James Huggett, Toronto, District Deputy, and H. Gerry, president of the Guelph Branch, surrounding him. There were also present: A. M. Wickens, past president of the executive council; John Fox, John Bain, and Wm. Sutton, all of Toronto; W. R. Cornish, vice-president of the Hamilton Association, was vice-chairman, W. Norris, secretary, supporting him. The toast list was: "The Queen"—National Anthem, in chorus. "Governor General," "Dominion Parliament, and Local Legislation"—Song, "The Maple Leaf." "Army and Navy"—Song by H. N. Thomas. "Mayor and Corporation"—Response by Mayor Tuckett; song by W. G. Blackgrove; response by Ald. McKeown. "The Executive Head"—Song, by T. Davis, response, by W. G. Blackgrove. "Manufactures"—Trio, Hyslop, Wilson and Davis; response by Mayor Tuckett; song by H. N. Thomas; speech by James McLaughlan, Toronto. "Sister Associations"—Response by A. E. Edkins, Toronto; song by W. S. Hyslop. "Learned

Professions"—Response by R. C. Pettigrew; song by R. Flint, Toronto; song by T. Davis. "Hamilton Branch, No. 2"—Response by Chairman Mackie. "The Ladies"—Responses by Fox and Huggett; song, Mark Wilson. "Our Host" closed the list. During the evening T. Davis sang, very feelingly, "Twelve Months Ago To-night," in memory of the late Bro. Duncan Robertson.

The following letter has been received by the publishers of THE CANADIAN ENGINEER from the C.A.S.E.:

Toronto, March 14th, 1896

MESSRS. BIGGAR, SAMUEL & CO.,

GENTLEMEN,—I am directed by the Library Committee of the Canadian Association of Stationary Engineers to thank you most cordially for the valuable contribution you have made towards our library. Trusting you may have success in your business pursuits, I remain,

Yours very truly,

W. G. BLACKGROVE,

Secy. Treas. Com.

The first open meeting of the Ottawa Branch of the C.A.S.E., which was held in Burbridge's Hall, Rideau st., Ottawa, on March 28th last, was a most successful affair. The recording secretary, N. D'Aoust, reports that Bro. F. Merrill was in the chair. The question box was opened and the first question, "How to find the constant for regular or irregular speed engines?" was fully explained and illustrated by Bro. F. Robert. "How to find the mean effective pressure with or without indicator," was discussed and illustrated on the blackboard by Inspector Donaldson, who happened to be present. President Merrill gave an explanation of the phrase, "A H.P. Boiler." A number of members gave their ideas as to the different constants of heating surface per horse-power adopted. The meeting decided to adopt 15 square feet of heating surface per h.p. for horizontal boilers.

THE LATE J. GOLDIE.

Jno. Goldie, of Goldie & McCulloch, Galt, Ont., who died at his home in Galt in the end of March, after a long and painful illness, was one of the oldest and best known citizens of the town, and, perhaps, the one who has done most to place it in its present position among Canada's manufacturing centres. Mr. Goldie was a student, as well as a business man. The Astronomical and Physical Society voiced the loss to the thinking public by the death of Mr. Goldie by passing a resolution expressing the deep regret of the members at the death of one who had proved so generous a supporter of the society. Jno. Goldie was born and educated in Scotland, coming to Canada in 1844, at the age of twenty-two. After fifteen years spent in contracting and working as a mill-wright, he formed a partnership with Hugh McCulloch, and bought the foundry business of Jas. Crombie. This business has always been conducted with the utmost skill and probity, the combination of the fairest dealing and the best workmanship making the firm celebrated. In 1891 the business was formed into a joint stock company, with a capital of \$700,000.

NEW BRIDGES.

There will be a great rush in bridge building this spring in Quebec, owing to the enormous damages resulting from the recent floods. The names of the bridges destroyed or seriously damaged make a long list. —Bissonette's bridge at St. Meloche and Plante's bridge at St. Clair, were carried away by the ice. —Three covered bridges over the Thames, near Inverness, Que., were destroyed. —The bridges over the L'Islet at Becancour and the Nicolet at Dupes, Que., were swept away. —The I.C.R. bridge over the River du Sud at St. Thomas, Montmagny, Que., damaged. —The Drummond County R. bridge over the Becancour at Mad-dington Falls, Que., was carried away. —The Quebec Central bridge over the Etchemin at St. Anselme, Que., was destroyed, as also the Q.C.R. bridge over the St. Francis at Sherbrooke. These two bridges will cost about \$100,000 to replace. —On the St. John River, N.B., the Grand Falls, the C.P.R. bridge at St. Leonard's, was carried away, and those at Andover and Upper Woodstock were rendered unsafe for use. —The bridge over the Kaministiquia at Stanley, Ont., was damaged to the extent of \$3,000 by the floods. The Port Arthur, Duluth and Western Ry. bridge was swept away.