

Thorings and gudgeons are forced into place. Gudgeons and barrel turned on centres, and heads held in place with joint bolts. Heads have extra long hubs fitted to gudgeons, instead of being forced on to outside wood. This method effectually prevents the heads coming loose.

The take-up roll is of steel tube covered with steel fillet, and will never shrink or swell.

In connection with this concern we may mention that they are offering a 60-inch warping machine which has been designed with special reference to conditions existing in cotton mills in Canada, and has, we are informed, many new and valuable features

not found in other warpers. The main points of excellence claimed for it are:

Reduced floor space. With full 21-inch beam, the distance from front to back is only 39½ inches.

All rolls run in covered anti-friction roll bearings.

Self-aligning cylinder boxes. No cramping of bearings due to uneven floor, or to failure to put box in proper place after being taken out.

The driving mechanism is so arranged that direction of rotation of cylinder can be changed in less than two minutes with no extra parts and no tool but a small screw-driver.

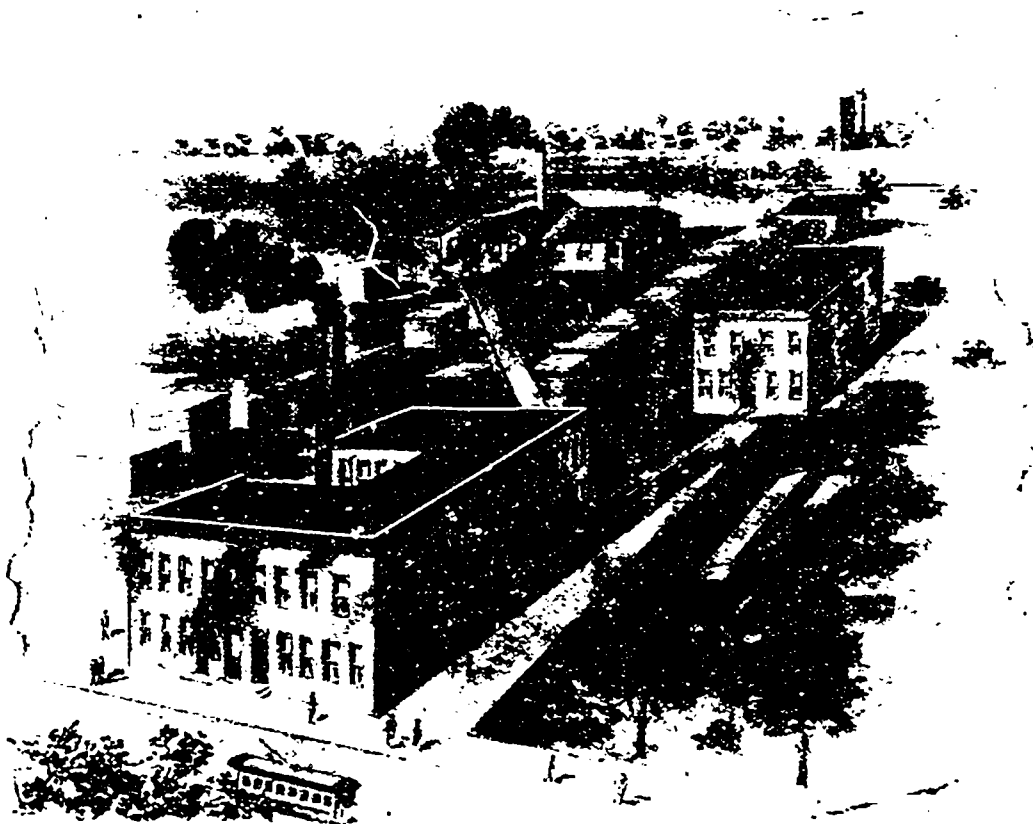
Measuring rolls of seamless drawn tube.

Less power required than in other machines.

Built low and with beam well back, thus making it more easily tended by small operators.

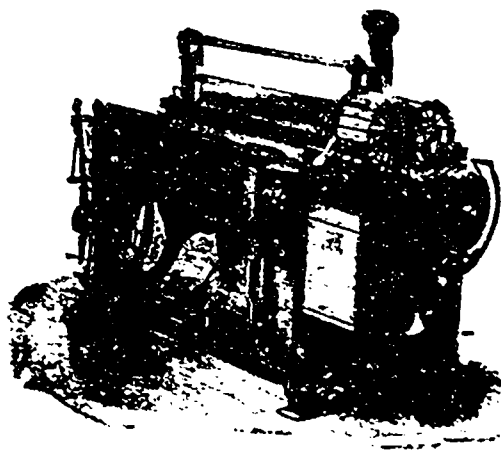
Print shows drop roll. It can be built with rise roll if desired.

The Northrop Loom Co. are not only manufacturers of textile machinery, but are fully equipped to take contracts for all lines of special mill machinery, repairs and general supplies. They are also in a position to render advice on mill engineering, as they employ a competent engineering staff including experienced draughtsmen.



The New Home of The Sprague Umbrella Company.

On this page is shown a half-tone cut of the new and commodious factory buildings of the Sprague Umbrella Co., Norwalk, O. The capacity of the new plant is 2,000 wagon umbrellas, 500 buggy canopies, 1000 bow tops, 500 lawn canopies, 1,000 illuminators, 1,000 advertising parasols and 1,000 campaign umbrellas, every day. Illustrated catalogue and price list sent to those interested enough to write for same.



THE NORTHROP LOOM.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

There is only one Profitable Plan—**BUY NORTHROP LOOMS**

With them the Future is Assured.

They are no Experiment.

Thousands have been running in the United States, and a large number are now in Canada. Sales steadily on the increase.

"The Mills that refuse their opportunities will find their future utility serving as picturesque ruins in the landscape."

We also Manufacture the Best Warper at present Known—also Spoolers.

Write for particulars and quotations. Address—

The NORTHROP LOOM CO. OF CANADA, Ltd.

VALLEYFIELD, P.Q.