C. HERSCHAFT.

Regulator for Hemp-Spinning Machines

No. 164,452. Patented June 15, 1875.

Fig. 1

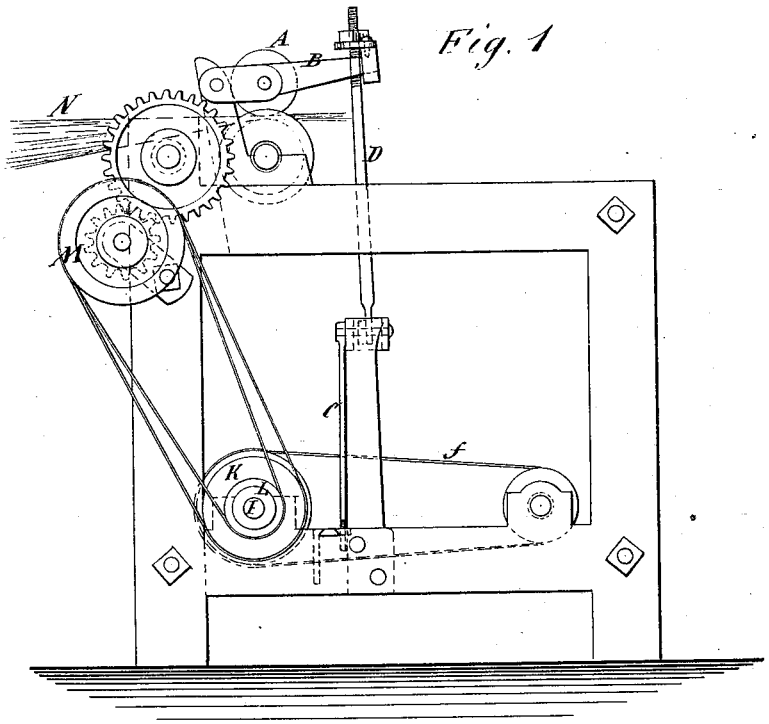
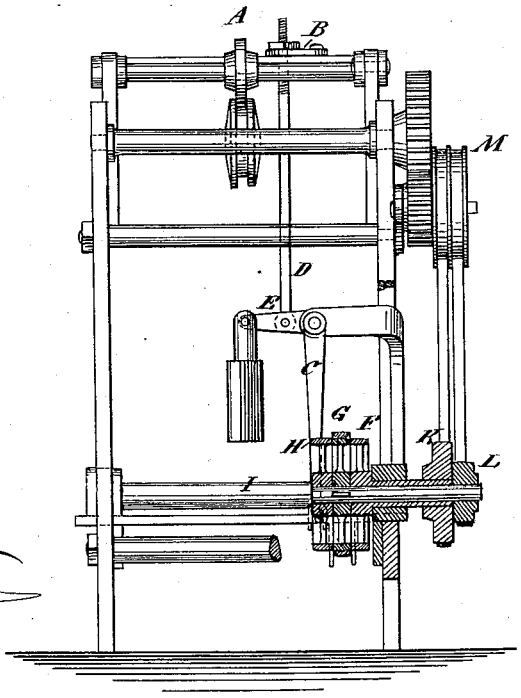



Fig. 2




WITNESSES:

C. Neveux

A. H. Terry

INVENTOR:

C. Herschaft

BY Munn & Co

ATTORNEYS.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

# UNITED STATES PATENT OFFICE.

CHRISTOPHER HERSCHAFT, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN REGULATORS FOR HEMP-SPINNING MACHINES.

Specification forming part of Letters Patent No. **164,452**, dated June 15, 1875; application filed May 8, 1875.

*To all whom it may concern:*

Be it known that I, CHRISTOPHER HERSCHAFT, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Feed-Regulator for Spinning-Jenny, of which the following is a specification:

In this invention a counter-shaft, having two driving-pulleys of different sizes, is belted to the driver for the gill-bars, and the main driving-belt is contrived to be automatically shifted by the upper condensing-roller from one to the other of the pulleys on the counter-shaft for turning the aforesaid pulleys, or onto a loose pulley, so that when the sliver is too large, the rising of the condensing-roller will shift the belt onto the pulley for slow speed to feed slower, or onto the loose pulley to stop the gill-chain in case the sliver is very much too large, and when the sliver is too small the belt will be shifted so as to increase the speed of the gill-bars and feed faster.

Figure 1 is a sectional elevation of my improved machine, and Fig. 2 is partly a front elevation and partly a transverse section.

Similar letters of reference indicate corresponding parts.

A is the upper condensing-roller for the sliver, to which a lever, B, is applied for working the belt-shipper C by the rod D and weighted or spring-pressed lever E. F and G are two driving-pulleys, and H a loose pulley on the counter-shaft I, on which the driving-belt *f* runs. F turns a large pulley, K, and G a smaller one, L, both of which belt onto the pulley M, which drives the gill-bars, which feed the sliver N to the condensing-rolls of the spinning-jenny.

When the sliver runs small, the roller A falls in consequence of it, and the weight moves the driving-belt J onto the pulley F, which increases the speed of the gill-bars, and thus increases the size of the sliver. The sliver then raises the roller A, and moves the belt back onto pulley G, which gives the slow feed, and in case any large bunch or knot passes into the condensing-rolls, the belt will be thrown onto the loose pulley, and the gill-bars stopped to correct the sliver.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The differential pulleys K L and their drivers F G on the counter-shaft, in combination with the driver M for the gill-bars, and the automatic belt-shifter, substantially as specified.

CHRISTOPHER HERSCHAFT.

Witnesses:
T. B. MOSHER,
ALEX. F. ROBERTS.