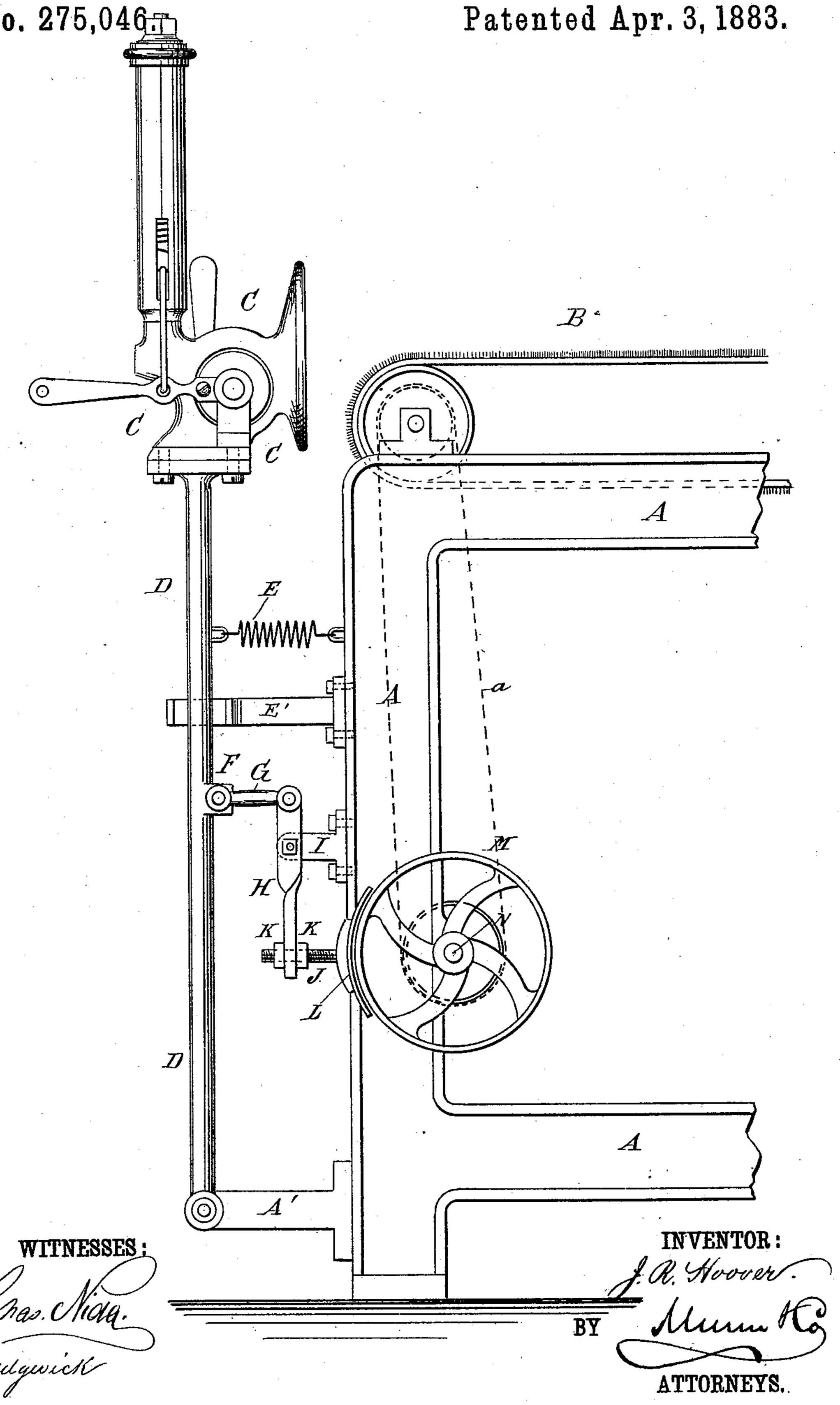
## J. R. HOOVER.

FEED REGULATOR FOR HEMP DRAWING AND SPINNING MACHINES. No. 275,046



## United States Patent Office.

JOHN R. HOOVER, OF ELIZABETH, NEW JERSEY.

FEED-REGULATOR FOR HEMP DRAWING AND SPINNING MACHINES.

SPECIFICATION forming part of Letters Patent No. 275,046, dated April 3, 1883.

Application filed June 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, John R. Hoover, of Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Feed-Regulators for Hemp Drawing and Spinning Machines, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawing, forming a part of this specification, and which is a side elevation of my improvement.

The object of this invention is to better control the delivery of the sliver to the condenser in hemp drawing and spinning machines.

The invention consists in a feed-regulator for hemp drawing and spinning machines constructed with a connecting-rod hinged to the upright rod that carries the condenser, and hinged to a lever which is connected adjustably by a screw and nuts with a brake-shoe held by a spring against a pulley attached to the shaft that drives the endless chain of gillpins, whereby the resistance of the sliver to the condenser will apply the brake and check the feed, as will be hereinafter fully described.

A represents the frame of a hemp drawing and spinning machine. B is the endless chain of gill-pins, by which the sliver is delivered or fed to the condenser C. The condenser C is attached to the upper end of an upright rod, D, which is hinged at its lower end to the frame A, or to a support, A', attached to the said frame.

As thus far described, there is nothing new in the construction.

The condenser C is held forward against the pull of the sliver by a spring, E, attached at one end to the upright rod D, and at its other 40 end to the frame A, and is kept from being drawn forward too far by a stop, E', attached to the frame A.

To lugs F, formed upon or attached to the upright rod D, is hinged the end of a short connecting-rod, G, the other end of which is

hinged to the upper end of a lever, H. The lever H is fulcrumed to a bracket, I, or other support attached to the frame A, and with its lower end is adjustably connected, by a screw, J, and nuts K, to the brake-shoe L, which rests 50 upon a pulley, M, attached to the shaft N, that drives the endless chain of gill-pins B by means of the belt a. With this construction, when the sliver becomes large it offers so much resistance to the condenser C that the said con- 55 denser will be drawn back against the tension of the spring E. As the sliver becomes smaller its resistance becomes less, and the condenser is drawn forward to its former position by the spring E. As the condenser C is drawn back 60 by the resistance of the sliver the movement of the upright rod D operates the lever H and presses the brake-shoe L against the pulley M with a force proportioned to the resistance of the sliver, and thus checks the movement of 65 the endless chain of gill-pins B, and consequently the feed of the sliver to the condenser C. With this construction the feed will be controlled automatically, so that an even or uniform yarn will be produced.

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

1. The combination, with the hinged rod D, the condenser C, the spring E, and the pulley M, of the rod G, the lever H, and the brake 75 shoe L, adjustably secured to the lower end of the said lever, substantially as and for the purpose set forth.

2. The combination, with the frame A, provided with the bracket I, the hinged rod D, 80 the condenser C, the spring E, the stop E', and the pulley M, of the rod G, the lever H, the screw J, provided with the nuts K K, and the brake-shoe L on the outer end of said screw, substantially as and for the purpose set 85 forth.

JOHN R. HOOVER.

Witnesses:
JAMES T.

JAMES T. GRAHAM, C. SEDGWICK.