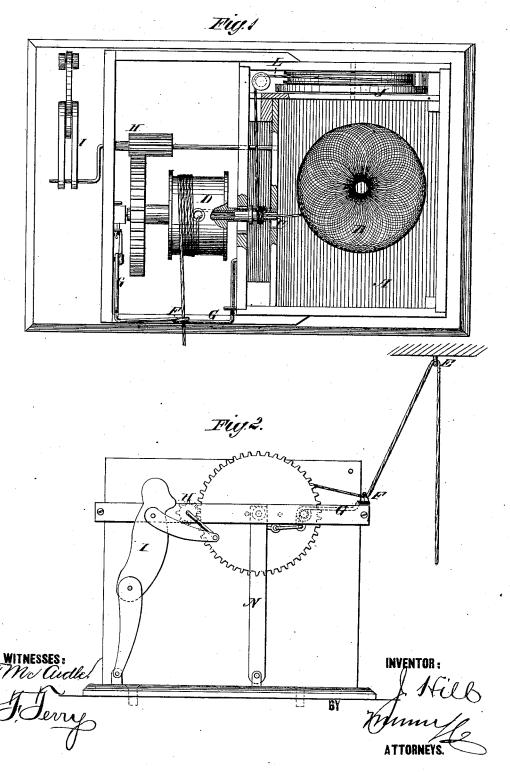
J. HILL. Twine-Holder.

No. 161,683.

Patented April 6, 1875.



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UNITED STATES PATENT OFFICE.

JONATHAN HILL, OF STANHOPE, NEW JERSEY.

IMPROVEMENT IN TWINE-HOLDERS.

Specification forming part of Letters Patent No. 161,683, dated April 6, 1875; application filed January 30, 1875.

To all whom it may concern:

Be it known that I, JONATHAN HILL, of Stanhope, in the county of Sussex and State of New Jersey, have invented a new and Improved Twine-Holder, of which the following is a specification:

The invention will first be fully described,

and then pointed out in the claims.

Figure 1 is a plan view of my improved twine-holder, with some parts shown in section; and Fig. 2 is a side elevation.

Similar letters of reference indicate corre-

sponding parts.

A represents the twine-box, containing the ball B, from which the twine is passed along the hollow axle C, out through the side, and around the drum D, and thence to the guide-eye E in the ceiling, from which it is to be suspended over the counter, passing also through the guide-eye F of the trip-lever G, so that when it is pulled off the ball the tension will lift the lever, and, by swinging the axle-support N, shift the drum out of gear with the regulating device H I, which is intended to act when the recoil takes place to slow the action of the spring. The spring is coiled in the drum J, from which a bend, L, extends around the axle C of drum D, so that when the twine is pulled off from drum D it will wind up the spring, to turn drum D back to wind on the slack again.

The spring might be in the drum D; but it would require a more extensive spring than is

desirable to obtain the requisite number of revolutions of drum D than is needful in this arrangement.

A weight and cord might be used instead of the spring, if preferred, the cord being coiled around the axle C. The regulator may, of course, be dispensed with; but the operation is better with it.

When the coils have all drawn off from drum D it will stop, so as not to wind the twine back too far when the recoil takes place, and the rest of the twine pulled off will run through it. The extent to which the twine will be taken back will be governed by the length coiled on the drum.

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

1. The combination of ball-box A, hollow axle C, and drum D, all constructed and arranged substantially as and for the purpose specified.

2. The combination, with spring-drum D, of trip-lever G, having eye F, the swinging axlesupport N, and the regulator H I, as and for the purpose specified.

3. The combination of the drum D, hollow spindle C, spring-drum J, and belt L, substantially as specified.

JONATHAN HILL.

Witnesses:

JAS. W. CAMPBELL, GEORGE MILLS.