L. & C. HOWARD.

Machines for Twisting Oakum.

No. 135,338. Patented Jan. 28, 1873.

Fig. 1.

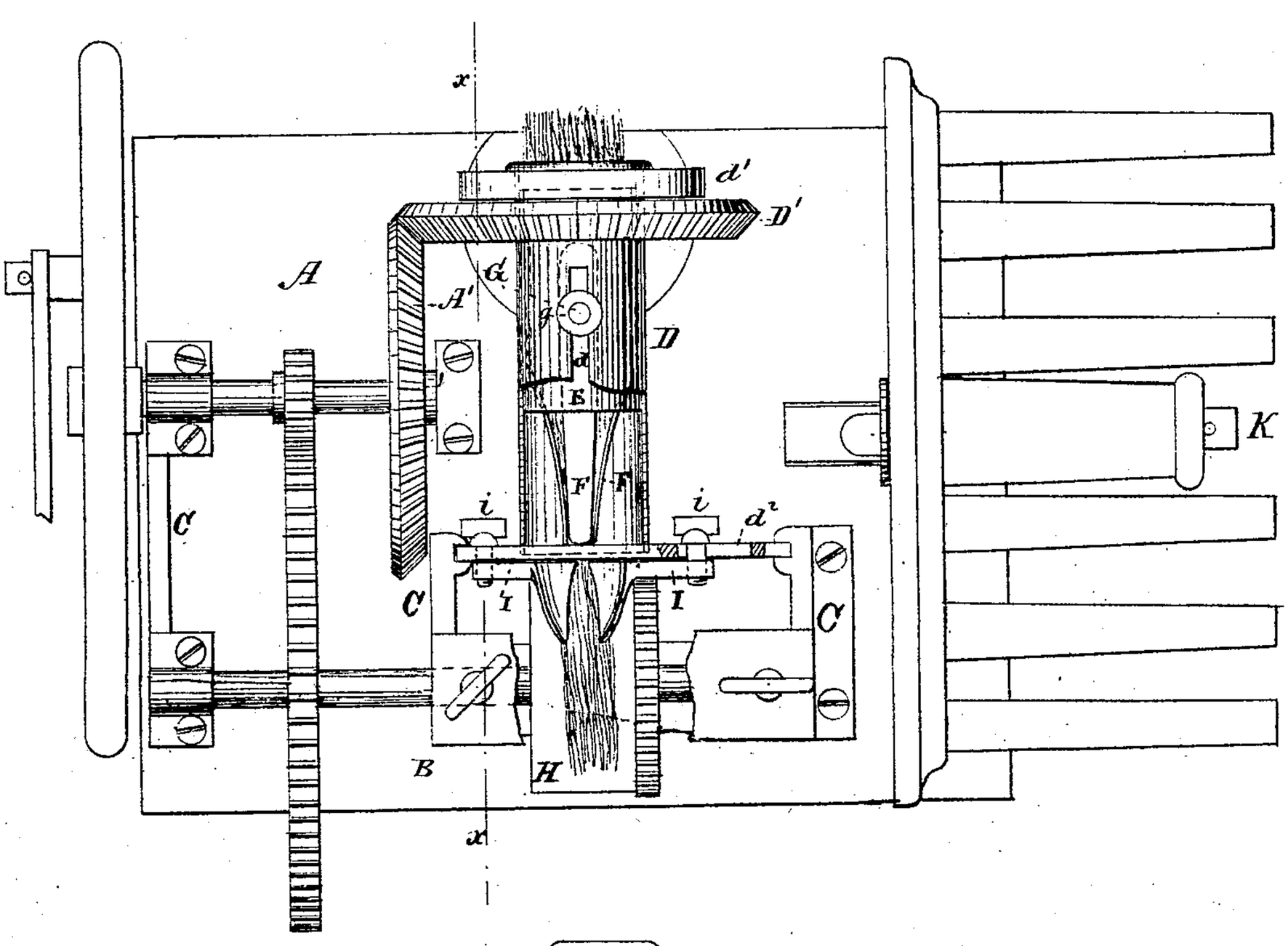

Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

LEWIS HOWARD AND CHARLES HOWARD, OF WATKINS, NEW YORK.

IMPROVEMENT IN MACHINES FOR TWISTING OAKUM.

Specification forming part of Letters Patent No. **135,338**, dated January 28, 1873.

To all whom it may concern:

Be it known that we, LEWIS HOWARD and CHARLES HOWARD, of Watkins, in the county of Schuyler and State of New York, have invented a new Machine for Roping Oakum, of which the following is a specification:

The invention consists in a machine for drawing the crude tow through a twister and shaper so as to form ropes.

The invention will first be fully described in connection with all that is necessary to a full understanding thereof, and the means which embody it then clearly pointed out in the claim.

In the drawing, Figure 1 is a top view, with parts broken away and the upper roller removed. Fig. 2 is a vertical section in line *x x*, Fig. 1.

A represents a train of mechanism operated by a treadle. B is a table on which the mechanism is placed, and C are the uprights which sustain the various parts. D is a tube, having on one end a bevel-spur wheel, D′, that connects with the bevel A′ of the actuating mechanism. This tube D is slotted at *d*, and revolves in the bearings d^1 d^2. E is a short tube, on the inside of which are secured four spring-fingers, F, which tend to close at their free ends. On the inner part, and against the sides of slot *d*, rests the head of screw G. This screw passes up through said slot *d* and receives a nut, *g*, on the outside, thus fastening the two tubes together. This compels the spring-fingers to rotate with tube D. H are two smooth-faced rolls, provided with spur-wheels on the ends thereof to compel them both to move with the same velocity. I I are two parts of a gage-guide placed between tube D and rolls H H, and with concavities converging toward the latter. They are arranged to slide to and from one another in grooves upon the bearing-plate d^2. Each of these sections I is provided with a screw-stud, *i*, which moves in the slot d^3 of the bearing-plate whenever said sections are moved. K is a reel on which the rope is subsequently wound.

The operation is as follows: The tow is fed by hand into the mouth of the tube D, and a stick or wire is used to carry the end between the rolls and enable them to get a bite upon it. As it passes between the spring-fingers F they clasp, hold, rotate, and twist it into the rope form required, while the rolls draw it through. The gage-guides I I shape and give the desired uniformity to the rope.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The rotary tube D, tube E having spring-fingers F, guides I I, and drawing-rolls H H, combined and arranged as described, to form an improved machine for roping oakum.

LEWIS HOWARD.
CHARLES HOWARD.

Witnesses:
S. L. ROOD,
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