B. E. DEXTER.

Machines for Making Boxes.

No. 134,039. Patented Dec. 17, 1872.

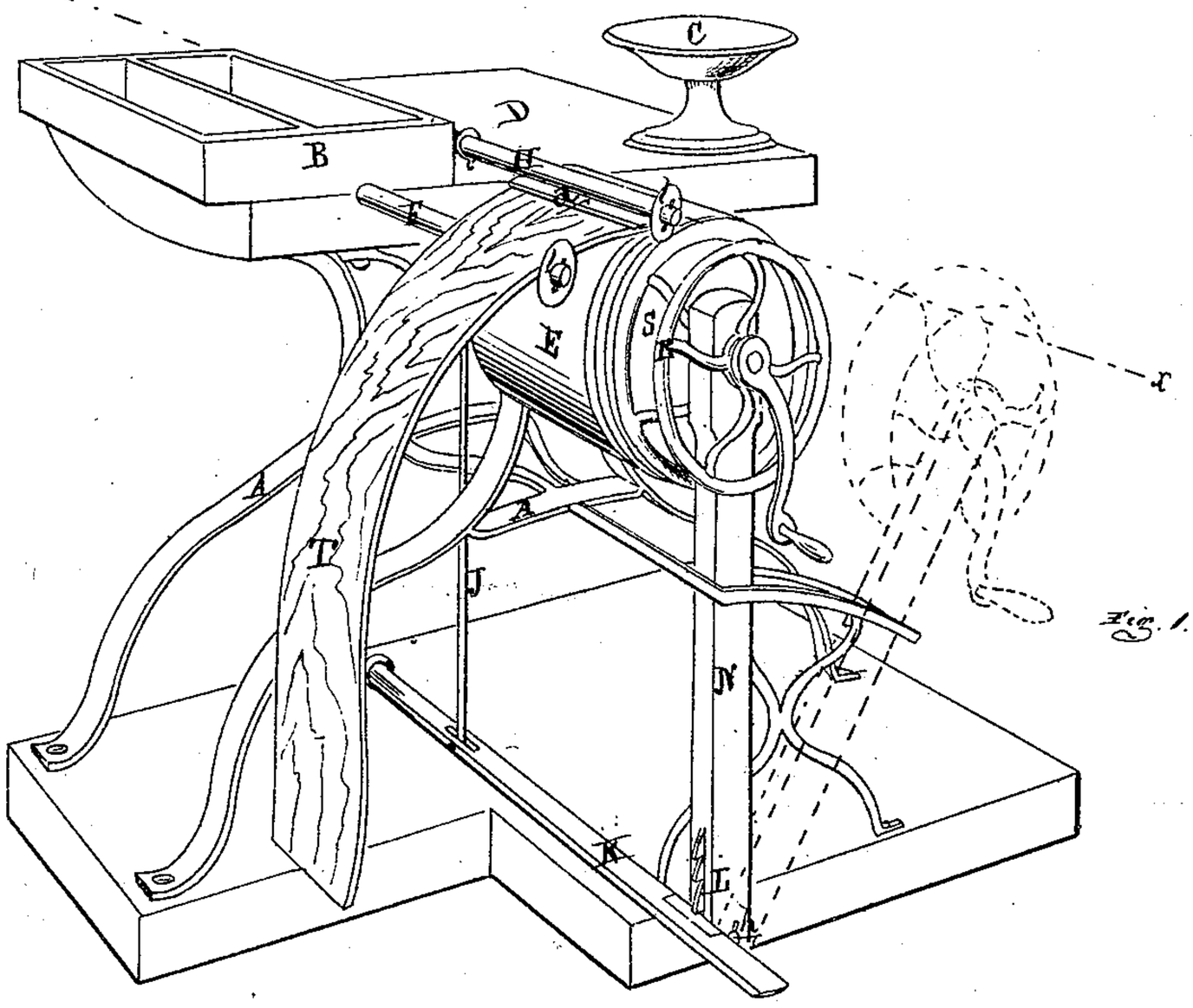

Fig. 1.

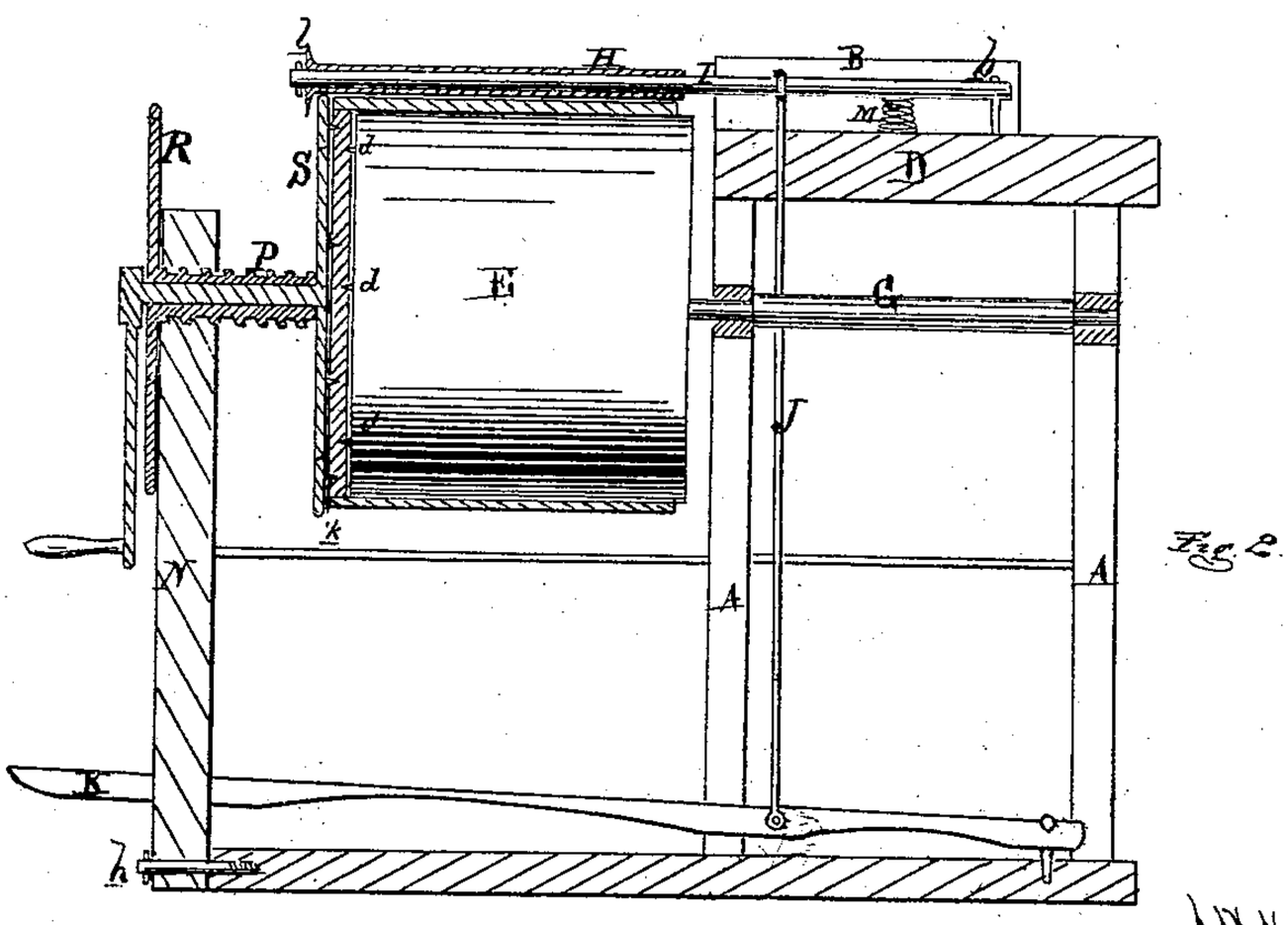

Fig. 2.

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BELA E. DEXTER, OF GOWANDA, NEW YORK.

IMPROVEMENT IN MACHINES FOR MAKING BOXES.

Specification forming part of Letters Patent No. **134,039**, dated December 17, 1872.

To all whom it may concern:

Be it known that I, BELA E. DEXTER, of Gowanda, in the county of Cattaraugus and State of New York, have invented a new and useful Improvement in Machine for Making Boxes; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective of my machine, and Fig. 2 is a vertical cross-section of the same on the line *x x* in Fig. 1.

Like letters refer to like parts in each figure.

The nature of this invention relates to the construction and operation of a machine for bending the hoops that form cheese and other similar boxes, either body or cover, and holding them in place until nailed or otherwise fastened to the bottom or head, as the case may be. The invention consists in the construction and arrangement of the several parts, as more fully hereinafter set forth.

In the accompanying drawing, A represents a suitable frame, which carries the working parts of the machine. B is a tool-box, and C a nail or screw-box surmounting the table D. E is a cylinder, the circumference of which should be the same as the interior circumference of the box which it is desired to manufacture. This cylinder is rigidly secured to the shaft G outside the frame. This cylinder is provided with a projecting lip, *a*. F is a rotating guide projecting from the frame, sleeved on a corresponding arm parallel with the face of the cylinder or drum E. H is a similar guide, sleeved on the arm I, the end of which is pivoted or swiveled to the table at *b*. A connecting-rod, J, leads from this arm I to the treadle K, by means of which the guide is depressed to a line parallel to the face of the cylinder E, and to the guide F, when the engagement of the treadle with the rack L compels the guide to retain its position, as just described, until the treadle is released from its engagement, when the spring M, suitably arranged for the purpose, will throw the guide up out of the way of the operator. The outer face of the cylinder or drum E is provided with a series of small sharp spurs, *d*. N is a vibrating standard pivoted, by means of the bolt *h*, to the side of the bottom of the frame. P is a screw, which passes through a suitable nut or thread near the top of this standard. At the outer end of this screw is secured the crank-wheel R and face-wheel S, the inner face of which latter wheel is provided with small sharp spurs *k*.

It will be noticed that each of the sleeved guides F H is provided with flanges *l*.

In operating this machine, the treadle is disengaged, the screw P rotated backward until the face-wheel S is against the inner face of the standard N. The standard is then thrown into the position shown in dotted lines in Fig. 1. The head of the box, which should be of the same diameter of the face of the drum or cylinder, is then secured to said face by being driven onto the small sharp spurs thereon. The standard is then brought to its original upright position, and the screw rotated until the small sharp spurs upon the face-wheel S enter the opposite side of the box head or bottom interposed between said face-wheel and the outer end of the cylinder or drum. The hoop T, which forms the box or cover, is then passed over the revolving guide F, under the guide H, until the end of said hoop will engage under the lip *a* of the drum, care being taken that the edge of the hoop shall project over the outer end of the drum far enough to cover the edge of the head or bottom, which is secured thereto. Then the treadle is depressed and engaged with the rack, which brings down the guide H upon the face of the hoop, and holds it in position rigidly. Now, one rotation of the drum bends the hoop around the same, when the hoop should be nailed or pinned to the edge of the bottom or head, and the ends of the hoop should then be riveted together. Then the treadle is disengaged, the screw rotated backward until the spurs in the face-wheel are withdrawn from the bottom or head, and the standard thrown into the position shown by dotted lines in Fig. 1, when the box can be slipped off from the drum, complete.

The cover may be made in the same way, the hoop being narrower.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In hoop-box-making machines, the stand-

ard N, screw P, crank-wheel R, and face-wheel S, constructed as described, in combination with the cylinder or drum E, as and for the purposes set forth.

2. In hoop-bending machines, the arrangement of the guide H with the treadle K, spring M, and rack L, substantially as described, and for the purposes set forth.

3. The arrangement of the drum E, shaft G, guides F H, arm I, connecting-rod J, treadle K, rack L, spring M, standard N, screw P, crank-wheel R, and face-wheel S, when the parts are constructed substantially as described and arranged for the purposes set forth.

BELA E. DEXTER.

Witnesses:

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