

(No Model.)

I. C. CASWELL.

MACHINE FOR BUNDLING CIGARS.

No. 368,932.

Patented Aug. 30, 1887.

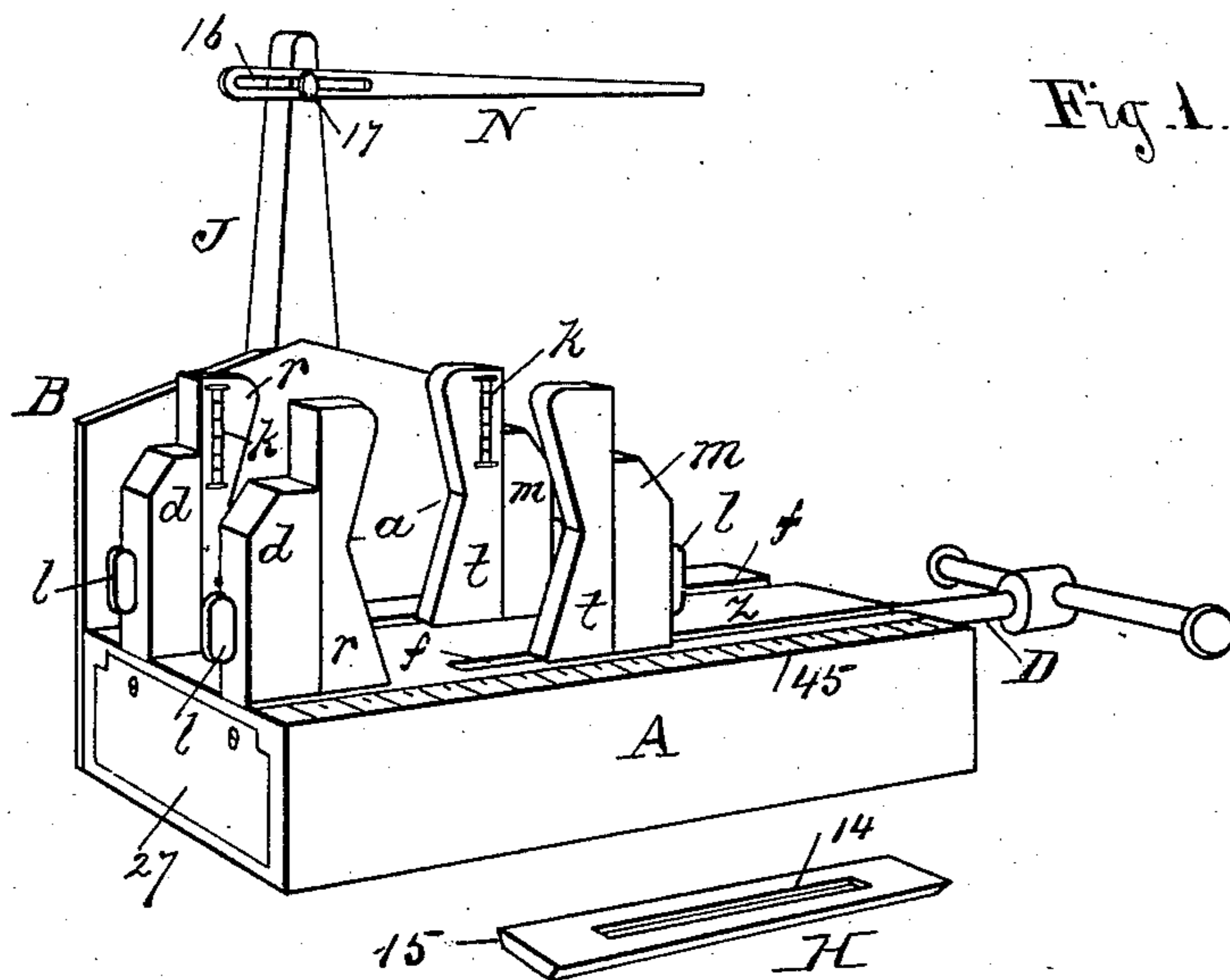


Fig. 1.

Fig. 2.

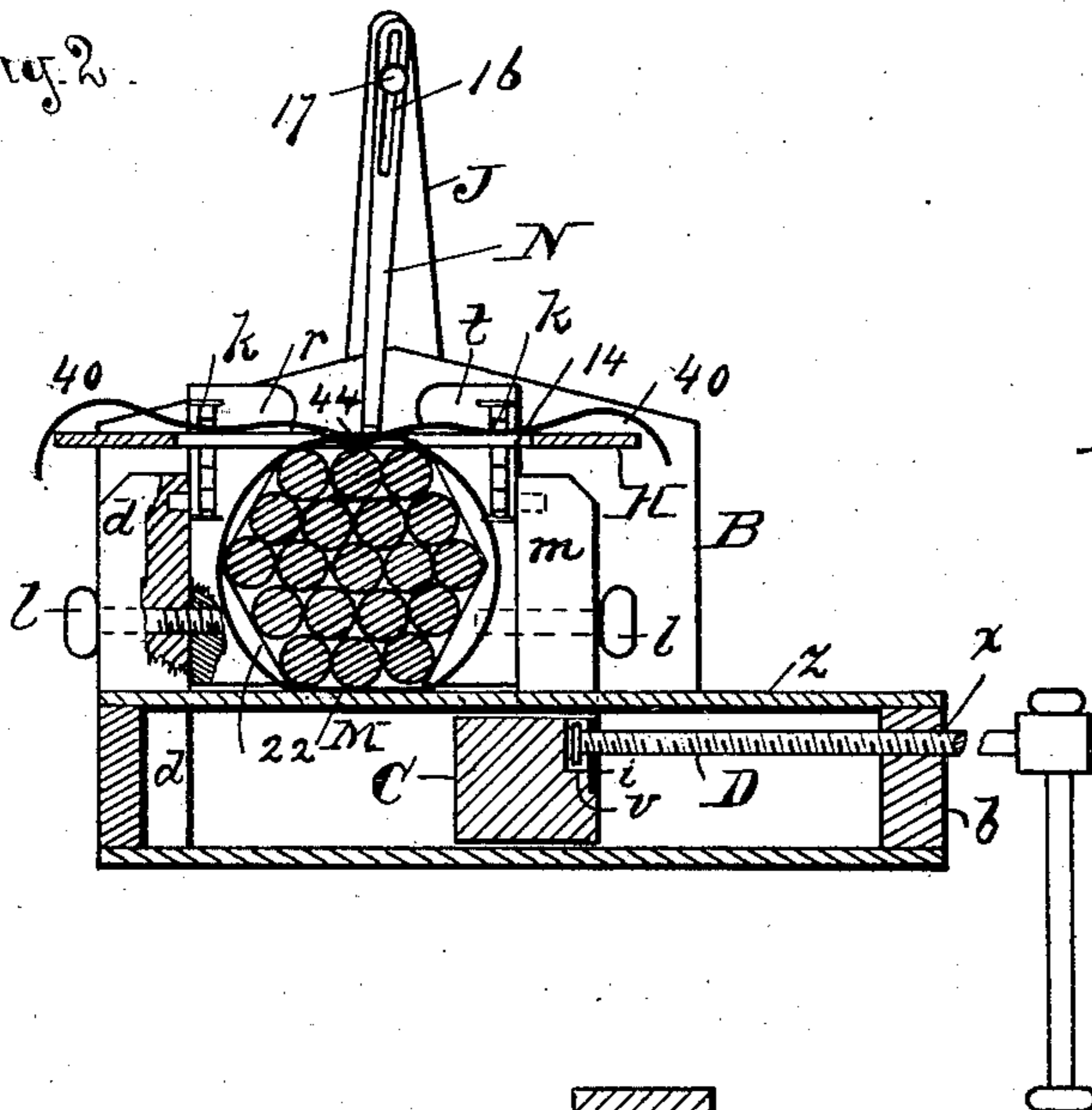


Fig. 3.

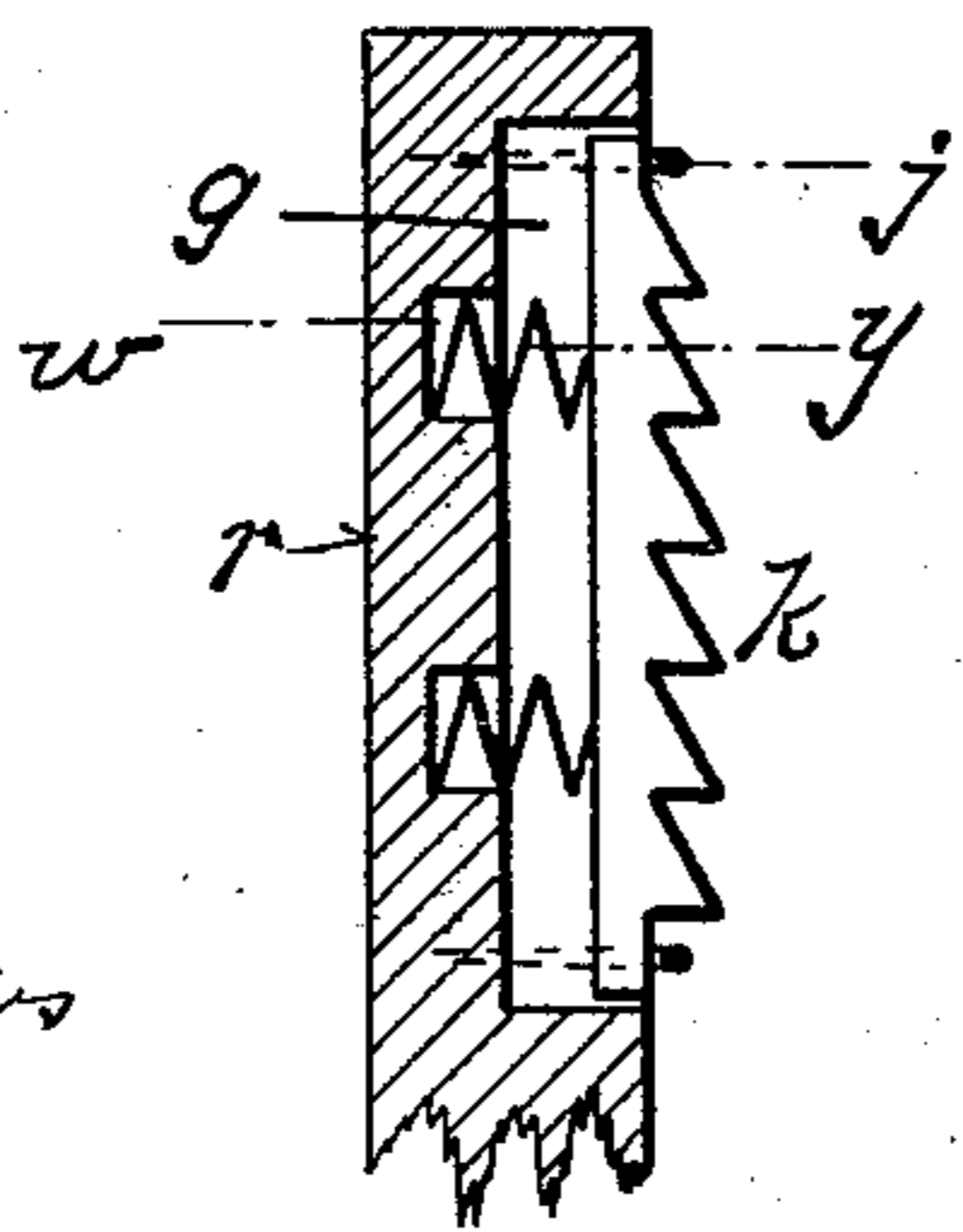
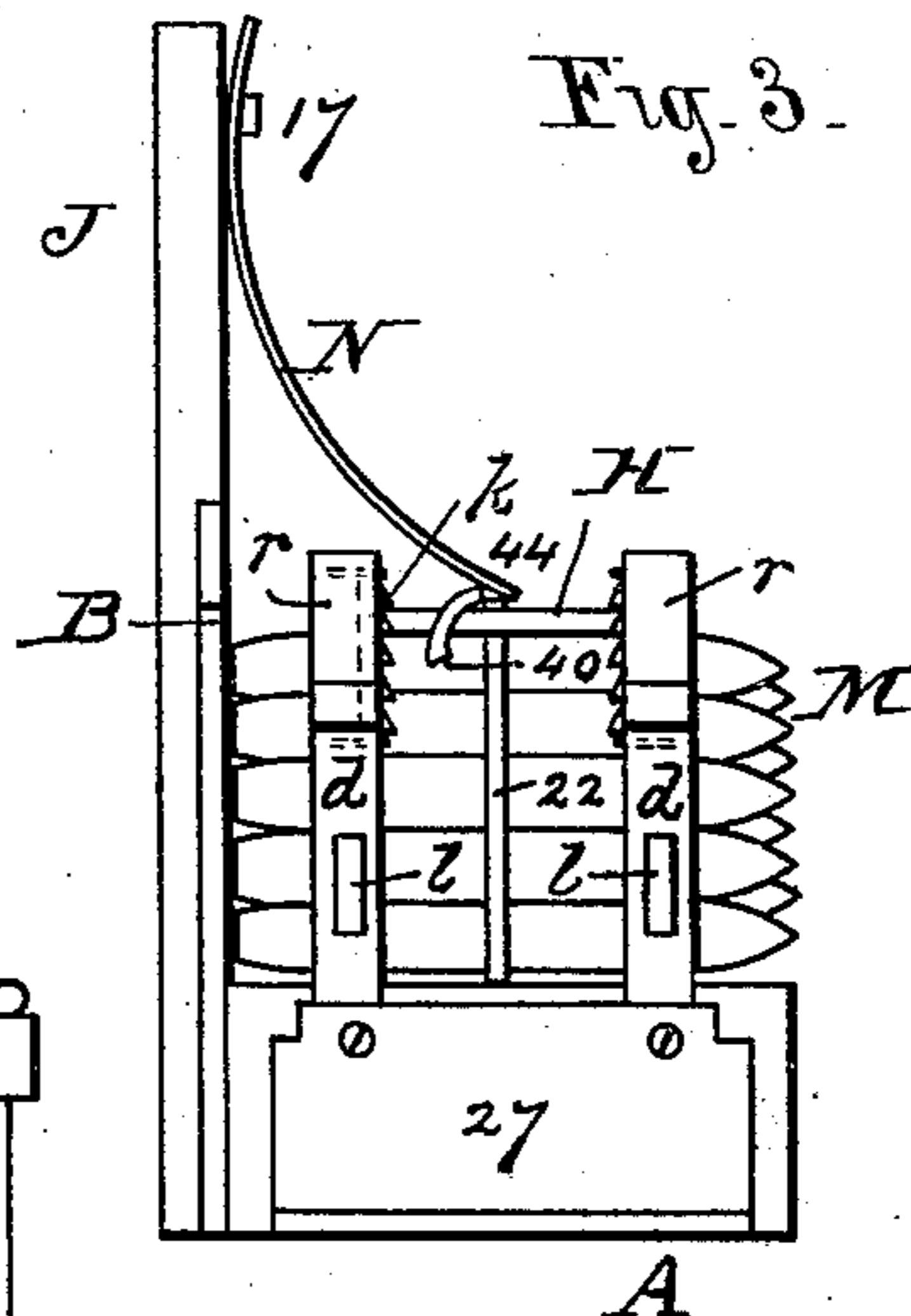


Fig. 4.

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UNITED STATES PATENT OFFICE.

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ONE-HALF TO WILLIAM A. PEASE, OF SAME PLACE.

MACHINE FOR BUNDLING CIGARS.

SPECIFICATION forming part of Letters Patent No. 368,932, dated August 30, 1887.

Application filed May 7, 1887. Serial No. 237,420. (No model.)

To all whom it may concern:

Be it known that I, ISAAC C. CASWELL, of New Bedford, in the county of Bristol, State of Massachusetts, have invented a certain new and useful Improvement in Machines for Bundling Cigars, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an isometrical perspective view of my improved machine with the follower removed; Fig. 2, a longitudinal section of the same, represented as in use, some of the parts being shown in elevation; Fig. 3, an end elevation, and Fig. 4 a diagram showing the construction and arrangement of the serrated bars.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of machines for bundling cigars which are provided with means whereby they may be adjusted to adapt them to forming bundles of any desired size; and it consists in a novel construction and arrangement of parts, as hereinafter more fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body, and B the gage. The body consists of a box which is rectangular in form, being preferably composed of wood and about ten inches long, five inches wide, and two inches high. It may, however, be made of any suitable size and of any suitable materials.

A block, C, is disposed within the body A, said block being fitted to slide lengthwise of said body and provided with two uprights or standards, *m m*, which respectively project vertically through slots *f* in the top *z*, in which they are designed to work.

A horizontally-arranged screw, D, is inserted in a correspondingly screw-threaded hole, *x*, formed in the end *b* of the body A, the inner end of said screw being provided with an annular flange, *v*, and so secured by a plate, *i*, to the block C as to be readily revolved without being withdrawn therefrom, thus enabling said block and standards *m* to be moved back and forth longitudinally of the body A by revolving said screw.

Two vertically-arranged standards, *d d*, are secured to the body A near its end 27 and directly opposite the standards *m*, as best seen in Fig. 1, said standards being respectively provided with removable face-plates *r*, which are attached thereto by screws *l*. The movable standards *m* are also provided with like face-plates, *t*, and screws *l*, all of said plates being cut out at the center, as shown at *a*, to correspond with the contour in cross-section of the sides of the bundle of cigars. A vertically-arranged mortise, *g*, is formed in the adjacent faces of each pair of the face-plates, and fitted to work in each of said mortises there is a serrated bar, *k*. Two coiled springs, *y*, disposed in sockets *w*, are placed beneath each of the bars *k*, said springs acting expansively to force said bars outwardly, as shown in Fig. 4, the bars being prevented from escaping from the mortises *g* by staples *j*, which span them near their ends.

A plate or follower, H, provided with a centrally-disposed elongated slot, 14, and having its edges beveled, as shown at 15, is employed to hold the cigars in position while the bunch is being tied.

A vertically-arranged standard, J, is centrally disposed at the rear of the machine, said standard being secured to the gage B, above which it projects, as shown in Figs. 1, 2, and 3. A resilient bar or "finger," N, provided with a slot, 16, is adjustably secured to the upper portion of the standard J by the screw-bolt 17.

The gage B is secured to the rear side of the body A, and is designed to serve as a stop to prevent the cigars from being pushed too far through the machine in building the bundle, and also to "square" or even the end of the bundle.

In the use of my improvement the face-plates *t* are first properly adjusted with respect to the plates *r* by means of the screw *D*, after which the ribbon or "binder" 22 is placed longitudinally on the top *z* of the body *A*, midway between each pair of the standards. The cigars *M* are then piled horizontally on the top *z*, between the face-plates *t* and *r*, with their butts against the gage *B*, until a sufficient number have been inserted between said plates to form the bundle. The ends 40 of the binder or ribbon 22 are then passed through the slot 14 of the follower *H* and crossed, as shown in Fig. 2. The follower is then forced downward between the serrated bars *k*, and the screw *D* turned in until the cigars are properly compacted or pressed, the follower being held in its depressed position by the teeth of said bars, after which the ribbon 22 is tied to hold the cigars in position.

In tying the ribbon after its ends are entwined to form the first portion of the knot, the ribbon is drawn taut around the cigars and held in position or prevented from slipping by means of the resilient finger *N*, the free end of which is drawn toward the operator from its normal position, (in Fig. 1,) turned on bolt 17, and placed on the entwined ends of the ribbon at the knot, as shown at 44 in Figs. 2 and 3, on which it presses until the knot is completed, when the finger is swung back into the position shown in Fig. 1, the follower withdrawn, and the bundle of cigars removed from the machine.

The face-plates *t r* are designed to form a bundle which is hexagonal in cross-section; but face-plates of any other suitable shape may be used in accordance with the form it is desired to give the bundle, although I deem those shown preferable. After the proper number of cigars have been inserted between the face-plates to form the bundles described, it is not always necessary to compress them by turning in the screw *D*, although I deem it preferable to do so, as it makes a more compact bundle.

The body *A* is provided with a scale of inches and fractional parts thereof, as shown at 45, to enable the movable standards *m* to

be set readily in accordance with the size of the bundle of cigars to be formed.

Having thus explained my invention, what I claim is—

1. In a machine for bundling cigars, the combination of the following instrumentalities, to wit: a body or base, two fixed standards provided with face-plates for giving shape to the bundle of cigars, a block fitted to slide in said body, a screw for actuating said block, two movable standards secured to said block and provided with face-plates for giving shape to the bundle of cigars, a gage or stop against which the ends of the cigars abut, a follower for compressing the bundle of cigars, means for securing said follower when depressed, and a finger or elastic bar so arranged as to press upon the ribbon with which the cigars are bound together and aid in tying the same, substantially as shown and described.

2. In a machine for bundling cigars, the body *A*, provided with the standards *d*, the sliding block *C*, provided with the standards *m* and screw *D*, the face-plates *r*, secured to the standards *d* by the screws *l* and provided with the spring-actuated serrated bars *k*, the face-plates *t*, secured to the standards *m* by the screws *l* and provided with the spring-actuated serrated bars *k*, the gage *B*, and follower *H*, combined and arranged to operate substantially as described.

3. In a machine for bundling cigars, the follower *H*, provided with the slot 14, in combination with the jaws *d m* and the face-plates *t r*, provided with the spring-actuated serrated bars *k*, substantially as set forth.

4. In a machine for bundling cigars, the standard *J* and the elastic bar or finger *N*, pivotally secured thereto, in combination with the cigar-bundling jaws, the follower *H*, provided with the slot 14, and means for holding said follower in a depressed position when forced downward onto the cigars, substantially as described.

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Witnesses:

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