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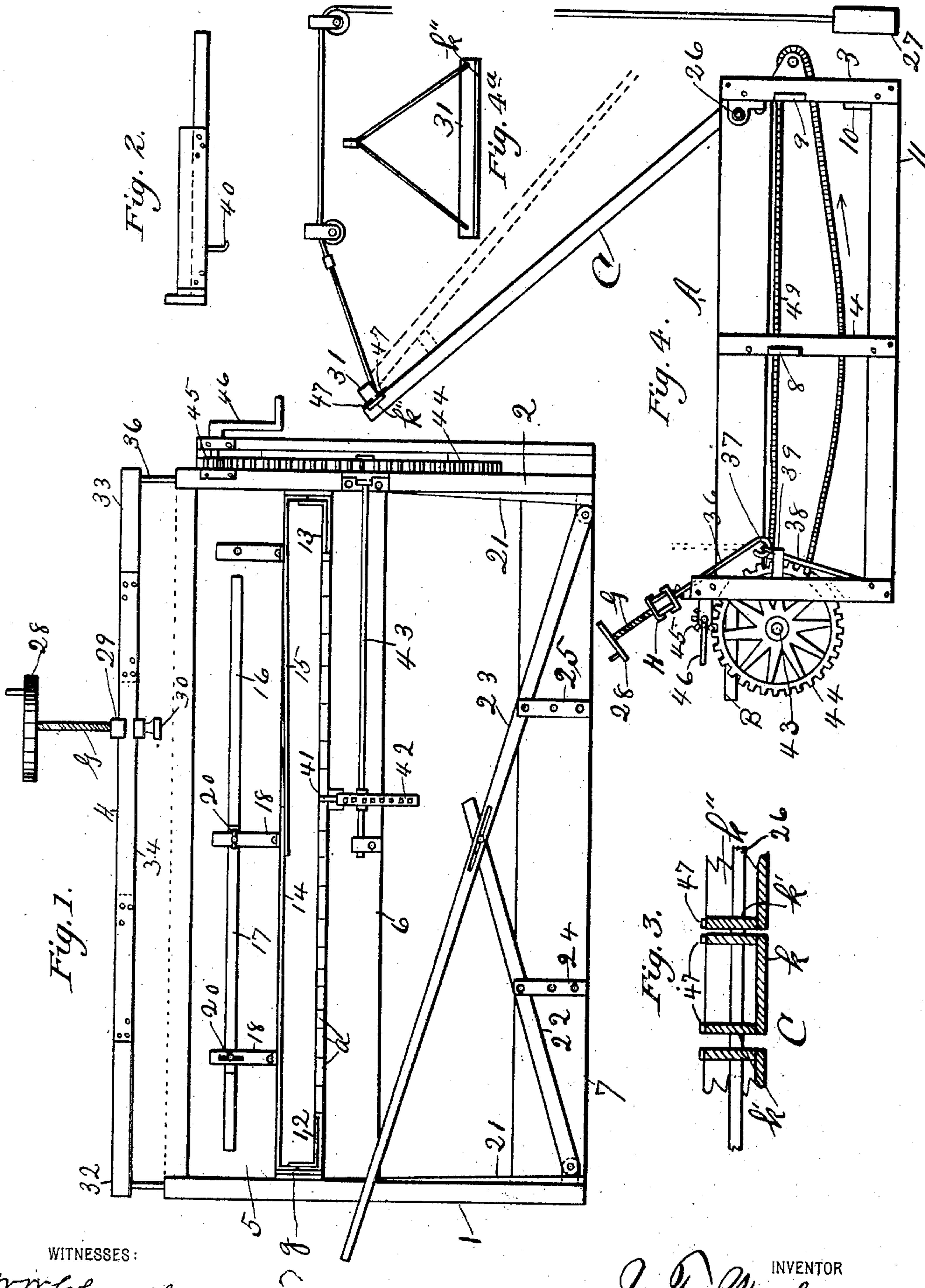
Patented July 30, 1901.

J. T. WOOLERY.
MATTRESS STUFFING MACHINE.

(No Model.)

(Application filed Aug. 9, 1898.)

3 Sheets—Sheet 1.



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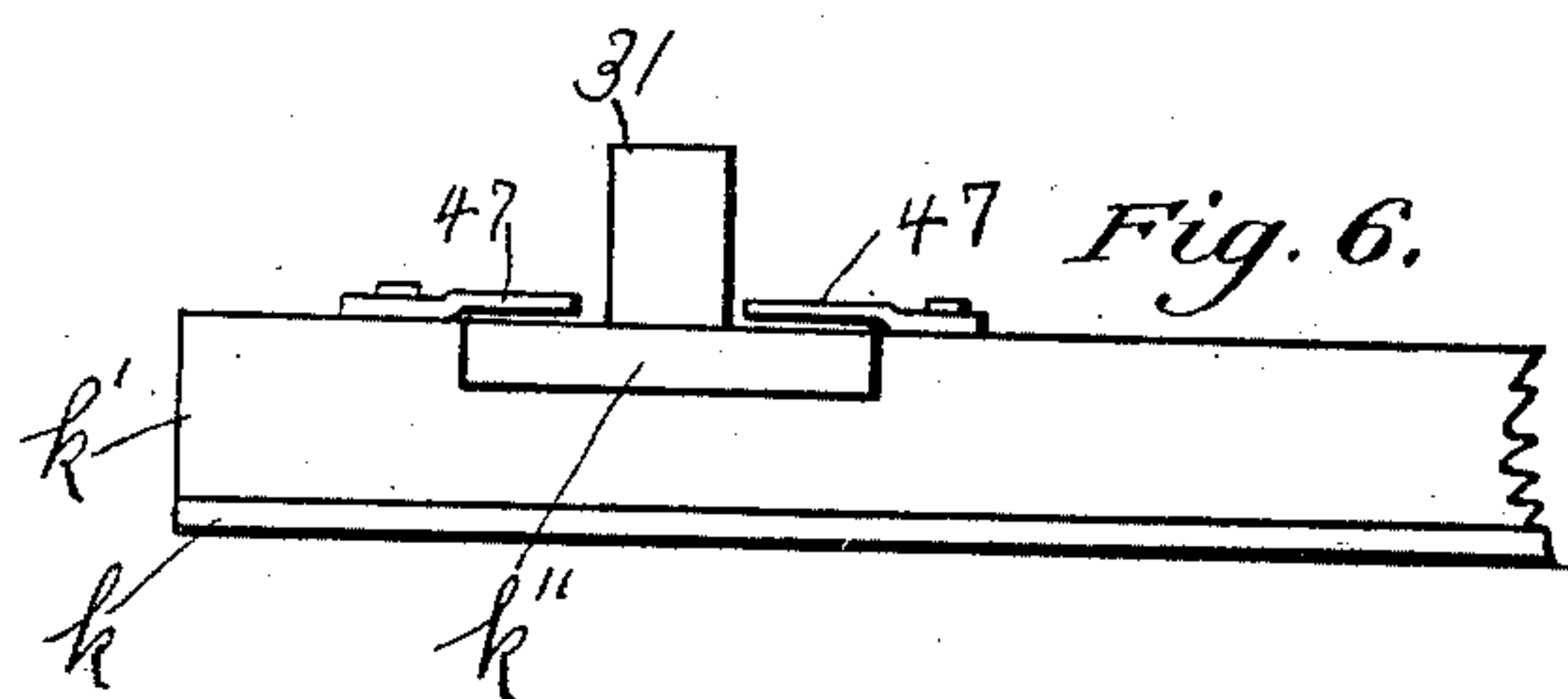
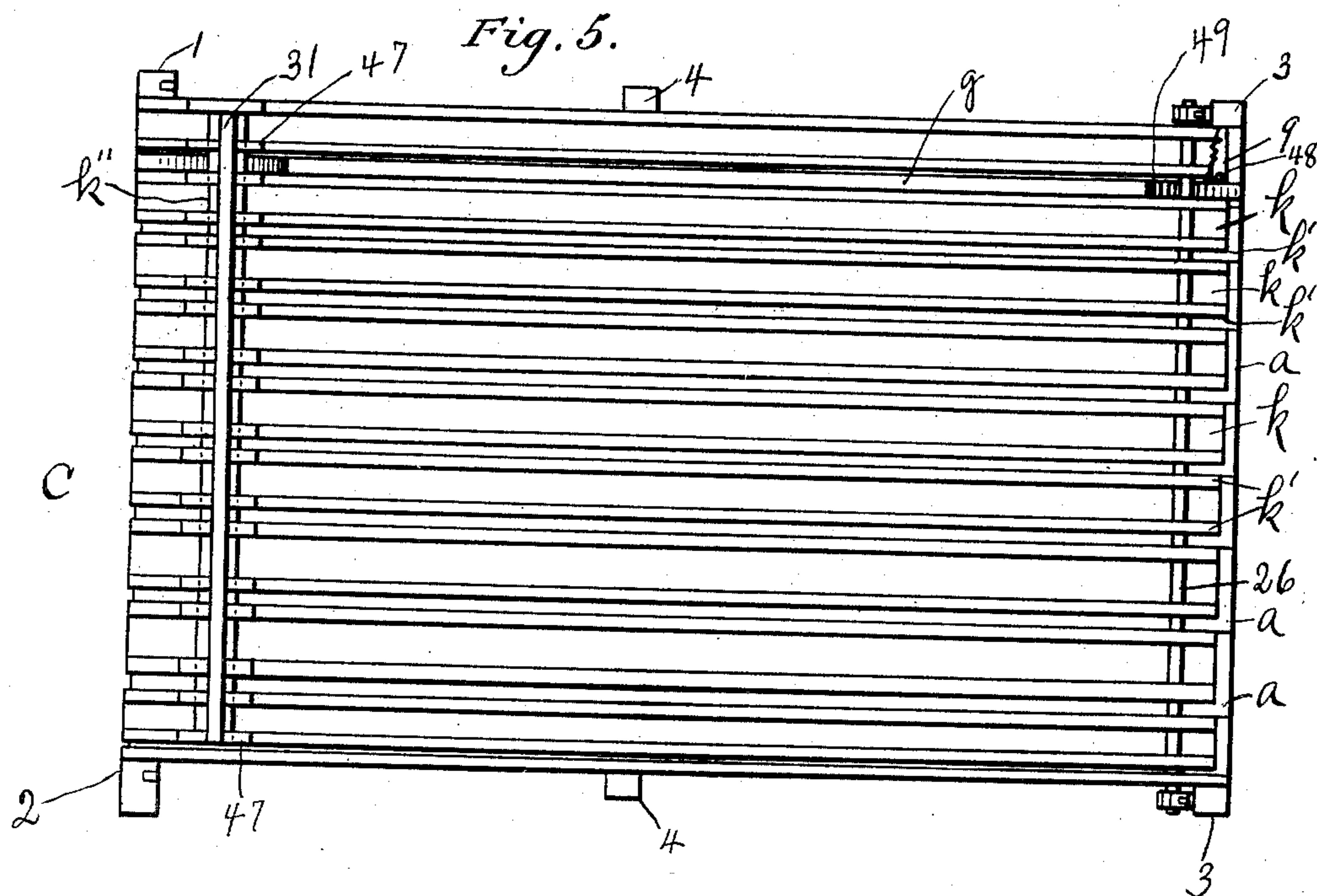
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3 Sheets—Sheet 2.



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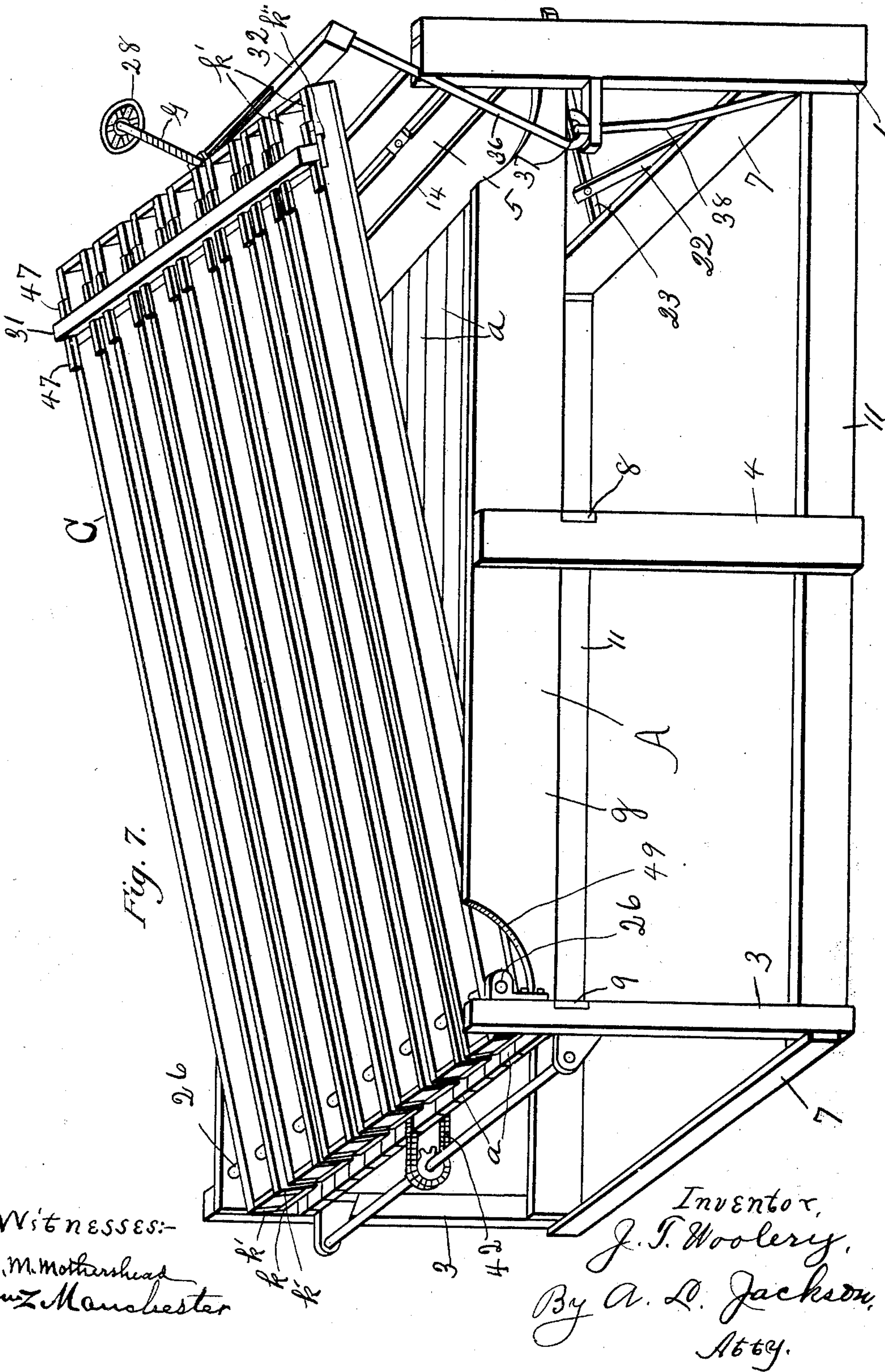
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UNITED STATES PATENT OFFICE.

JOHN T. WOOLERY, OF FORT WORTH, TEXAS.

MATTRESS-STUFFING MACHINE.

SPECIFICATION forming part of Letters Patent No. 679,584, dated July 30, 1901.

Application filed August 9, 1898. Serial No. 688,167. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. WOOLERY, a citizen of the United States, residing at Fort Worth, Texas, have invented certain Improvements in Mattress-Stuffing Machines, of which the following is a specification.

This invention relates to a machine for holding material for forming mattresses and compressing and stuffing the material into ticks; and the object is to construct devices by which the material can be more easily compressed than has heretofore been done.

Other objects and advantages will be better understood from the following description when read in connection with the accompanying drawings, which form a part of this specification.

Figure 1 is an end elevation of the machine. Fig. 2 is a side elevation of the follower. Fig. 3 is a broken sectional view of the top or presser-frame. Fig. 4 is a side elevation of the machine on a smaller scale than Fig. 1. Fig. 4^a is a detail view of means for raising the pressure-frame. Fig. 5 is a plan view of the cover or pressing-frame, showing how the frame engages the movable side piece of the press-box. Fig. 6 is a broken view of the pressing-frame, illustrating the construction of the frame. Fig. 7 is a perspective view of the machine with the pressing-frame slightly raised and the cable for raising the frame omitted.

Similar characters of reference are used to indicate the same parts throughout the several views.

In the drawings the figures 1, 2, 3, and 4 indicate upright frame-pieces, and 5, 6, and 7 are end beams attached to said uprights. The box A is mounted in the frame, constructed of the above-named parts. The box A rests on the beams 6, 8, and 9, which are attached to the uprights. The frame is further strengthened by the beams 10 and 11. The bottom of box A is constructed of a number of boards *a*, which are removable, and the side *g* of the box is movable, so that the box can be adjusted to make any size mattress desired. The side *g* is not attached to the frame, but lies on the frame. When the largest size mattress is being made, the frame holds the side *g* in place. When a smaller-sized mattress is to be made, the side *g* is

moved in and will be held in place by the pressure-frame.

The machine is provided with a chute B, composed of parts 12 and 13, attached to the bottom and sides of the box A and the parts 14 and 15, the part 15 being rigidly attached to the end beam 5 and the part 14 being adjustably mounted on said beam by nails or screws or bolts. A slot 16 is cut in beam 5 and a bar 17 is mounted in this slot. The bar 17 is held in the slot by means of the hangers 18 and suitable bolts 20, provided with thumb-nuts and having flat heads large enough to extend across the slot 16. Bar 17 is loosely mounted in the slot 16, and the part 14 of the chute is attached to the hangers 18. When the bottom is made narrower by removing some of the boards *a*, the part 14 of the chute will telescope on the part 15, and thus make the chute narrower.

The beam 5 is adjustable as to height. The beam is attached to two uprights 21, which work in slots in the uprights 1 and 2. Two levers 22 and 23 are pivotally attached to uprights 21 by means of flat pieces of metal 60, which are rigidly attached to the uprights and pivotally attached to the levers 22 and 23 by bolts 61. These levers are pivotally mounted in the supports 24 and 25 and pivotally connected together, so that pressure on the extended part of lever 23 will operate both levers and raise the beam 5 to the dotted line in Fig. 1. The object in raising the beam 5 is to stretch the tick. The tick is stretched so that the material may be inserted in the tick in as loose condition as possible. This makes a better mattress than if the material was pressed very hard and put in the tick with the tick loose to make space for the expansion of the material. When I finish a mattress, the tick is stretched taut on loose material. When so manufactured, the mattress is much more fluffy and comfortable.

Box A is provided with a top or pressure frame C, hinged to one end of the box by means of a rock-shaft 26, which may be a piece of tubing. In Fig. 4 the pressure-frame is raised by means of the weight 27 and suitable cord and pulleys. When enough material has been put in the box to form the mattress, this frame is let down by raising the weight 27. The frame C is pressed down by

means of the yoke H and screw G, which is operated by the hand-wheel 28, provided with a suitable crank-pin. A casting 29, constructed as shown in Fig. 4 and mounted as shown in that figure and in Fig. 1, has a threaded aperture for the screw G. The screw G has a swivel-bearing 30, attached to the end thereof, which presses on the cross-piece 31 of the pressure-frame after the pressure-frame is let down on the material. The yoke is preferably constructed of two wooden pieces 32 and 33 and clamped between two pieces of metal 34, the wood extending to the dotted lines across the yoke in Fig. 1. This leaves a slot in which the casting 29 is moved back and forth for making mattresses of different widths. The yoke is mounted on two rods 35 and 36, which have pivotal bearings at 37 on the sides of the machine. As now constructed rods 35 and 36 are connected to other rods 38, which are firmly attached to the uprights 1 and 2 and braced by the braces 39. When in use, the yoke occupies the position indicated by dotted lines in Fig. 4.

Fig. 2 illustrates a follower of ordinary construction, having a depending hook or lug 40, which projects through the slot 41 in the bottom of the box. The lug or hook 40 is engaged by a sprocket-chain 42. The sprocket-chain is driven by two sprocket-wheels under each end of the box. One of the sprocket-wheels is mounted on the shaft 43. This shaft is driven by the cog 44, which is driven by the pinion 45, which may be driven by a crank 46, these parts being located at the front of the machine for convenience.

The pressure-frame or top C is constructed of a number of boards k , which are made strong by similar boards k' , the boards k being rigidly attached to the bottom edges of boards k' by nails or screws and a suitable end piece k'' at one end. The shaft 26 passes through each side brace k' . The end piece k'' is countersunk in the side boards k' of the pressure-frame. The end piece k'' is bolted or otherwise securely attached to the cross-piece 31, the piece k'' being broader than the cross-piece 31 and the two pieces forming an inverted T in cross-section. Small strips of metal 47 are nailed or attached to the top edges of boards k' and extend over the part of the end piece k'' not covered by the end piece 31, the strips 47 being as wide as the boards k' are thick. The cross-piece k'' is loosely mounted in the pieces or boards k' , and these boards are loosely mounted on the shaft 26, so that boards k may be moved side-wise. When a small mattress is to be made, the movable side g of box A will project up between the boards k . The floor-pieces a of the box may be removed, as shown in Fig. 5, and pins 48 inserted in the frame-pieces to hold the bottom edge of the side g in place, while the top edge is held in place by the boards k of the cover or pressing-frame C. The side g is cut out or beveled at 49, so that it will extend under the shaft 26. The

boards k and k' constitute longitudinal frame-pieces which are laterally adjustable, the boards k' being loosely mounted on the shaft 26 and on the cross-piece k'' .

It will be observed that the pressure-frame is so constructed that it will be very strong and can be used in making any sized mattress to hold the side piece of the stuffing-box in place. When this frame is to be let down, the yoke H is swung forward, as shown in Fig. 4 in full line, and after the frame is down the yoke is swung back to the position shown in dotted lines.

The operation may be described as follows: The pressure-frame is raised and secured in the raised position while material for a mattress is being placed in the box A. When enough material has been placed in the box for a mattress, the pressure-frame is lowered on the material and the yoke H is moved forward, so as to be over the end of the pressure-frame. The cross-piece 31 is then pressed down on the frame by means of screw G. When the material has been pressed enough, the tick is placed on the chute, and the upper part of the chute is raised by the levers above described, thus stretching the tick. The material is then discharged into the tick by means of the follower, the follower being propelled by the engagement of the lug 40 with the sprocket-chain 42. The sprocket-chain is driven by the gearing above described.

Many changes in the assembling and construction of the various parts may be made without departing from the spirit of my invention.

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

1. A mattress-stuffing machine having a suitable frame, a stuffing-box mounted on said frame, and a pressure-frame comprising a number of boards forming a smooth under surface, boards mounted edgewise on said boards flush with the edges thereof to strengthen the same, a cross-beam, means for applying pressure upon said cross-beam, a cross-piece countersunk in said last-mentioned boards and secured to said cross-beam, strips attached to said last-named boards and adapted to engage said cross-piece, and a shaft on which said frame is pivotally mounted at one end.

2. In a mattress-stuffing machine provided with a stuffing-box and a pressure-frame; said box having removable bottom pieces and an adjustable side piece and said frame having sections composed of flat boards reinforced by boards mounted edgewise thereon, said sections being capable of lateral adjustment and arrangement to engage and hold said side piece between any two sections when the frame is down whereby mattresses of any desirable width can be made.

3. In a mattress-stuffing machine provided with a stuffing-box, a pressure-frame, and a

chute at the end of said box; said chute being adjustable and provided with telescopic side pieces, means for adjusting the top of said chute consisting of a cross-beam to which
5 said top is attached, two uprights supporting said cross-beam, each of said uprights having a lever pivotally attached to the bottom thereof, suitable fulcrums for said levers, and means for guiding said uprights in their
10 upward and downward motion, said levers

being pivotally connected together whereby pressure on one lever will operate both levers and raise the top of the chute.

In testimony whereof I set my hand, in the presence of two witnesses, this 5th day of August, 1898.

JOHN T. WOOLERY.

Witnesses:

A. L. JACKSON,

JAMES GILFORD BROWNING.