No. 706,643. Patented Aug. 12, 1902.

L. DOPPELMAYR & M. WEBER.

CELERY BUNCHING DEVICE.

(Application filed Apr. 22, 1901.)

(No Model.) 2 Sheets—Sheet 1.

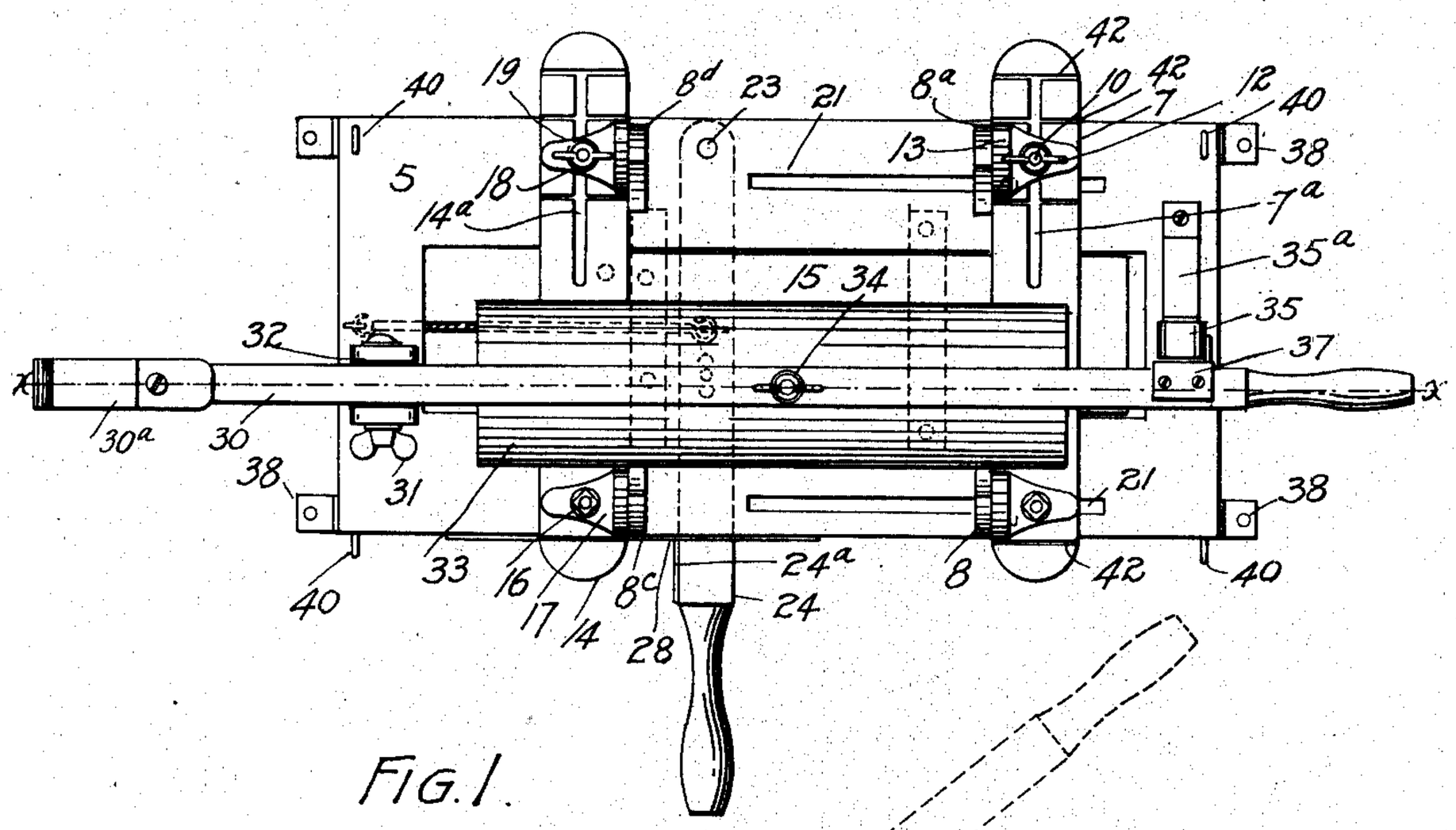

FIG. 1.

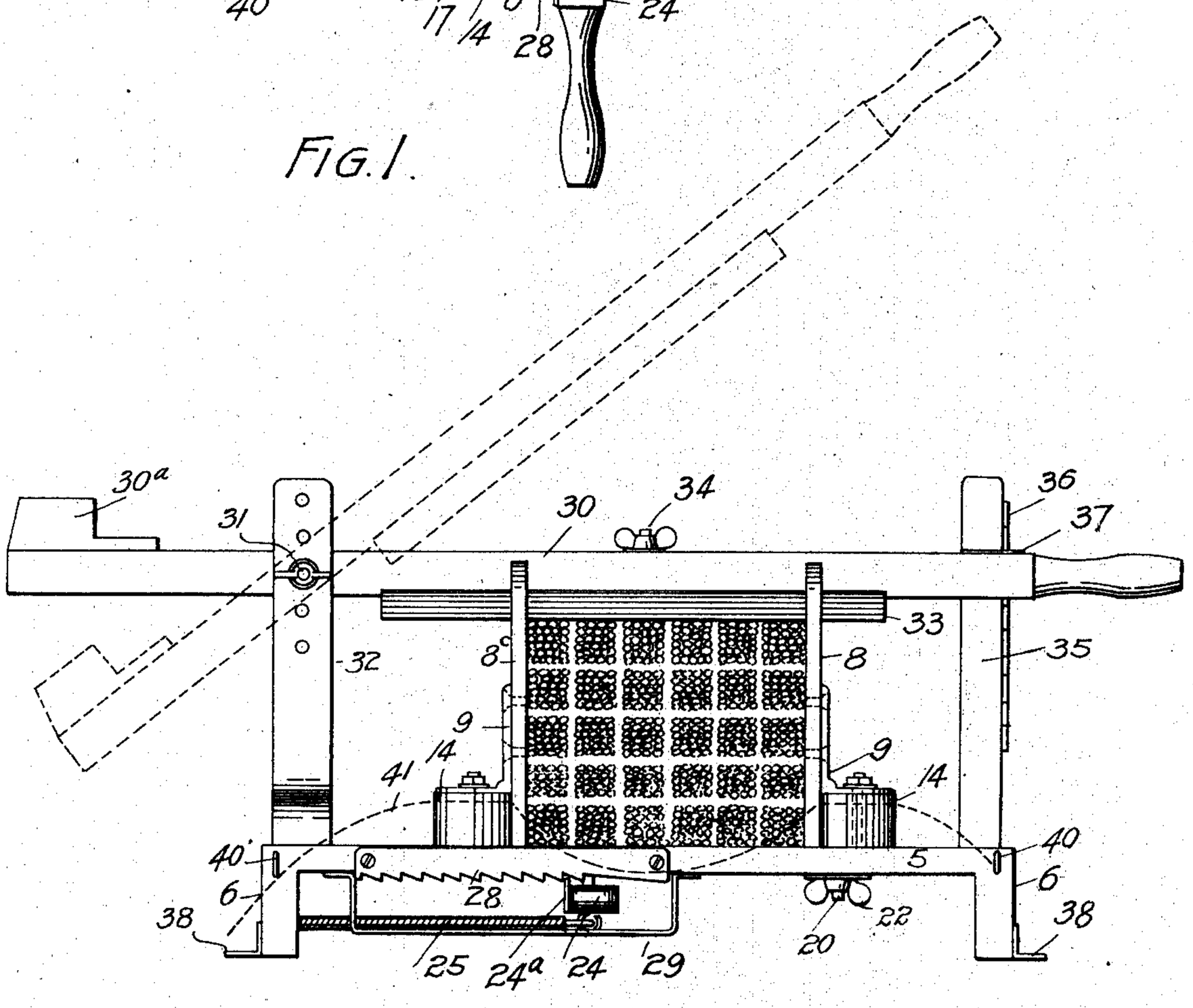

FIG. 2.

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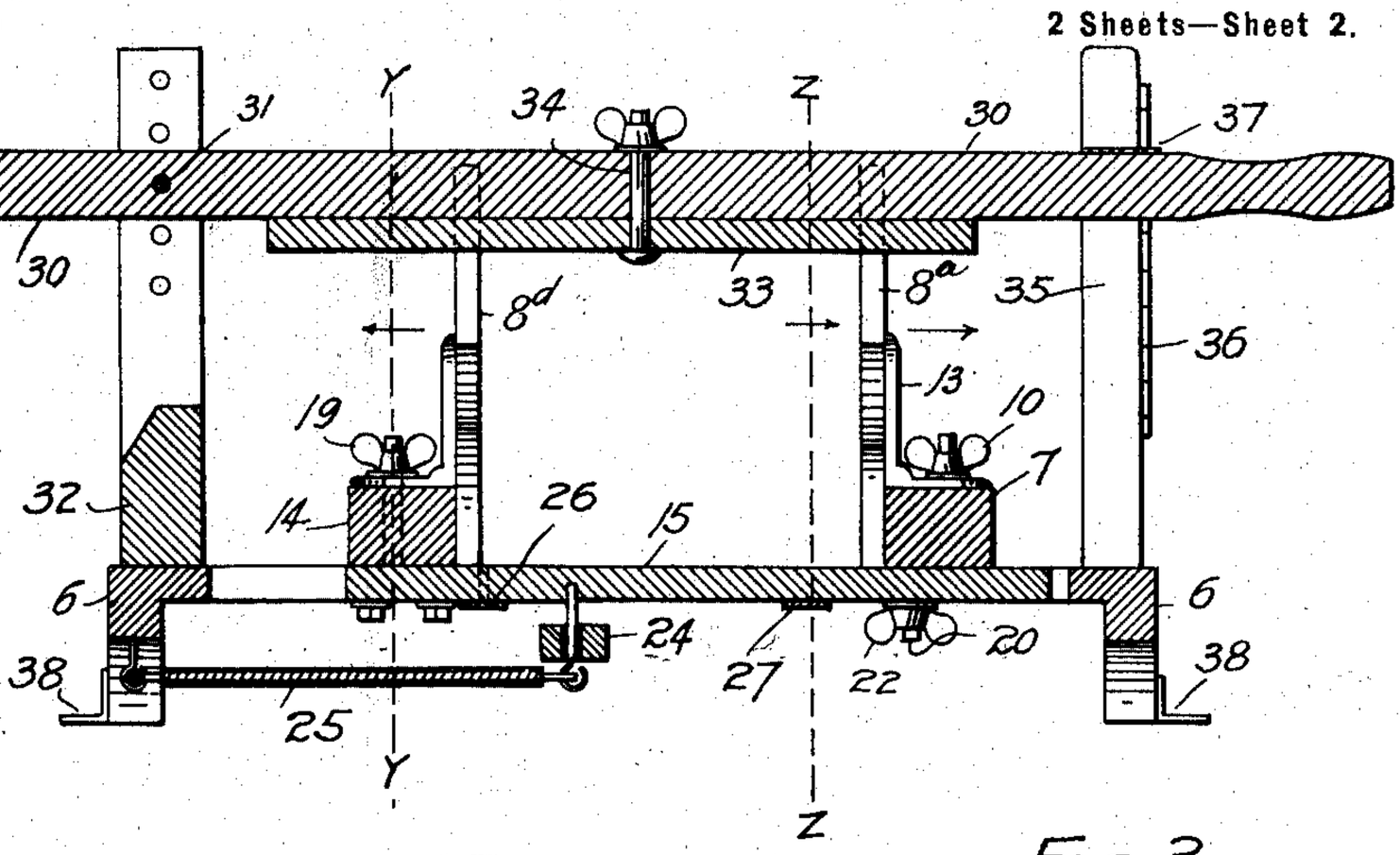

FIG. 3.

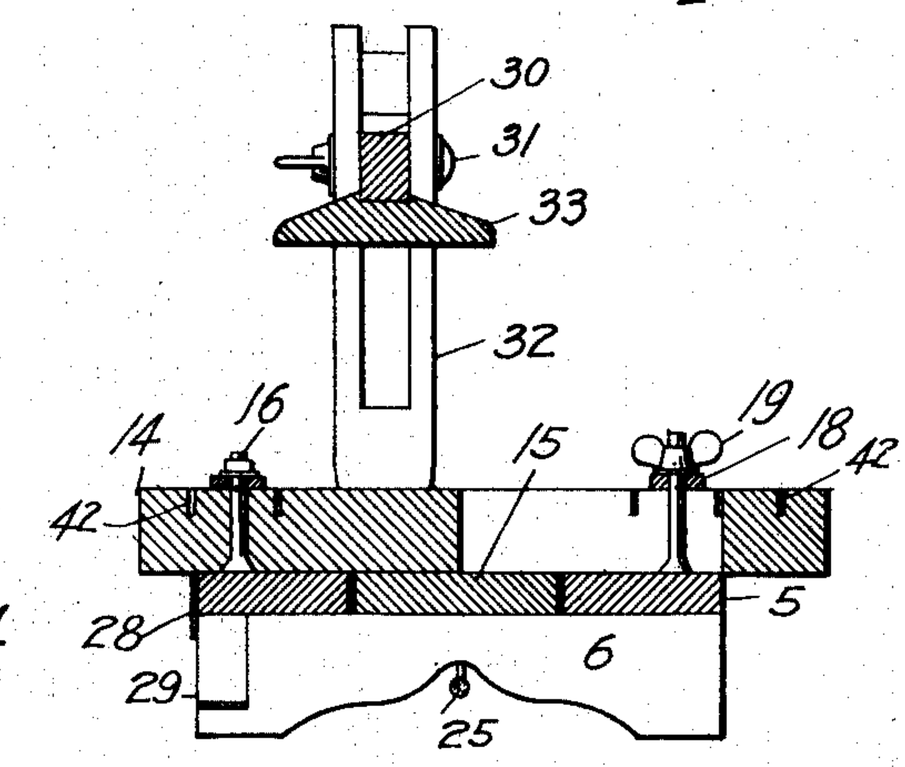

FIG. 4.

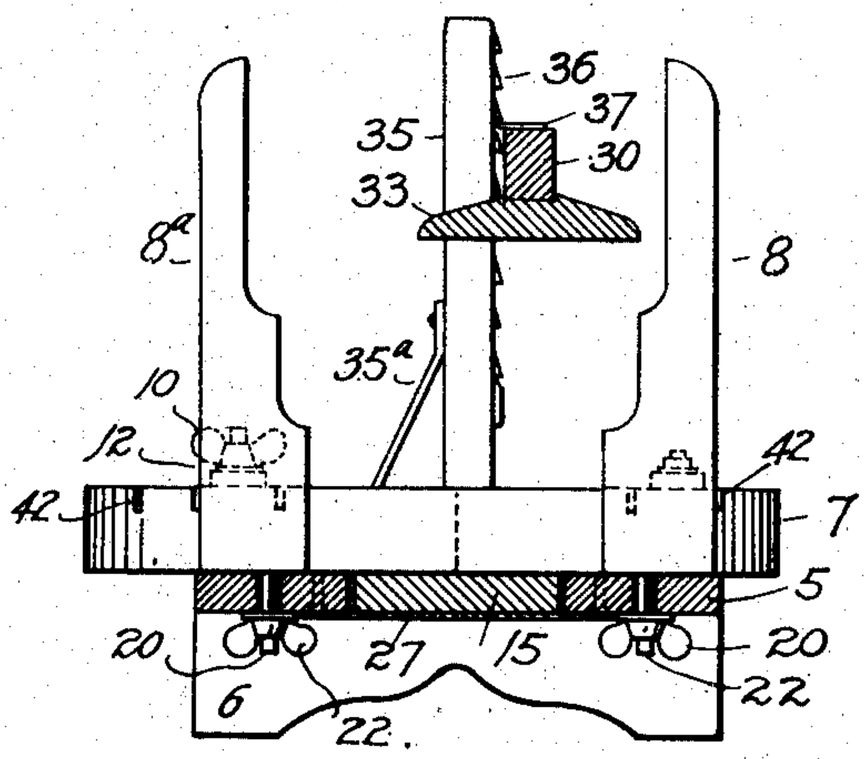

FIG. 5.

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UNITED STATES PATENT OFFICE.

LOUIS DOPPELMAYR, OF VALVERDE, AND MARTIN WEBER, OF DENVER, COLORADO.

CELERY-BUNCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 706,643, dated August 12, 1902.

Application filed April 22, 1901. Serial No. 56,843. (No model.)

To all whom it may concern:

Be it known that we, LOUIS DOPPELMAYR, residing at Valverde, and MARTIN WEBER, residing at Denver, in the county of Arapahoe and State of Colorado, citizens of the United States of America, have invented certain new and useful Improvements in Celery-Bunching Devices; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in devices for bunching celery, our object being to facilitate, cheapen, and make easier the work of bunching and tying celery and other articles; and to this end the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a top or plan view of our improved celery-bunching apparatus. Fig. 2 is a side elevation of the same. Fig. 3 is a section taken on the line $x\ x$, Fig. 1. Fig. 4 is a section taken on the line $y\ y$, Fig. 3, viewed in the direction of the arrow. Fig. 5 is a section taken on the line $z\ z$, Fig. 3.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate a bed-plate or platform, and 6 end supports therefor. Upon this platform is adjustably secured a cross-bar 7. To this bar 7 is rigidly attached an upright piece or standard 8 by means of an angle-plate 9. An upright piece 8^a is adjustably attached to this same cross-bar by means of a bolt 10 passing through a slot 7^a formed in the bar 7 and to which a thumb-nut 12 is applied above the bar. As shown in the drawings, an angle-plate 13 is made fast to the piece 8^a and the bolt 10 is passed through an opening formed in the horizontal part of the angle-plate. By loosening the thumb-nut the standard 8^a and the angle-plate may be moved out or in at pleasure on the bar 7. This cross-bar 7 is adjustably attached to the platform by passing bolts 20 through openings formed in the bar and slots 21 in the platform, extending at right angles to the cross-bar. Thumb-nuts 22 are applied to the lower extremities of these bolts.

A cross-bar 14 similar to the cross-bar 7 is slidably mounted on the platform 5 and secured to a rectangular piece 15, occupying an opening in the platform of greater length than the piece 15, whereby the said piece is allowed a limited degree of movement longitudinally, this movement, however, being sufficient for all practical purposes in the operation of the machine, as hereinafter explained.

To the cross-bar 14 is rigidly attached an upright part or standard 8^c by passing a bolt 16 through registering-openings formed in an angle-plate 17 and the cross-bar, the angle-plate being also made fast to the part 8^c. A standard 8^d is adjustably attached to the cross-bar 14 by passing a bolt 18 through an opening formed in an angle-plate 19 and through a slot 14^a formed in the bar, the angle-plate being secured to the part 8^d.

Pivotally connected with the under surface of the platform, as shown at 23, is a hand-lever 24, which is connected with the movable part 15. A coil-spring 25 is connected with an end support of the platform at one extremity and at the other extremity with the lever 24. A guide-strap 26 is attached to the part 15 and overlaps the platform 5 on opposite sides. A similar strap 27 is attached to the platform on opposite sides and passes under the slidable part 15. To one of the vertical edges of the lever 24 is attached a plate 24^a, which projects a short distance above the lever and is adapted to engage a ratchet-plate 28, attached to the adjacent edge of the platform. The lever is supported in operative relation with the other parts by a metal strap 29, which is attached to the under surface of the platform and is bent down to form a guide for the lever, whose function is the adjustment of the bar 14 and its attachments.

A vertically-swinging lever 30 is fulcrumed

on a bolt 31, passed through registering openings formed in a post 32 and the lever. This post is slotted to receive the lever, and its arms are provided with a number of openings, whereby the fulcrum may be raised or lowered at will. To this lever is detachably applied a piece of material 33, flat on its under surface and adapted to engage the celery from above between the upright pieces 8 and 8^c on one side and the similar pieces 8^a and 8^d on the other side. As shown in the drawings, the part 33 is connected with the lever by means of a bolt 34, fastened by a thumb-nut. It is evident from this construction that the piece 33 may be changed at will for one of different size whenever circumstances may require.

Mounted on the end of the platform, remote from the post 32, is a post 35, provided with a vertical ratchet-plate 36, adapted to be engaged by a plate 37, attached to the top of the lever and overlapping it on the side adjacent the ratchet-plate for the purpose. The post 35 is provided with a brace 35^a, located on the side opposite the lever. This lever is provided with a weight 30^a, which normally holds it in the raised position when released from engagement with the ratchet.

To facilitate the tying operation, the edge of the platform on one side and the top of the platform on the opposite side are provided with screw-eyes 40, through one of which on each side the tie-string 41 from a ball of twine may be passed. The cross-pieces 7 and 14 are also provided with slots 42, adapted to receive the bunching-twine.

When the apparatus is in use, the small bunches of celery (usually a dozen) to be tied into a larger bunch, package, or bundle are placed on the platform 5 across the sliding part 15 and between the standards 8 and 8^c on one side and the standards 8 and 8^c on the opposite side. The two standards 8^a and 8^d may be adjusted on their respective cross-bars to occupy positions nearer the standards 8 and 8^c or more remote therefrom, according to the length of the celery. The normal adjustment of the bar 7 with reference to the bar 14 will depend upon the size of the bunches of celery.

After the bunches of celery have been placed in position, as aforesaid, they are pressed tightly together from the side by the movement of the bar 14 and its uprights 8^c and 8^d toward the bar 7 and its uprights 8 and 8^a through the instrumentality of the lever 24, which when properly adjusted is locked in place by the ratchet-plate 28. The celery bunches are pressed tightly down from the top by the use of the lever 30 and its board or plate 33, the lever 30 being locked in place when adjusted by the ratchet 36. The celery bunches being now securely held in place may be quickly tied into a package or large bunch, after which the levers 30 and 24 are unlocked and the package of celery removed from the machine preparatory to repeating the operation.

Having thus described our invention, what we claim is—

1. In an apparatus of the class described, the combination of a platform having a central opening, a slide located in said opening, a cross-bar attached to the slide, standards attached to the cross-bar, a lever connected with the slide for adjusting the cross-bar, another cross-bar attached to the platform, standards attached to the cross-bar, and a vertically-swinging lever acting from above on the material embraced by the side standards.

2. The combination of a platform composed of two parts, one part being movable, coöperating side standards for embracing the material placed thereon, one set of standards being mounted on the movable part of the platform, a lever for adjusting the movable platform part and its standards, and another lever arranged to act from above on the material between the standards.

In testimony whereof we affix our signatures in presence of two witnesses.

LOUIS DOPPELMAYR.
MARTIN WEBER.

Witnesses:
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