

No. 840,901.

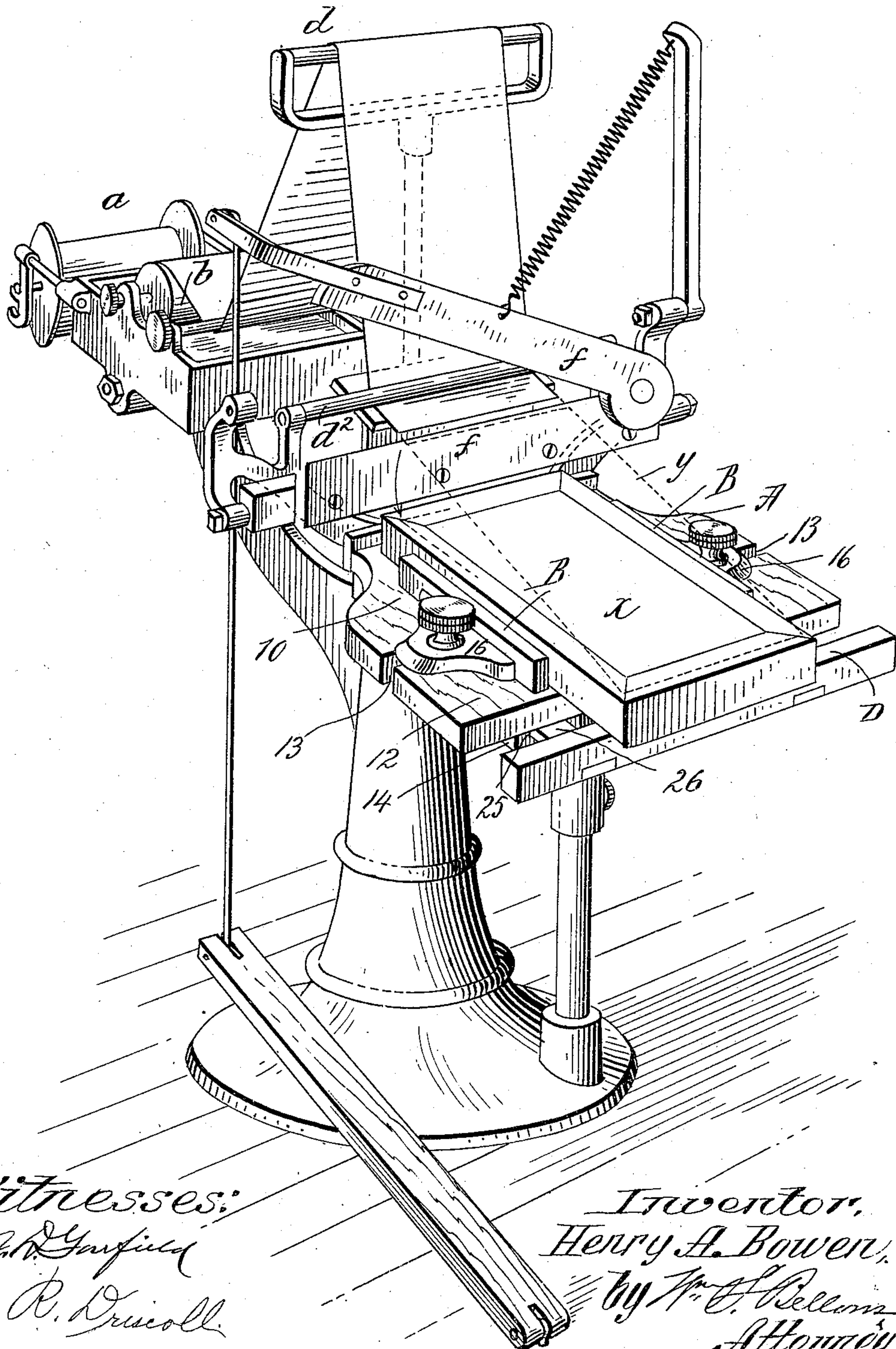
PATENTED JAN. 8, 1907.

H. A. BOWEN.
PAPER BOX TOPPING MACHINE.

APPLICATION FILED JUNE 4, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

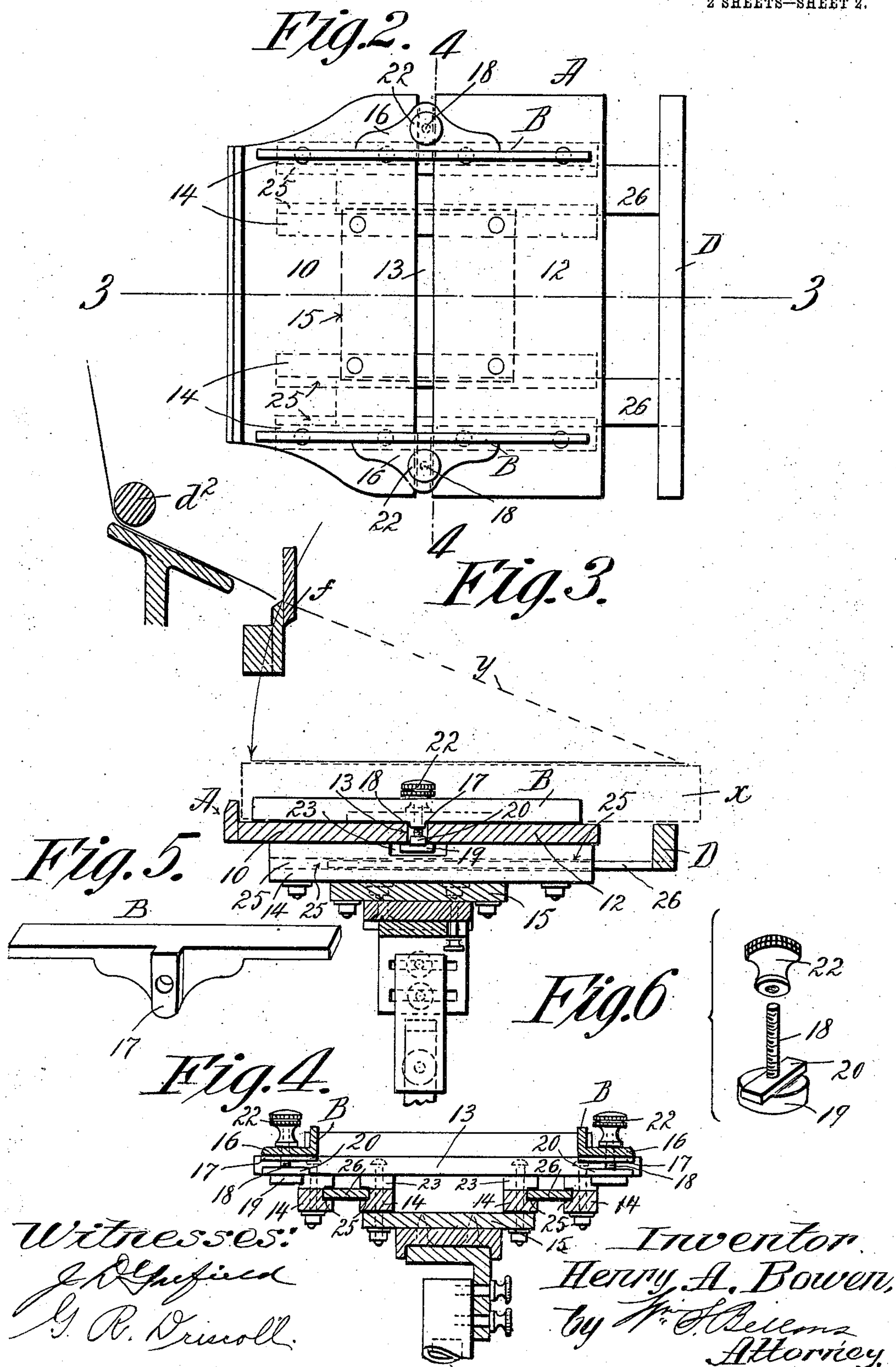


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PAPER BOX TOPPING MACHINE.
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2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

HENRY A. BOWEN, OF SHELBURNE FALLS, MASSACHUSETTS.

PAPER-BOX-TOPPING MACHINE.

No. 840,901.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed June 4, 1906. Serial No. 320,008.

To all whom it may concern:

Be it known that I, HENRY A. BOWEN, a citizen of the United States of America, and a resident of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Paper-Box-Topping Machines, of which the following is a full, clear, and exact description.

This invention relates to improved box-supporting means for a "topping-machine," as termed—that is, a machine which is employed for supplying and permitting the delivery of a paper strip from a supply-roll in a gummed or paste-covered condition onto the inverted bottom of a paper box or onto a paper-box cover for imparting a finished covering for the box or cover, the paper as drawn off from the supply-roll being surfaced with paste, and when forwardly brought to its position properly in relation to the box to be smoothly pressed thereon is cut off from the supply by a shear-blade.

This invention particularly relates to an improved table or box supporting attachment for the topping-machine, having for an object to provide opposite side gages whereby the boxes may be successively positioned with their opposite edges accurately corresponding to the longitudinal edges of the covering-strip of paper supplied from the topping-machine, said gages being adjustable toward and from each other to accord with boxes or covers of varying widths and having means for confining them in the proper adjustments, and having for a further object to provide a supporting extension which may be distended more or less forwardly relatively to the box-supporting table proper, so that in top-covering unusually long boxes during the action of manually pressing and smoothing the pasted paper onto the forward end portion of the box such end portion will be reliably sustained against any liability of being downwardly and forwardly tilted; and a further object is to construct the box-supporting attachment for the topping-machine having the capabilities mentioned in a most compact and simple manner for the advantages of easy operation or adjustment, durability, and convenience of use.

The invention consists in the box-supporting appliances for and in combination with a topping-machine, all as hereinafter fully described in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a topping-machine having my improved box-supporting table applied thereon. Fig. 2 is a plan view of the box-supporting table. Fig. 3 is a vertical sectional view, as taken from front to rear on line 3 3, Fig. 2. Fig. 4 is a vertical cross-sectional view, as taken on line 4 4, Fig. 2. Fig. 5 is a perspective view of one of the side gages, and Fig. 6 is a perspective view of one of the gage-confinement devices.

In the drawings, A represents the table of a topping-machine for supporting a box *x* thereon to be covered or topped by a strip of paper drawn off from the supply-roll *a* over a paste-roll *b* and guides *d d'* to and past and to be cut off by the shear *f*, the dotted lines *y* in Fig. 1 representing the length or portion of the paper to be cut off for topping one box.

The table A is supported in the relative position shown by a suitable bracket of the topping-machine supporting upright provided therefor.

The table is composed of two top sections or boards 10 and 12 in the same plane, one in front of the other and separated by the transverse space or way 13, opposite pairs of parallel bars 14 14, which range from front to rear of and are firmly secured to the under side of the top sections 10 12 and hold them immovably, and a rectangular board 15 of smaller area than the table-top bolted on and to the under side of the inner bars 14 of the pairs thereof, these parts making a rigid platform-like structure, the lower board 15 thereof constituting the means for making the table-supporting connection with the sustaining-bracket therefor.

B B represent the opposite side gages for the box, the same comprising the plates or bars having intermediate outwardly-projecting base-flanges 16 and intermediate downwardly-protruding transverse ribs 17, which have guiding fits in the crossway 13 of the table and prevent the swinging of the gages from the parallel portions.

The confining devices for the gages consist of the screws 18, having lower end heads 19, with transverse ribs 20, engaging in the way 13 from below, the shanks of the screws passing upwardly through the way 13 and through and above the gage base-flanges, and the binding thumb-nuts 22, screw-engaging the upper extremities of the screw-shanks.

By loosening the thumb-nuts the gages and their clamping devices may be slid to-

ward and from each other accordingly as necessary for gaging the position of boxes of any width required to be "topped."

In order that the bars 14 14 may not obstruct the transverse movements of the ribbed heads of the gage clamp-screws, such bars have intermediate recesses 23 within their sides next to the under surface of the table-top boards 10 and 12 and adjacent the crossway 13, which recesses provide passes for the free movements of the clamp-screw heads.

The pairs of parallel bars 14 14 have grooves 25 in their inwardly-facing sides, making slideways for the parallel longitudinal bars 26 26 of an extension-support D for the box, the same being capable of forward distension when necessary to support the front ends of long boxes and of being compactly positioned next to the forward end of the table-top board 12.

By the use of the above-described fixture or appliance as a part of a topping-machine the boxes may be positioned to most accurately receive the covering-strip, and inexperienced and unskilled persons may satisfactorily and very rapidly perform the work.

I claim—

1. A machine for topping paper boxes having at the forward portion thereof a table consisting of two top sections or boards, one in front of the other, and separated by a transversely-extending space or way, opposite parallel bars which are arranged from front to rear and are firmly secured to the under side of the top sections, and a board extending between and secured to the under sides of said bars, a pair of gages comprising plates or bars having outwardly-projecting base-flanges, and intermediately of their lengths, downwardly-protruding transverse ribs having guiding fits in the crossway of the table, and the clamping devices for the gages consisting of screws having lower end heads with transverse ribs at their upper sides engaging in the table-way from below, the shanks of the screws passing upwardly through the gage base-flanges, and thumb-nuts screw-engaging the upper extremities of the screw-shanks and to be set against the tops of the base-flanges.

2. A machine for topping paper boxes having at the forward portion thereof a table consisting of two top sections or boards, one in front of the other, and separated by a transversely-extending space or way, oppositely-arranged pairs of parallel bars extending from front to rear and secured to the under side of the top sections, each pair of

said bars having longitudinal grooves within the sides thereof which are toward each other, a supporting-piece extending between, and secured to, the under sides of said bars, a pair of gages comprising plates or bars having outwardly-projecting base-flanges, and, intermediately of their lengths, downwardly-protruding transverse ribs having guiding fits in the crossway of the table, and the clamping devices for the gages consisting of screws having lower end heads with transverse ribs engaging in the table-way from below, the shanks of the screws passing upwardly through the gage base-flanges, and thumb-nuts screw-engaging the upper extremities of the screw-shanks and to be set against the tops of the base-flanges, and a pair of bars slidably engaged in the pairs of grooves in said first-named bars, having extending between, and supported by their forward portions, an extension-support bar.

3. A box-supporting table for a topping-machine consisting of two top sections, one in front of the other, and separated by a transversely-extending space or way, oppositely-arranged pairs of parallel bars extending from front to rear and secured to the under side of the top sections, each pair of said bars having longitudinal grooves within the sides thereof which are toward each other, and having the recesses 23 at their upper intermediate portions adjacent said transverse way, a supporting-piece extending between, and secured to, the under sides of said bars, a pair of gages comprising plates having outwardly-projecting base-flanges, and, intermediately of their lengths, downwardly-protruding transverse ribs having guiding fits in the crossway of the table, and the clamping devices for the gages consisting of screws having lower end heads with transverse ribs engaging in the table-way from below, the shanks of the screws passing upwardly through the gage base-flanges, and thumb-nuts screw-engaging the upper extremities of the screw-shanks and to be set against the tops of the base-flanges, and a pair of bars slidably engaged in the pairs of grooves in said first-named bars, having extending between, and supported by their forward portions, an extension-support bar.

Signed by me at Shelburne Falls, Massachusetts, in presence of two subscribing witnesses.

HENRY A. BOWEN.

Witnesses:

GEO. W. JENKS,
F. H. AMSDEN.