

(No Model.)

E. E. PORTER.

SELF LOCKING PRESS FOR BUNDLE WRAPPING.

No. 401,587.

Patented Apr. 16, 1889.

FIG. II.

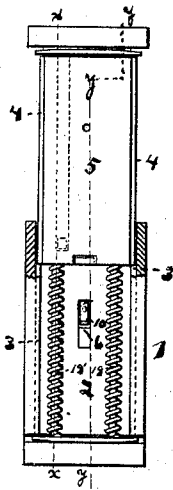


FIG. I.

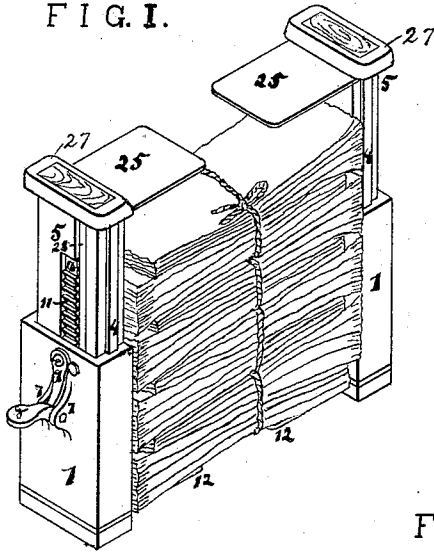


FIG. V.

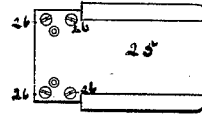


FIG. VI.

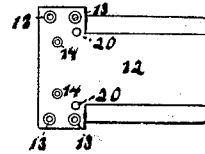


FIG. M.

FIG. III.

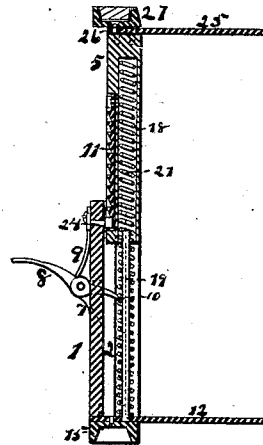
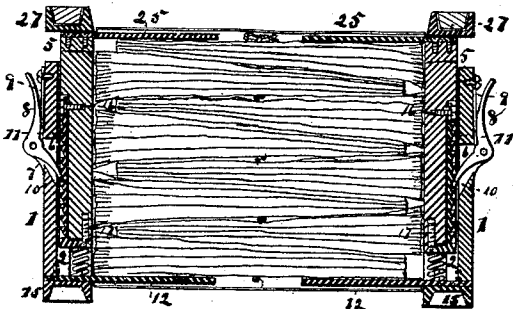
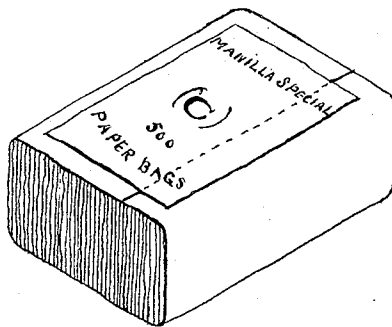


FIG. VII.



ATTEST

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ATTYS

# UNITED STATES PATENT OFFICE.

EDWARD E. PORTER, OF CINCINNATI, OHIO.

## SELF-LOCKING PRESS FOR BUNDLE-WRAPPING.

SPECIFICATION forming part of Letters Patent No. 401,587, dated April 16, 1889.

Application filed September 13, 1888. Serial No. 285,329. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. PORTER, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Self-Locking Press for Bundle-Wrapping, of which the following is a specification.

This device is for compressing and wrapping paper, paper bags, and other similar articles, being particularly designed for paper bags.

My invention is intended to enable the wrapping of paper bags to be performed better and with much greater rapidity and ease than by either of the customary manipulations—such, for example, as where the pile is held by the body of the operator while he ties the same by hand, or in which the bundle is held and corded entirely by hand or is held between two plates having grooves for the wrapping-cord, which is in like manner applied manually.

My improvements relate, first, to means whereby a package of paper, paper bags, or other similar articles can be compressed to any desired degree of compression and firmly held in position while such bale is tied, wrapped, and sealed; and, second, to means for lining up the edges of the bags or paper to form a neat parcel.

In the accompanying drawings, Figure I is a perspective view showing the two similar halves of my device with bags in position for compression. Fig. II is an elevation of one of said halves with the sliding plate released and raised. Fig. III is a section taken on the line *yy* of Fig. II, with bags compressed for wrapping. Fig. IV is a section taken on the line *xx* of Fig. II. Figs. V and VI are plans of the upper side of the upper plate and lower side of the lower plate, respectively. Fig. VII represents a bundle after wrapping and sealing.

The two halves of my device being in every respect identical, a description of one will serve for both. 1 is an oblong rectangular standard having upon one side an excavation or channel, 2, extending the entire length of said standard, the side walls of said excavation or channel having grooves 3 3 in which slide tongues 4 4 of the sliding plate 5, which fit the grooves 3 3 accurately, these tongues

being part of the sliding plate 5. Between the walls of a hole, 6, and the inner walls of the projections 7 7 plays a pawl or trigger, 8. A spring, 9, tends to keep the point 10 of said pawl or trigger in engagement with a rack, 11, on the sliding plate 5.

To the lower end of the standard is attached a plate or follower, (see Fig. VI,) 12, said plate being attached to said standard by means of screws, which engage in screw-holes 13. Screw-holes 14 receive screws by which a leg, 15, is attached to said plate.

The sliding plate 5, besides the beforementioned tongues 4 4 and rack 11, (said rack being secured in a groove made for its reception by the screws 16 17,) has two similar longitudinal orifices, 18, (one of which is here shown,) which receive two similar rods, 19, which are shrunk into holes 20 in the plate 12. The office of the said rods is to keep the lower portion of the spring 21, which bears against the lower walls of the orifices, vertical when the sliding plate is up. The sliding plate 5 has also a groove, 23, into which projects the pin 24, rigidly attached to the standard. Said pin is for limiting the upward motion of the sliding plate 5.

A plate or follower, 25, (see Fig. V,) is secured to the upper end of the said sliding plate by screws 26 secured to the plate 25. The block 27 is secured to plate 25 in the same manner that the leg 15 is secured to the plate 12. Said block may be recessed to receive any comparatively soft material—such as wood, vulcanite, or similar substance—to form a cushion for the hand.

The operation is as follows: The regularly-tied packages of paper bags or whatever articles it may be desired to bundle and wrap are placed upon one another, the whole being laid upon the lower plates, 12, and the two halves pushed toward each other. This forces the ends of the articles into line, making the ends uniform and true. The operator then presses down the sliding plates, thereby compressing the articles into a parcel. After a sufficient degree of compression has been attained, the operator removes pressure, and the said sliding plates are held in place, being locked by the engagement of the pawl 8 with the rack 11. The operator then takes a sheet

of paper, wraps it around the bundle and the plates 12 25, and pastes or ties the bundle together. A label is then placed over the joined edges of the pasted wrapper. The operator 5 then grasps the two halves of the press and pulls them away from the bundle, drawing plates 12 25 from the under portion of the wrapper, leaving it intact and the bundle complete. The operator then releases the 10 sliding plates by pressing the pawls toward the standards, thus permitting the plates to be moved upward by the action of springs 19, making the machine ready for a repetition of the operation.

15 The width of the plates is a little less than the width of the articles bundled to allow the ready removal of the said plates from beneath the wrapper. By attaching plates of a larger or smaller size to the standards and sliding 20 plates the machine may be made to wrap bags of various sizes.

I claim as new and of my invention—

1. In a self-locking press for bundle-wrapping, the combination of two pairs of plates or 25 followers, 12 25, members carrying said plates or followers and adapted to slide one on the other, and a lock for holding said members in any position to which they are set, substantially as set forth.

2. In a self-locking press for bundle-wrapping, the combination of the mutually-dependent members 1 5, the plates or followers 12 25 carried thereby, the springs 21, for forcing said members apart, and a lock for holding 35 said members in any position to which they may be set, substantially as set forth.

3. In a self-locking press for bundle-wrapping, the combination of the plates or followers 12 25, the members 1 5, sliding one upon 40 the other, a rack, 11, attached to one of the members, springs 21, for forcing said members apart, and a pawl or trigger upon the other member for engagement with said rack, so as to lock or hold said members in any position 45 to which they may be set, as set forth.

4. In a self-locking press for bundle-wrapping, the combination of the member or sliding plate 5 with the other member or standard, 1, the plate or follower 12, attached to the 50 standard, the plate or follower 25, attached to the sliding plate, springs 19, for forcing said standard and sliding plate apart, rack 11 upon the sliding plate, a pawl or trigger, 8, upon the standard for engagement with said rack, a 55 spring, 9, for automatic engagement of said pawl with said rack, and a pin, 24, projecting into a groove, 23, in the sliding plate for preventing separation of the sliding plate and standard by the springs 19, as set forth.

5. The self-locking press for bundle-wrap- 60 ping, consisting of the two similar disconnected halves, each half consisting substantially of a channeled standard, 1, a sliding plate, 5, capable of sliding in channel of said standard and carrying a rack, 11, a pawl or trigger, 8, upon the standard adapted to automati- 65 cally engage with said rack, the springs 21, for projecting said sliding plate upward upon disengagement of said pawl and said rack, and the plates or followers 12 and 25, attached to 70 the standard and the sliding plate, respectively, for the purposes set forth.

6. A self-locking press for bundle-wrapping, consisting of the two similar disconnected halves, each half having the sliding 75 plate 5, adapted for sliding in a channel or excavation, 2, of the standard 1, having its outer surface flush with the surface of the standard, for the purpose specified, and provided with tongues 4 4, which engage in 80 grooves in the sides of said excavation, a rack, 11, and the grooves 23, in which engages the pin 24, for limiting the upward motion of said sliding plate, as set forth.

7. A self-locking press for bundle-wrap- 85 ping, consisting of the two similar disconnected halves, each half having, in combination, the following elements, to wit: the channeled standard 1, having a hole, 6, lugs 7 7, and a pawl or trigger, 8, fulcruming upon 90 said lugs and whose point 10 lies in said hole, a spring, 9, whose office is to keep said trigger in engagement with rack 11 of the sliding plate 5, grooves 3 3, the pin 24, and the detachable plate or follower 12, secured to the 95 lower standard, as set forth.

8. In a self-locking press, the combination of the standard, a leg, 15, secured to said plate, two similar rods, 19, shrunk into holes 100 in said plate, the sliding plate 5, whose dimensions correspond to the dimensions of excavation or channel 2 of the standard, and which slides in said excavation, having the tongues 4 4, which engage with said grooves 105 3 3, rack 11, groove 23, into which projects the pin 24, the two similar orifices 18, which receive springs 21, that surround said rods 19, a detachable plate, 25, secured to the upper end of the sliding plate, and the block 27, all 110 substantially as described, and for the purposes set forth.

In testimony of which invention I hereunto set my hand.

EDWARD E. PORTER.

Attest:

RANKIN D. JONES,  
GEO. H. KNIGHT, Jr.