March 10, 1936.

L. H. PLATT

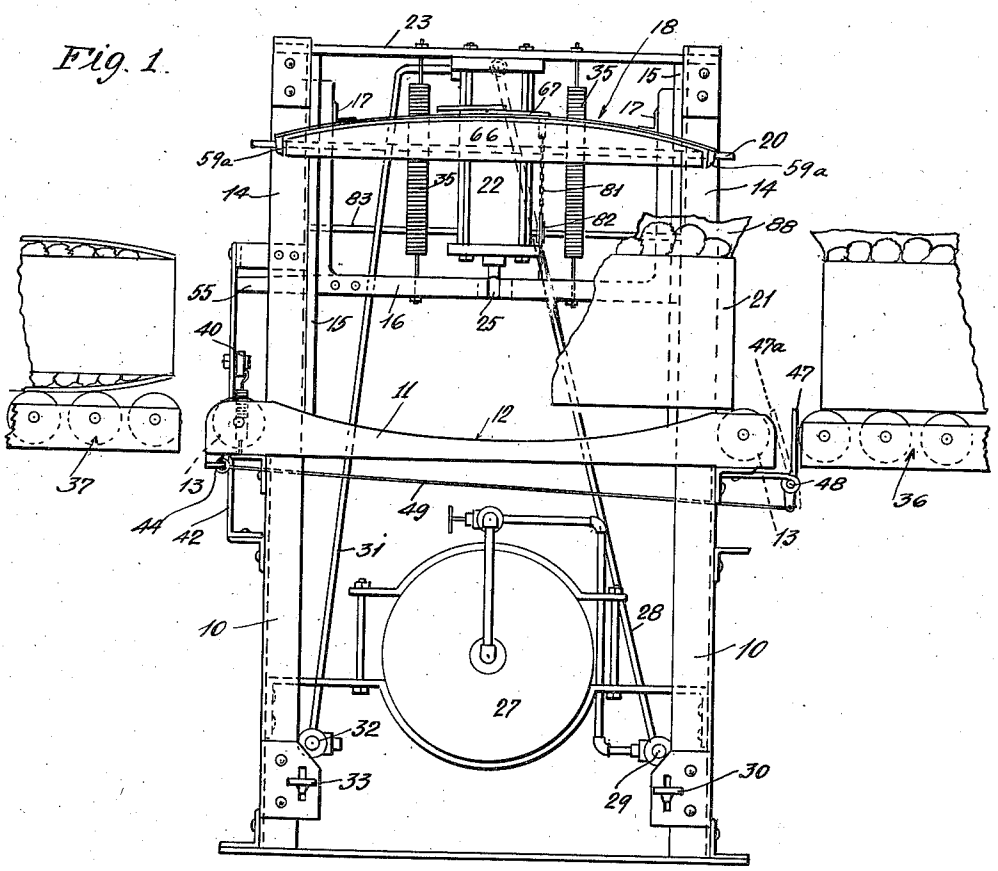
2,033,865

CRATE PRESS

Filed March 13, 1929

3 Sheets-Sheet 1

Fig. 1.



Inventor.
Leland H. Platt.

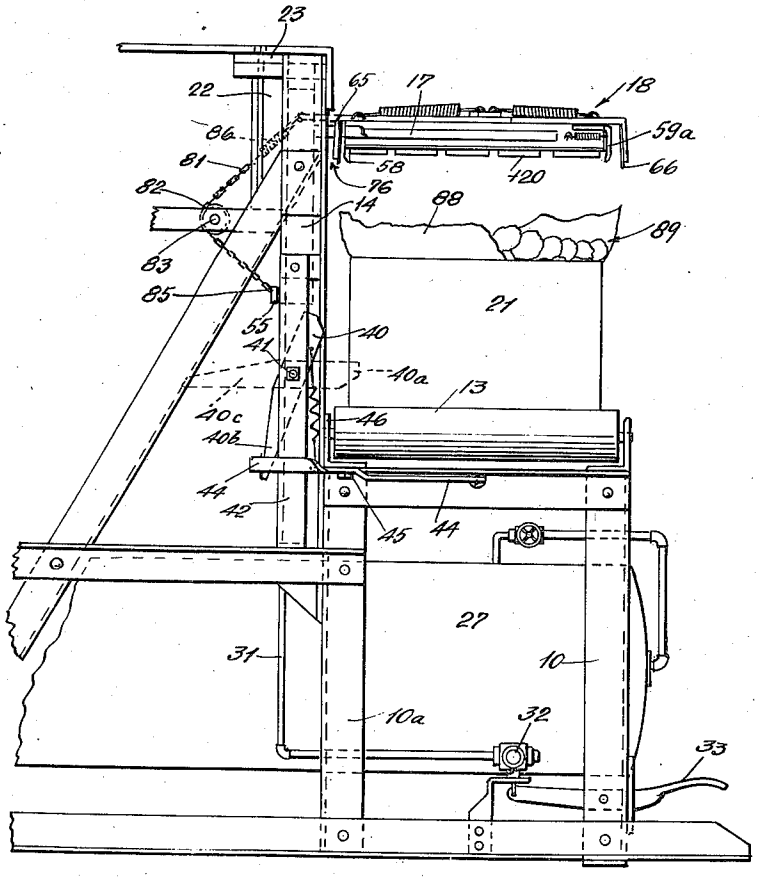
Attorney.

March 10, 1936. L. H. PLATT 2,033,865

CRATE PRESS

Filed March 13, 1929 3 Sheets-Sheet 2

Fig. 2.



Inventor.
Leland H. Platt.

Attorney.

March 10, 1936. L. H. PLATT 2,033,865

CRATE PRESS

Filed March 13, 1929 3 Sheets-Sheet 3

Fig. 3.

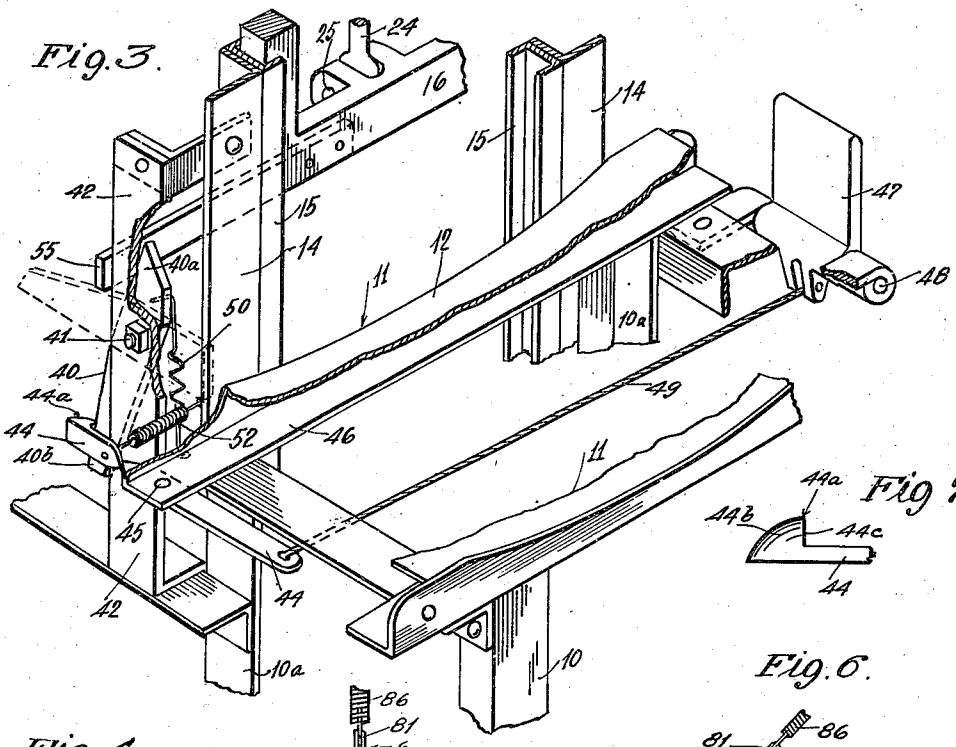


Fig. 7.

Fig. 6.

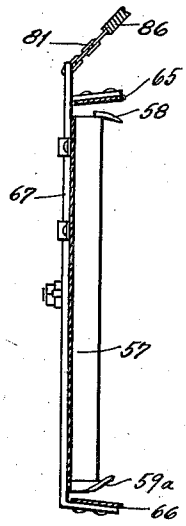


Fig. 4.

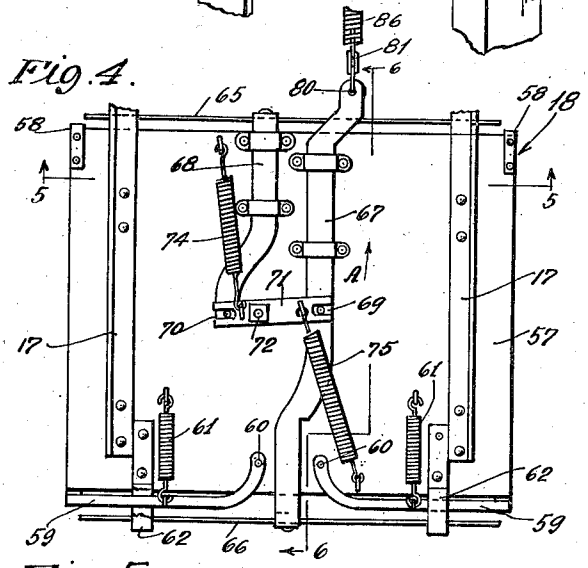
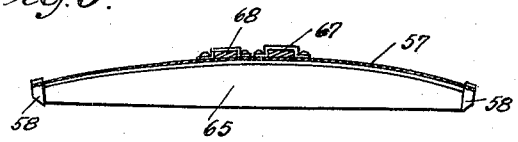


Fig. 5.



Inventor.
Leland H. Platt.

Attorney.

Patented Mar. 10, 1936 2,033,865

UNITED STATES PATENT OFFICE

2,033,865

CRATE PRESS

Leland H. Platt, Los Angeles, Calif., assignor to Clara B. Parker, Riverside, Calif.

Application March 13, 1929, Serial No. 346,659

30 Claims. (Cl. 100—57)

My invention relates generally to presses for crating fruit, vegetables and the like, and is more particularly concerned with improvements in the type of crate presses comprising the subject matter of patents to John H. Platt and myself, although the invention in certain of its aspects is not limited to use in this particular form of press. The referred patents are those to John H. Platt on Vegetable-crate-cover presses, No. 1,248,002, issued Nov. 27, 1917, and Crate presses No. 1,345,878, issued July 6, 1920; and also the patent to Leland H. Platt on Fruit-box-cover presses, No. 1,598,252, issued Aug. 31, 1926.

Generally speaking, the present type of press is constructed to provide a rest or table for supporting an uncovered crate, and a vertically movable cover holder above the table and releasably carrying the cover to be applied to the crate, the cover holder being actuated by suitable means to move downward and press the cover into place on the crate. In this procedure, the crate is moved intermittently in one direction along the table, to and from cover applying position beneath the cover carrier. It has been practised heretofore to stop or arrest the movement of the crate in the correct cover applying position, by means of a stationary stop mounted on the frame of the press, and after applying the cover it has been necessary to back the crate away from the stop and to pull it forward on the table to clear the stop in order to remove the crate from the table. The necessity for manually moving the crate interferes to a certain extent with the continuity of operation, and especially in cases where provision is made to facilitate continuous and rapid operation by the use of conveyors for delivering the crate to and from the press table and in a general line of movement.

It is a purpose of the present invention to obviate these difficulties by providing an automatically controlled stop for arresting the movement of the crate in cover applying position, the control of the stop being such that at a predetermined point in the travel of the uncovered crate, and before it reaches said position, the stop is automatically tripped into place to arrest the movement of the crate at the desired point. Then during the operation of applying the cover to the crate, the stop is caused to be returned and held in its original or crate releasing position in order to permit the crate to be removed from the table. Thus the movement of the stop is controlled automatically and, as previously mentioned, this system of control is particularly advantageous in instances where the delivery of the crate to and from the press is made through a conveyor line.

The invention embodies in addition to the automatic stop control mentioned, certain features of improvement in the construction and operation of the cover holder. It is customary in the crating of fruit and vegetables to line the crate with suitable packing paper and thereafter to over-fill the crate, with the result that the cover necessarily must be pressed downward over the top of the crate contents in the process of securing the cover to the crate. The lining paper however usually extends upward and outward beyond the sides of the crate to such an extent that normally it would not be folded into the crate and beneath the cover during the applying of the latter. Also in certain instances the material being crated may project beyond the sides of the crate, and thus it becomes necessary to gather such overflow into place beneath the cover during its downward movement. To accomplish these results, I have provided what may be termed gathering plates mounted at opposite sides of the cover holder and laterally movable relative thereto. The movement of the gathering plates is such that when the holder is in an upper position, the plates are spaced a suitable distance from the sides of the holder, and are spaced a maximum distance apart, and during the downward travel of the cover holder the gathering plates are caused simultaneously to move inward toward the holder in a manner such as to gather the packing paper and possible products overflowing the crate, into position beneath the cover before its being pressed on the crate. It will be understood that hereinafter, and in the claims, the term "overflow" broadly applies to the projecting packing paper above the crate or the overflow portion of the products themselves.

The above and numerous additional features and advantages of the invention will be understood from the following detailed description throughout which reference is made to the accompanying drawings, in which:

Fig. 1 is a front elevational view of a form of press embodying the invention;

Fig. 2 is a left side elevation of Fig. 1, parts of the press having no bearing on the invention being broken away;

Fig. 3 is an enlarged fragmentary perspective view of parts of the press associated with the crate rest and showing the automatically controlled stop mechanism;

Fig. 4 is an enlarged plan view of the cover holder shown in Figs. 1 and 2;

Fig. 5 is a section through the cover holder on line 5—5 of Fig. 4;

Fig. 6 is a section on line 6—6 of Fig. 4; and

Fig. 7 is an enlarged fragmentary view showing a part of the catch arm, hereinafter described.

Referring to the drawings, the press is seen to embody the upright legs 10, 10a for supporting the crate rest or table 11. The upper surface of the crate support is curved centrally and downwardly at 12 to enable the crate bottom to bulge downwardly when pressure is applied to the contents of the crate by the cover carrier, rollers 13 being mounted at each end of the table to facilitate sliding the crate to and from position thereon. The frame also embodies a pair of spaced vertical supporting members 14 carrying channels 15 on their inner sides, the channels serving as guides for the vertical movable carrier frame 16. The latter carries a pair of integral and horizontally extending arms 17 to which is secured the cover holder generally indicated at 18, and extending above the crate support, the cover holder being curved oppositely to the upper surface of the table. The carrier 18 is provided with suitable means, hereinafter described, for releasably holding the crate cover 20, and when the carrier frame 16 is actuated as will be described, the cover holder moves downward to press the cover 20 in place on the crate 21 supported on the table.

My preferred system for actuating the carrier embodies a plunger cylinder 22 mounted on the horizontal frame plate 23 between guide members 14, the cylinder containing a vertically movable plunger, (not shown) the rod 24 of which is connected at 25 to the lower end of the carrier frame. The cylinder plunger is actuated by compressed air delivered to the upper end of the cylinder from the supply tank 27. Air is delivered from the supply tank to the upper end of the plunger cylinder through the feed line 28, the flow of air therethrough being regulated by means of valve 29 controlled by the foot lever 30. The discharge line 31 also opens into the cylinder at its upper end, the exhaust through line 31 being controlled by valve 32 which is actuated by means of foot lever 33. Upward movement of the cover carrier is effected by means of the coil springs 35 secured at their upper ends to plate 23 and at their lower ends to the movable carrier frame 16.

In applying the cover to the crate, the latter is first placed in position on the table and the cover 20 secured to the carrier, the latter being in its uppermost position shown. Valve 29 is actuated by stepping on the foot lever 30, the plunger in cylinder 22 thereupon being caused to move downward to actuate the cover carrier until the cover is in place on the crate. After the cover has been pressed on the crate and nailed in place, valve 29 is closed and the exhaust valve 32 open, thereby relieving the air pressure on the plunger, and permitting springs 35 to lift the carrier upward to its starting position. In Fig. 1, I have shown conveyor lines 36 and 37 for delivering the crate to and from the press table.

In order to arrest the movement of the crate at a point on the table immediately below the cover, it is necessary to provide a stop for engaging the crate when this point is reached. Heretofore a stationary stop mounted, for instance, on upright 14, has been employed for arresting the movement of the crate, but the use of this form of stop entails the necessity for backing up the crate, after the cover is applied, from the stop and pulling the crate forward on the table to permit it to move on to conveyor 37, thus necessitating reversing the direction of movement of the crate and preventing the desirable continued movement of the crate after application of the cover, in the direction of movement of the conveyors. By means of the invention, however, I have provided an automatically controlled stop whereby these difficulties are eliminated, and which I will now describe in detail.

Referring particularly to Fig. 3, a stop arm 40 is pivotally mounted at 41 on the vertically extending and off-set frame member 42, the stop being vertically and pivotally movable about point 41, and the inner end 40a of the stop being adapted to project sufficiently over the table to engage the end of crate 21. The other end of the stop arm is adapted to engage the horizontally movable catch arm or dog 44 pivotally mounted at 45 on the table member 46. A lug 44a is formed on one end of the dog, said lug preferably being shaped to provide a downwardly curved and spherically shaped surface 44b, (see Fig. 7), and upon engagement of the curved surface of the lug by the lower edge 40b of the stop arm, the dog is caused to move outwardly against the pull of spring 52 until the stop arm moves past the lug, whereupon the dog, by latch action, snaps back into the position shown in Fig. 3, and is retained against shoulder 44c of the lug. The dog thus serves to hold the stop arm in crate releasing position as shown, that is, in a position such as to allow unarrested movement of the crate across the table, and against the pull of spring 50 tending to move the stop to the horizontal position 40c, indicated by the dotted lines.

The dog is operatively connected with the vertical arm or trigger 47 pivotally mounted on the frame supported rod 48 at the opposite end of the table, by means of a suitable connecting means 49, preferably longitudinally collapsible such as a cord or wire. As shown in Fig. 1, the trigger 47 projects above the table and conveyor 36, and a crate, upon moving from the conveyor 36 to the table, engages the trigger, moving it to the dotted line position 47a. This movement of the trigger is accompanied by a simultaneous turning of the dog about pivot 45 thereby releasing lug 44a from engagement with the stop arm, and permitting the latter to assume position 40c. The dog is returned to its normal position by means of spring 52, the trigger 47 thereupon being returned to its upright position 47.

Subsequent to the placing of the crate in cover applying position on the table, the carrier 18 is caused to move downward to press the cover into place on the crate, and in order to release the stop from its arresting position during this operation, I have provided a horizontally extending arm 55 mounted on the back side of the carrier frame 16, arm 55 being adapted to engage the upper edge of the stop. Thus assuming the stop to be in position 40c at the beginning of the downward travel of the carrier, arm 55, at a predetermined point in the travel of the carrier, engages the stop arm moving it to the solid line position, lug 44b being shaped as described to enable the stop arm to force the dog outwardly until the latter is brought back into retaining engagement with the lug by the action of spring 52. The connecting member 49 being collapsible, the trigger remains substantially stationary during the movement of the lever arm to crate releasing position. It may be stated that although it is prefer-

able that the trigger be placed substantially at the location illustrated, it or a similar device may, if desired, be interposed substantially at any point along the path of the crate prior to its movement into position.

As previously mentioned, provision is also made in my improved form of crate press for gathering the overflow of the crate into position beneath the cover prior to the positioning of the latter on the crate. This feature is illustrated particularly in Fig. 4 of the drawings. The cover carrier 18 embodies the curved plate 57 carrying a pair of cover holding lugs 58 at the inner side of the cover adjacent the press frame. Arms 59 are pivotally mounted at 60 on the top side of the cover and have integral lugs 59a adapted to engage and hold the cover in position in the holder, springs 61 tending constantly to urge the arms inward toward the holder and lugs 59a into holding engagement with the cover 20. As shown, the cover holding arms are laterally movable in the guide brackets 62.

Extending longitudinally along and normally spaced from the inner and outer sides of the holder plate 57, are the laterally movable and vertically extending gathering plates 65 and 66, these plates preferably being downwardly and outwardly inclined somewhat. The outer plate 66 is mounted on a longitudinally movable bar 67 extending across the cover holder, plate 65 being connected with a similar bar 68 extending part way across the holder top. Bars 67 and 68 have sliding and pivotal connections at 69 and 70, respectively, with lever arm 71, the latter being pivotally connected to plate 57 at 72. It will be noted that the pivot point 72 is offset from the center of arm 71 toward the pivot 70, this provision being made since it is preferred that for a given length of movement of bar 67, and therefore the outer gathering plate, comparatively less movement be imparted to bar 68 and the inner plate due to the fact that it is desirable to mount the cover holder fairly close to the frame, thereby more or less limiting the space 76 (see Fig. 2) between the holder and the frame. Thus upon movement of bar 67 in the direction of arrow A, bar 68 is caused to move in the opposite direction, with the result that the gathering plates 65, 66 are caused to move toward the holder and relatively together against the resistance of springs 74 and 75. Upon release of the actuating force applied to bar 67 hereinafter described, the gathering plates are returned to their original or relatively spread positions by the action of springs 74 and 75.

As a typical means for actuating the gathering plates during the travel of the cover holder, I have shown the inner end of bar 67 attached at 80 to chain 81 passing around pulley wheel 82, mounted on the horizontal frame support rod 83, and anchored to the carrier frame at 85. A spring 86 is interposed in the chain to give to the latter, in effect, a certain degree of elasticity in order to permit continued movement of the cover carrier after any slack in the chain has been taken up and after the chain has been put under tension. The pulley is located at an offset point such that upon downward movement of the carrier, the chain is gradually tensioned and caused to exert a pull on bar 67, thereby causing the gathering plates to gradually move relatively together.

As previously mentioned, the crate is lined with packing paper 88, the latter spreading outwardly above the uncovered crate as illustrated in Fig. 2. In the operation of the gathering plates, and for a given length of travel of the cover holder, the adjustment of chain 81 is such that preferably the inward movement of plates 65 and 66 starts substantially at the point in the travel of the carrier immediately above the upper extent of the paper 88. During subsequent downward movement of the carrier the gathering plates move inward toward their limiting positions against the carrier, and serve to gather and hold the paper inward above the crate, and into such position as to be held by the cover 20 when the latter is secured to the crate. Similarly any overflow of the material in the crate as indicated at 89, would be moved into place beneath the cover by the gathering plates during their inward travel. Usually, however, the crate is not filled to the extent of overflowing indicated, and the purpose of the gathering plates primarily is to cause the packing paper to be folded into place beneath the cover.

The structure indicated at 18 has been referred to as both a cover holder and carrier, in the specification and claims. In order to clarify the interpretation to be placed on these terms, it is desired to point out that the expression "holder" is used to define broadly a means or member operating to engage the cover for applying it to a box, without connoting any capacity for receiving the cover to hold it in elevated position above the box or its contents. The term "carrier" has this last mentioned meaning, i. e., it denotes the capacity for supporting the cover in raised position above the box and contents.

It will be understood the drawings and description are to be considered merely as illustrative of and not restrictive on the broader claims appended hereto, for various changes in design, structure and arrangement may be made without departing from the spirit and scope of said claims.

I claim:

1. A press of the character described embodying a frame, a vertically movable cover holder, a horizontally extending crate support beneath said cover holder and across which a crate is adapted to be moved intermittently in one direction, to and from cover applying position beneath said holder, an adjustable stop for arresting the movement of the crate in cover applying position, means whereby said stop is automatically moved to arresting position substantially at the point of movement of the crate onto said support, and means for releasing said stop from its crate arresting position at a predetermined point in the travel of said cover holder.

2. A press of the character described embodying a frame, a vertically movable cover holder, a horizontally extending crate support beneath said cover holder and across which a crate is adapted to be moved intermittently in one direction, to and from cover applying position beneath said holder, an adjustable stop at one end of said support for arresting the movement of the crate in cover applying position, a dog adapted to releasably hold said stop in crate releasing position, and means at the other end of said support operatively connected to said dog and adapted to be engaged by the crate to actuate the dog, thereby causing the stop to move into crate arresting position.

3. A press of the character described embodying a frame, a vertically movable cover holder, a horizontally extending crate support beneath said cover holder and across which a crate is adapted to be moved intermittently in one direction to

and from cover applying position beneath said holder, and adjustable stop at one end of said support for arresting the movement of the crate in cover applying position, a dog adapted to releasably hold said stop in crate releasing position, a trigger at the other end of said support having a collapsible connection with said dog and adapted to be engaged by the crate to actuate the dog, thereby releasing said stop and permitting it to move into crate arresting position.

4. A press of the character described embodying a frame, a vertically movable cover holder, a horizontally extending crate support beneath said cover holder and across which a crate is adapted to be moved intermittently in one direction, to and from cover applying position beneath said holder, an adjustable stop at one end of said support for arresting the movement of the crate in cover applying position, a dog adapted to releasably hold said stop in crate releasing position, means at the other end of said support, operatively connected to said dog and adapted to be engaged by the crate to actuate the dog, thereby releasing said stop and permitting it to move into crate arresting position, and means associated with said cover holder adapted to engage said stop to move it to crate releasing position and into retaining engagement with said dog.

5. A press of the character described embodying a stationary frame, a vertically movable frame and a cover holder secured to said movable frame, a horizontally extending crate support beneath said cover holder and across which a crate is adapted to be moved intermittently in one direction, to and from cover applying position beneath said holder, an adjustable and pivotally mounted stop at one end of said support and adapted to releasably arrest the movement of the crate in cover applying position, a pivotally movable dog adapted to releasably hold said stop in crate releasing position, a trigger at the other end of said support having a collapsible connection with said dog and adapted to be engaged by the crate, thereby actuating the dog to release said stop to permit it to return to its arresting position, and an arm mounted on said movable frame and adapted, upon downward movement of said cover holder, to engage said stop and to move it to releasing position and into retaining engagement with said dog.

6. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a vertically movable cover holder above said support, a laterally movable member mounted on said holder and adapted to gather the overflow of said crate into position beneath the holder as the latter moves downward, and means for actuating said member.

7. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a vertically movable cover holder above said support, a laterally movable plate extending longitudinally along the outer side of said holder and adapted to move toward the holder as the latter moves downward, to gather the overflow of said crate into position beneath the holder, a longitudinally movable bar extending across the top of the holder and attached at its outer end to said plate, and means for actuating said bar whereby said plate is caused to move laterally during a predetermined interval of the travel of the cover holder.

8. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a vertically movable cover holder above said support, a pair of laterally movable plates extending longitudinally along outer and inner sides of said holder and adapted to move relatively together as said cover moves downward, to gather the overflow of said crate into position beneath the holder, a longitudinally movable bar extending across the top of the holder and attached to the outer of said plates, means for actuating said bar whereby the last mentioned plate is caused to move laterally during a predetermined interval of the travel of the holder, and means operatively connecting said bar with the inner plate.

9. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a cover carrier above said support, said crate rest and cover carrier being relatively vertically movable, means for moving said crate rest and carrier relatively vertically, a gathering member movable laterally relative to said cover carrier and adapted to gather the overflow of said crate into position beneath a cover carried by the carrier as the latter moves relatively toward said crate support and means for automatically actuating said gathering member in its lateral movement in timed relation with the operation of said first mentioned means.

10. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a cover holder above said support, said crate rest and cover holder being relatively vertically movable, means for moving said crate rest and holder relatively vertically, a gathering member comprising a plate depending below and at one side of the cover holder and movable laterally relative to said cover holder, said member being adapted to gather the overflow of said crate into position beneath a cover carried by the holder as the latter moves relatively toward said crate support, and means for automatically actuating said gathering member in its lateral movement in timed relation with the operation of said first mentioned means.

11. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a cover holder above said support, said crate rest and cover holder being relatively vertically movable, means for moving said crate rest and holder relatively vertically, a pair of gathering members at opposite sides of said holder and movable laterally relative to said cover holder, said members being adapted to gather the overflow of said crate into position beneath the holder as the latter moves relatively toward said crate support, and means for automatically actuating said gathering members in their lateral movement in timed relation with the operation of said first mentioned means.

12. The combination in a crate press, comprisprising, a frame, a crate support adapted to support an uncovered crate, a cover carrier above said support, said crate support and cover carrier being relatively vertically movable, means for moving said crate support and carrier relatively vertically, a gathering member movable laterally relative to said cover carrier, and means for moving said member laterally toward a cover carried by said carrier as the carrier moves relatively toward said crate support, and for moving said member laterally away from the cover as the carrier moves relatively away from said crate support, the last mentioned means being operated by virtue of relative vertical movement between said crate support and the cover carrier.

13. The combination in a crate press comprising, a frame, a crate support adapted to support an uncovered crate, a cover holder above said support, said crate support and cover holder being movable relatively together to cover applying position to press a cover on the crate, means for moving said crate rest and holder relatively vertically, a gathering member movable laterally relative to said cover holder, and means for operating said member to gather the overflow of said crate into position beneath the holder in advance of the relative movement of said support and holder together to cover applying position and in timed relation with the operation of the first mentioned means.

14. A liner tucking attachment for crate lidding machines comprising in combination, a reciprocally operated lidder adapted for pressing a lid upon the crate and a tucker carried by the lidder for movement into and out of engagement with one edge of the crate liner whereby to force the liner inwardly of the crate.

15. A liner tucking attachment for crate lidding machines comprising in combination, a reciprocally operated lidder adapted for pressing a lid upon the crate, a pair of liner tucking members disposed at opposite sides of the crate for engaging the edges of the liner whereby to force the same inwardly of the crate, means for slidably mounting one of said members upon said lidder for horizontal sliding movement and means associated with said member for slidably actuating the same in a direction inwardly of the edge of the crate during the downward movement of the lidder.

16. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a relatively vertically movable structure, including a cover carrier, above said support, means for moving said crate rest and cover carrier relatively vertically, a laterally movable gathering member included in said structure, the lower portion of said member being adapted to move inward toward a cover carried by the carrier upon relative vertical movement between the carrier and crate rest, to gather the overflow of said crate into position beneath the cover, and means for automatically actuating said member by virtue of relative vertical movement between said cover carrier and the crate rest.

17. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a relatively vertically movable structure, including a cover carrier, above said support, means for moving said crate rest and cover carrier relatively vertically, a pair of oppositely positioned and laterally movable gathering members included in said structure, portions of said members being adapted to move relatively together upon relative vertical movement between the carrier and crate rest, to gather the overflow of said crate into position beneath opposite edges of a cover carried by the carrier, and means for actuating said members.

18. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a super-structure including a cover holder, above said support, said crate rest and cover holder being relatively vertically movable, means for moving said crate rest and holder relatively vertically, a pair of oppositely positioned gathering members included in said super-structure and movable laterally relative to a cover carried by said cover holder, said members comprising depending metallic plates adapted to gather the overflow of said crate into position beneath a cover carried by the holder as the latter moves relatively toward said crate support, and means for automatically actuating said gathering members in their lateral movement in timed relation with the operation of said first mentioned means.

19. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a cover holder above said support, said crate rest and cover holder being relatively vertically movable, means for moving said crate rest and holder relatively vertically, a pair of gathering members mounted on and depending below opposite sides of said holder and movable laterally relative to said cover holder, said members comprising vertically extending plates adapted to gather the overflow of said crate into position beneath a cover carried by the holder as the latter moves relatively toward said crate support, and means for automatically actuating said gathering members in their lateral movement in timed relation with the operation of said first mentioned means.

20. The combination in a crate press comprising, a crate rest adapted to support an uncovered crate, a relatively vertically movable super-structure above said crate rest, said super-structure being adapted to carry a crate cover, means for moving said crate rest and super-structure relatively vertically, a gathering member mounted on said super-structure, the lower portion of said member being movable upon relative vertical movement between the super-structure and the crate rest, to gather the overflow of the crate into position beneath a cover carried by the super-structure, means carried by said super-structure above the lower portion of said gathering member for engaging opposite edges of a cover to position the latter, and means for automatically actuating said member by virtue of relative vertical movement between said super-structure and the crate rest.

21. In a box lidding device the combination of: means for receiving a lid in position for applying it to a box; means for conveying a box horizontally beneath said lid receiving means and stopping it with said lid superimposed thereabove; lid applying means for bringing said lid receiving means and said conveying means together to apply said lid to said box in position for nailing it thereto; and means provided on said lid receiving means for tucking fruit and the like inward from edges of said box to prevent it being crushed between said box and said lid.

22. In a box lidding device, the combination of: means for receiving a lid in position for applying it to a box; means for conveying a box horizontally beneath said lid receiving means and stopping it with said lid superimposed thereabove; lid applying means for bringing said lid receiving means and said conveying means together to apply said lid to said box in position for nailing it thereto; means provided on said lid receiving means for tucking fruit and the like inward from edges of said box to prevent it being crushed between said box and said lid; and means actuated by said lid applying means for operating said tucking means.

23. In combination: a frame; means on said frame for supporting a shipping case crown packed with fresh fruit or the like; a structure on said frame rising above said case supporting means; lid applying means mounted on said

structure and overlying said supporting means; means for moving one of the aforementioned means toward the other to apply a lid to said case; and tucking means mounted with said lid applying means on said structure and actuated by said moving means, in timely relation with the lid applying operation, to move an overflow of the contents of said case inward between said lid and said case before the consummation of said operation.

24. In combination: means for receiving and supporting a box filled with produce so that the latter extends above the top of the box; means for acting upon a lid applied to said box to arch said lid to bring opposite edges of said lid downwardly; means for tucking said produce inwardly between opposite edges of said box and adjacent edges of said lid; and means for coordinately operating said lid-arching means and said tucking means.

25. In combination: means for positioning a box of farm produce with the produce extending above the top of the box and with a lid positioned thereabove; means for arching said lid downwardly against said produce so as to depress opposite edges of said lid; and means operatively connected to said lid-arching means for automatically tucking said produce inside of the planes of opposite inner faces of said box before a substantial downward pressure has been brought against outer portions of said produce by said lid-arching means.

26. In combination: means for positioning a box of farm produce with the produce extending above the top of the box and with a lid positioned thereabove; means for arching said lid downwardly against said produce so as to depress opposite edges of said lid; and means operatively connected to said lid-arching means for automatically tucking said produce inside of the planes of inner faces of the sides of said box before a substantial downward pressure has been brought against outer portions of said produce by said lid-arching means.

27. The combination in a crate press, comprising, a frame, a crate support adapted to support an uncovered crate, a cover holder above said support, said crate rest and cover holder being relatively vertically movable, means for moving said crate rest and holder relatively vertically, a gathering member movable laterally relative to said cover holder, and means for moving said member laterally toward said holder as the holder moves relatively toward said crate support, and for moving said member laterally away from the holder as the latter moves relatively away from said crate support, the last mentioned means being operated by virtue of relative vertical movement between said crate support and the cover holder.

28. The combination in a crate press, embodying a frame, a crate rest adapted to support an uncovered crate, a relatively vertically movable cover holder above said support, means for moving said crate rest and cover holder relatively vertically, a pair of laterally movable gathering members mounted on and extending longitudinally along opposite sides of said holder, said members being adapted to move relatively together upon relative vertical movement between the holder and crate rest, to gather the overflow of said crate into position beneath the holder, and means for actuating said members.

29. In a box lidding device the combination of: means for engaging a lid for applying it to a box; means for conveying a box horizontally beneath said lid engaging means and stopping it with said lid engaging means superimposed thereabove; lid applying means for bringing said lid engaging means and said conveying means together to apply said lid to said box in position for nailing it thereto; and means provided on said lid engaging means for tucking fruit and the like inward from edges of said box to prevent it being crushed between said box and said lid.

30. In a box lidding device the combination of: means for engaging a lid for applying it to a box; means for conveying a box horizontally beneath said lid engaging means and stopping it with said lid engaging means superimposed thereabove; lid applying means for bringing said lid engaging means and said conveying means together to apply said lid to said box in position for nailing it thereto; means provided on said lid engaging means for tucking fruit and the like inward from edges of said box to prevent it being crushed between said box and said lid, and means actuated by said lid applying means for operating said tucking means.

LELAND H. PLATT.