To all whom it may concern:

Be it known that I, Joseph Irwin Pogue, a citizen of the United States, and resident of Omak, in the county of Okanogan and State of Washington, have invented certain new and useful Improvements in Box-Press Stamps, of which the following is a specification.

This invention relates to stamping devices for use in connection with fruit box presses.

An important object of this invention is to provide a stamping mechanism for fruit box presses having novel means whereby the desired characters or words may be readily stamped on the box as the cover is pressed on the box and which mechanism does not interfere with the nailing of the cover on the box.

A further object is to provide a stamping mechanism for fruit box presses having novel means whereby the printing drum may be readily adjusted for printing the desired matter on the box.

Further the invention aims to provide a printing mechanism for fruit box stamps which is entirely automatic in its operation and which is of durable and economical construction.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application and in which like numerals are employed to designate like parts throughout the same.

Figure 1 is an elevation of the improved stamping mechanism applied to a fruit box press.

Figure 2 is a detailed horizontal sectional view taken on the line 2--2 of Figure 1.

Figure 3 is a perspective of the improved stamping mechanism detached.

Figure 4 is a detail sectional view through the printing means of the stamping mechanism.

In the drawing wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numerals 10 designate the legs of the press joined by transversely extending struts or beams 11. The legs 10 support a platform 12 upon which a fruit receiving crate 13 is adapted to be mounted so that the cover 14 may be pressed downwardly into position by means of a pair of pressing or clamping members 15 secured to a transversely extending head 16. The transversely extending head 16 has connection with vertically arranged links 18, arranged at opposite sides of the frame 19 and having their lower ends connected to the lower links 19 of a pair of toggle levers. Connection between the lower links 19 and the links 18 is by means of brackets 20 having hooks 21 to which coiled springs 22 are connected.

The upper ends of the coiled springs 22 of which there are two are anchored to the frame by hooks 23 and the said coiled springs 22 urge the lower ends of the links 20 to the position illustrated in Figure 1.

With reference to Figure 1 it will be observed that the upper portions of the lower links 19 are pivotally connected as indicated at 25 to the lower portions of upper links 19 which are in turn pivoted to the frame of the machine as indicated at 27. When the adjacent portions of the links 19 and 26 are drawn inwardly toward the machine the vertically arranged links 18 are drawn downwardly so as to cause the pressing members to force the lid 14 down onto the fruit whereupon the operator may nail the lid in position.

The means employed for moving the adjacent portions of the links 19 and 26 inwardly include rods 28 threaded into the U-shaped members 29 which are pivoted to the pivot elements 25 on opposite sides of the links 19 and 26. The inner portions of the rods 28 are formed with loops 30 to which sprocket chains 31 are connected. The sprocket wheel 32 is anchored at one end of the same as indicated at 42.

The shaft 38 to which the sprocket wheel is connected is rotated so that when the shaft 38 to which the sprocket wheel is connected is rotated the sprocket wheel will be rotated for drawing the sprocket chains 31 inwardly.

The shaft 38 has a grooved pulley 40 mounted thereon and a cable 41 which is trained about the pulley and anchored at one end of the same as indicated at 42. The
other end of the cable 41 is secured as indicated at 44 to the intermediate portion of a foot lever 45 which is pivoted at its forward end to the frame as indicated at 46.

The other end of the foot lever 45 is formed with a foot pedal 48 which when depressed by the foot will draw the cable 41 downwardly and thereby rotate the shaft 38. A latch 49 is pivoted to the foot lever 45 and is adapted to engage on a vertically arranged rack 50 secured to the same. When the foot lever 45 is moved downwardly the same is held in an adjusted position by means of the latch 49 which engages the teeth on the rack 50. When it is desired to release the lever 45 it is merely necessary to exert a downward pressure on the latch 49 whereupon the same will be released from engagement with the rack 50.

The improved stamping mechanism includes a pair of spaced parallel sides 52 pivoted at their forward ends to the frame of the machine. The side bars 52 which are arranged in spaced relation are connected intermediate their ends by a U-shaped bracket 53. The upper portion of the sides 52 are in turn connected by a U-shaped head 54 connected to the inner sides of the arms by means of rivets or other suitable fastening devices. The head 54 carries a printing stamp 55 bearing matter which is to be printed on the end of the box. For example, the stamping member 55 which is of rubber may bear the words “Wine Sap” to indicate the brand of apple within the box. In case oranges are packed in the boxes the stamp 55 may bear a word indicating the brand in the box. When the frame formed by the sides 52 and the head 54 is swung inwardly the stamp 55 which is of elongated formation and is supported by the bracket 56 of the head is engaged with the box to provide the same with the required data.

The head 54 is provided with a rotatable shaft 58 having a stamping segment 59 secured thereon by means of a set screw 60. The rubber face of the stamping segment 59 may be provided with such data as “Fancy,” “Extra fancy,” “C-grade” or other suitable data. The segment 59 may be adjusted so that the same will be properly presented to the end of the box. That is to say the desired word or designation may be positioned in alignment with the rubber stamp 55 so that all the data printed on the box will be in the same line. One end of the segment 59 is provided with a spring finger 62 extended laterally beyond the segment and adapted to be received within locking notches 63 in an intermediate wall 64 of the head.

As illustrated in Figure 4 a gear 66 is rotatably mounted on the shaft 58 and is provided with a bushing 67 extended through one of the sides of the head and into the hub of a stamping cylinder or drum 69. The cylinder or drum 69 is securely connected to the bushing 67 by means of oppositely arranged set screws 70. By reason of this construction, the rotation of the gear 66 which is connected or formed integral with the bushing 67 results in the rotation of the member 69 which is provided on its surface with an annular series of numbers or characters 71 adapted to be positioned in alignment with the data on the segment 59 and in alignment with the data on the stamp 55. In this case the characters 71 on the drum 69 are in the nature of numbers. The gear 66 is in mesh with the teeth formed on the inner side of the longitudinally curved rack 72 having supporting branches 73 pivotally connected to the head 54 as indicated at 74. By this construction, the frame formed by the rack 72 and the branches 73 may be rotated to a limited degree for rotating the gear 66 and the drum 69. The frame thus formed is provided with an operating handle 75 having a knob 76 forming a gripping means whereby the frame may be rotated for positioning the pointer 77 at the desired point on an arcuate dial 78. By positioning the pointer 77 at the desired point on the dial 78 the cylindrical drum 69 may be adjusted so that the desired character on the periphery of the same may be lined up with the stamp 55. It will be noted that the handle 75 is offset so that the knob 76 of the same will not obstruct the view of the pointer 77 and so that the drum may be readily rotated.

The segment 59 may be rotated to a limited degree by rotating a crank 79 secured to the end of the shaft 58, said crank having connection with a link 80 which is in turn connected to a short link 81 securedly connected to the knob 76. By moving the link 80 longitudinally the crank 79 may be rotated for imparting a similar movement to the shaft 58 whereby the segment 59 will 110 be rotated.

The stamping devices are inked by means of a pad 88 supported for swinging movement by a pair of longitudinally curved arms 89 pivoted intermediate their ends as indicated at 90, to the outer ends of outwardly inclined brackets 91. When the frame formed by the arm 52 and associated elements is swung outwardly, a transversely extending bar 92 of the head 54 engages the 100 arms 89 and thereby swings the inking pad 88 into contact with the stamping members 53, 59 and 71 so as to provide them with a fresh supply of ink after each stamping operation. As the printing members move inwardly in the direction of the box the inking pad 88 is swung downwardly to its inoperative position as illustrated in Figure 3.

The stamping mechanism is swung in
wardly by means of a longitudinally curved arm 95 having its forward portion formed with a slot 96 which receives a pivot bolt 97 carried by a crank 98 rigidly secured on the shaft 98. When the shaft 98 is rotated in a clockwise direction by the means previously described the arm or rod 95 is drawn inwardly so as to draw the stamping mechanism into contact with the box.

As illustrated in Figure 3 one end portion of the actuating rod 95 is in the form of a pin or shaft 100 slidable through a central opening in the U-shaped connecting member 53. The coiled springs 101 are mounted on the shaft 100 on opposite sides of the U-shaped connecting member 53 and serves to cushion the action of the stamper when the same is moved into contact with the fruit box. In other words the coiled springs 101 provide a yieldable connection with the rod 95 and the stamping frame. One of the coiled springs 101 is confined between the connecting member 53 and the shoulder formed at the juncture of the shaft 100 and the rod 95 and the other coiled spring is confined between the connecting member 53 and a nut 102 threaded onto the shaft.

A Y-shaped catch generally designated by the numeral 105 is provided with a pair of spaced branches 106 slidable through the connecting portion 53 on opposite sides of the shaft 100 and provided with coiled springs 107 which serve to cushion the action of the stamper. The catch or tripping device 105 is also provided with a longitudinally curved shoe 108 which is adapted to contact with the side of the frame so that the shoe is elevated. When the shoe is elevated the notch formed by the juncture of the branches 106 with the shank 109 is elevated and a longitudinally curved guard 110 is released from locking engagement with the tripping device. The forward portion of the longitudinally curved guard is formed with a right angle bend providing a shoulder 111 adapted to be received within the aforementioned notch whereby to provide a locking connection between the actuating rod 95 and the tripping device. When the tripping device 105 is elevated by contact with the frame of the machine, the coiled spring 101 between the shoulder 111 and the connecting portion 53 returns the stamping mechanism to a neutral position. With the stamping mechanism thus moved outwardsly to a neutral position the operator may quickly nail the lid on the box. Also with the stamping mechanism thus thrown into a neutral position, the members 59 and 60 may be adjusted for stamping the grade and other data on the box.

Having thus described the invention, what is claimed is:

1. A stamper for fruit presses comprising a frame, an actuating rod slidable through the said frame, coiled springs mounted on said rod and contacting with opposite sides of said frame whereby to provide a yieldable connection between the rod and frame, a stamping mechanism carried by said frame, and a tripping device engaged with said rod and having a contact shoe adapted to engage the fruit press.

2. A stamper for fruit presses comprising a frame, an actuating rod slidable through said frame, coil springs mounted on said rod and contacting with opposite sides of said frame whereby to provide a yieldable connection between the rod and frame, a stamping mechanism carried by said frame, a tripping device engaged with said rod and having a contact shoe adapted to engage the fruit press, said tripping device being extended through the frame, and a coil spring confined between the frame and the end of the tripping device.

3. The combination with a fruit box press, having an actuating rod of a frame pivoted to the press and having a cross piece, the outer portion of said actuating rod being slidable through said cross piece, a coiled spring mounted on said actuating rod and engaging said cross piece, and a Y-shaped tripping device having branches slidable through said cross piece and having a shoe adapted to engage said press, said actuating rod being provided with a shoulder engaged by said tripping device.

4. The combination with a fruit box press, of an actuating rod, a frame pivoted to the press and having a cross piece, the outer portion of said actuating rod being slidable through said cross piece, a coiled spring mounted on said actuating rod and engaging said cross piece, a Y-shaped tripping device having branches slidable through said cross piece and having a shoe adapted to engage said press, said actuating rod being provided with a shoulder engaged by said tripping device and springs confined between the ends of said branches and said cross piece.

5. The combination with a fruit box press having an actuating rod, of a frame pivoted to the press and having a cross piece, the outer portion of said actuating rod being slidable through said cross piece, a coiled spring mounted on said actuating rod and engaging said cross piece, a tripping device having branches slidable through said cross piece and having a shoe adapted to engage said press, said actuating rod being provided with a shoulder engaged by said tripping device, springs confined between the ends of said branches and said cross piece, and a longitudinally curved guard extending from said shoulder and overhanging the said first named spring.

6. The combination with a fruit box press having an actuating rod, of a frame pivoted to the press and having a cross piece, the...
outer portion of said actuating rod being slidable through said cross piece, a coiled spring mounted on said actuating rod and engaging said cross piece, a Y-shaped tripping device having branches slidable through said cross piece and having a shoe adapted to engage said press, said actuating rod being provided with a shoulder engaged by said tripping device, springs confined between the ends of said branches and said cross piece, a longitudinally curved guard extending from said shoulder and overhanging the said first named spring, and a stamping device carried by said frame.

7. The combination with a fruit box press having an actuating rod, of a frame pivoted to the press and having a cross piece, the outer portion of said actuating rod being slidable through said cross piece, a coiled spring mounted on said actuating rod and engaging said cross piece, a Y-shaped tripping device having branches slidable through said cross piece and having a shoe adapted to engage said press, said actuating rod being provided with a shoulder engaged by said tripping device, springs confined between the ends of said branches and said cross piece, a longitudinally curved guard extending from said shoulder and overhanging the said first named spring, a stamping device carried by said frame, and inking means for said stamping device.

8. A stamping mechanism for fruit presses, comprising a frame having means whereby the same may be pivoted to a fruit box press, an actuating rod slidable through said frame and having a longitudinally curved guard provided with a shoulder, a coiled spring confined between said shoulder and said frame, a tripping device having a notch receiving said shoulder and provided with a longitudinally curved guard to engage said frame, a tripping device being adapted to ride on said guard upon the engagement of said shoe with said press, and a stamping mechanism carried by said frame.

9. A stamping mechanism for fruit presses comprising a frame, a shaft carried thereby, a printing member rigidly secured on said shaft, a second printing member rotateable on said shaft, a gear rigidly connected to said printing member, a rack in mesh with said gear, a knob connected to said rack for adjusting the same and said rotateable printing member, a crank connected to said shaft a link establishing connection between said crank and said knob whereby the knob forms a means for adjusting said first named printing member.

11. A printing mechanism for fruit presses comprising a shaft, a printing drum having a hub surrounding the shaft, a gear having a bushing rotateable on said shaft and having secure connection with said drum, a rack having engagement with said gear, a pointer having connection with said rack, a dial cooperating with said pointer, and a second printing member rigidly secured to said shaft and rotateable therewith.

12. A printing mechanism for fruit presses comprising a shaft, a printing drum having a hub surrounding the shaft, a gear having a bushing rotateable on said shaft and having secure connection with said drum, a rack having engagement with said gear, a pointer having connection with said rack, a dial cooperating with said pointer, and a second printing member rigidly secured to said shaft.

13. A printing mechanism for fruit presses comprising a shaft, a printing drum having a hub surrounding the shaft, a gear having a bushing rotateable on said shaft and having secure connection with said drum, a rack having engagement with said gear, a pointer having connection with said rack, a dial cooperating with said pointer, and a printing member rigidly secured on said shaft and rotateable therewith.

14. A printing mechanism for fruit presses comprising a shaft, a printing drum having a hub surrounding the shaft, a gear having a bushing rotateable on said shaft and having secure connection with said drum, a rack having engagement with said gear, a pointer having connection with said rack, a dial cooperating with said pointer, a knob having connection with said rack whereby the pointer may be moved across said dial, a second printing member rigidly secured to said shaft, and means connecting said shaft and said knob.

15. A printing mechanism for fruit presses comprising a shaft, a printing drum having a hub surrounding the shaft, a gear having a bushing rotateable on said shaft and having secure connection with said drum, a rack having engagement with said gear, a pointer having connection with said rack, a dial cooperating with said pointer, inking means for said drum, a second printing member secured on said shaft, and a single adjusting member for said first and second named printing members.

16. A printing mechanism for fruit presses comprising a frame, a shaft carried thereby, a gear having a bushing rotateable on said
shaft, a printing drum securely connected to said bushing, a printing segment secured on said shaft, a rack engaged with said gear and having branches provided with a pointer, a dial cooperating with said pointer to indicate the position of said segment, means whereby said pointer may be moved across said dial, a crank connected to said shaft, a link connected to said crank, and forming a means whereby said shaft may be rotated, and inking means for said segment and said drum.

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