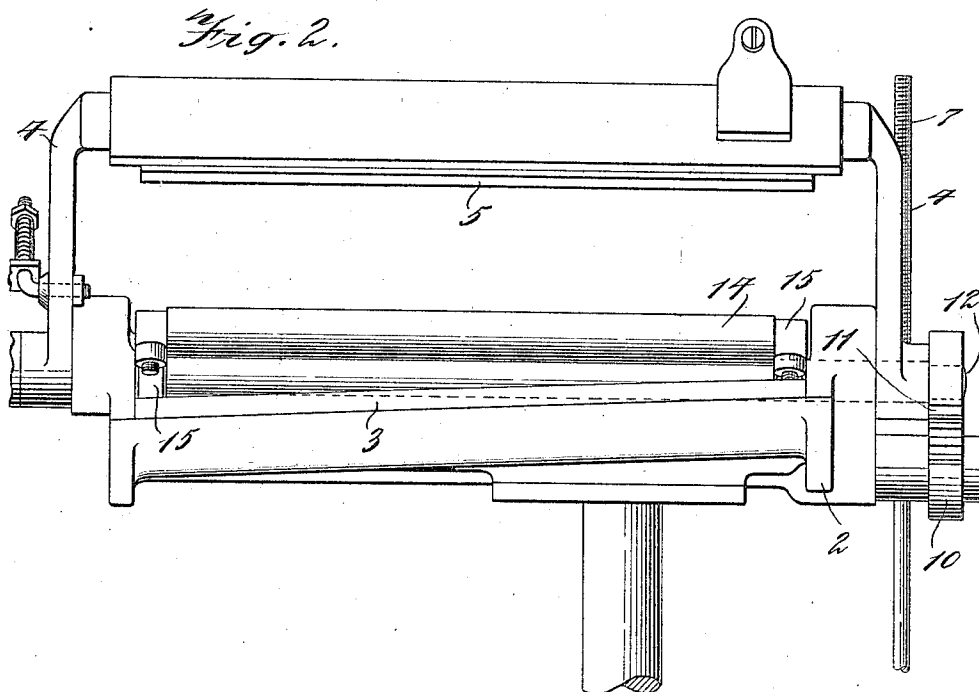
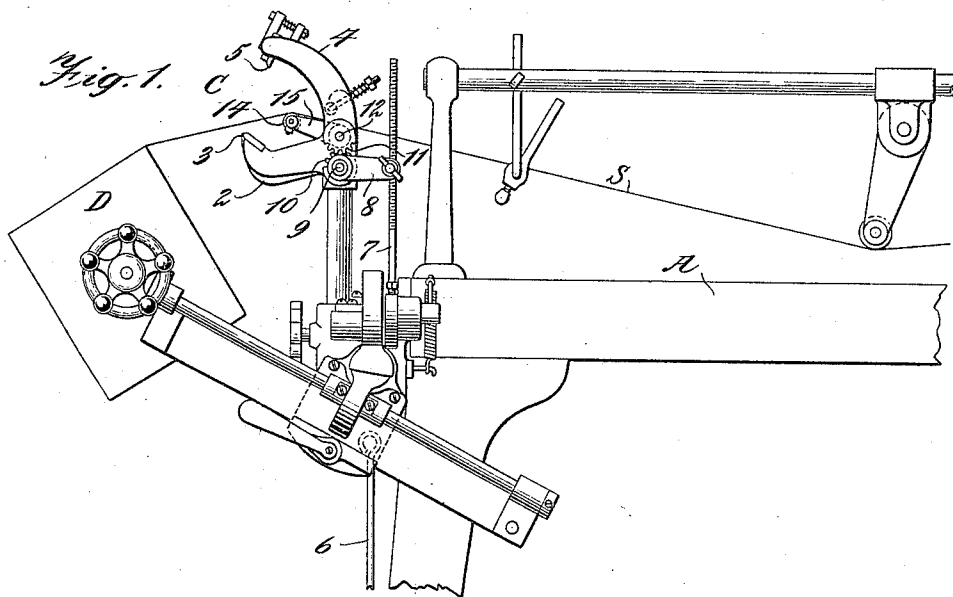


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BOX COVERING MACHINE AND THE LIKE.  
APPLICATION FILED JULY 28, 1917.

1,302,587.

Patented May 6, 1919.

2 SHEETS—SHEET 1.



Inventor

C. B. Pearsall

By his Attorney

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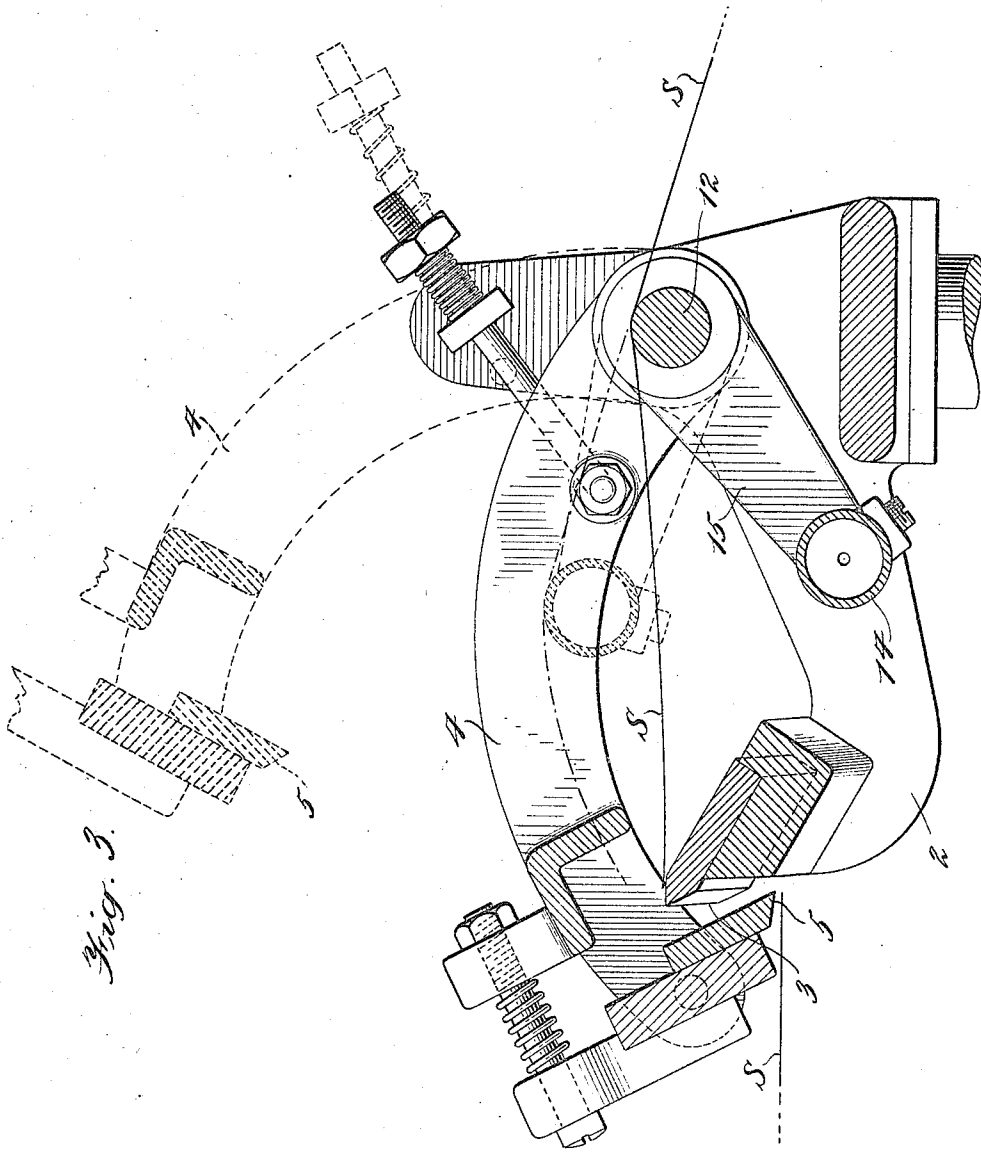


Fig. 3.

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C. B. Pearsall  
By his Attorney  
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# UNITED STATES PATENT OFFICE.

CHESTER B. PEARSALL, OF ROCHESTER, NEW YORK, ASSIGNOR TO M. D. KNOWLTON COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

## BOX-COVERING MACHINE AND THE LIKE.

1,302,587.

Specification of Letters Patent.

Patented May 6, 1919.

Application filed July 28, 1917. Serial No. 183,246.

*To all whom it may concern:*

Be it known that I, CHESTER B. PEARSALL, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Box-Covering Machines and the like, of which the following is a specification.

This invention relates to box covering machines of the class in which a continuous strip of covering material is fed from a roll or other source of supply to the point where it is to be applied to the box and there cut by a suitable cutting device into desired lengths for the boxes to be covered. The cutting device, which comprises a pair of knives between which the covering strip is led in its passage from the roll to the box, is located just at the rear of the box support and in a position where the operator may grasp the cut end of the main covering strip following each box covering operation and draw a sufficient length of strip forward to effect the next covering operation. This cut end of the main covering strip normally rests upon the lower knife, in which position it is somewhat inconvenient for the operator to readily grasp. Therefore, it has been the object of the present invention to provide means for lifting the cut end of the main strip from the lower knife after each cutting operation and holding the same free and in a position to be conveniently grasped by the operator. This object is attained by means of a device which, in the form of my invention illustrated in the accompanying drawings, comprises a lifting member which is positioned just at the rear of the lower knife of the cutting device for engagement with the covering strip at its under side and which is operative to lift the cut end of said strip above the lower knife upon the raising of the upper knife following the strip cutting operation.

Referring to the accompanying drawings—

Figure 1 is a side elevation of the front end of a box covering machine provided with my invention.

Fig. 2 is an enlarged detail, in front elevation, of the cutting device of said machine, with which the strip lifter of the present invention is directly associated.

Fig. 3 is a sectional detail showing the lowered and raised positions of the upper

knife and the strip lifter, by full and dotted lines respectively.

Similar reference characters indicate like parts in the several figures of the drawings.

The covering machine here shown and to which I have applied the strip lifter constituting the present invention, is substantially the same as that disclosed in Letters Patent No. 1,037,154, granted August 27, 1912, to which reference may be made for any desired details of construction and operation not entering into the present invention.

The machine as shown comprises a frame A, on which is supported the usual elements of a box covering machine, including a cutting device C, and a box support D.

The cutting device comprises a lower stationary frame 2 provided with a knife 3, and an upper movable frame 4 provided with a knife 5, the latter being adapted upon its descent to cooperate with the knife 3 to cut the covering strip or web S transversely. The movable knife frame 4 may be operated in any suitable or desired way. In the present case it is made to descend by depressing a treadle, which is not shown in the drawings but which is connected to the link 6. The link 6 thus pulled downwardly, sets in rotation a cam shaft carrying a cam which controls the movement of a rod 7. The cam and cam shaft just referred to do not show in the drawings, but at a point during the rotation of said cam the rod 7 is permitted to descend, thus swinging a connected rock arm 8 about its pivotal connection 9. The rock arm 8 is provided with a series of teeth 10 which mesh with a corresponding series of teeth 11 associated with a rock shaft 12. The rock shaft 12 is operatively connected with the upper movable knife frame 4, and it is therefore obvious that when the rod 7 is permitted to lower, the connected frame 4 with its knife 5 will descend by gravity. When the rod 7 is again lifted, the frame 4 is raised and again assumes its normal open position shown in Fig. 1. This construction and operation of cutting device is well known in the art and is the same as that of the aforesaid patent.

The strip lifter of the present invention comprises a member 14 which is supported in a position substantially parallel with and to the rear of the knives of the cutting device, whereby it may be caused to engage

with the under side of the main covering strip just to the rear of its cut end. This lifter member may be made operative in any desired way to perform its function of freeing or moving the cut end of the strip from the lower knife. As here shown, it is supported at its opposite ends by two bracket arms 15, 15, which are rigidly attached to the rock shaft 12 which carries the upper knife frame 4, whereby the lifter member will be caused to move up and down in unison with the upper knife. Thus, when the upper knife is depressed to sever the strip, the connected lifter member is moved below the path of said strip, as shown by full lines in Fig. 3, and subsequently, when the knife 5 is raised to its open position following the cutting operation, the lifter member is likewise raised and caused to move the cut end of the strip above the lower knife, as shown by dotted lines in Fig. 3, in which position said end may be readily and conveniently grasped by the operator when it is desired to draw the strip forward to provide the necessary length for the covering of the next box.

Although the strip lifter has been here shown and described in connection with the cutting device of a box covering machine, it will be obvious that it may be used to the same advantage in connection with a cutting device in most any type of machine in which the cut end of a strip of material is adapted to be grasped by the operator for the purpose of advancing the strip through the machine.

What I claim is:

1. In combination with a cutting device comprising two coöperating cutters one of which is movable relative to the other, a device operative to move the cut end of a strip away from one of the cutters upon the opening of the other following the cutting operation, said device being associated and movable with the movable cutter.

2. In combination with a cutting device comprising two coöperating cutters one of which is movable and the other stationary, a device operative to move the cut end of a strip away from the stationary cutter upon the opening of the movable cutter, said device being associated and movable with the movable cutter.

3. In combination with a cutting device

comprising two coöperating cutters one of which is vertically movable and the other stationary, a lifter device operative to lift the cut end of a strip above the stationary cutter upon the raising of the movable cutter, said lifter device being associated and movable with the movable cutter.

4. In combination with a cutting device comprising a lower cutter and an upper cutter one of which is movable vertically relative to the other, a device operative to move the cut end of a strip away from one of said cutters upon the opening movement of the other following the cutting operation, and means for so operating said device.

5. In combination with a cutting device comprising two coöperating cutters one of which is movable relative to the other, a device connected to and movable with said movable cutter and operative upon the opening of the latter to free the cut end of a strip from engagement with the other cutter.

6. In combination with a cutting device comprising a lower cutter and an upper movable cutter, a lifter device connected to and movable with said upper cutter and operative upon the opening movement of the latter to move the cut end of a strip above the lower cutter.

7. In combination with a cutting device comprising a lower cutter and an upper movable cutter, a lifter device associated with the upper cutter for movement therewith and being arranged to move below the path of the strip when the upper cutter is depressed to cutting position, and to engage the cut end of the sheet and lift the same above the lower cutter upon the raising of the upper cutter to open position.

8. In a box covering machine, the combination with the cutting device comprising a lower stationary cutter and an upper movable cutter, of a lifter device associated with the upper cutter for movement therewith and being operative upon the raising of said upper cutter to lift the cut end of a strip to a raised position between the open cutters.

Signed at Rochester, in the county of Monroe and State of New York, this 21st day of July, A. D. 1917.

CHESTER B. PEARSALL.

Witnesses:

THOS. D. PATTON,  
H. W. SPEARES.