May 29, 1934. E. F. SIEG 1,960,799

FRAMING APPARATUS FOR MAKING PURSES

Filed Dec. 17, 1931 4 Sheets-Sheet 1

Fig. 1.

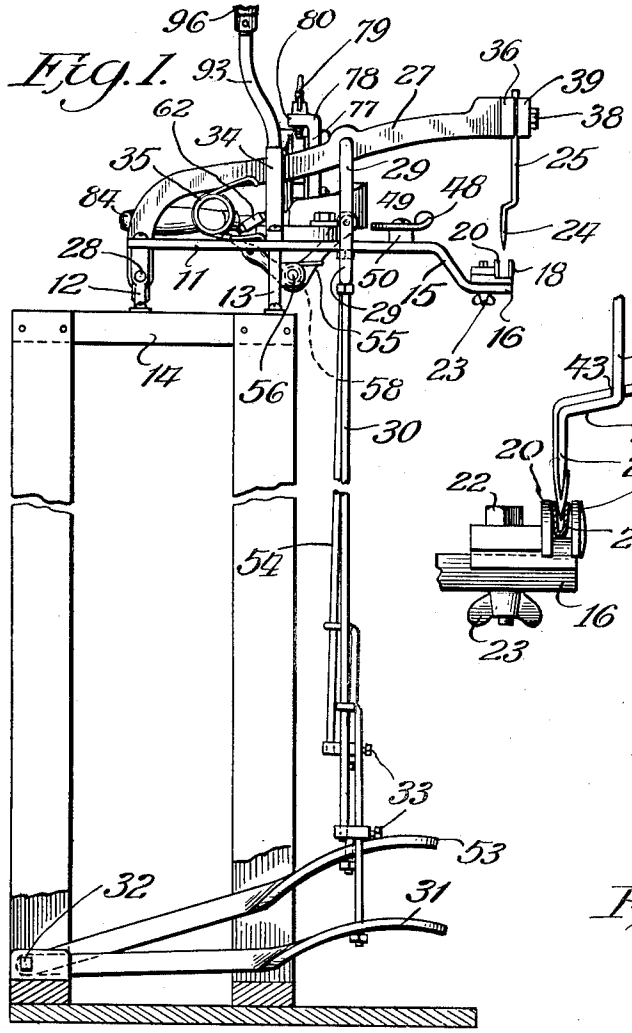


Fig. 6.

Fig. 7.

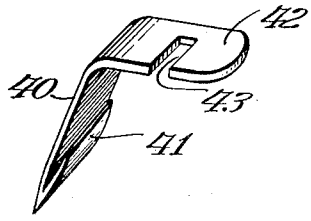
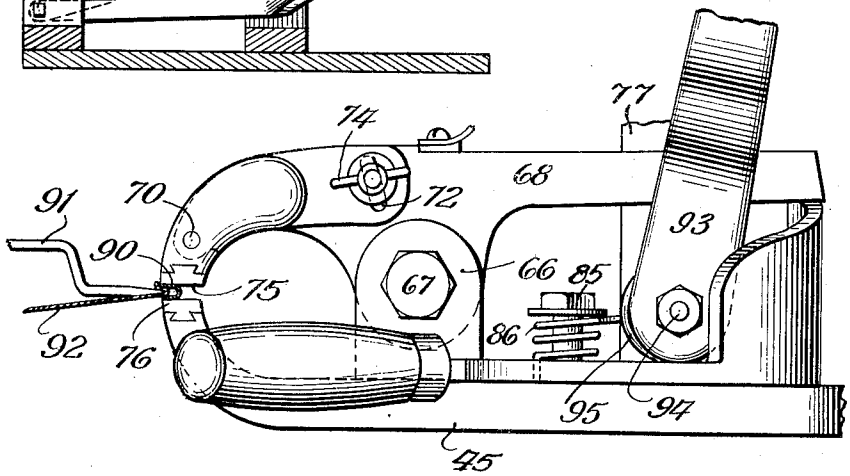


Fig. 8.



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Filed Dec. 17, 1931 4 Sheets-Sheet 2

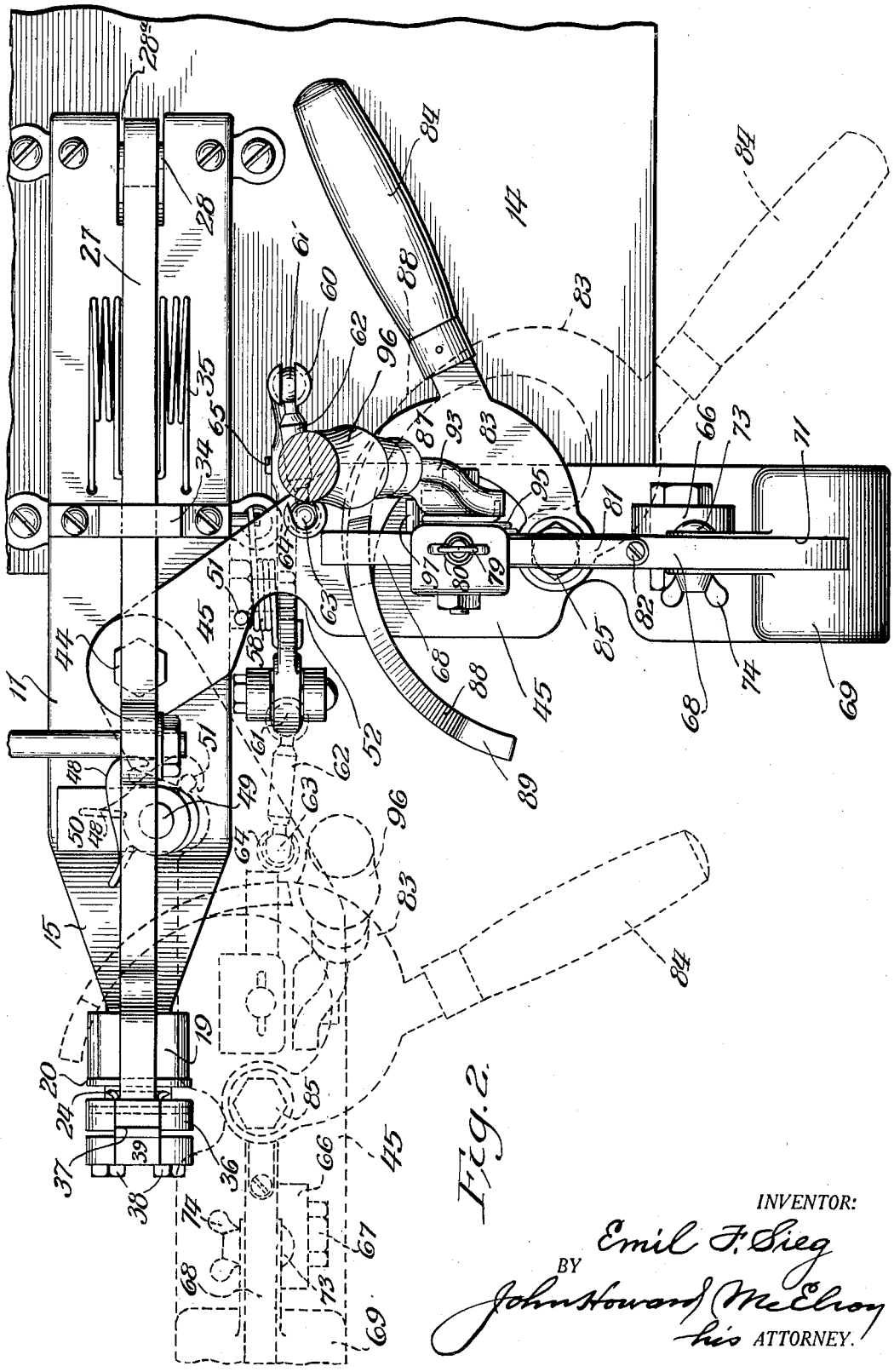


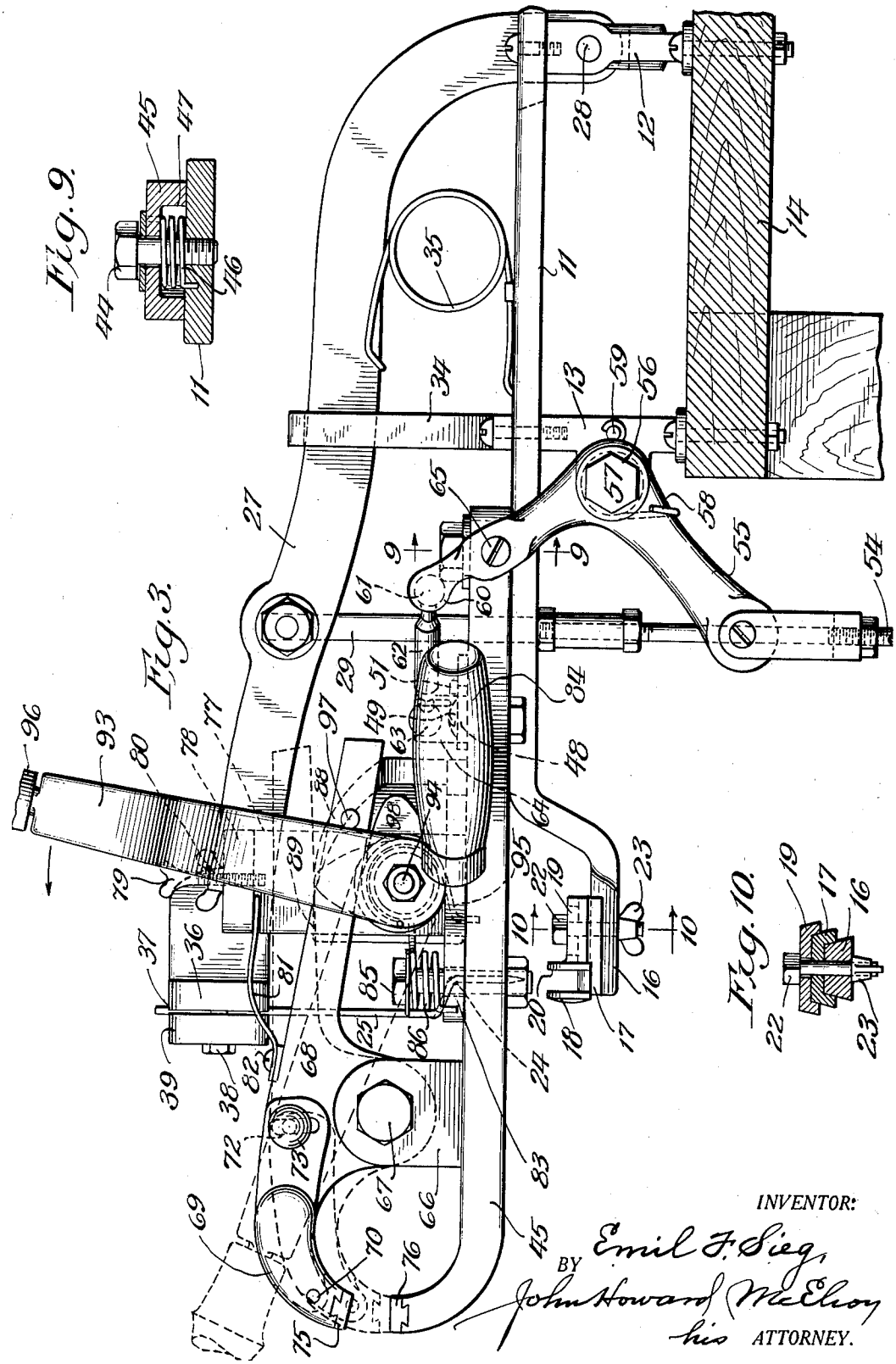
Fig. 2.

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FRAMING APPARATUS FOR MAKING PURSES

Filed Dec. 17, 1931 4 Sheets-Sheet 3



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FRAMING APPARATUS FOR MAKING PURSES

Filed Dec. 17, 1931 4 Sheets-Sheet 4

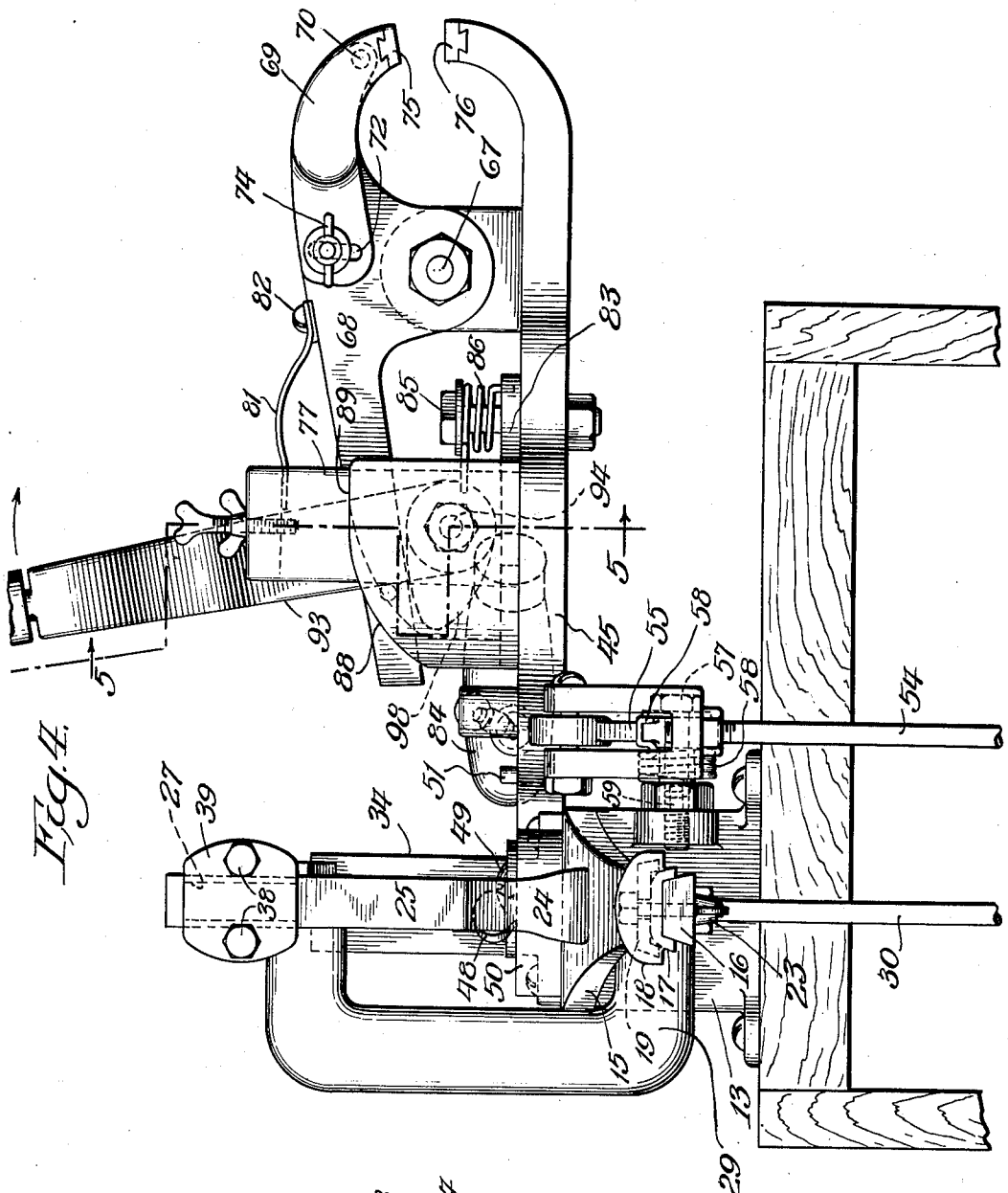


Fig. 4.

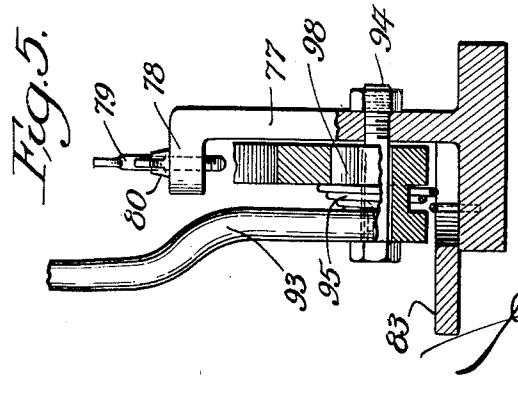


Fig. 5.

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UNITED STATES PATENT OFFICE

1,960,799

FRAMING APPARATUS FOR MAKING PURSES

Emil F. Sieg, Maywood, Ill., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application December 17, 1931, Serial No. 581,693

19 Claims. (Cl. 153—1)

My invention is concerned with a novel apparatus for use in making purses, and more especially with an apparatus that is used in securing the open tops of the flexible bodies to the metallic frames that are customarily employed in forming the closures for said bodies. These frames in their simplest form consist of two halves, each in the shape of a shallow inverted U, hinged together at their ends, each half being composed of thin sheet metal, U-shaped in cross section, so that the open top of the flexible body portion, whether cloth or leather, can have the top edges inserted in the open trough, as it were, and then be secured in place by bringing the edges of the frame together, clamping the edges of the body material between them.

My invention is designed to produce an apparatus which can be used: (1) to open up the frames,—i. e., spread their edges apart so that the body material can be easily inserted; (2) to force the edges of the body material in place in the frames; and (3) finally to crimp the frames on the body material after it is in place, to finish the job.

To illustrate my invention, I annex hereto four sheets of drawings, in which the same reference characters are used to designate identical parts in all the figures, of which—

Fig. 1 is a side elevation of the apparatus, as seen from the left-hand side thereof;

Fig. 2 is a top plan view of the same, on a much larger scale;

Fig. 3 is a side elevation of the same, as seen from the right-hand side, with the crimping mechanism in position for use;

Fig. 4 is a front elevation of the same, with the crimping mechanism swung out of the way;

Fig. 5 is a detail in section on the line 5—5 of Fig. 4;

Fig. 6 (Sheet 1) is a detail on the scale of Figs. 2 to 4, showing the apparatus in use for spreading the frames;

Fig. 7 is a perspective view of the spreading attachment;

Fig. 8 is a view of a portion of the mechanism seen in Fig. 3, but used for holding the frame while the body material is being inserted; and

Figs. 9 and 10 (Sheet 3) are details in section on the lines 9—9 and 10—10 of Fig. 3.

In carrying out my invention in its preferred form, I employ a base casting 11 of the shape shown in plan view in Fig. 2, and provided with a pair of standards 12 and 13 by which it is secured to a work bench, represented diagrammatically at 14. The outer end of the base member 11 is bent downwardly at 15, and narrowed, as seen, and terminates in the horizontal portion 16, which preferably has the shape seen in cross section in Fig. 10. This furnishes a support for an adjustable groove, which is formed by the member 17 having the upwardly projecting flange 18, and the member 19 having the upwardly projecting flange 20, the two members 17 and 19 preferably having the cross section shown in Fig. 10, so that the two members may be adjusted longitudinally on the support 16 to determine the width of the groove formed between the members 18 and 20, and to determine the position of said groove so that it will register exactly with the cooperating tool to be hereinafter described. The members are secured in place by the screw bolt 22, passed through longitudinal slots formed in said members 17 and 19, and through an aperture in the part 16 and having the wing nut 23 thereon to secure the parts in the desired adjustment, as will be readily understood.

The tool 24, cooperating with the groove, is of the shape best seen in Figs. 1, 3, 4 and 6, and has the shank 25 connected with the blade portion 24 by the offset 26. This shank 25 is secured in the forward end of the lever 27 of the third class, which is fulcrumed at 28 in the U-shaped bearing recess 28^a formed in the standard 12 and base 11 for that purpose. The lever 27 has extending downwardly from the central portion thereof the shallow U-shaped offset 29, the lower end of which has connected thereto the link 30, which is connected at its lower end to the foot-pedal 31, fulcrumed at 32 in the bench 14. For convenience of adjusting the apparatus to benches of different heights, I form the link 30 in two telescoping parts, as clearly seen in Fig. 1, which are secured together to form the desired length by use of the set screw 33. The lever 27 is guided in its swinging movement and the limit of its upward movement determined by the inverted U-shaped guide piece 34, secured on the top of the base 11, the lever being held yieldingly in its elevated position by the coiled spring 35, secured to the base 11 and cooperating with the under side of the lever 27 in the manner clearly shown in Figs. 2 and 3, which fully illustrate said spring. The shank 25 of the blade 24 is held in the desired position by being clamped in the groove 37 formed in the face of the enlargement 36 at the end of the lever, the screws 38 being passed through the other clamping member 39 and threaded in the enlargement 36.

The mechanism thus far described is, in the

ordinary operation, first employed to spread the frames, and for this purpose, the spreader attachment shown in perspective in Fig. 7 is placed on the blade in the manner shown in Fig. 6, where it will be seen that the spreader 40 has the hook-shaped portion 41 by which it is fitted over the edge of the blade 24, and the offset portion 42, having the recess 43 therein, by which it is fitted over the shank 25 and rests on the offset portion 26, so as to hold the spreader securely in place. The frame 21 is placed in the groove between the flanges 18 and 20, with its open side up, and by depressing the pedal 31 and shifting the position of the frame between depressions, the entire length of it may be opened up by the action of the spreader, as clearly seen in Fig. 6.

The crimping mechanism is carried by a swinging base plate or piece 45, which is fulcrumed on the screw bolt 44, best seen in Fig. 9, which is screwed into the base 11, and is encircled by the helically coiled expanding spring 46, which has its ends secured in the base 11 and in the bottom of the recess 47, formed in the under side of the member 45 to receive the spring. This spring serves to hold the crimping mechanism in the position shown in full lines in Figs. 2 and 4, where it is out of the way of the mechanism previously described. When it is drawn forward into the position shown in dotted lines in Fig. 2, and in full lines in Fig. 3, it is preferably held in this position by the hook 48, best seen in Figs. 1 and 2, which is pivoted at 49 on the block 50, projecting upward from the face of the base piece 11, the hook 48 cooperating in this position with the pin 51, best seen in Fig. 4, projecting upward from the swinging member 45, which is provided with a recess 52, best seen in Fig. 2, which permits it to assume the position shown in dotted lines in Fig. 2 without engaging the block 50.

This swinging member 45 is swung from the full line position shown in Fig. 2 to the dotted line position by depressing the second foot pedal 53, which is connected by a link 54, similar to the link 30, to the bell crank lever 55, which is fulcrumed on a bearing 56, extending from the standard 13. The bearing 56, formed by the bolt 57, secured in the standard 13, has the helically coiled expanding spring 58 surrounding the bearing bolt 57 and having one end fastened to the pin 59, projecting from the standard 13, while its other end engages the lower arm of the bell crank 55, so as to tend to throw the bell crank upward and return the swinging member 45 to its inoperative position, the two springs 46 and 58 cooperating for this purpose. The upper end of the bell crank 55 is split and forms the bearing 60 for the ball 61 of the short link 62, the other end of which is a ball 63, secured in the bearing 64, projecting upwardly from the member 45. The split upper end of the bell crank 55 is provided with the screw 65, seen in Fig. 3, which serves to secure the ball 61 in its bearing 60. With the connection shown, it is possible to swing the member 45 from its inoperative to its operative position by merely depressing the pedal 53, and it can then be secured by the hook 48, as previously explained.

The member 45 is provided with the standard 66, on which is fulcrumed, by the bolt 67, the lever 68 of the first class, which has the jaw 69 fulcrumed thereon by the pin 70 at the forward end thereof, the jaw 69 having the U-shaped slot 71 therein to receive the end of the lever 68. The rear end of the jaw is comparatively narrow and its two parts have the slot 72 therein cooperating with the bolt 73 and wing nut 74 to adjust the jaw so that its fibre face 75 may be placed at the exact angle desired to cooperate with the fibre surface 76 of the stationary jaw, formed by the upturned end of the member 45. The member 45 has projecting upward from the central portion thereof the standard 77, which is best seen in Figs. 1, 2, 4 and 5, and has the overhanging flange 78, through which is threaded the screw 79, secured in desired adjustment by the lock nut 80. The lower end of the screw engages the leaf spring 81, which has its free end secured at 82 to the lever 68, so as to hold the jaw normally in its raised position.

Two means are provided to depress the jaw 69 through the lever 68, the first of these consisting of the horizontal lever 83, having the handle 84 and fulcrumed on the bearing bolt 85, projecting upward from the member 45 and having the helically coiled expanding spring 86 surrounding it, with one end engaged by the lever, and the other end engaging the standard 77, so that the spring serves to hold the lever normally in the inoperative position shown in full lines in Fig. 2. This lever has the curved extension 87 beyond the handle, and on this extension is formed the curved cam 88, which has the inclined upper surface terminating in the substantially horizontal portion 89, the cam surface cooperating with the rear end of the lever 68, and the cam is so designed that when the lever 84 is drawn forward to the dotted line position shown in the upper part of Fig. 2, and in full lines in Fig. 8, the lever 68 will be moved to bring the jaw 69 into the position shown in Fig. 8, where it will be held against the action of the spring 86 by the substantially flat surface 89, previously mentioned. When in use, of course, the clamping jaw mechanism is swung into the position shown in full lines in Figs. 3 and 8, and in this position the inner frame 90, if one is employed in the purse, can be gripped between the fibre surfaces 75 and 76 securely enough so that by using the hand tool 91, similar to the tool 24, but provided with a handle by which it is operated manually, the flexible material 92 of the inner purse pocket, if one is employed, can have its edge forced into the frame 90 in the manner clearly indicated in Fig. 8. In the outer frame 21, seen being spread in Fig. 6, when the body material is to be put in place, the spreading tool 40 is removed, and the material is forced in place by the blade 24, operated by the pedal 31, in the same manner as where the hand tool is employed, as shown in Fig. 8.

The second means for moving the jaw 69 is the hand lever 93, fulcrumed on the base of the standard 77 by the bolt 94, passed through said standard and secured by a nut. As seen in Figs. 2 and 3, the bolt 94 has the helically coiled expanding spring 95 surrounding it, with one end engaging the lever 93, which has the handle 96, and the other end secured in the member 45, as seen in dotted lines in Fig. 3, so that the lever 93 tends to stand in a vertical position, it being prevented from moving farther back by reason of its engagement with the pin 97, projecting from the lever 68 engaging it and preventing further backward movement. The lever 93 has rigidly secured to it at its fulcrum point the cam 98, which engages the under side of the lever 68, and is ordinarily employed after the material 92 has been forced into the frame 90,

as seen in Fig. 8. The lever 93 is then swung forwardly, and its cam moves the lever 68 still farther to bring the fibre surfaces 75 and 76 closer together, thereby crimping the frame 90 on the material 92, and at the same time releasing the cam or switch member 88 so that it is returned to its normal inoperative position by its spring 86. This lever will also be used for crimping the frame 21 on the body material of the outside of the bag after it has been put in place in the manner heretofore described.

While I have shown and described my invention as embodied in the form which I at present consider best adapted to carry out its purpose, it will be understood that it is capable of modifications, and I do not desire to be limited in the interpretation of the following claims, except as may be necessitated by the state of the prior art.

What I claim as new, and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, the combination with a support having a groove in the upper surface thereof adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward the support, and an auxiliary spreading blade adapted to be removably fitted over said first mentioned blade.

2. In a device of the class described, the combination with a support having a groove in the upper surface thereof adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured by its shank in said holder so that its edge will enter the groove when moved toward it, said shank having an offset therein, means to move said holder toward the support, and an auxiliary spreading blade adapted to be removably fitted over said first mentioned blade and having a hook-shaped portion to engage said first mentioned blade, and an offset with a slot therein adapted to engage the offset of the shank of the first mentioned blade.

3. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, means for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other, and to hold them in said position, and a second means operable to move said jaws still closer together, thereby releasing them from the holding action of the first means.

4. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, means for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other, and to hold them in said position, a second means operable to move said jaws still closer together, thereby releasing them from the holding action of the first means, and automatic means for returning said first mentioned means to its inoperative position when it is released by the action of said second means.

5. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, means for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other, and to hold them in said position, a second means operable to move said jaws still closer together, thereby releasing them from the holding action of the first means, and a spring for returning said first mentioned means to its inoperative position when it is released by the action of said second means.

6. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, means for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other, and to hold them in said position, means for adjusting the position of the cooperating jaw on its supporting member to vary the angle of its operative face relative to that of the first mentioned jaw, and a second means operable to move said jaws still closer together, thereby releasing them from the holding action of the first means.

7. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, a pivoted wedge member for moving said second member toward the first member so as to bring the jaws within a certain fixed position relative to each other and to hold them in said position, and means operable to move said jaws still closer together, thereby releasing them from the holding action of the wedge member.

8. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, means for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other and to hold them in said position, and a rotary cam member operable to move said jaws still closer together, thereby releasing them from the holding action of the first means.

9. In a device of the class described, the combination with a supporting member carrying a jaw, of a second supporting member carrying a cooperating jaw, a pivoted wedge member for moving said second member toward the first so as to bring the jaws within a certain fixed position relative to each other and to hold them in said position, and a rotary cam member operable to move said jaws still closer together, thereby releasing them from the holding action of the wedge member.

10. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, and means for moving said jaw supporting members into their operative position adjacent the blade holder.

11. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter

the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, and means for moving said jaw supporting members into their operative position adjacent the blade holder and securing them in said operative position.

12. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, means for moving said jaw supporting members into their operative position adjacent the blade holder and securing them in said operative position, and automatic means for returning them to their inoperative position when released.

13. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, a foot pedal, and connections from said pedal to said first jaw supporting member for moving both of said jaw supporting members into their operative position adjacent the blade holder.

14. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, a foot pedal, connections from said pedal to said first jaw supporting members into their operative position adjacent the blade holder, and a hook pivoted on one of said jaw supporting members cooperating with a lug on the first mentioned supporting member.

15. In an apparatus of the class described, the combination with a supporting member having a groove in its upper surface adapted to receive an open frame, of a blade holder mounted to move to and from said support, a blade adapted to be secured in said holder so that its edge will enter the groove when moved toward it, means to move said holder toward its support, a jaw supporting member movably mounted on said support, but normally held away from said blade holder, a second jaw supporting member movably mounted on the first jaw supporting member, so that the two jaws may be brought into juxtaposition, a foot pedal, and connections from said pedal to said first jaw supporting member for moving both of said jaw supporting members into their operative position adjacent the blade holder, said connections comprising a link from the pedal, a bell crank lever connected to the link, and a short link having ball and socket connections at each end to the bell crank lever and to the first mentioned jaw supporting member.

16. In a device of the class described, the combination with a narrow, rounded support having a groove in the upper surface thereof, adapted to have the bottom of an open frame, U-shaped in cross section, rest on its bottom, the frame as a whole being of an inverted U-shape, of a blade holder mounted to move to and from said support, a short blade adapted to be secured in said holder so that its edge will enter such a frame in the groove when moved toward it, a pedal, and connections from the pedal to the holder to move it toward the support to force a fabric held manually into the frame.

17. In a device of the class described, the combination with a narrow, rounded support having a groove in the upper surface thereof, adapted to have the bottom of an open frame, U-shaped in cross section, rest on its bottom, the frame as a whole being of an inverted U-shape, of a blade holder mounted to move to and from said support, a short blade adapted to be secured in said holder so that its edge will enter such a frame in the groove when moved toward it, a pedal, connections from the pedal to the holder to move it toward the support to force a fabric held manually into the frame, and automatic means to move the holder and blade away from the support.

18. In a device of the class described, the combination with a narrow support, of two pieces, rounded on their upper surfaces, adjustably secured on said support and co-operating to form a groove that may have its width or its position or both changed by adjusting them, said groove adapted to have the closed bottom of an open frame, U-shaped in cross section, rest on its bottom, the frame as a whole being of an inverted U-shape, a blade holder mounted to move to and from said support, a short blade adapted to be secured in said holder so that its edge will enter such a frame in the groove when moved toward it, and means to move said holder toward the support to force a fabric held manually into the frame.

19. In a device of the class described, the combination with a narrow support, of two pieces, rounded on their upper surfaces, adjustably secured on said support and co-operating to form a groove that may have its width or its position or both changed by adjusting them, said groove adapted to have the closed bottom of an open frame, U-shaped in cross section, rest on its bottom, the frame as a whole being of an inverted U-shape, a blade holder mounted to move to and from said support, a short blade adapted to be secured in said holder so that its edge will enter such a frame in the groove when moved toward it, a spring resisting the movement of the blade holder, a foot pedal, and connections from said pedal to the blade holder.

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