

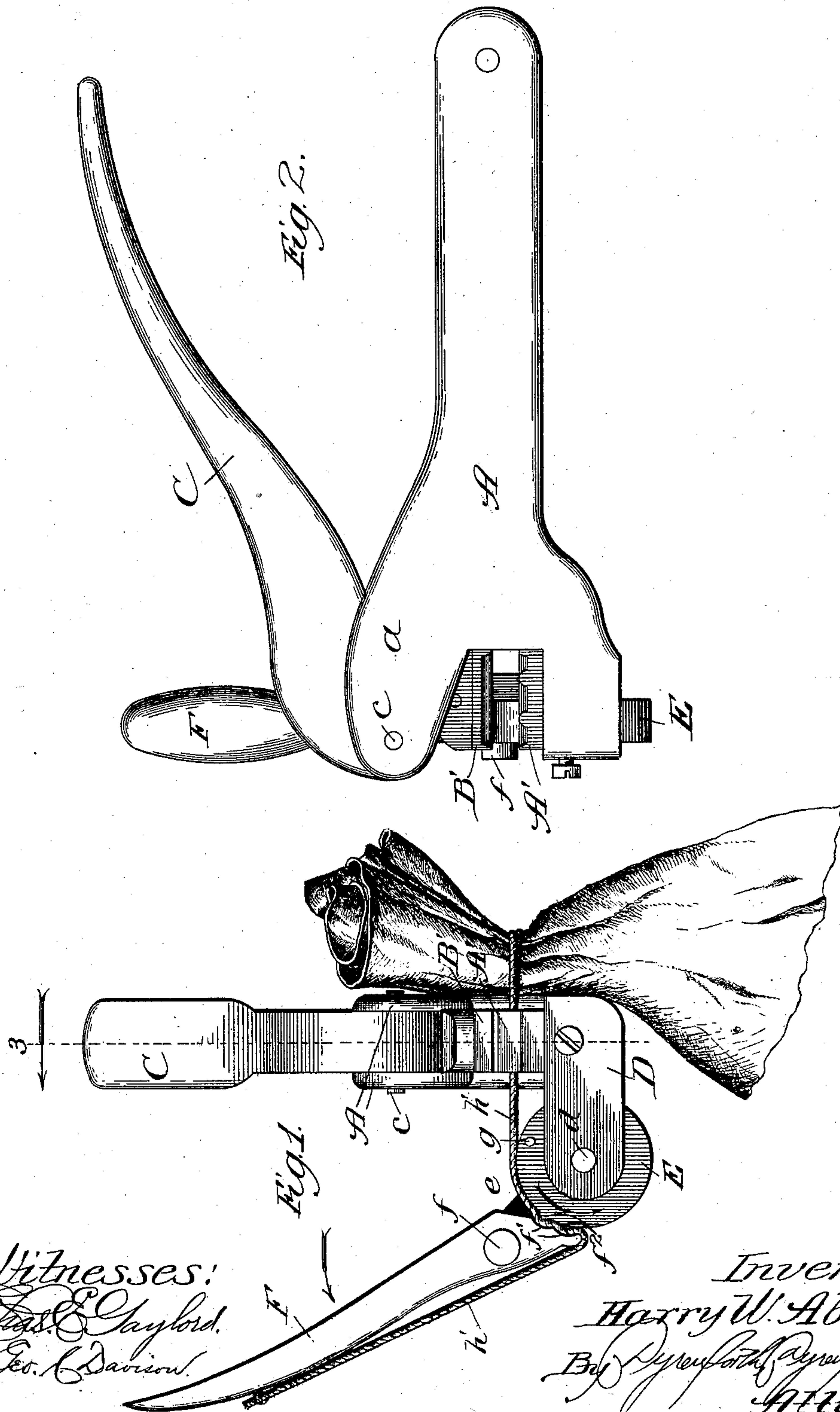
No. 702,351.

Patented June 10, 1902.

H. W. ABBOTT.
SEALING IMPLEMENT.
(Application filed Aug. 20, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
E. S. Gaylord.
Geo. A. Davison.

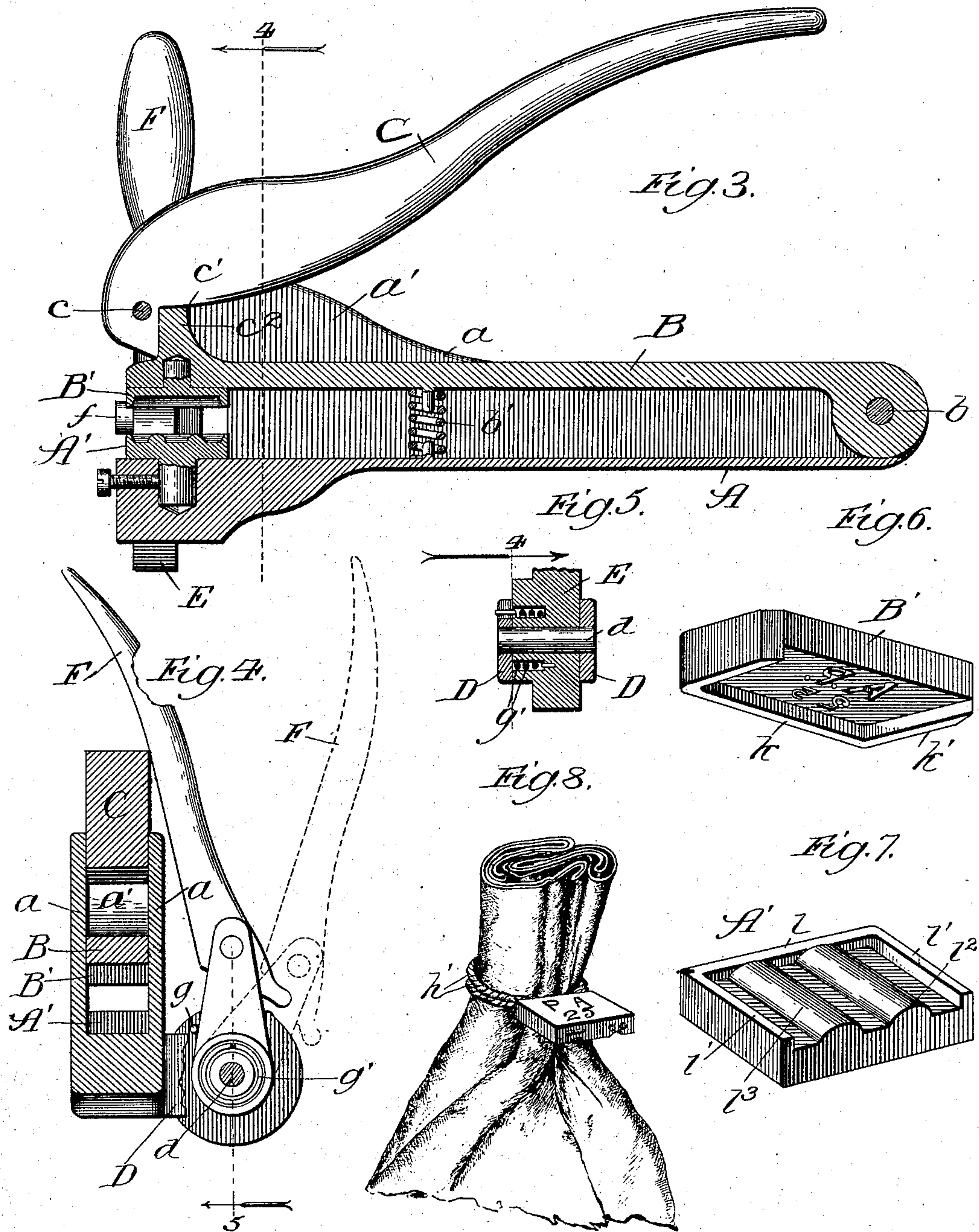
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Witnesses:
Geo. C. Gaylord,
Geo. C. Davison.

Inventor:
Harry W. Abbott,
By *[Signature]* Attorney.

UNITED STATES PATENT OFFICE.

HARRY W. ABBOTT, OF CHICAGO, ILLINOIS, ASSIGNOR TO PORTER SAFETY SEAL COMPANY, A CORPORATION OF ILLINOIS.

SEALING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 702,351, dated June 10, 1902.

Application filed August 20, 1901. Serial No. 72,644. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. ABBOTT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Sealing Implement, of which the following is a specification.

My invention relates particularly to implements for sealing bags or the like where a tie-loop is used in connection with a sealing-block and it is desirable to draw the loop taut prior to sealing the same at the block.

My primary object is to provide an implement with which a tie for a bag or the like can be drawn as tightly as desired and then sealed readily, rendering unnecessary any knotting of the cord or tie loop.

My invention is illustrated in the accompanying drawings in connection with a bag-seal, which is fully described and claimed in the application of Thomas I. Porter, No. 74,612, filed September 7, 1901.

In the drawings, Figure 1 is a view of my improved implement looking at the end whereat the dies are situated and illustrating the operation of the cord-tightening device connected with the implement; Fig. 2, a side view of the implement looking toward that side which is opposite the side bearing the cord-tightening device; Fig. 3, a view, partly in section, taken as indicated at line 3 of Fig. 1; Fig. 4, a transverse section taken as indicated at line 4 of Fig. 3; Fig. 5, a section taken as indicated at line 5 of Fig. 4; Figs. 6 and 7, perspective views of the upper and lower dies, respectively; and Fig. 8, a broken view showing the appearance of the seal after application to a bag by means of my improved implement.

The preferred construction is as follows: A represents the lower-die-carrying lever, the same being recessed longitudinally to receive the upper-die-carrying lever, thus affording sides *a*, provided at their front portions with enlargements *a'*; B, an upper-die-carrying lever connected at its rear end by a pivot *b* to the rear end of the lever A, said levers being held normally separated by a spring *b'*; A' B', dies carried respectively by the levers A and B; C, a lever of the second class connected by a pivot *c* to an enlargement *a'* of

the lever A and having a cam-surface *c'*, which engages a lug *c²* on the upper surface of the front portion of the lever B; D, a laterally-projecting slotted lug or bracket carried by the front portion of the lever A; E, a gripper-disk pivoted in the bracket D on a pin *d* and provided with an arm *e*, and F a gripper-lever connected by a pin *f* to the end of the arm *e*, said lever having a roughened lower end *f'*, coacting with a roughened surface *f²* on the disk E.

The levers A and B are levers of the third class and have but comparatively small movement at their free ends. It readily will be understood that by pressing the levers A and C together the dies can be forced together with great pressure through the medium of the cam *c'* and lug *c²*. The lever B is practically sheathed within the slotted lever A. The disk E is provided with a pin *g*, which in the position of rest (indicated by the full lines of Fig. 4) bears upon one arm of the bracket D, the disk E being yieldingly held in the corresponding position by means of a spring *g'*.

In the seal described in the above-mentioned application there is employed a sealing-block *h* and a tie-loop *h'*, one end of the loop being secured in a perforation or perforations with which the block is provided and the other end of the loop passing through a parallel guide perforation or perforations in said block. The upper die is preferably formed with a downwardly-projecting front flange *k* and downwardly-projecting lateral flanges *k'*. The lower die is preferably formed with an upwardly-projecting front flange *l*, upwardly-projecting lateral flanges *l'*, and intermediate ridges or corrugations *l²*, *l³*, parallel with the flanges *l'*. The lateral flanges of the dies are each adjacent to the disk E and serve to prevent movement of the sealing-block during the operation of drawing upon the loop, as readily will be understood from Fig. 1. The corrugations *l²* *l³* serve to indent or depress the metal in a manner to cause the same to bind or grip the cord where it passes through the perforations in the sealing-block, as will readily be understood from Fig. 8.

The operation will readily be understood

from the foregoing detailed description. The sealing-block is placed in the dies in the manner indicated in Fig. 1, and the free end of the tie-loop of the seal is passed between the gripping-surfaces f' f^2 and then drawn upwardly, so as to be gripped with the handle F. Movement of the lever F in the direction indicated by the arrow in Fig. 1 serves to firmly grip the cord between the lower end of said lever and the gripper-disk E, whereupon further movement of said lever causes said disk to rotate and draw the cord through the sealing-block. After the loop has been drawn as closely as possible the levers A and C are pressed together, thereby causing the dies to impress the sealing-block and firmly seal the cord, the free end or ends of the cord being afterward severed, leaving the seal as shown in Fig. 8. It will be understood that the levers A and C may be grasped in one hand while the lever F is grasped in the other hand, so that after the operation of the lever F and while said lever is being employed to hold the cord the levers A and C can be pressed together.

Changes in details of construction within the spirit of my invention may be made. Hence no undue limitation is to be understood from the foregoing detailed description.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an implement of the character described, the combination with suitably-connected hand-levers and dies carried thereby, of a hand-operated cord or tie tightening device located adjacent to said dies, substantially as and for the purpose set forth.

2. In an implement of the character described, the combination with suitably-connected levers and dies carried thereby, of a cord or tie-tightening device located adjacent to said dies, and comprising a pivoted movable gripping member supported from one lever and a second gripping member pivotally connected with said first-named gripping member and serving to actuate said first-named gripping member.

3. In an implement of the character described, the combination with suitably-connected levers and dies carried thereby, of a laterally-projecting bracket, a gripping member pivotally connected therewith, and a gripping member pivotally connected with said first-named gripping member.

4. In an implement of the character described, the combination with suitably-connected levers and dies carried thereby, of a laterally-projecting bracket adjacent to said dies, and a gripping device supported from said bracket and movable in a transverse plane, said gripping device serving for tightening a cord or loop, substantially as described.

5. In an implement of the character described, the combination with suitably-con-

nected levers and dies carried thereby, of a yieldingly-held pivoted gripper-disk provided with an arm, and a gripper-lever pivotally connected with said arm, the inner end of said last-named lever and an adjacent surface of said gripper-disk having coacting gripping-surfaces.

6. In an implement of the character described, the combination of two levers pivotally connected at their rear ends, dies carried by the front ends of said levers, and a lever pivotally connected with the front end of one of said first-named levers and engaging and serving to depress the other of said levers, substantially as and for the purpose set forth.

7. In an implement of the character described, the combination of two levers pivotally connected at their rear ends, dies carried by the front ends of said levers, a lever pivotally connected with the front end of one of said first-named levers and engaging and serving to depress the other of said levers, and a gripping device supported from the front end of one of said first-named levers and movable in a transverse plane.

8. In an implement of the character described, the combination of a lever, a die connected with the front end thereof, a laterally-projecting bracket connected with the front end thereof, upwardly-projecting lugs or enlargements at the front end of said lever, a lever pivotally connected with said enlargements, an intermediate lever pivotally connected at its rear end with the rear end of said first-named lever and actuated by said second-named lever, and a gripping device carried by said laterally-projecting bracket.

9. In an implement of the character described, the combination of suitably-connected levers, dies carried thereby, one of said dies having a lateral flange or stop, a laterally-projecting bracket, and a gripping device carried by said bracket and movable in a transverse plane, said flange serving to prevent movement of the sealing-block during the operation of said gripping device, substantially as and for the purpose set forth.

10. In an implement of the character described, the combination of a slotted lever having upwardly-projecting side enlargements at its front end, a lever pivotally connected between said enlargements, an intermediate lever sheathed in said first-named lever and pivotally connected at its rear end with the rear end of said first-named lever, a bracket carried by the front end of said first-named lever, and a transversely-movable gripping device carried by said bracket, substantially as and for the purpose set forth.

HARRY W. ABBOTT.

In presence of—

D. W. LEE,
J. H. LEE.