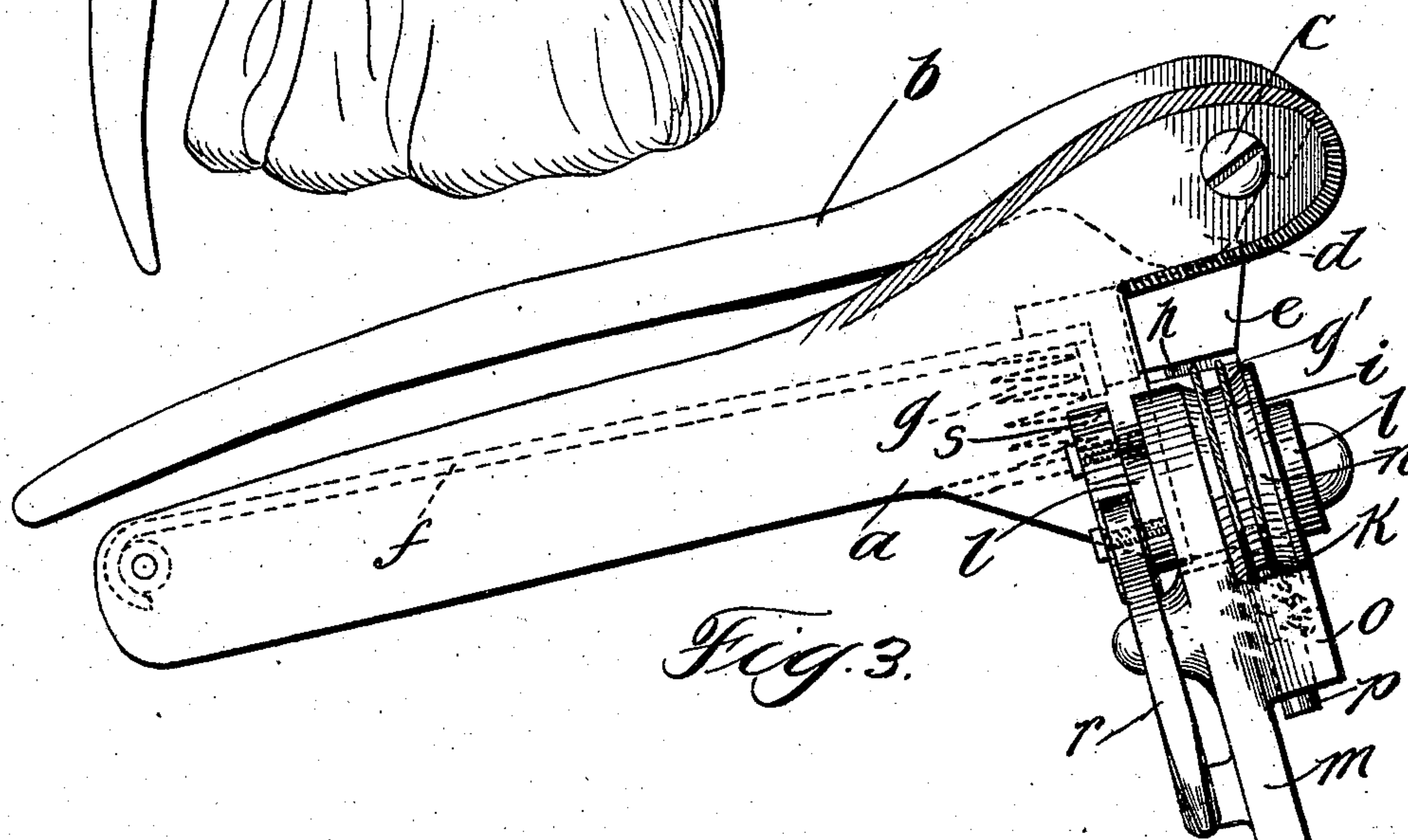
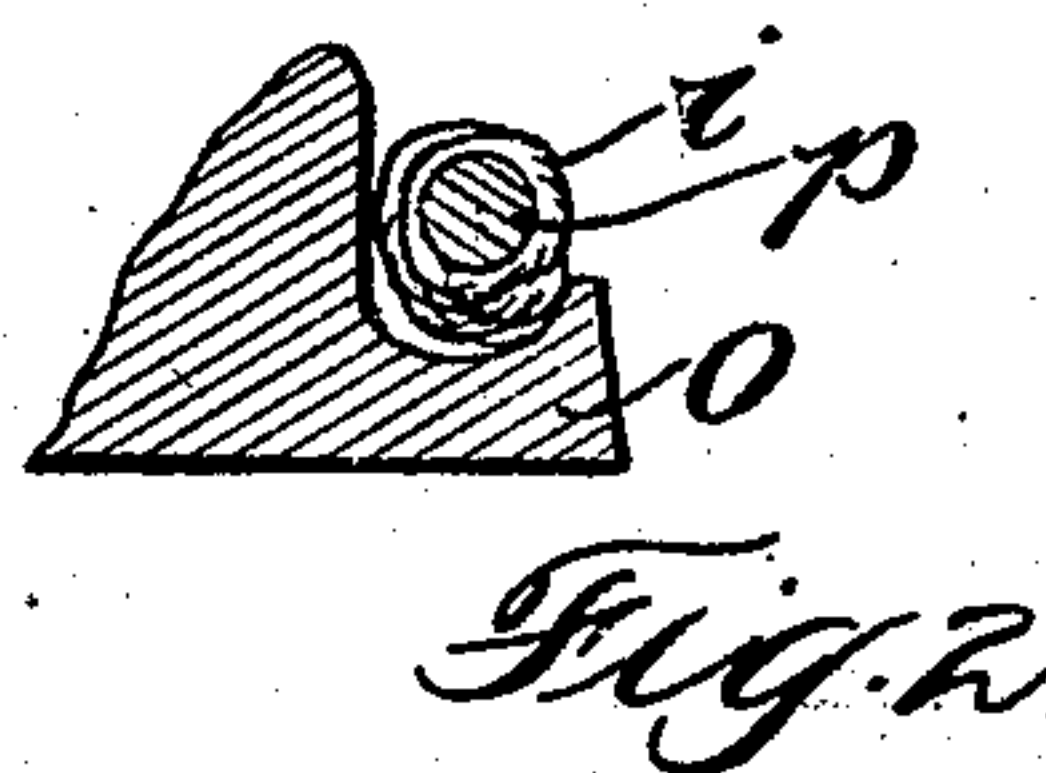
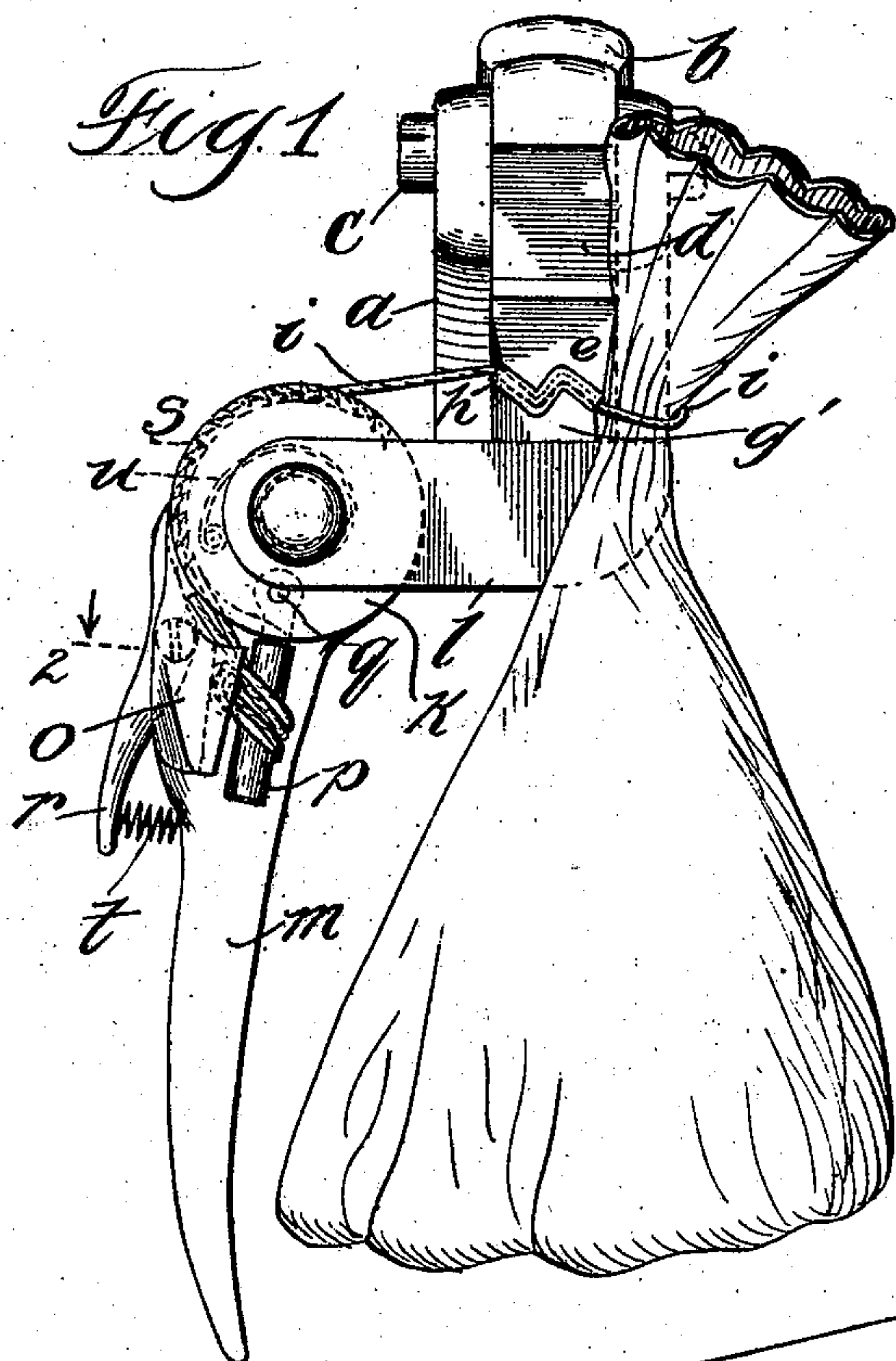


No. 847,776.

PATENTED MAR. 19, 1907.

G. H. HUISING.
SEAL PRESS.

APPLICATION FILED MAR. 23, 1906.



Witnesses:
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SEAL-PRESS.

No. 847,776.

Specification of Letters Patent.

Patented March 19, 1907.

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To all whom it may concern:

Be it known that I, GARRETT H. HUISING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Seal-Presses, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to seal-presses, and particularly to that class of seal-presses employed for applying seals to the free ends of loops surrounding the necks of bags.

My invention has two objects, one, provision of means for tightly drawing the loop about the neck of a bag, and, two, provision of means for maintaining the loop in its drawn or taut condition before the seal-press is operated to compress the seal about the free ends of the loop. For convenience in construction the device is preferably so arranged that after the seal has been fully pressed the instrumentality employed for maintaining the loop taut may be released.

Desirably in practicing my invention I employ a stock carrying two complementary dies, one desirably fixedly mounted in the stock and the other mounted upon a spring member that may be forced toward its companion by a lever desirably having cam engagement therewith. The dies have opposed faces, between which the seal is engaged, and when the die-plunger is operated the seal partakes of the configuration of said faces, such configuration desirably forming a crimp in the seal that makes an effective crimp in the loop, so that the loop may not be withdrawn from the seal. There is mounted laterally of the stock a tightening device, including two elements between which a passage is afforded for the extending ends of the loop, which by being suitably bunched and twisted may have engagement with the tightening device, so that when said tightening device is operated the loop will be tightly drawn through the seal, so that the loop may tightly close the neck of the bag, about which it may be disposed, whereafter the plunger-die is moved toward the stationary die to crimp the seal so as to maintain the portion of the loop surrounding the bag taut. The tightening device desirably includes a swing-

ing member about which the free ends of the loop may be passed, this swinging member being limited in its movement by a lug forming a part of the tightening device, which serves to engage the loop portions surrounding the swinging member, so that as the tightening device is rotated the loop is drawn through the seal until sufficiently tight about the neck of the bag, whereafter, as stated, the seal is crimped.

In order that the hand may be released from the tightening device, so that both hands may be used in operating the seal-press, I provide a locking device that maintains the tightening device in the position in which it has been adjusted in tightening the loop about the neck of the bag. This locking device desirably comprises a pawl carried by the tightening device and a ratchet stationarily mounted upon the stock of the press, preferably at the head portion thereof.

The axis of rotation of the tightening device is desirably substantially parallel with the stock of the tool, said tightening device being preferably mounted upon a bracket extending transversely of the stock.

I will explain my invention more fully by reference to the accompanying drawing, in which—

Figure 1 shows a front view of the tool with the tightening device and the retaining device for said tightening device placed in position to draw the loop tightly around the neck of a bag, the dies of the seal-press being approached to crimp the loop. Fig. 2 is a sectional view of a portion of the structure, taken on line 2 of Fig. 1. Fig. 3 is a side elevation of the structure as it appears in Fig. 1 with the exception that the bag illustrated in Fig. 1 does not appear in Fig. 3.

Like parts are indicated by similar characters of reference throughout the different figures.

The stock *a* of the seal-press carries a hand or gripping lever *b*, pivoted at *c* upon the stock. The pivoted end of the lever *b* may be provided with a cam formation *d*, employed for engaging the plunger-die *e*, mounted in this instance upon a swinging member *f*, the cam *d* acting in opposition to a stiff spring *g*, which forces the elevation of the die *e* and the handle *b* when released. The handle *b* is shown approached toward the stock

a. The stationary die *g'* is mounted upon the stock beneath the die *e*. The opposing faces of the dies are zigzag-shaped in the embodiment of the invention indicated, as will be clearly seen in Fig. 1.

The lead seal *h* is pressed between the dies into zigzag form, so that the cord forming the loop *i* may be crimped in the seal in order that said cord may not be withdrawn from the seal.

The tightening device is desirably in the form of a gripping-wheel *k*, journaled between two brackets *l l*, formed upon the stock, desirably in the same integral casting therewith. This gripping-wheel *k* is extended to form a handle *m*, so that purchase may be secured upon the wheel to rotate it. The wheel desirably has formed in a portion of its periphery a groove *n*, constituting a receiving-channel for the cord *i*. A lug *o* moves with the wheel and handle, a gap existing between said lug and wheel through which the free ends of the cord *i* are passed, the said free ends being twisted or knotted in such a way as to have engagement with said lug, so that when the handle *m* is turned the cord *i* is drawn sufficiently through the seal *h* to tighten the cord about the neck of the bag. The seal during this tightening operation is only slightly pressed between the dies just for the purpose of keeping the same in position while the cord is being drawn there-through by the tightener.

To promote the engagement of the loop ends with the lug *o*, I provide a swinging post *p*, about which the free ends of said loop may be wrapped, as indicated most clearly in Figs. 1 and 2. As the handle *m* is swung the cord forces the rotation of the post *p* upon its pivot *q* until said cord is tightly engaged with the lug *o*, whereby the longitudinal movement of the cord through the seal is forced upon continued movement of the handle *m*. After the cord has been drawn sufficiently through the seal the lever *b* is moved toward the stock *a*, and in order that both hands may be used in the manipulation of the lever tightly to press the seal I provide a retaining device that holds the loop in the position it has been forced to assume with respect to the seal so that the handle *m* may be released. This retaining device desirably operates automatically, and in the embodiment of the invention shown includes a pivotally-mounted dog *r* and a ratchet *s*, the teeth of the ratchet being so sloped that when the handle *m* is moved to draw the loop the engaging nose of the dog *r* may ride over said teeth.

The return movement of the handle *m* is prevented by reason of the engagement of the dog *r* with the teeth of the ratchet, said engagement being maintained by a spring *t*, which may be compressed manually when it is desired to release the engagement of the dog and ratchet. Upon the release of the

dog from the ratchet the return of the handle *m* to a normally elevated position may be promoted by a coil-spring *u*, having one end anchored to the wheel *k* and the other to a bracket member *l*.

The cord *i* constitutes a binder, and the action of the tightening device is to draw this binder until it is sufficiently taut, and said tightening device therefore constitutes a binder-drawing device. These expressions are used in the claims.

While I have illustrated the application of the invention to use in connection with bags, I do not wish to be limited to such use, as it is obvious that the invention has other applications.

It is obvious that changes may readily be made in the preferred embodiment of the invention herein shown and particularly described without departing from the spirit thereof, and I do not, therefore, wish to be limited to the precise construction shown; but,

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a moving post located in proximity to said lug, about which post said binder may be passed, said binder, as the tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn.

2. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a swinging post located in proximity to said lug, about which post said binder may be passed, said binder, as the tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn.

3. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a moving post located in proximity to said lug, about which post said binder may be passed, said binder, as the rotating tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the rotating tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn.

4. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a

swinging post located in proximity to said lug, about which post said binder may be passed, said binder, as the rotating tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the rotating tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn.

5. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a moving post located in proximity to said lug, about which post said binder may be passed, said binder, as the tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn, and mechanism for retaining the tightening device in the position to which it has been adjusted.

6. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a swinging post located in proximity to said lug, about which post said binder may be passed, said binder, as the tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn, and mechanism for retaining the tightening device in the position to which it has been adjusted.

7. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a moving post located in proximity to said lug, about which post said binder may be passed, said binder, as the rotating tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the rotating tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn, and mechanism for retaining the tightening device in the position to which it has been adjusted, said mechanism including as elements a ratchet and a dog, one of said elements being stationarily mounted with respect to the

stock of the seal and the other element moving with the binder-drawing device.

8. A seal-press, in combination with a binder drawing or tightening device, said binder-drawing device including a lug and a swinging post located in proximity to said lug, about which post said binder may be passed, said binder, as the rotating tightening device is operated, serving to move the post toward the lug, whereby the binder and lug are engaged firmly to connect the binder with the rotating tightening device, whereby upon continued operation of the tightening device the binder may be properly drawn, and mechanism for retaining the tightening device in the position to which it has been adjusted, said mechanism including as elements a ratchet and a dog, one of said elements being stationarily mounted with respect to the stock of the seal and the other element moving with the binder-drawing device.

9. A seal-press, in combination with a binder drawing or tightening device mounted thereupon, and mechanism for retaining the tightening device in the position to which it has been adjusted.

10. A seal-press, in combination with a binder drawing or tightening device mounted thereupon, and automatically-operated mechanism for retaining the tightening device in the position to which it has been adjusted.

11. A seal-press, in combination with a binder drawing or tightening device mounted thereupon, and mechanism for retaining the tightening device in the position to which it has been adjusted, said mechanism including a ratchet and dog.

12. A seal-press, in combination with a binder drawing or tightening device mounted thereupon, and mechanism for retaining the tightening device in the position to which it has been adjusted, said mechanism including a ratchet and dog, the ratchet being mounted upon the stock of the seal-press while the dog is carried by the tightening device.

In witness whereof I hereunto subscribe my name this 7th day of February, A. D. 1906.

GARRETT H. HUISING.

Witnesses:

LEON STROB,
G. L. CRAGG.