

G. M. SLACK.

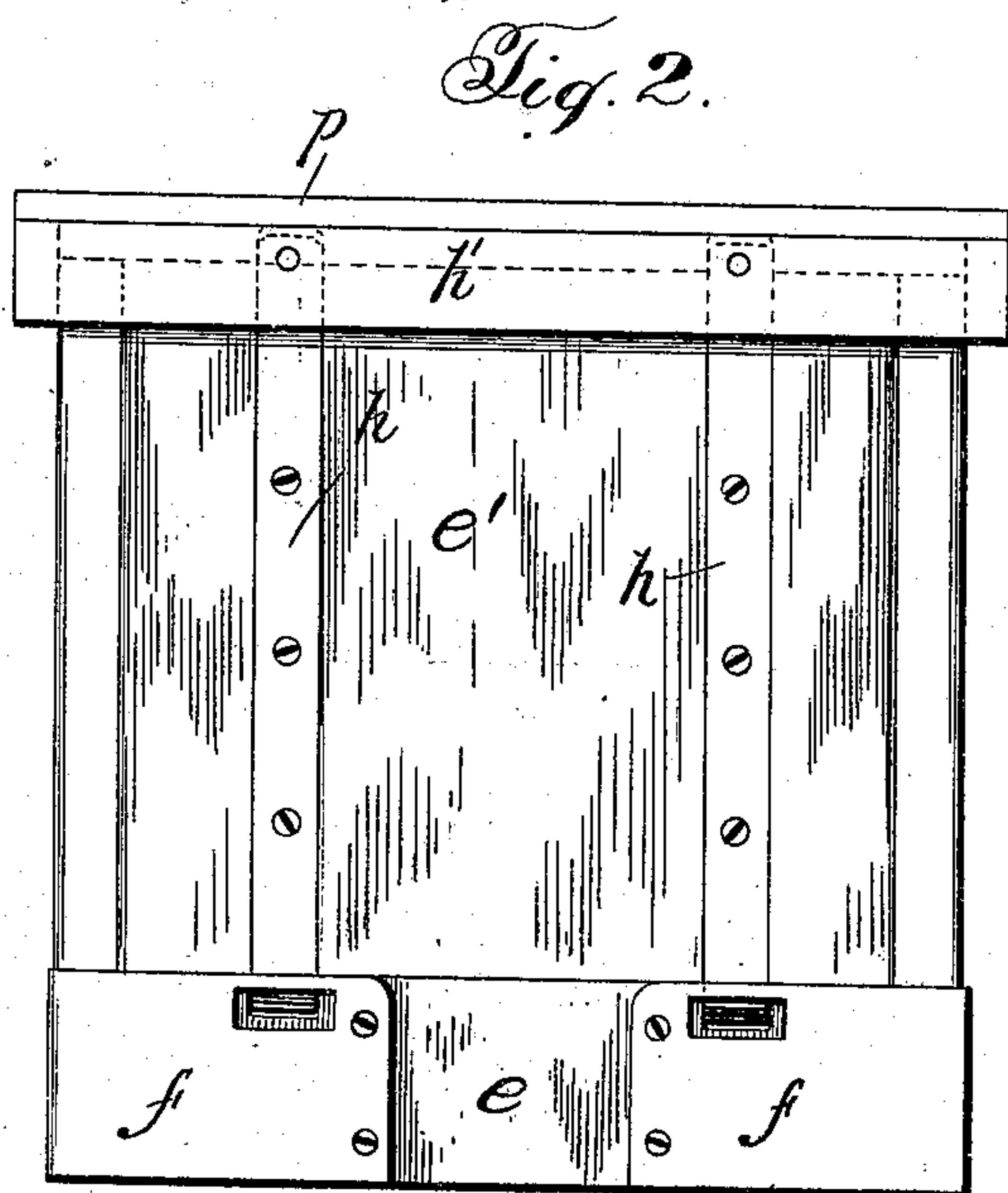
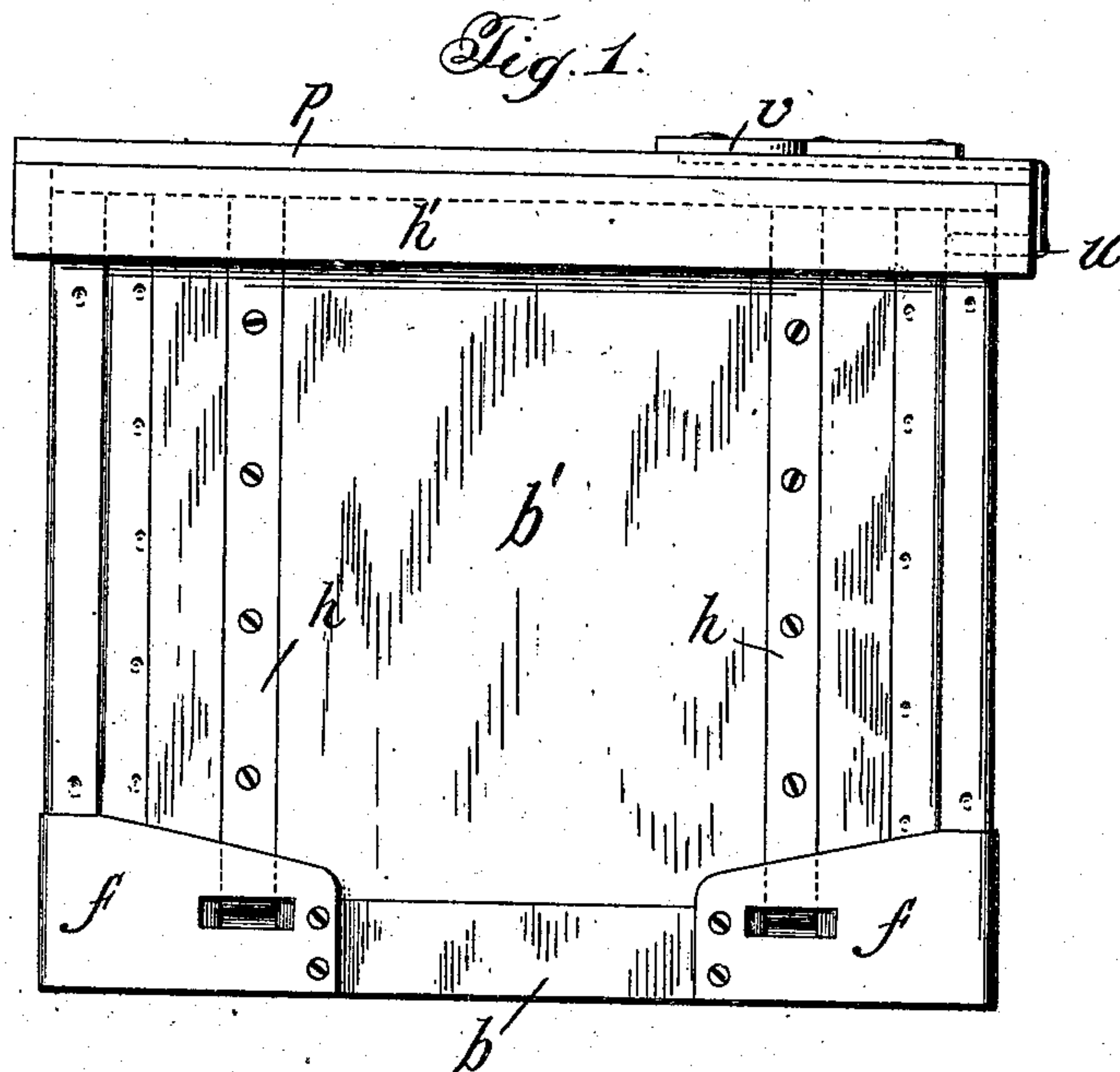
FOLDING BOX.

APPLICATION FILED FEB. 16, 1907.

924,504.

Patented June 8, 1909.

2 SHEETS—SHEET 1.



Witnesses:

James Hutchinson
William D. Hall

Inventor:

Geo. M. Slack

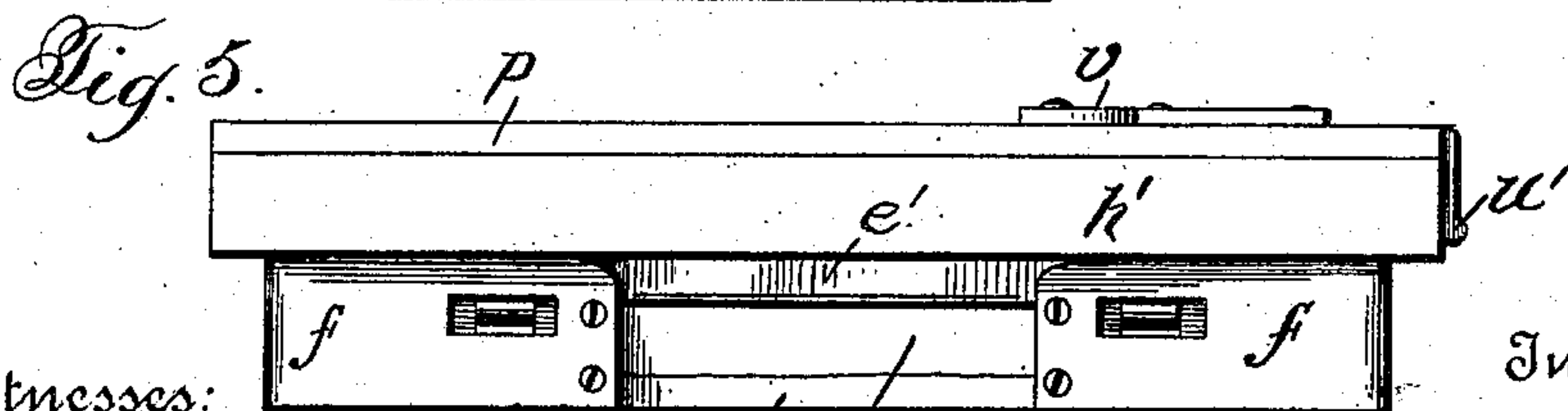
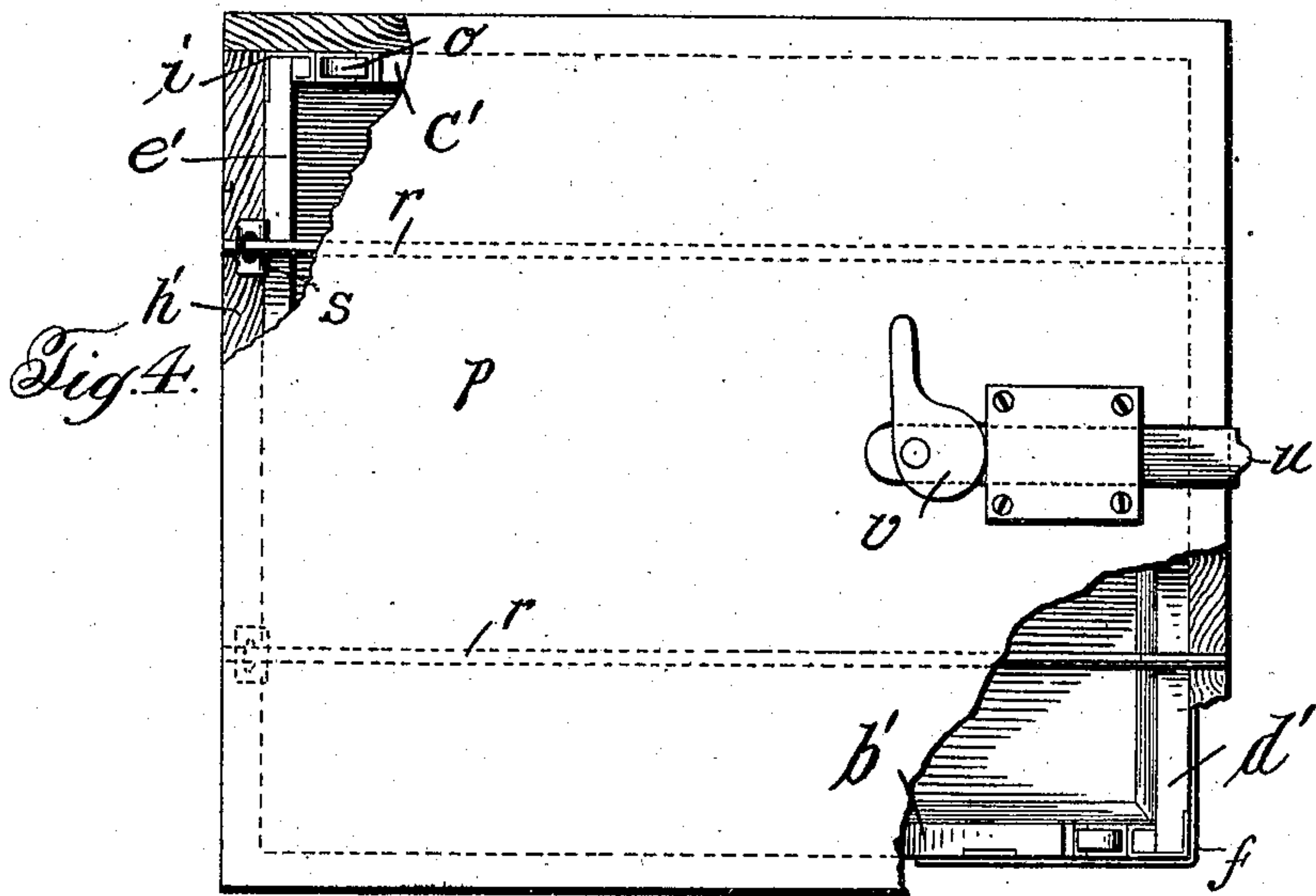
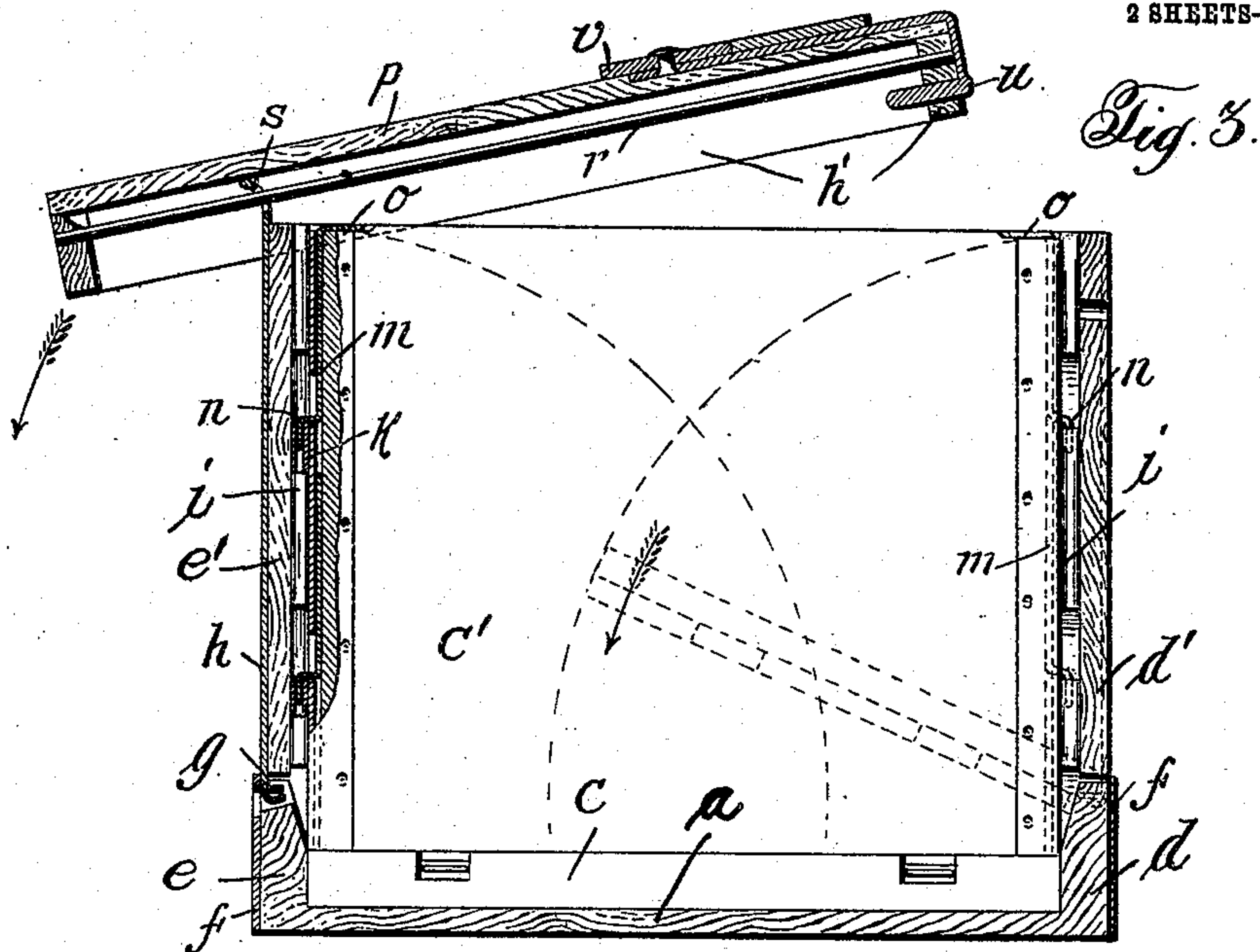
By *J. D. Hicks* Attorneys.

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2 SHEETS—SHEET 2.



Witnesses:
Jas. E. Hutchinson
William A. Hall

By

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Geo. M. Slack
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UNITED STATES PATENT OFFICE.

GEORGE M. SLACK, OF ALTOONA, PENNSYLVANIA.

FOLDING BOX.

No. 924,504.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed February 16, 1907. Serial No. 357,632.

To all whom it may concern:

Be it known that I, GEORGE M. SLACK, a citizen of the United States, residing at Altoona city, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to knock-down or folding crates or boxes and its object is to provide an article of this character which is simple, inexpensive and durable in construction and which may be folded compactly.

The invention includes the combination and arrangement of parts to be hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a side elevation of the side of the box. Fig. 2 is an end elevation of the same. Fig. 3 is a vertical sectional view showing the cover partly removed. Fig. 4 is a plan view with the cover partly broken away and Fig. 5 is a side view of the box in collapsed condition.

The invention includes, generally, a bottom, folding sides and end sections and a removable top carried by one of said sections. The bottom is designated *a*, is preferably of rectangular shape and has rigidly secured thereto the minor side sections *b-c* and end sections *d-e*. The major side and end sections *b' c' d' e'* are respectively pivotally connected to the minor sections *b c d e* and when in set-up position form in effect an integral part of the same. The pivotal connections are preferably provided by corner brackets *f* having tongues *g* extending inwardly into recesses in the adjacent side or end sections and providing pivot bars which are engaged by the loop ends of straps *h* secured to the major sections. The opposite edges of the major side sections are provided with detachable interlocking mechanism co-acting with interlocking means on the adjacent edges of the major end sections for retaining the sides and ends in upright position. As shown herein, the locking mechanism comprises metallic edge strips *i* secured to the opposite edges of the major end sections and provided with pockets *k* and slidable locking bars *m* at opposite edges of the major sides provided with tongues *n* for engaging the walls of the pockets in the strips *i*. The locking bars are provided with laterally ex-

tending ends *o* providing operating means for the same which ends are designed, when the bars are down in locking positions, to lie against the upper edges of the sides and are held in this position against accidental displacement when the cover, to be hereinafter described, is secured down in position.

The cover is designated *p*, is provided with an edge flange *h'*, designed to fit down over the sides and ends and has a sliding and a pivotal connection to one of the folding members. As here illustrated, the top is connected to and carried by the end section *e'*; the connection between the parts being formed by parallel rods *r* secured in the flange *h'* at opposite ends of the cover which pass through openings *s* in the angles *s* of the upper angle ends of the straps *h* secured to the end section *e'*. Suitable mechanism is provided to lock the cover in closed position that illustrated herein including a sliding bolt *u* having its shank guided on the top of the cover and provided with a controlling cam *v* and its interlocking end movable in register with alining openings in the end *d'* and adjacent part of flange *h'*.

When the box is set up the adjacent edges of the sides *b' c'* and ends *d' e'* are locked together and the cover *p* may be locked in position or it may be thrown back to lie in parallelism with the end *e'*. The cover is moved in the latter position when it is desired to collapse the box and thereafter the bolts *m* are lifted whereupon the side *c'* may be folded down upon the bottom, thereafter the side *b'* may be folded down, then the end *e'* is superimposed upon the latter side, the end *d'* is then folded inwardly and finally, the cover *p'* is moved until the flange *h'* fits over the end sections *d-e* as shown in Fig. 5.

I claim:

1. In a knockdown box, in combination, a bottom, minor side and end walls provided with recesses in their upper edges adjacent the ends thereof, exterior corner brackets enclosing the meeting ends of the side and end walls, and each bracket being provided with a pair of inwardly extending tongues projecting into the adjacent recesses, major side and end walls, and straps secured to the major walls provided with end portions extending into the recesses and pivotally engaging the tongue therein.

2. In a knockdown box, folding end and side walls, pockets provided at the edges of the end walls, locking bars mounted on the

side walls and having tongues coacting with the pockets, said bars being guided vertically at the edges of the side sections and provided with laterally extending operating devices at their upper ends adapted to lie against the upper edge of the box when the locking tongues are in engagement with the pockets, and a cover adapted to rest upon said operating devices.

3. In a knockdown box, the combination of folding walls arranged with their end portions adjacent each other, one of said end portions being provided with a plurality of fixed pockets, and the end portions of the adjacent wall having movably mounted therein a locking bar provided with a plurality of tongues adapted to engage with said pockets, said locking bar having a portion projecting above the upper edge of the box wall, and a cover for the box adapted to set over said projecting portion to maintain the locking bar in locking position when the cover is in position to close the box.

4. In a knockdown box, in combination a

bottom, minor side and end walls arranged with their end portions adjacent each other and said end portions being provided respectively with recesses, exterior corner brackets connecting the ends of the side and end walls and having tongues struck therefrom and projecting inwardly into the said recesses, major side and end walls, and straps secured to the same provided with end portions extending into the said recesses and pivotally engaging the tongues therein, said pivotal connections being housed completely within said recesses permitting free hinged movement of the major walls whereby they may be folded down upon the bottom of the box without being disconnected from the side walls.

In testimony whereof I have affixed my signature in presence of two witnesses.

GEORGE M. SLACK.

Witnesses:

MARY L. GOSS,
LENA STANLEY.