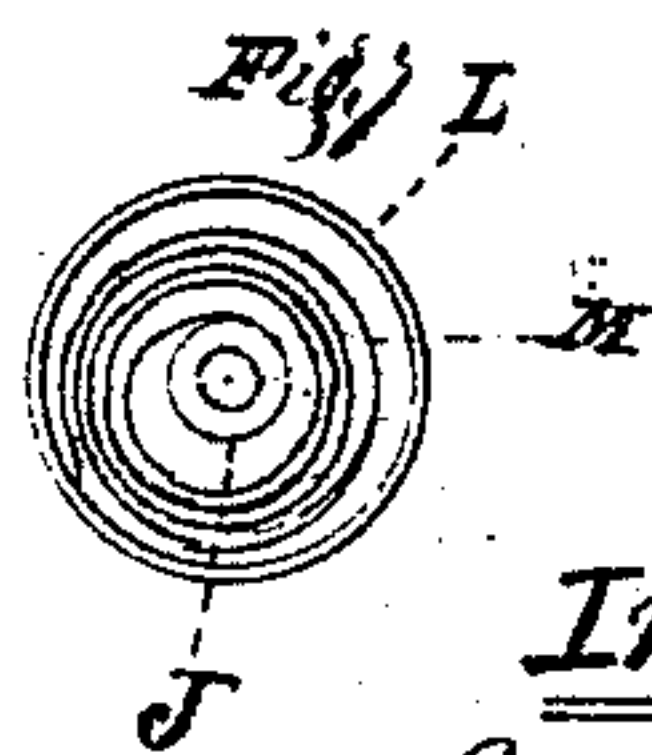
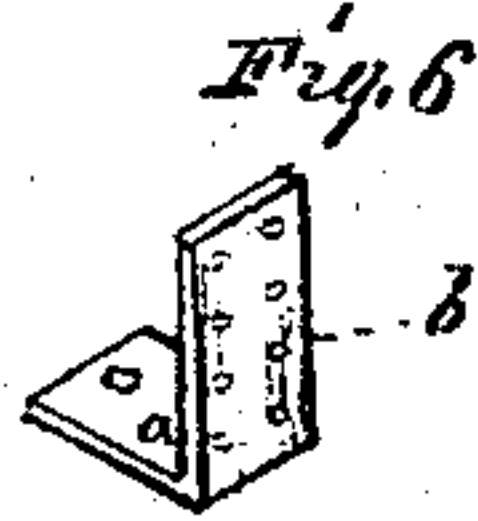
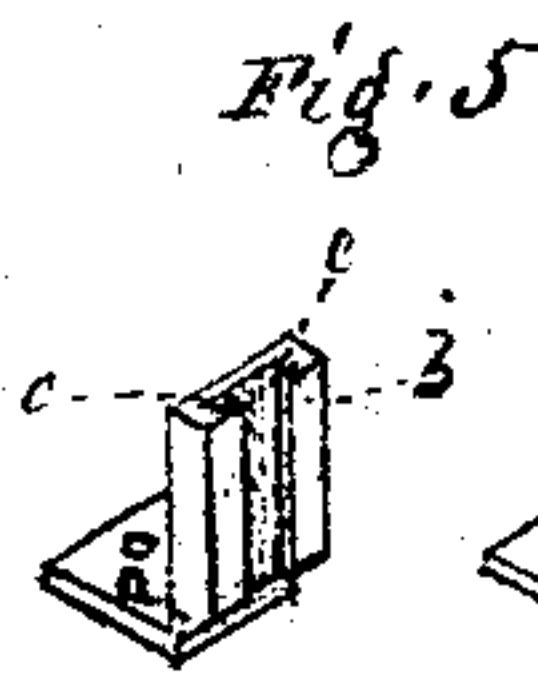
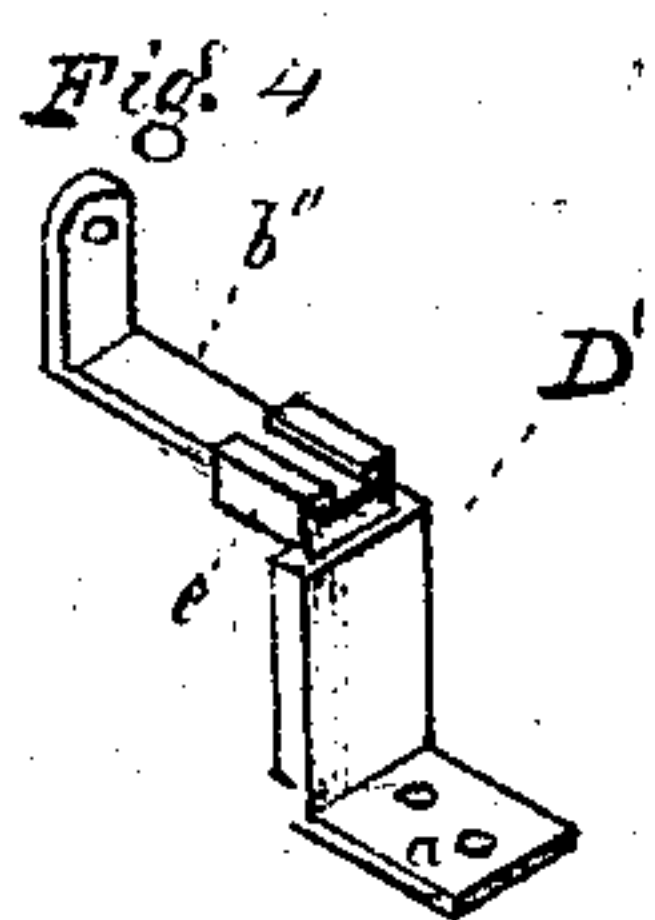
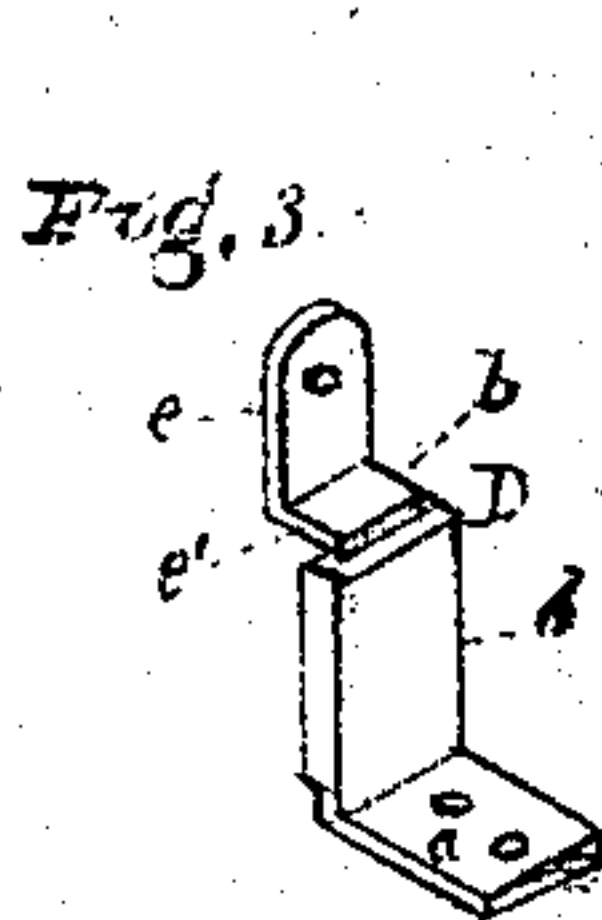
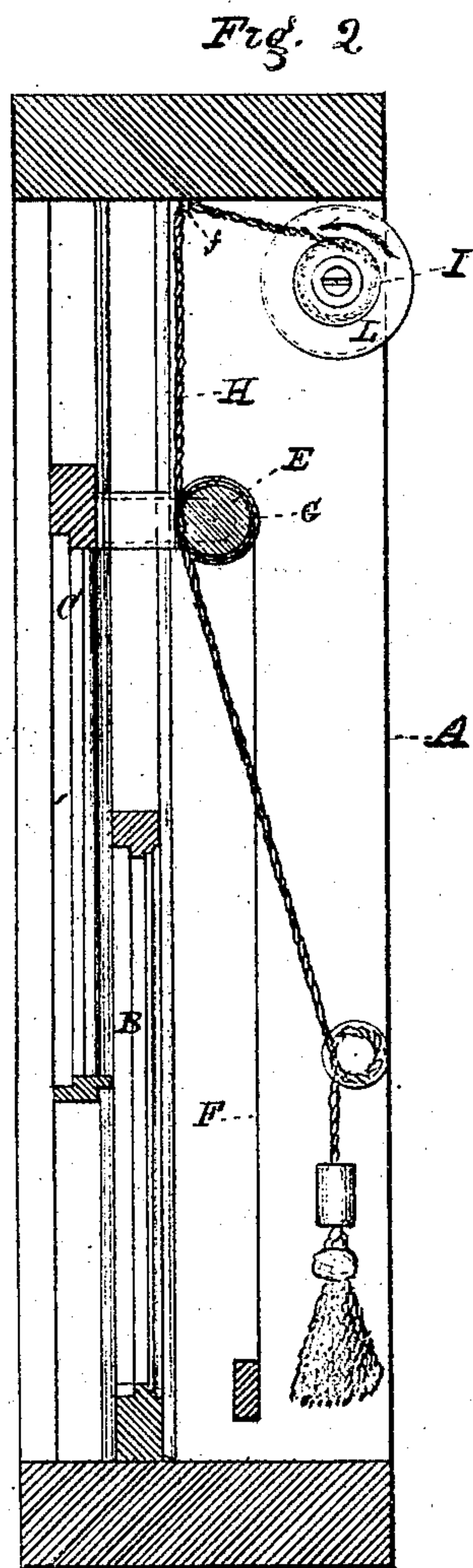
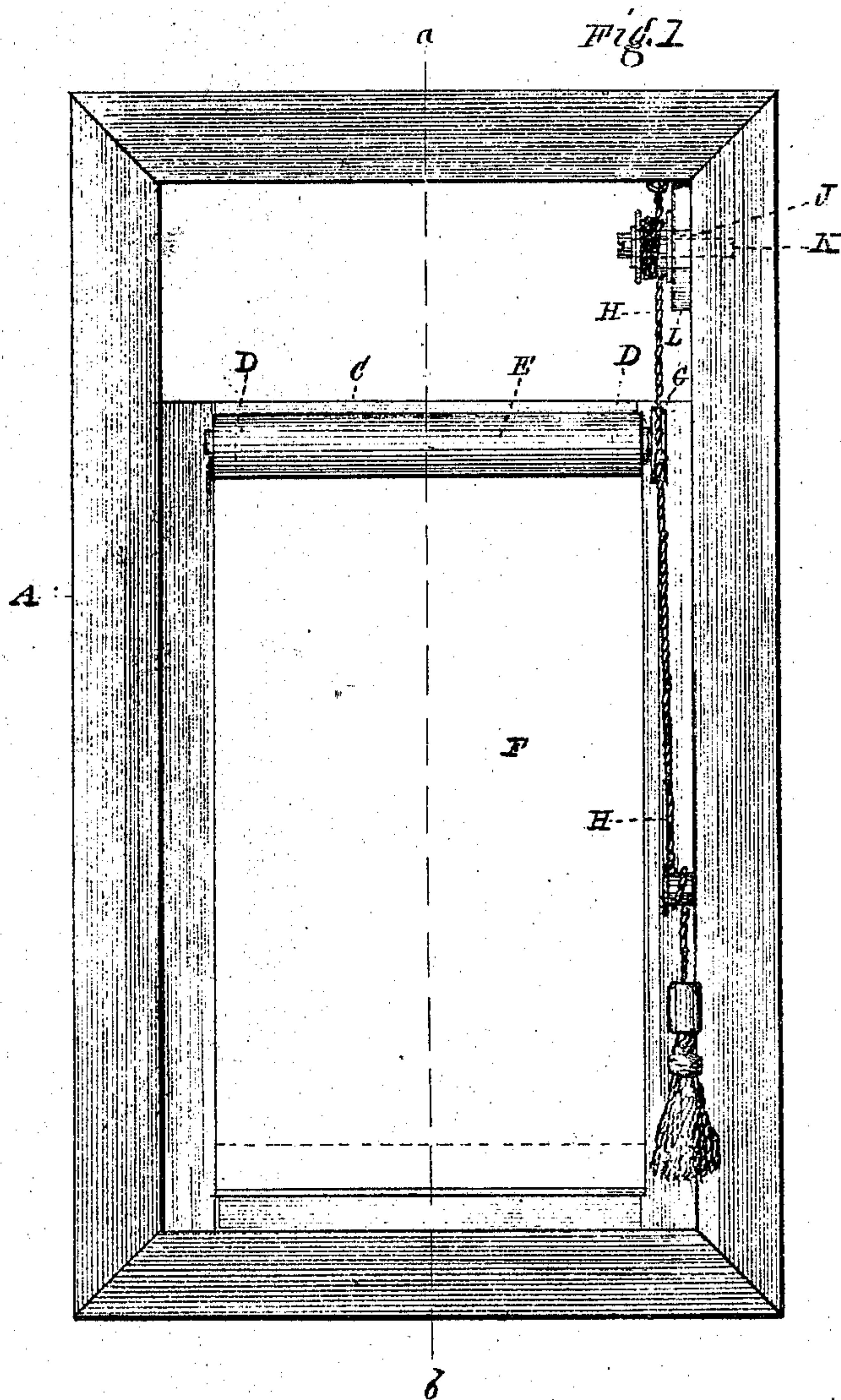


G. P. Fuller,

Curtain Fixture.

No. 103,167.

Patented May 17, 1870.



Witnesses
Alexander Jamham
J. S. Chahoon

Inventor
George P. Fuller,
 By his Attorney
Stephen Ustick

United States Patent Office.

GEORGE PLINY FULLER, OF HUMPHREY, NEW YORK.

Letters Patent No. 103,167, dated May 17, 1870; antedated May 10, 1870.

IMPROVED CURTAIN-FIXTURE.

The Schedule referred to in these Letters Patent and making part of the same

I, GEORGE PLINY FULLER, of Humphrey, in the county of Cattaraugus and State of New York, have invented certain Improvements in Curtain-Fixtures, of which the following is a specification:

The nature of my invention consists, in the first place, in extension-brackets, made in two or more pieces, connected together by means of grooves on the face of one piece, at the edges thereof, between which the adjoining piece is caused to slide, to adjust it; or the grooves are dispensed with, and the pieces are held together when adjusted, by means of rivets, or in any other convenient manner, as hereinafter described.

The object attained by the construction of the brackets in separate pieces is, the adjustment of them to variable thicknesses of window-sash; and to different widths of the window-jambs, and their accommodation to rollers when hung outside of the window-frames.

The invention, in the second place, consists in preserving the height of the lower end of the curtain, by means of a cross-cord and pulley on one end of the curtain-roller, so as to wind the curtain as the upper sash is lowered, and to unwind it when the same is raised.

To enable others skilled in the art to which my improvement appertains to apply the same to practice, I will now fully explain it.

In the accompanying drawings, which make a part of this specification—

Figure 1 is a front elevation of a window with the improvements attached.

Figure 2 is a vertical section at the line *a b* of fig. 1.

Figure 3 is an isometrical view of one of the extension brackets *D* made in two adjustable pieces, to accommodate it to any depth of the window-jamb.

Figure 4 is a like view of a bracket, *D'*, composed of three pieces in accommodation to the curtain-roller, when the latter is hung in front of the window.

Figure 5 is a view of the piece *b* of the brackets *D*.

Figure 6 is a view of the piece *b*, showing a modified mode of connecting the pieces of the bracket together.

Figure 7 is a side view of the spring-case *L*, and coil-spring *M*, in connection with it, and the sleeve *J* detached from the frame *A*.

Like letters in all the figures indicate the same parts.

A is the window-frame.

B is the lower, and

C the upper sash.

D *D* are extension-brackets which sustain the roller *E*, on which the curtain *F* is hung, the feet *a* of the brackets being fastened by means of screws to the sash *C*.

The brackets *D* are made in two pieces *b* and *b'*, when the curtain *F* is hung inside of the frame, so as to be adjustable to any thickness of the window-sash. One of the brackets is represented in detail in fig. 3.

The said pieces *a b* being held in their adjusted position by means of the grooves *c c* on the face of the piece *b*, between which the piece *b'* is placed, the turned over edges *d d* of the piece *b* being hammered down to hold the piece *b'* securely, to keep it from slipping endwise.

The piece *b* is shown in detail in fig. 5.

When the curtain *F* is to be hung in front of the window, I construct brackets *D'* of three pieces. One of the brackets is represented in fig. 4. This bracket is made like the bracket shown in fig. 3, with the exception of the part *e*, being left off the piece *b*, and the piece *b''* being connected with the elbow *e'* of the piece *b'*.

Instead of connecting the pieces *b b' b''* together by means of the grooves *c c*, the said pieces may be left plain, and all perforated with rows of holes equidistant apart, as represented in fig. 6, the pieces being fastened together, when adjusted by means of rivets; or the fastening may be effected in any other convenient manner.

I usually make the brackets of sheet-iron or brass, but do not confine myself to this plan.

On one end of the curtain-roller *E* there is a sheave, *G*, which receives the cross-cord *H*, one end of which is suspended for manipulation, and fastened to the window-jamb; the other end is passed through the staple *f* in the head of the frame *A*, and wound around the pulley *I*, on one end of the sleeve *J*. Said sleeve turns on the short shaft *K* which projects inward from the window-frame *A*.

There is a case, *L*, which contains a coil-spring, *M*, to which one end of the spring is attached, the other end being fastened to the sleeve *J*.

The spring *M*, case *L*, and sleeve *J* are represented in connection, in fig. 7.

The lower end of the curtain *F* is adjusted to any desired height, by the winding, or unwinding of the cord *H* on the pulley *I*, which is effected by pulling, or slacking the lower end of the cord. When the cord is pulled, said pulley is turned in the direction of the arrow, and the curtain is lowered at its lower end, and, when the cord is slackened, the force of the coil-spring *M*, connected with the sleeve *J* of the pulley as above described, turns the pulley *I* in the opposite direction, and winds up the curtain wholly, or partially, as may be desired.

When the height of the lower end of the curtain is only to be varied, the lower end of the cord is secured, to resist the action of the spring *M*; but, when the curtain is to be wound clear up, the spring is allowed sufficient play to accomplish it.

By the cord H being crossed, as the sash C is lowered, the curtain F is wound on the roller E; and it is unwound in the upward movement of the sash, to preserve the height of its lower end.

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

1. The extension-brackets D D' formed of two or more pieces *b b' b''*, and connected together by means of grooves *c* or rivets, as hereinbefore described.

2. The combination of the roller E, sheave G, cord H, staple *f*, pulley I and shaft K, with the curtain F, and window-frame A; the said cord being attached

at one end to the pulley I, and the other end suspended, or fastened to said frame A, and the shaft K provided with a spring, M; all constructed and arranged for joint operation, as above described.

In testimony that the above is my invention, I have hereunto set my hand and affixed my seal, this 12th day of October, 1869.

GEORGE PLINY FULLER. [L. S.]

Witnesses:

STEPHEN USTICK,
JOHN WHITE.