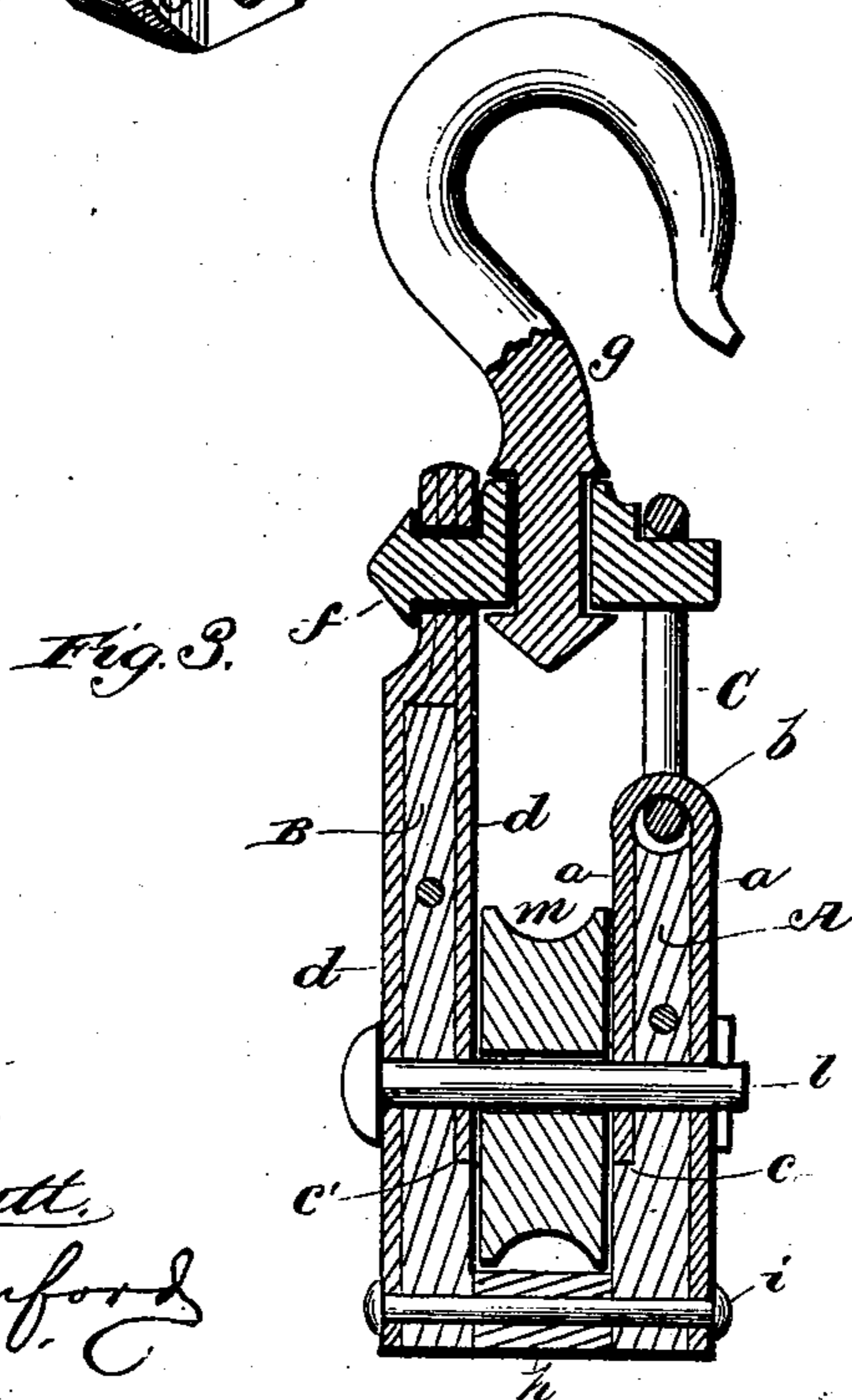
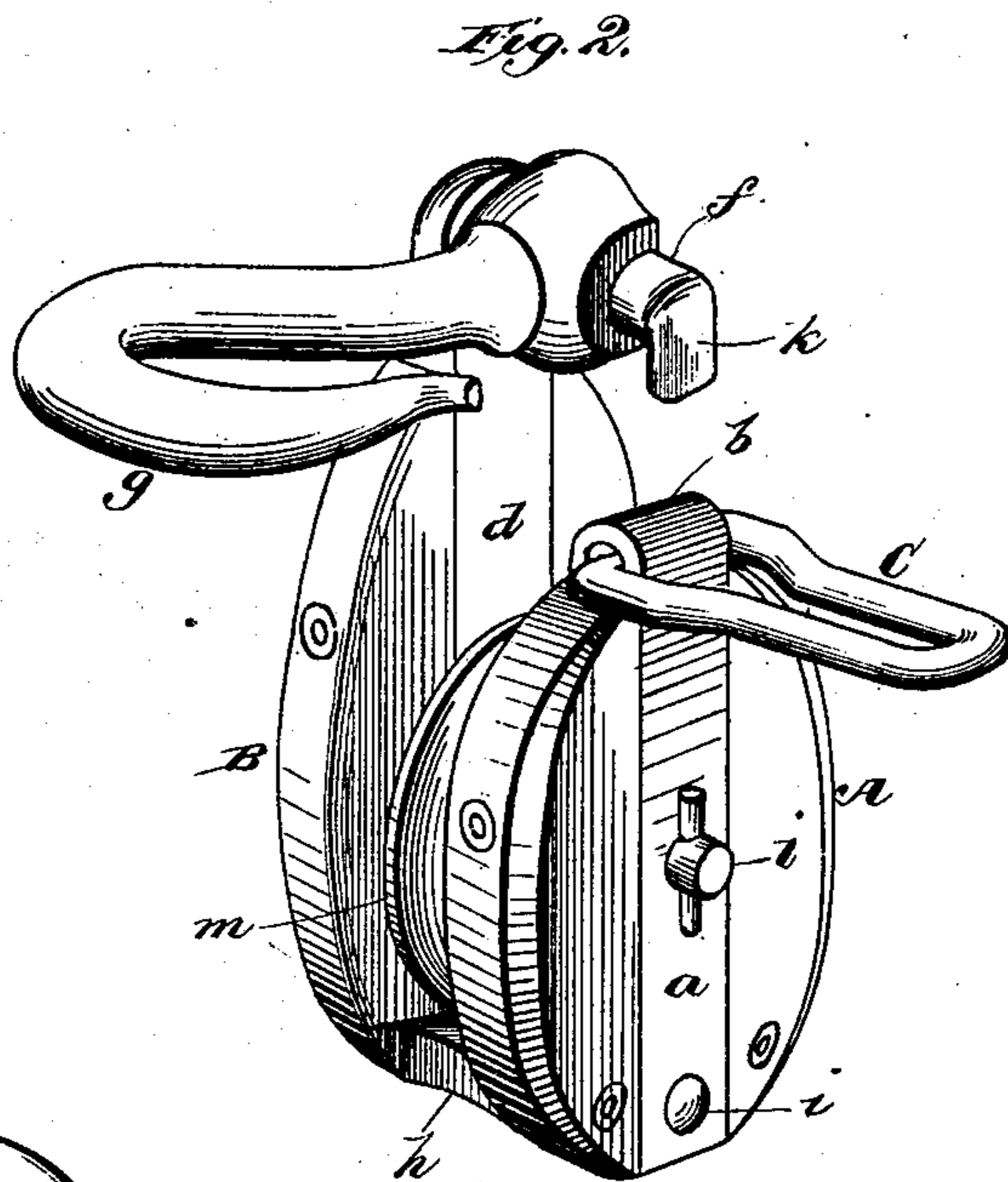
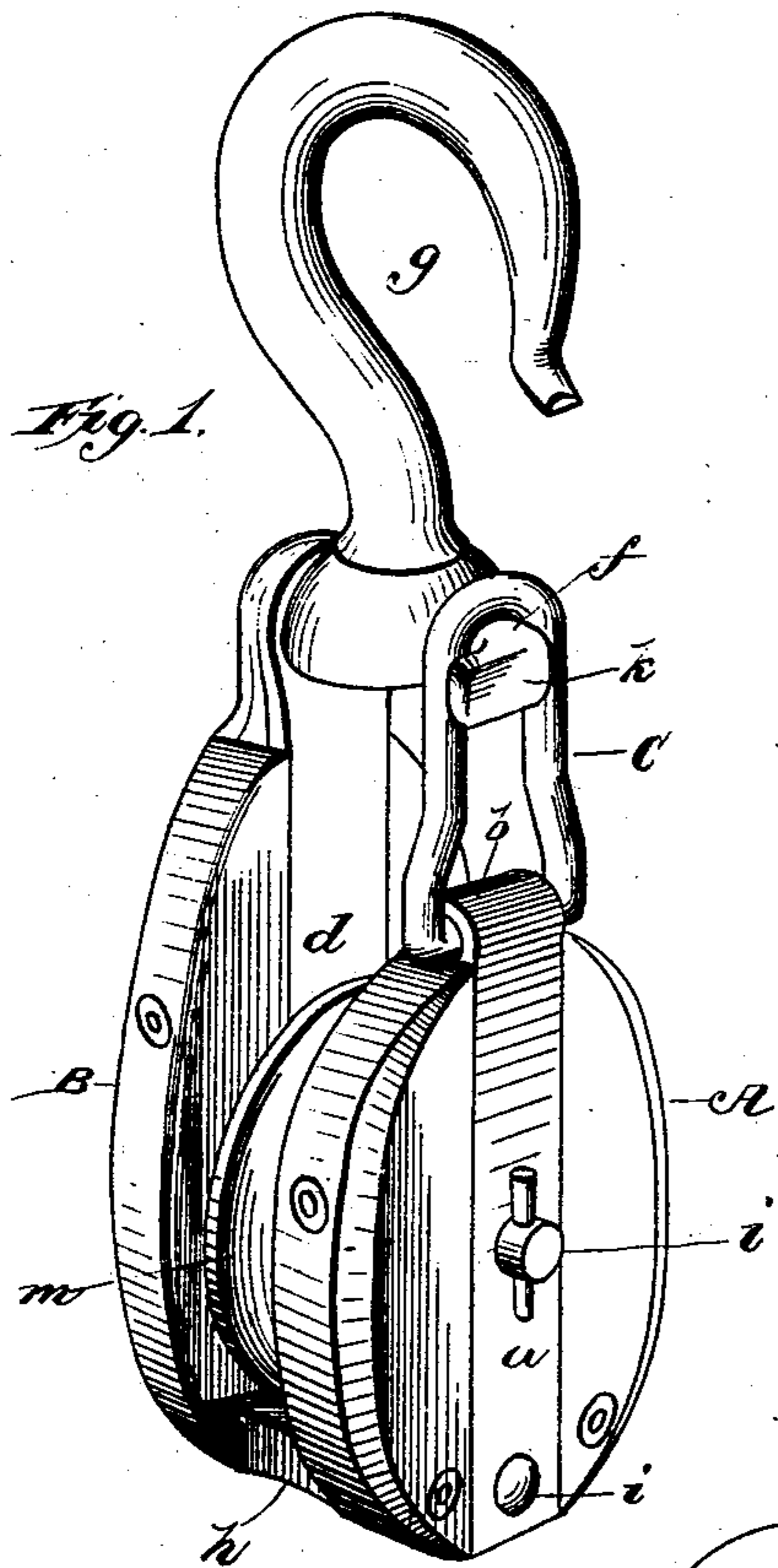


(Model.)

T. R. FERRALL.  
Snatch Block.

No. 243,034.

Patented June 14, 1881.



Witnesses.

Robert Emmett,  
J. A. Rutherford

Inventor.

Thos R. Ferrall.

Brown Bros.

By *H. J. J. J.* Atty.

# UNITED STATES PATENT OFFICE.

THOMAS R. FERRALL, OF BOSTON, MASSACHUSETTS.

## SNATCH-BLOCK.

SPECIFICATION forming part of Letters Patent No. 243,034, dated June 14, 1881.

Application filed May 16, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, THOMAS R. FERRALL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Snatch-Blocks, of which the following is a full, clear, and exact description.

This invention relates to improvements in the snatch-blocks for which Letters Patent No. 235,222 were issued to me on the 7th day of December, A. D. 1880. In this patent the cheek-pieces are composed of hollow cast-metal frames with rounded edges, and the pivoted pin of the swiveled hook extends through one cheek-piece and through a metal strap passing centrally through the said cheek, while the loop or link for embracing and holding the other end of the pivoted pin of the swiveled hook is hinged or journaled in a metal strap extending centrally through the other cheek-piece, said metal straps being solely sustained by the axial pin of the sheave-pulley.

The objects of my present invention are to render such snatch-blocks less expensive of production, to lessen their weight, to maintain the very desirable feature of the pivoted hook and the hinged retaining loop or link, and to firmly sustain and hold the cheek-pieces in parallel position by a transverse pin or bolt at the lower end of the snatch-block. These objects I accomplish by the structure of snatch-block illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of a snatch-block constructed according to my invention, with the pivoted pin of the swiveled hook engaged by the hinged loop or link; Fig. 2, a perspective view of the same, with the parts in position to admit the rope into the snatch or opening; Fig. 3, a vertical central sectional view.

Referring to the drawings, the letters A B indicate two wooden cheek-pieces, preferably formed of a single piece of well-seasoned ash or other suitable wood.

The wooden cheek-piece A is embraced on its inner and outer faces with longitudinal metal straps *a a*, which project beyond the upper edges of the wooden cheek, and their extended ends are joined or united so as to form a seat or bearing, *b*, in which is hinged or

journaled a link or loop, C, which rests on the upper edge of the wooden cheek, and is confined in position by the connected or united ends of the metal straps *a a*. These straps can be made of a single piece of metal doubled upon itself so as to embrace the inside and outside faces of the wooden cheek, and the inside metal strap terminates at a short distance from the lower end of the wooden cheek, as at *c*, so as to avoid cutting away the lower portion of the cheek; or the said inner strap may extend to the lower edge of the cheek, the same as the outer cheek.

The wooden cheek-piece B is somewhat longer than the other cheek, A, and is embraced and clasped on its inside and outside faces by the metal straps *d d*, the upper ends of which project beyond the cheek to form an extension, which is perforated to receive one end of the pivoted pin *f* of the swiveled hook *g*. The inner strap *d* terminates a short distance from the lower edge of the cheek B, as at *c'*, similar to the inner strap *a*; or it may extend to the lower edge of said cheek. The straps *d d* are preferably formed of two separate pieces of metal, welded together at their upper ends, which virtually constitute a single piece, with two arms which embrace the cheek.

The wooden cheek-pieces at their lower ends are spaced by an interposed block, *h*, preferably of wood, for lightness and economy, and the outside metal straps, together with the cheeks, are sustained and braced in parallel position with relation to each other by means of a transverse pin or bolt, *i*.

The pivoted pin *f* of the swiveled hook is bent, or extends at right angles therefrom, forming the laterally-projecting arm or lip *k*, and the other end of the pivoted pin is adapted to freely turn in its socket or bearing in the extension of the metal straps *d*.

When it is desirable to place the bight of the rope in the snatch-block the hook *g* is turned down into the position shown in Fig. 2, which brings the arm or lip *k* into coincidence with the opening of the loop or link C, when the latter can be swung over and away from the arm or lip, leaving the snatch or opening free for the insertion of the rope. After the rope is passed through the snatch or opening the link or loop C is swung back over the arm or lip *k*,

and the hook *g* is turned to its normal position, as shown in Fig. 1, thus securely connecting the parts.

5 The metal straps and the wooden cheeks are provided with coincident apertures for receiving the axial pin *l* of the sheave-pulley *m*, and this axial pin subserves the function of further strengthening and supporting the straps and cheek-pieces.

10 A snatch-block constructed as hereinbefore described provides lightness with increased strength in the structure, and at the same time secures the very desirable features of the pivoted hook and the retaining loop or link.

15 The metal straps are each set within a vertical recess in the opposite faces of the wooden cheeks, in order to cause said straps to set in flush with the faces of the cheeks, and by terminating the inside straps above the lower  
20 edges of the wooden cheeks I avoid cutting away such lower portions on their inner faces, and thereby impart strength to the structure.

I do not here claim, broadly, a snatch or pulley block consisting of wooden cheek-pieces embraced by inner and outer longitudinal metal  
25 straps, all connected at their lower ends by a transverse pin, and the upper-end portions of the straps being extended beyond the upper edge of the wooden cheek-pieces to form ex-  
30 tensions, which are provided with devices to suspend the snatch or pulley block, as such structure of itself forms the subject-matter of a separate application for Letters Patent heretofore filed by me.

What I claim, and desire to secure by Letters Patent, is— 35

1. A snatch-block embodying in its structure the two wooden cheek-pieces embraced on their inner and outer faces by the inner and outer metal straps, the inner straps terminating a short distance from the lower edge of the cheeks to avoid cutting away the latter, and the outer straps only connected at their lower ends by a transverse pin, the upper ends of the said metal straps being extended and joined  
40 beyond the upper edges of the cheeks, and provided, respectively, with the journaled loop or link, and the pivoted pin having the arm or lip, and the swiveled hook, substantially as described. 50

2. A snatch-block consisting of the inner and outer metal straps, each formed integral, and embracing the inside and outside faces of two wooden cheek-pieces, the lower ends of the outside straps being connected by the transverse pin, and the upper ends of the straps being extended beyond the upper edges of the wooden cheek-pieces, one of said straps being provided with a loop or link for opening and closing the snatch, substantially as described. 60

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

THOMAS R. FERRALL.

Witnesses:

EDWIN W. BROWN,  
WM. S. BELLOWS.