

(No Model.)

T. R. FERRALL.  
SNATCH BLOCK.

No. 264,143.

Patented Sept. 12, 1882.

Fig. 1.

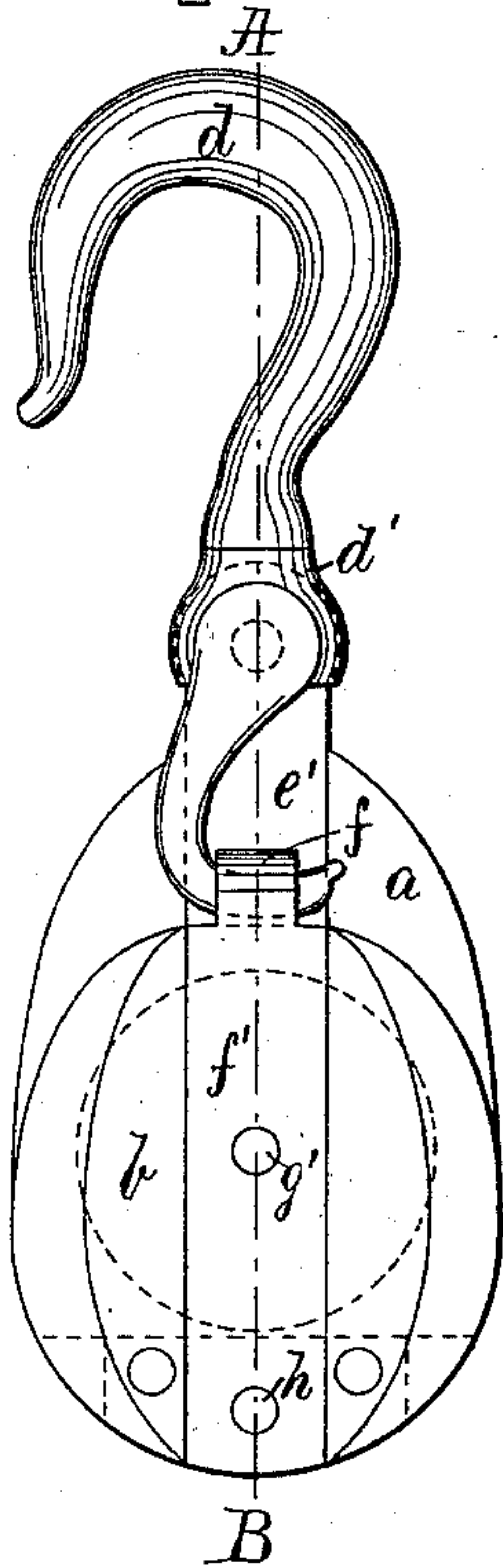


Fig. 2.

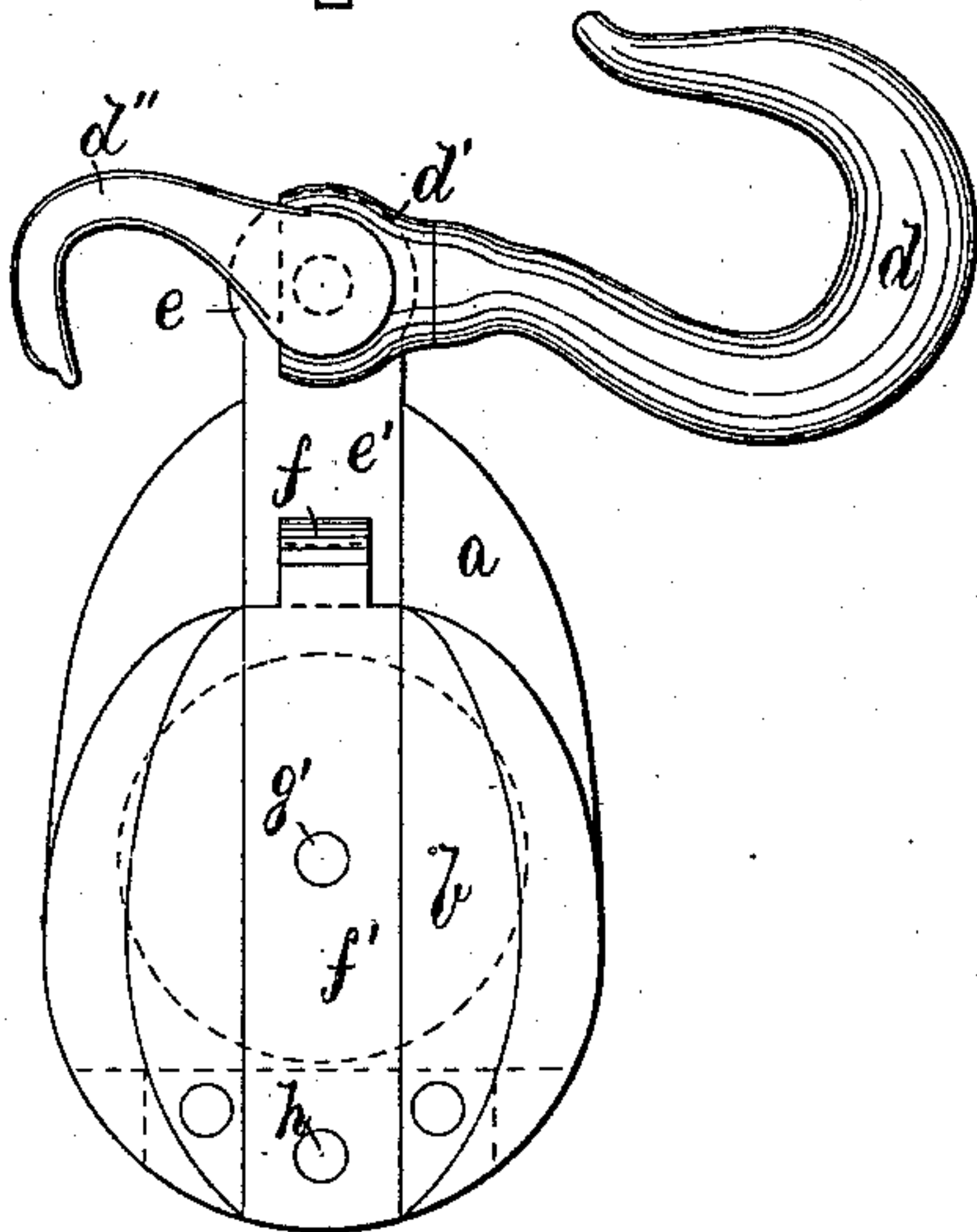
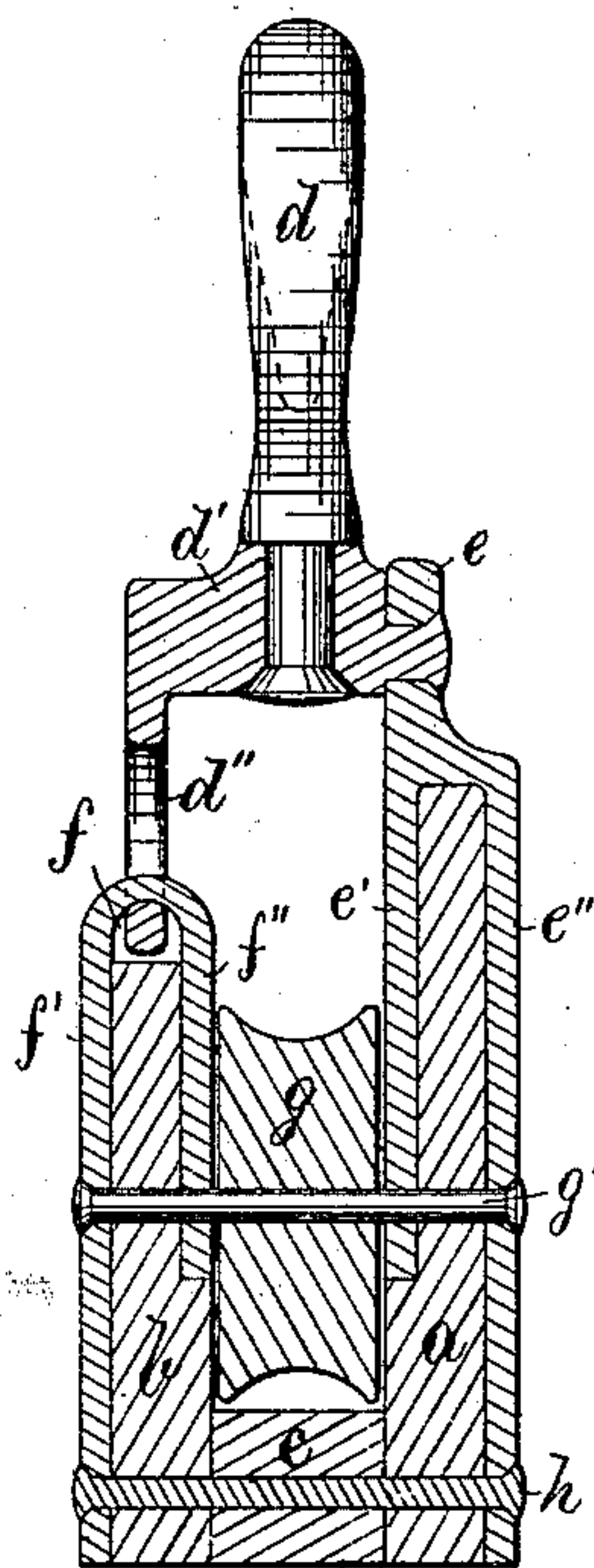


Fig. 3.



Witnesses

Henry Chadbourne.  
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Inventor

Thomas R. Ferrall  
by Adam Hudson his atty.

# UNITED STATES PATENT OFFICE.

THOMAS R. FERRALL, OF BOSTON, MASSACHUSETTS.

## SNATCH-BLOCK.

SPECIFICATION forming part of Letters Patent No. 264,143, dated September 12, 1882.

Application filed July 3, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS R. FERRALL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Snatch-Blocks; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

10 This invention relates to improvements in snatch-blocks; and it is carried out as follows, reference being had to the accompanying drawings, in which—

15 Figure 1 represents a side view showing the block in a locked position. Fig. 2 represents a side view showing the block as unlocked, in a position for receiving the rope; and Fig. 3 represents a central longitudinal section on the line A B shown in Fig. 1.

20 Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

25 *a* and *b* represent the sides of the block, and *c* represents the lower connecting-piece between said sides, as usual.

30 *d* is the hook, as usual, having its shank secured to and made to swivel in the head *d'*, one end of which is journaled to the metal eye *e*, which is extended downward on the outside and inside of the block-piece *a* as an inside strap, *e'*, and outside strap, *e''*, as shown in the drawings. To the opposite end of the head *d'* is secured or made in one piece with it the hook or catch *d''*, the lower end of which is adapted to hook and lock into the eye *f* in the upper end of the block-piece *b*, the latter being made somewhat shorter than the opposite side piece, *a*, so as to allow the rope to be placed on the sheave *g* when the hooks *d* *d''* are turned to the position shown in Fig. 2. The eye *f* forms the upper termination of the outside and inside straps, *f'* *f''*, which latter pass downward on the outside and inside of the shorter block-piece *b*, as shown.

45 *h* is a bolt or rivet passing through the lower ends of the straps *e''* *f'*, side pieces, *a* *b*, and middle piece, *c*, by which arrangement all the

said parts are firmly secured together, as shown.

*g'* is the spindle, on which the sheave *g* revolves loosely, said spindle passing through the sides *a* *b*, as well as the outside and inside straps, *e'* *e''* *f'* *f''*, and is riveted in its outer ends.

In snatch-blocks heretofore made a hinged link has been used to close the block when in use; but such link is objectionable on account of its liability to be accidentally left open when the block is in use, and thus cause the block to break by the strain of the rope thereon; and this is entirely avoided with my invention, for should the block be left open it will be automatically closed by the tension of the rope thereon, and remain in such locked position until unlocked by the operator in charge.

It will be seen by reference to the drawings that, as the hooks *d* *d''* are rigidly attached to each other and in a line with each other and adapted to swing together on a common fulcrum, the block cannot remain open when the rope is in it and a tension brought to bear on the rope and a strain on the upper hook, *d*, but is instantly and automatically closed the moment a strain is brought to bear on the hook *d*, causing it to turn on its fulcrum, and with it the hook *d''* swings to lock into the eye *f*, as shown and described. The rope is laid within the block by turning the hooks *d* *d''* to the position shown in Fig. 2.

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

80 A snatch-block having outside and inside straps, *e'* *e''* *f'* *f''*, secured to the block *a* *b* *c* at its bottom by means of a bolt or rivet, *h*, in combination with the hinged head *d'*, journaled to the eye *e*, the swivel-hook *d*, and the self-locking hook or catch *d''*, secured to the head *d'* and adapted to lock into the eye *f*, as and for the purpose set forth and described.

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

THOMAS R. FERRALL.

Witnesses:

ALBAN ANDRÉN,  
HENRY CHADBOURN.