

(No Model.)

T. R. FERRALL.

PULLEY BLOCK.

No. 268,364.

Patented Nov. 28, 1882.

Fig. 1.

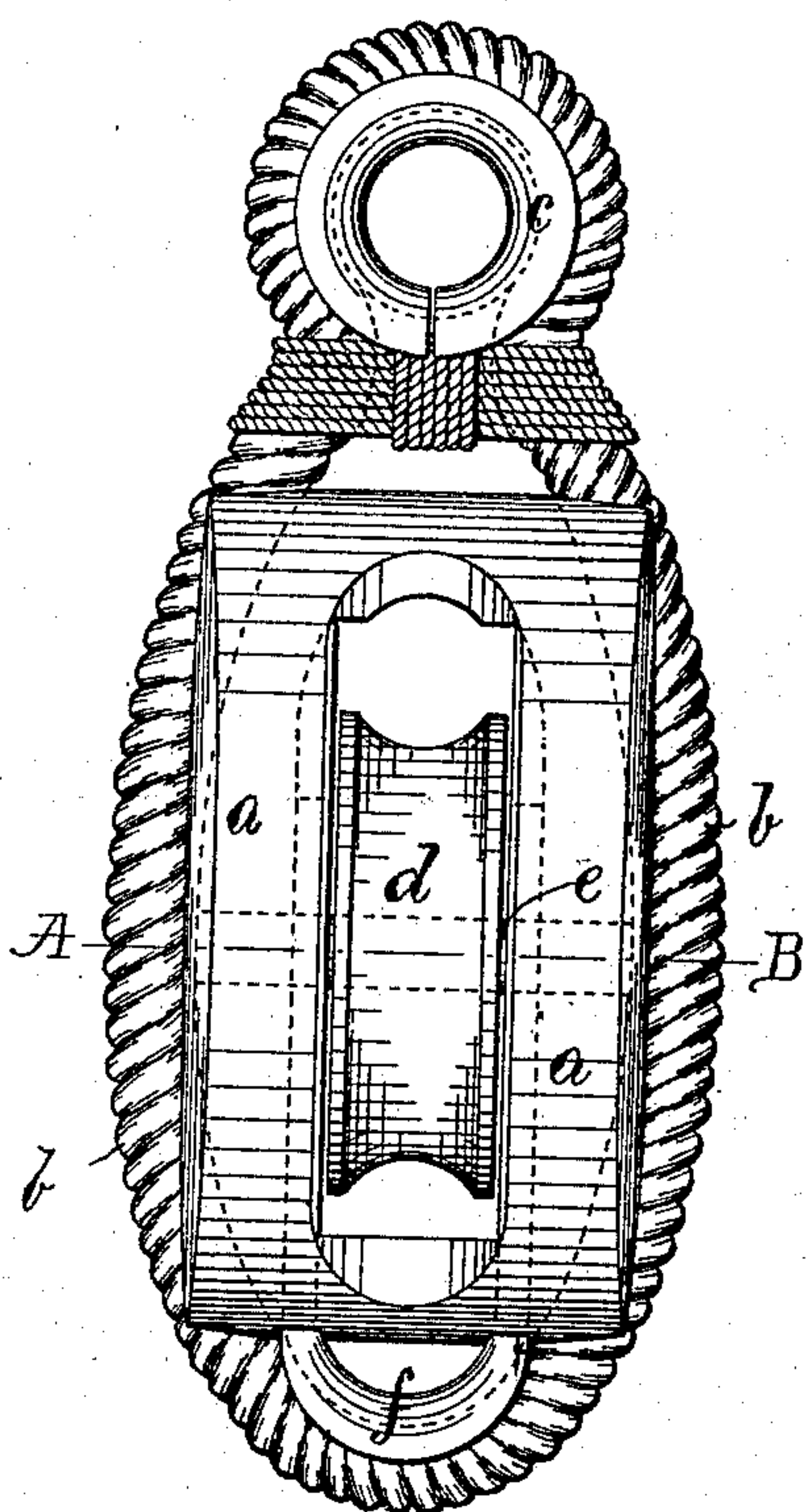


Fig. 2.

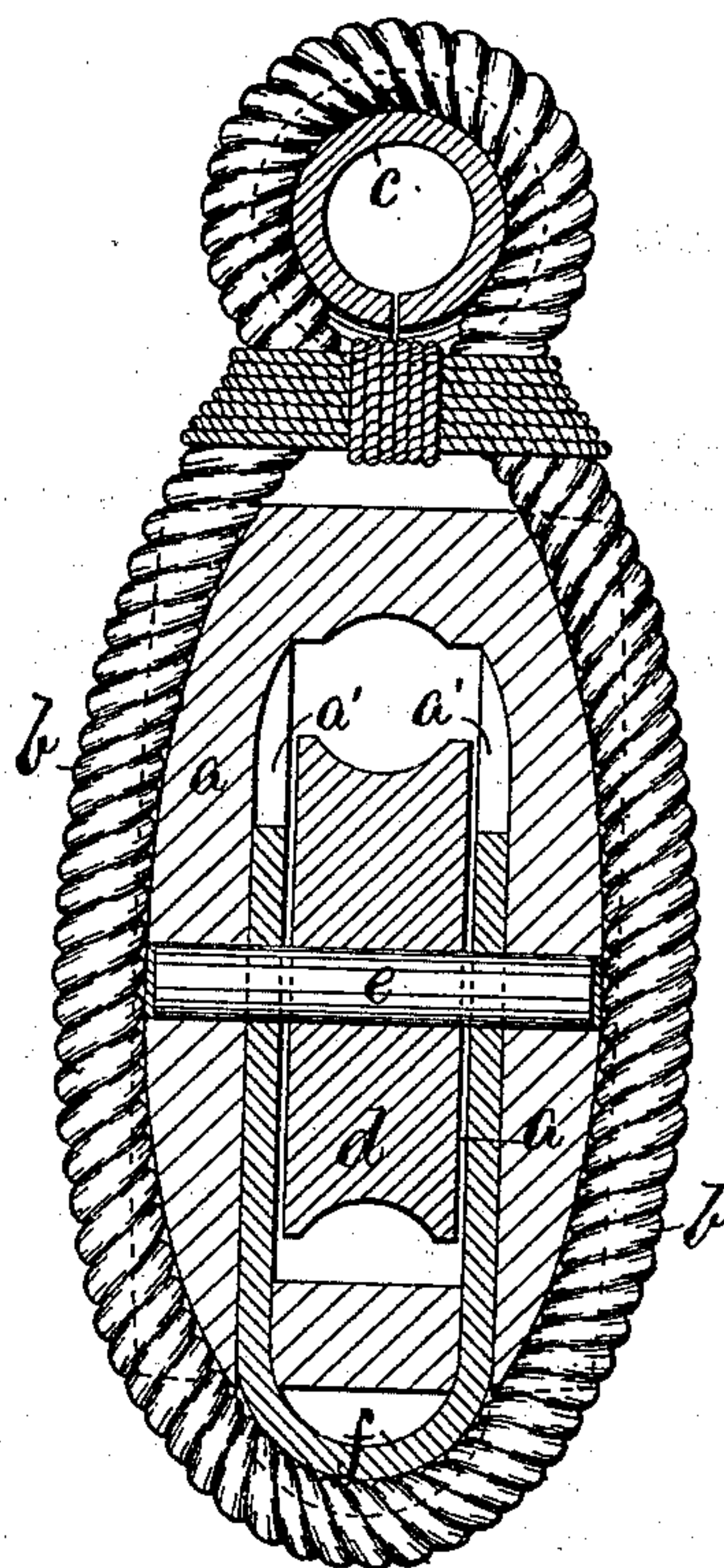
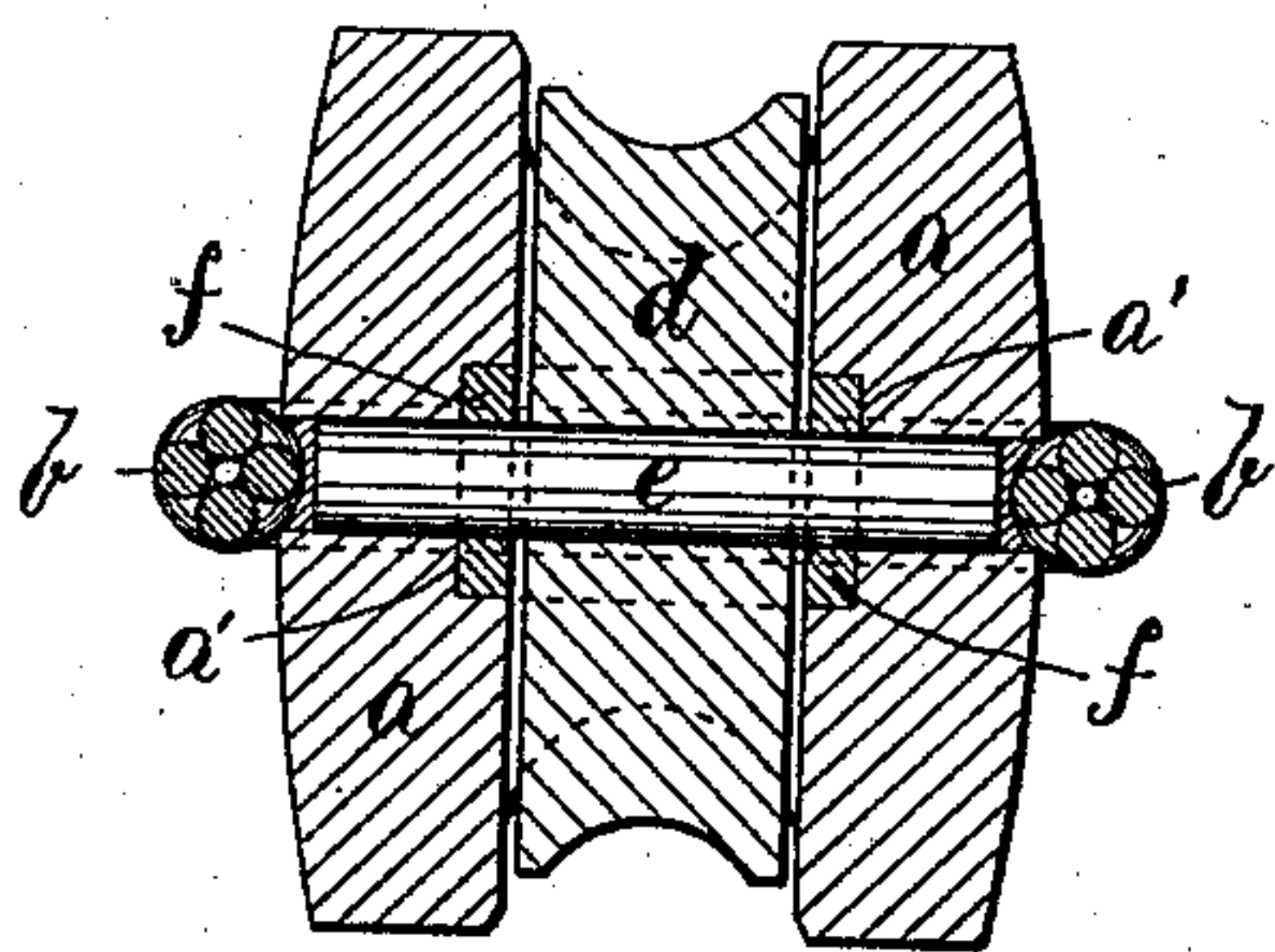


Fig. 3.



Witnesses.

Henry Chadbourne.
Sarah M. Goodrich

Inventor.

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by Alban Hudreth, his atty.

UNITED STATES PATENT OFFICE.

THOMAS R. FERRALL, OF BOSTON, ASSIGNOR TO HERBERT LOUD, OF
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PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 268,364, dated November 28, 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 Pulley-Blocks; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

10 In the accompanying drawings, Figure 1 represents a front elevation, and Fig. 2 represents a central longitudinal section, of my improved pulley-block. Fig. 3 represents a cross-section on the line A B, shown in Fig. 1.

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

20 The invention consists, in a pulley-block, of the combination, with the outer strap that surrounds the block, of an inner metallic bearing-strap that serves as a bearing for the pin of the sheave, and which rests in its lower end on the outer strap, by which arrangement the entire strain of the block, when in use, is transferred from the wooden block directly to the outer strap, and in this manner the strength and durability of the pulley-block are materially increased, as the whole strain is taken up by the outer strap, independent of the block-body, as will hereinafter be more fully shown and described.

30 The invention is equally well adapted for single as well as double or multiple blocks, and the outer strap on such block or blocks may be made of rope, metal, or wire without departing from the spirit of my invention.

In the accompanying drawings, *a* represents the block, as usual, with its outer strap, *b*, and metal ring or eye *c*, in the ordinary manner.

40 *d* is the sheave, loose on the pin *e*, which latter, after passing through the block *a*, has its bearing in the U-shaped metallic inner strap, *f*, that is inserted into the block *a* and

its grooves *a'* *a'* from below, previous to securing the outer strap, *b*, to the block *a*, as shown in the drawings. The pin *e* is inserted through the block *a*, the inner metal strap-bearing, *f*, and the sheave *d*, previous to securing the outer strap, *b*, to the block *a*.

It will be seen that the lower bent part of the inner metallic strap, *f*, rests directly upon the lower part of the outer strap, *b*, and consequently when the pulley-block is in use the whole strain of the sheave *d* is transferred to the outer strap, *b*, by the medium of the inner metal strap, *f*, as shown.

In case the outer strap, *b*, should be of such a material as to yield when the block is used, I may prefer to make the holes for the pin *e* in the block *a* of an oval shape, or a little larger than the said pin's diameter, so as to allow the inner metallic strap, *f*, to follow with and rest upon the lower part of the outer strap, *b*; but this is not usually necessary, as the outer strap, *b*, is generally so firmly secured to the block *a* as to admit of hardly any expansion during ordinary use for which it is intended.

The sheave *d* shown in the drawings is of the ordinary kind; but I desire to state that my invention is equally well adapted for sheaves provided with anti-frictional roller-bearings.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

75 The herein-described improved pulley-block, consisting essentially of the block *a*, outer strap, *b*, the sheave *d*, pin *e*, and inner metallic strap, *f*, adapted to rest in its lower end upon the outer strap, *b*, as and for the purpose set forth.

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

THOMAS R. FERRALL.

Witnesses:

ALBAN ANDRÉN,

HENRY CHADBOURN.