

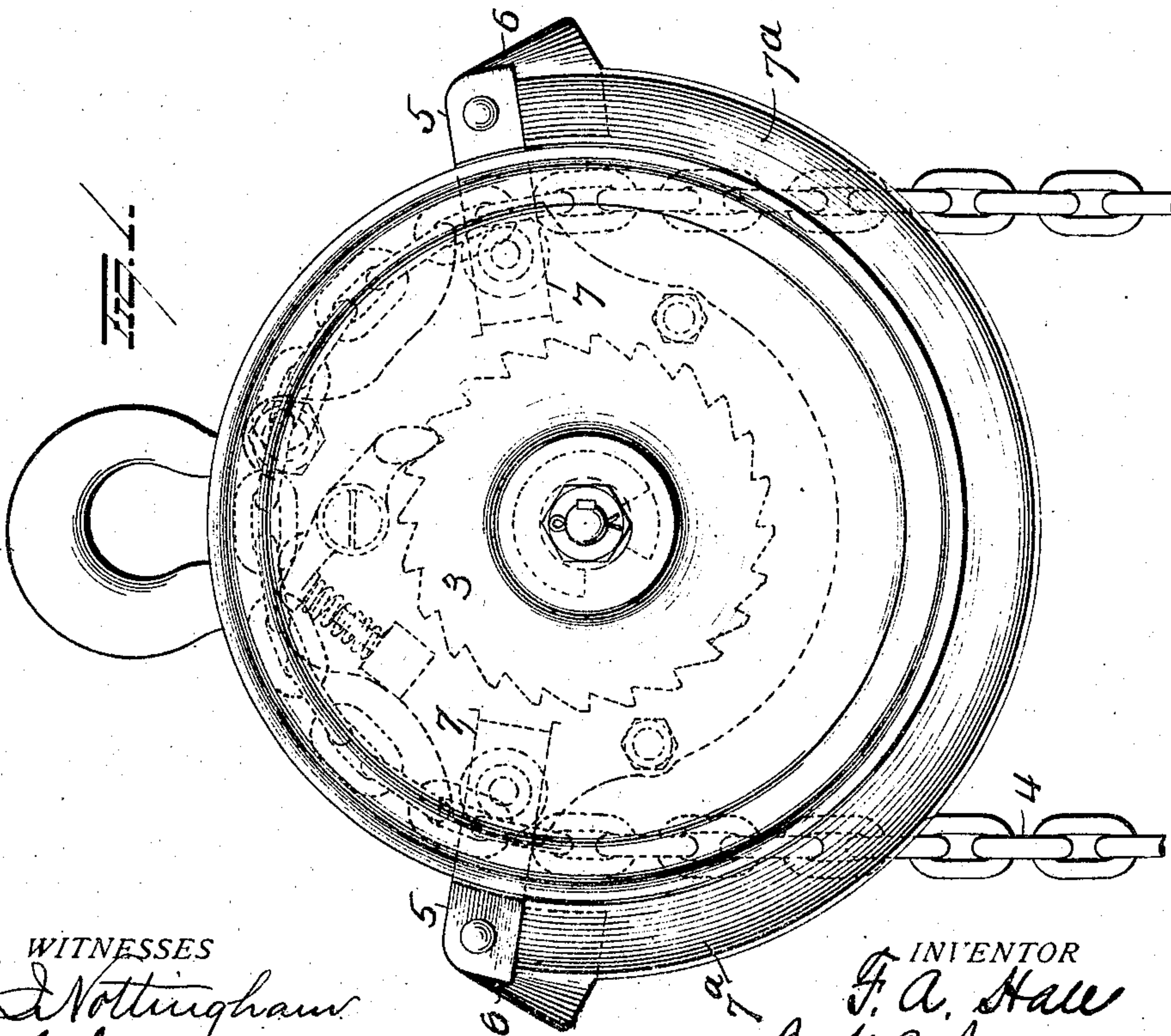
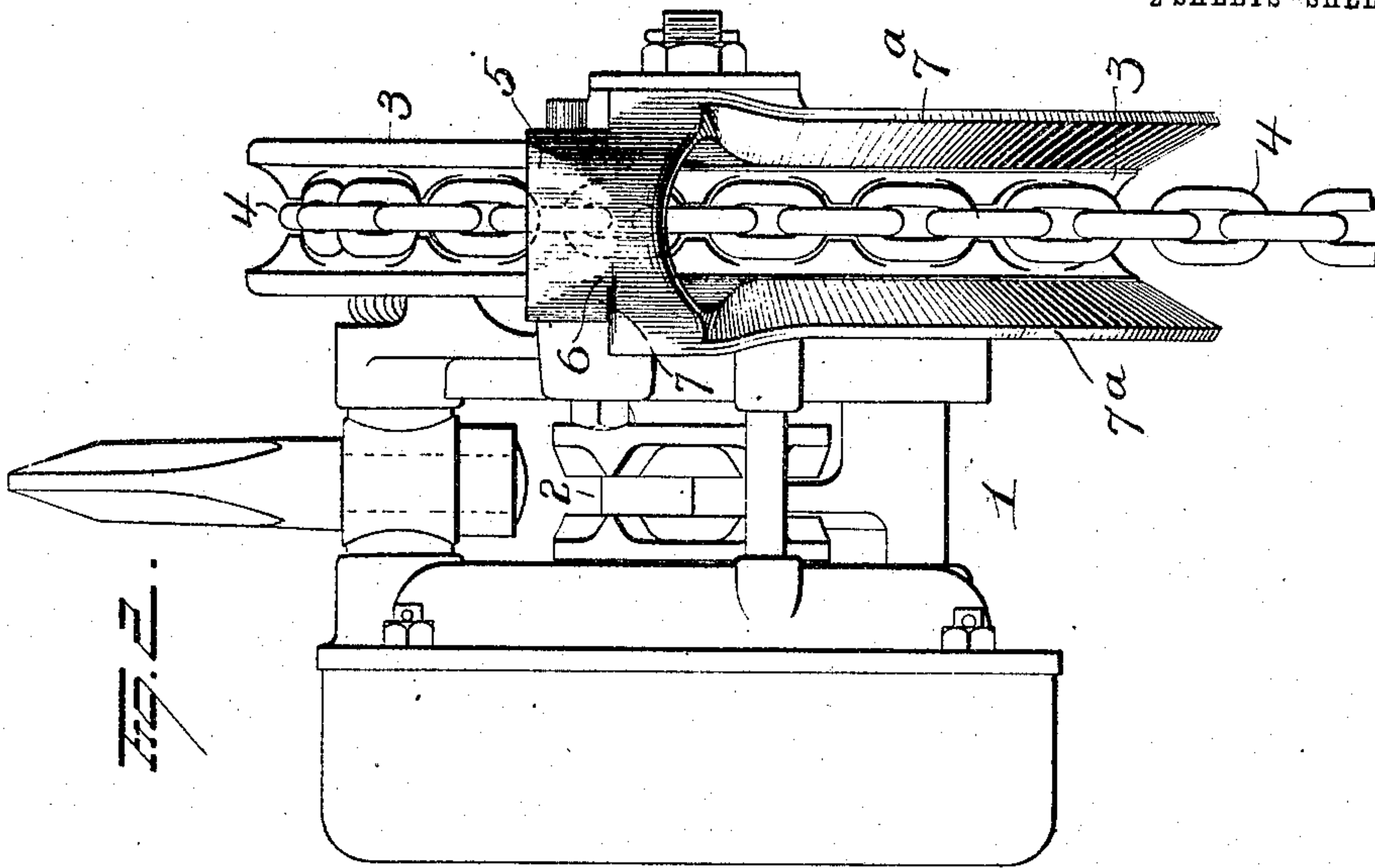
PULLEY BLOCK.

APPLICATION FILED DEC. 7, 1907.

915,953.

Patented Mar. 23, 1909.

2 SHEETS--SHEET 1.



WITNESSES

Ed Nottingham
G. F. Downing.

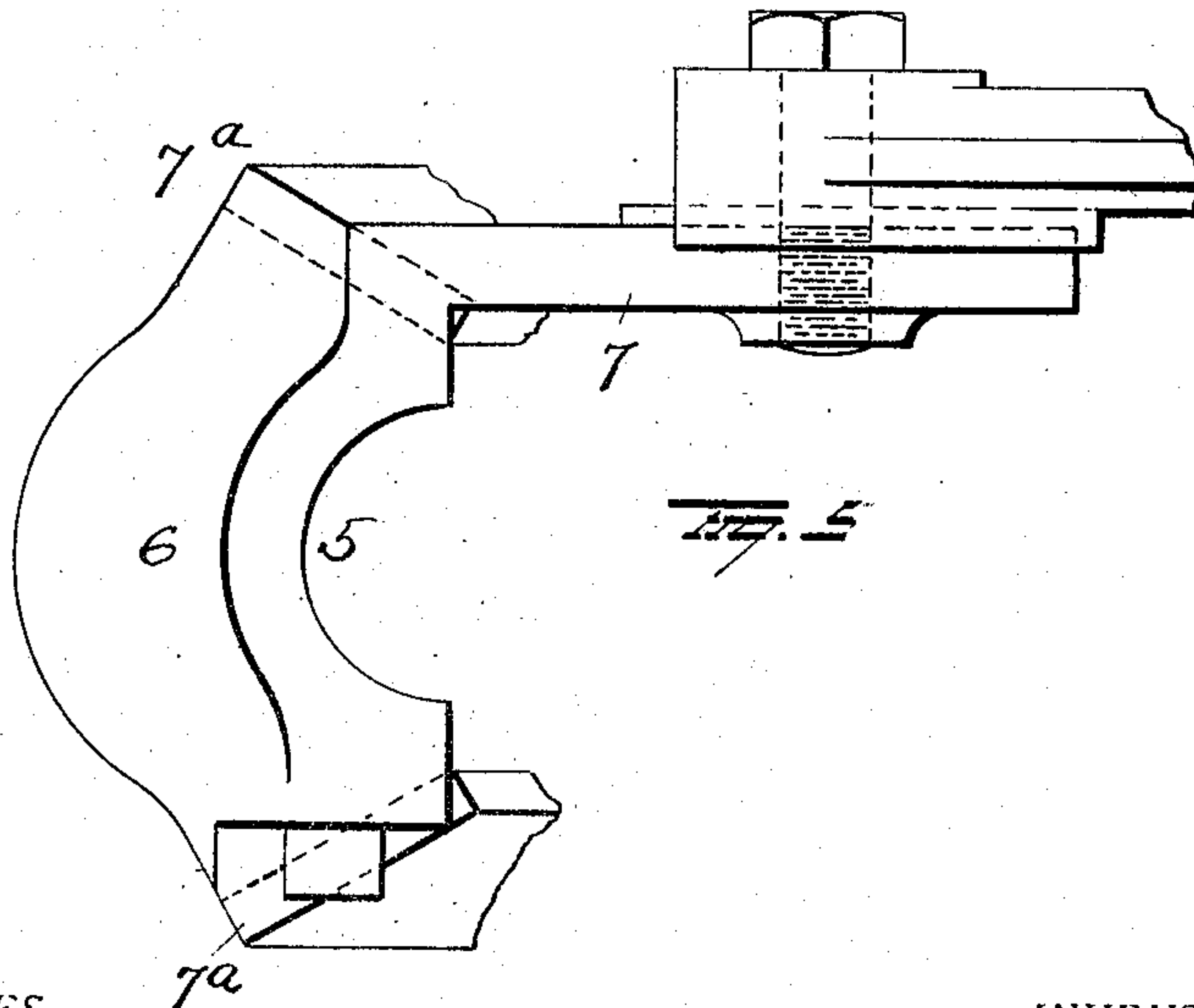
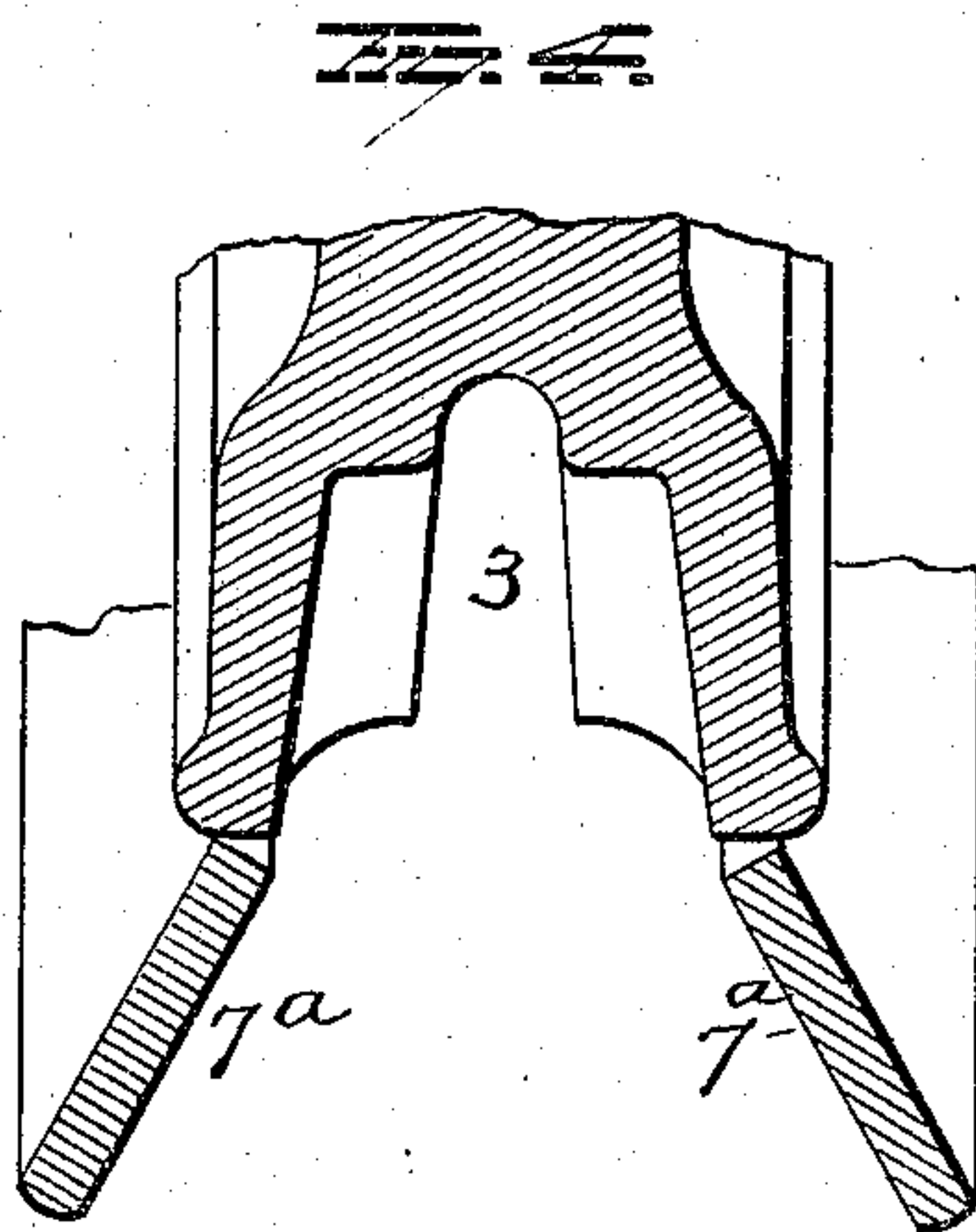
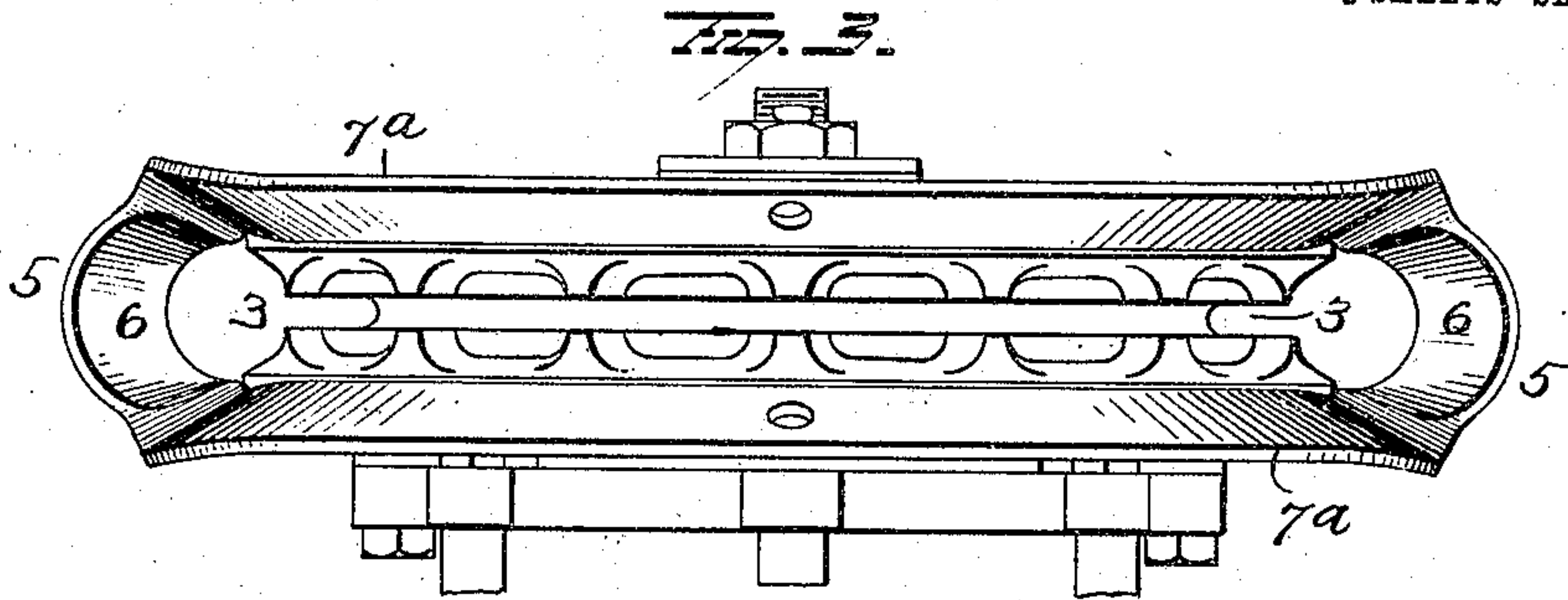
INVENTOR

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F. A. HALL.
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UNITED STATES PATENT OFFICE.

FREDERICK A. HALL, OF NEW YORK, N. Y.

PULLEY-BLOCK.

No. 915,953.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed December 7, 1907. Serial No. 405,563.

To all whom it may concern:

Be it known that I, FREDERICK A. HALL, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Pulley-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in hoist blocks.

In all hoist blocks actuated by a hand chain, it is necessary to provide guides for preventing the actuating chain from running off the hand or actuating wheel.

The guides in use are objectionable owing to the fact that the side flanges of the actuating wheel, below the guides, are exposed, and when the block is being spun down, as in lowering, the chain links are free to ride over the edge of the wheel, and frequently catch or gag between the edge of the wheel and the guide, resulting in injury to the hoist block or chain.

The object of my invention is to provide means for preventing the actuating chain from engaging the side flanges of the actuating wheel between the guides, and it consists in the parts and combinations of parts as will be fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of a chain block embodying my invention. Fig. 2 is an end view of same. Fig. 3 is a bottom plan view. Fig. 4 is a view in section through the guide strips and portion of the hand or actuating wheel and Fig. 5 is a view in section showing the manner of attaching the chain guide to the frame of the block.

The chain block 1 may be of any approved form, and is provided with a pocketed sheave 2 over which the hoist chain passes, and with a hand or actuating wheel 3 around which the hand or actuating chain 4 passes, in the well known manner.

5 are chain guides, each consisting of a body 6 and an integral stem 7, the body having an opening therethrough for the passage of the chain 4, the opening being flaring and of greater diameter at its bottom than at its top, and the stem 7 being rigidly secured to the frame of the block in a vertical plane intermediate the hand wheel 3 and the pocketed sheave 2, around which the hoist chain passes. These guides 5 are preferably

located slightly above the central diameter of the hand or actuating wheel 3 and operate to prevent the chain from leaving the wheel 3 at the top, or above the guides 5.

7^a are guiding strips curved to conform to the periphery of the side flanges of hand wheel, and preferably integral at their ends with the guides 5, but they may be separate therefrom and secured thereto by screws. The inner edges of these strips 7^a rest in close proximity to the peripheries of the side flanges of wheel 3, and are so shaped as to flare outwardly and downwardly, thus forming shields which positively prevent the chain links from coming in contact with the moving edges of the hand wheel, and also from wedging between the guides 5 and the side flanges of the wheel. The two guides 5 thus connected by the strips 7^a, form a continuous guide encircling rather more than half of wheel 3.

The two side guides and the connecting strips above described, form an endless loop out of which it is not possible for the chain to escape, and which prevents the possibility of the chain becoming wedged.

With this construction, when the hand wheel 3 is operated at high speed, these strips throw the chain into the pockets, and guide it to the end guides 5, and as the strips connect the two guides 5 there is no space between the latter and the wheel 3 into which the links of the actuating chain can catch.

Another decided advantage this improvement has over the devices in use, is, that the actuating or hand chain may be pulled at an angle on either side of the plane of the hand wheel, which would not be possible with the two end guides alone.

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood that I do not wish to confine myself to the exact construction shown and described, but,

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. In a chain block, the combination with a hand wheel and its chain, of two chain guides secured to the frame of the block slightly above the axis of the wheel and on opposite sides of the latter, and fixed guid-

ing strips extending from one guide to the other adjacent to the flanges of the wheel, and forming with the guides an unobstructed endless loop through which the chain passes.

5 2. In a chain block, the combination with a hand wheel and its chain, of two chain guides secured to the frame of the block slightly above the axis of the wheel and on opposite sides of the latter, and guiding
10 strips secured at their ends to the guides and located adjacent to the flanges of the wheel, the said guides and connecting strips forming an unobstructed endless loop conforming to the periphery of the hand wheel.

15 3. In a chain block the combination with

a hand wheel and its chain, of two fixed guides located on opposite sides thereof and guiding strips secured at their ends to said guides and located adjacent, and conforming to the periphery of the flanges of the wheel, 20 the said guides and strips forming a single unobstructed endless loop through which the chain passes.

In testimony whereof, I have signed this specification in the presence of two sub- 25 scribing witnesses.

FREDERICK A. HALL.

Witnesses:

ROYAL T. HODGKINS,
C. W. BEAVER.