

(No Model.)

3 Sheets—Sheet 1.

W. M. WILKIN.
BAND SAW MILL.

No. 539,320.

Patented May 14, 1895.

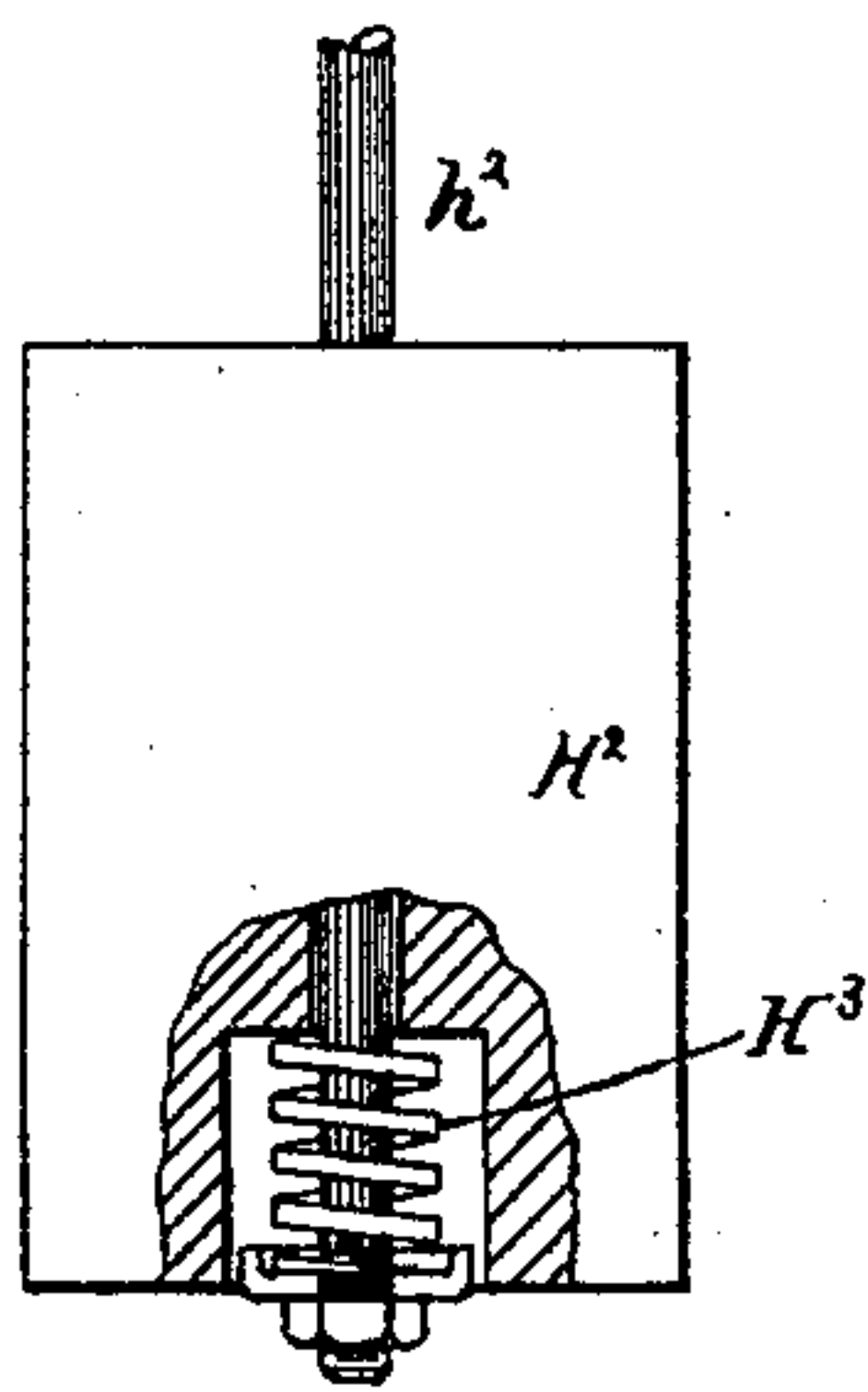
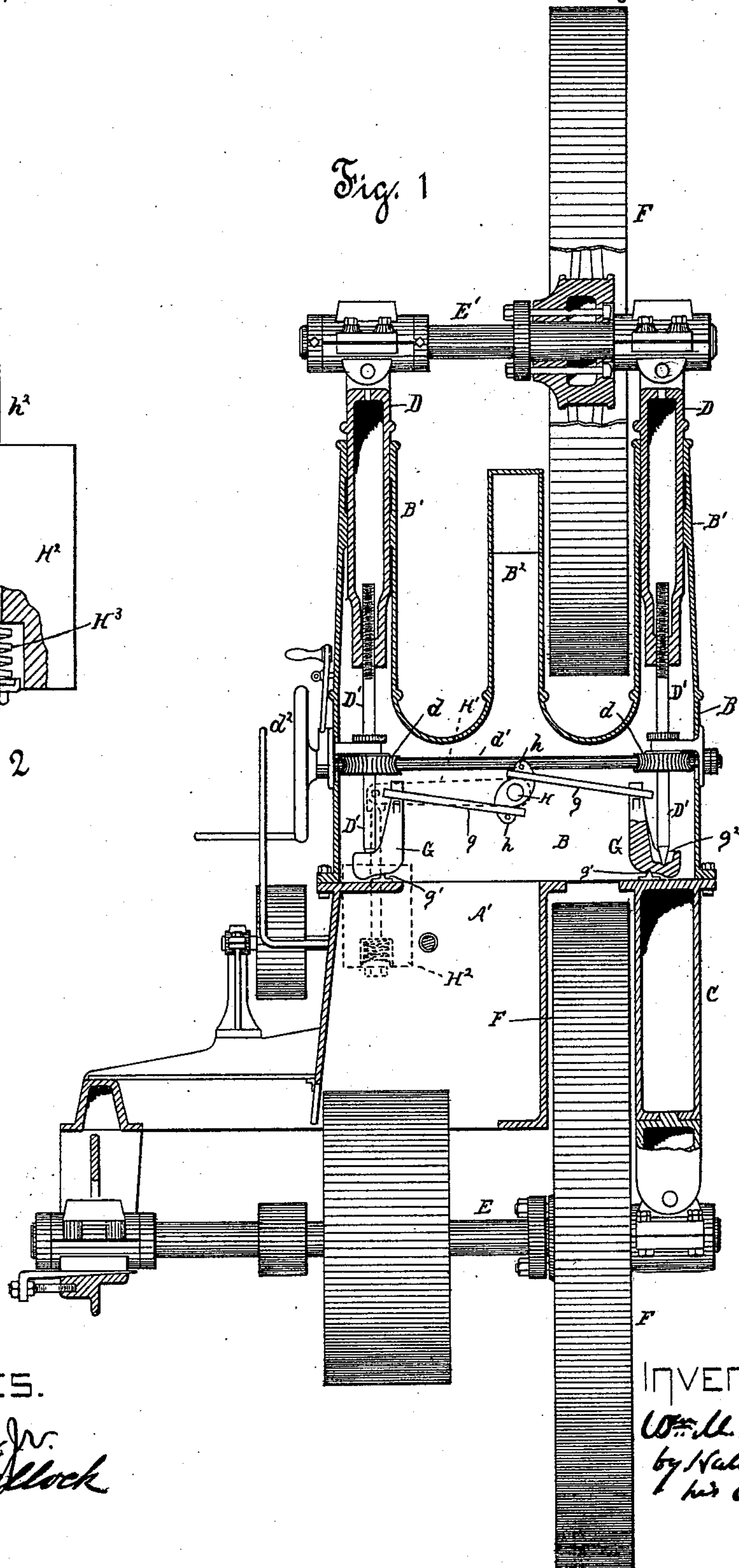


Fig. 2



WITNESSES.

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Hess & Fallock

INVENTOR.

W. M. Wilkin
by H. H. Lord
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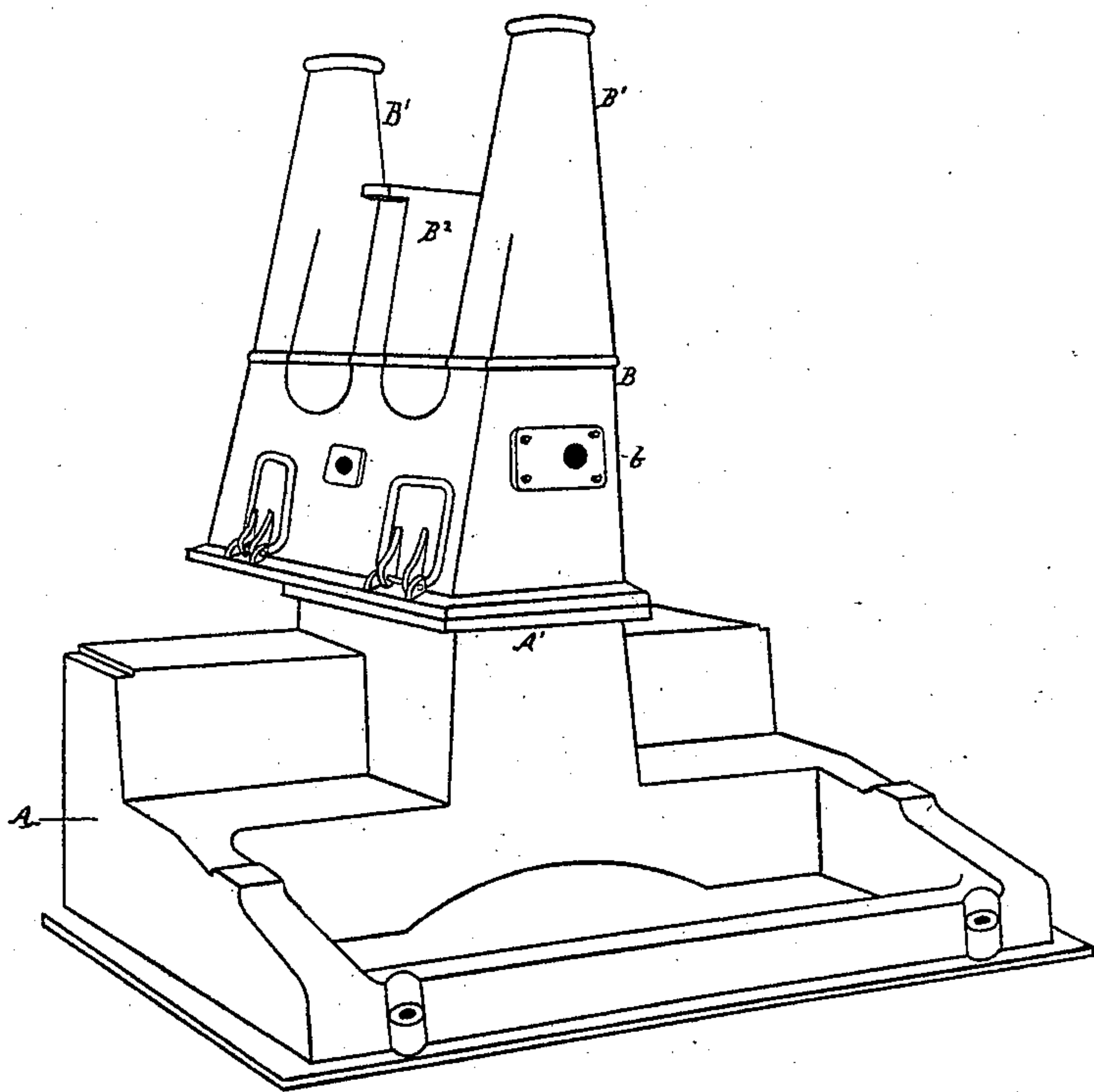


Fig. 3

Witnesses
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J. H. Wallock

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By Attorneys Wallock & Lord

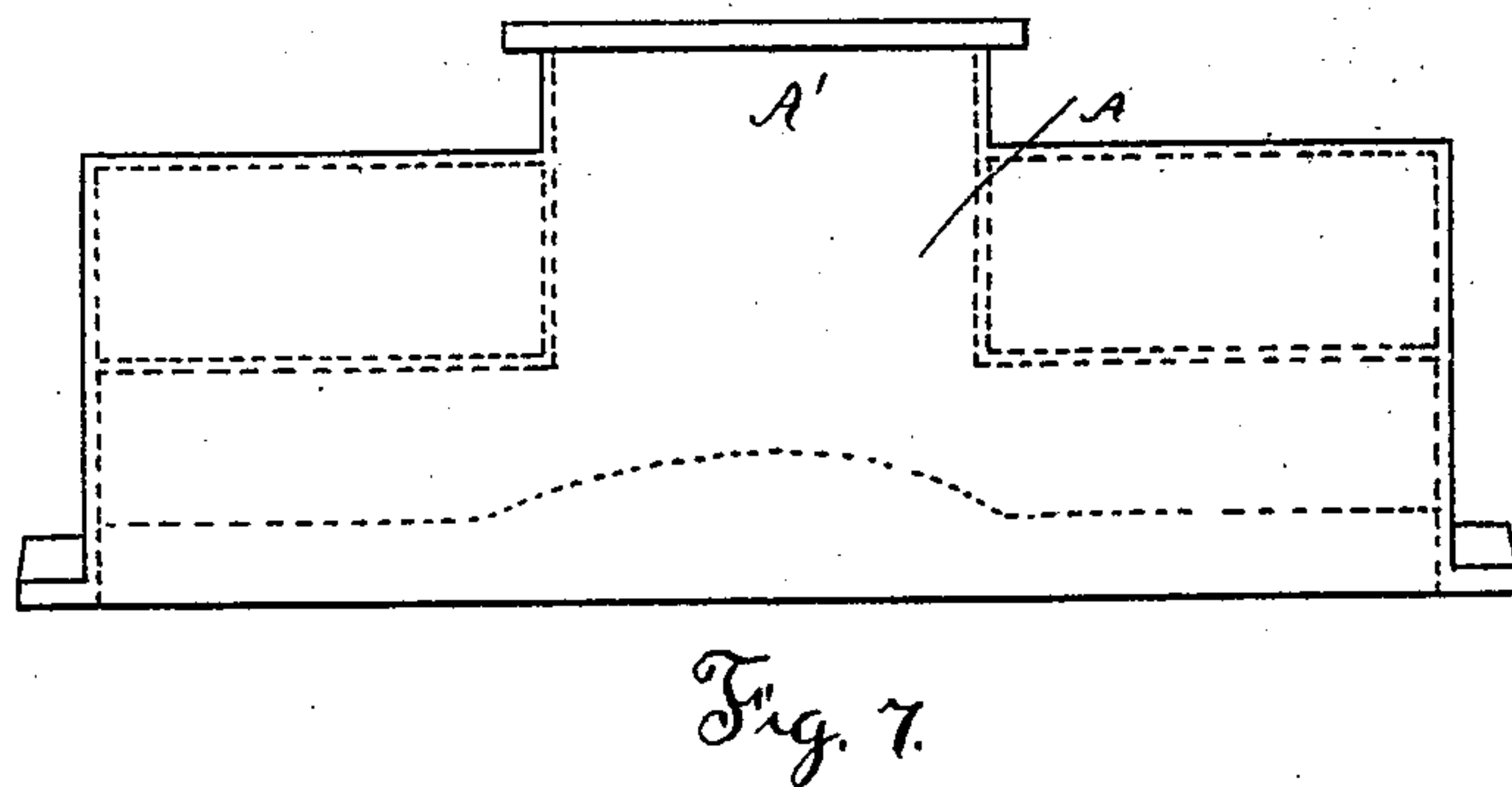
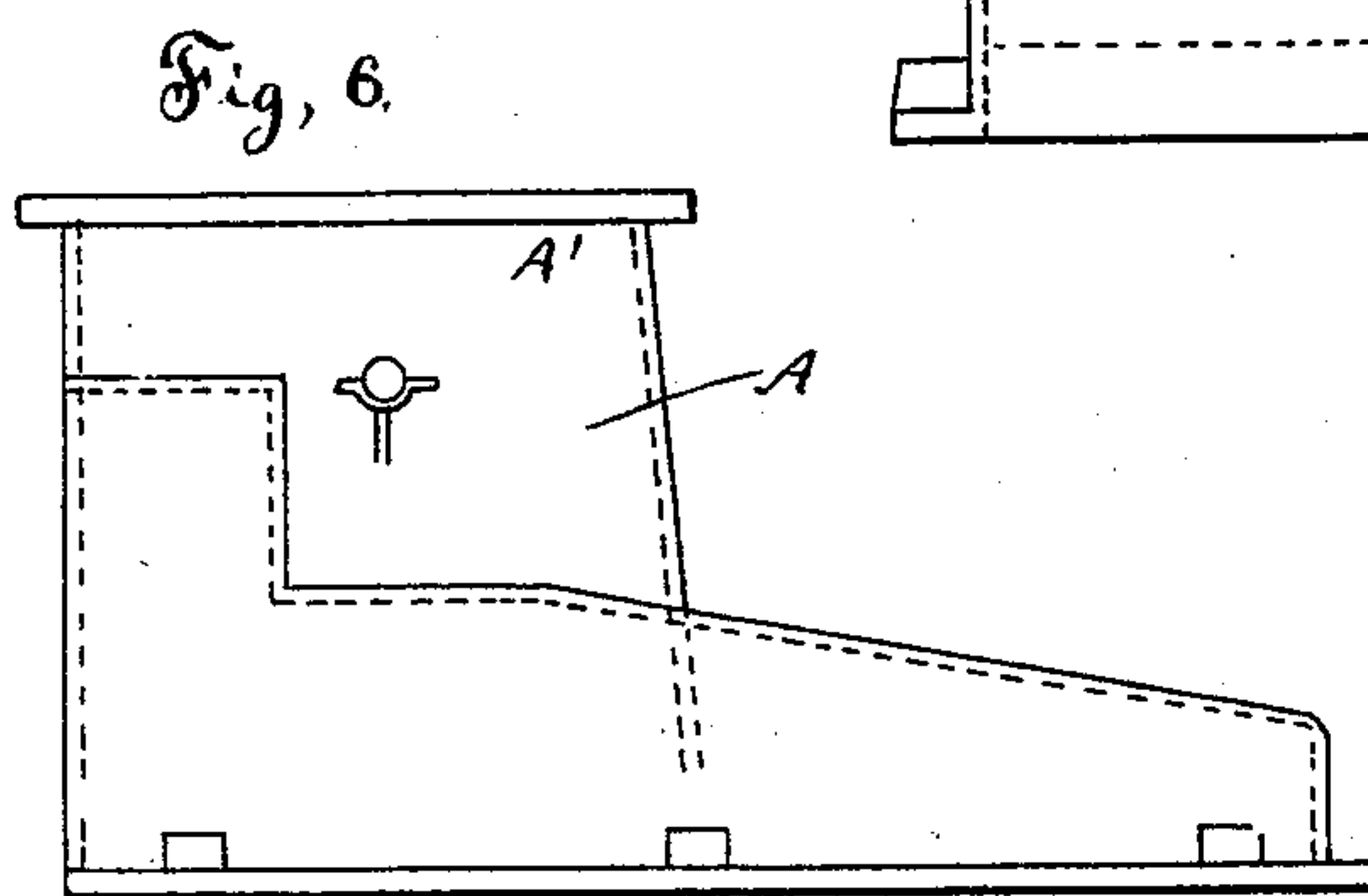
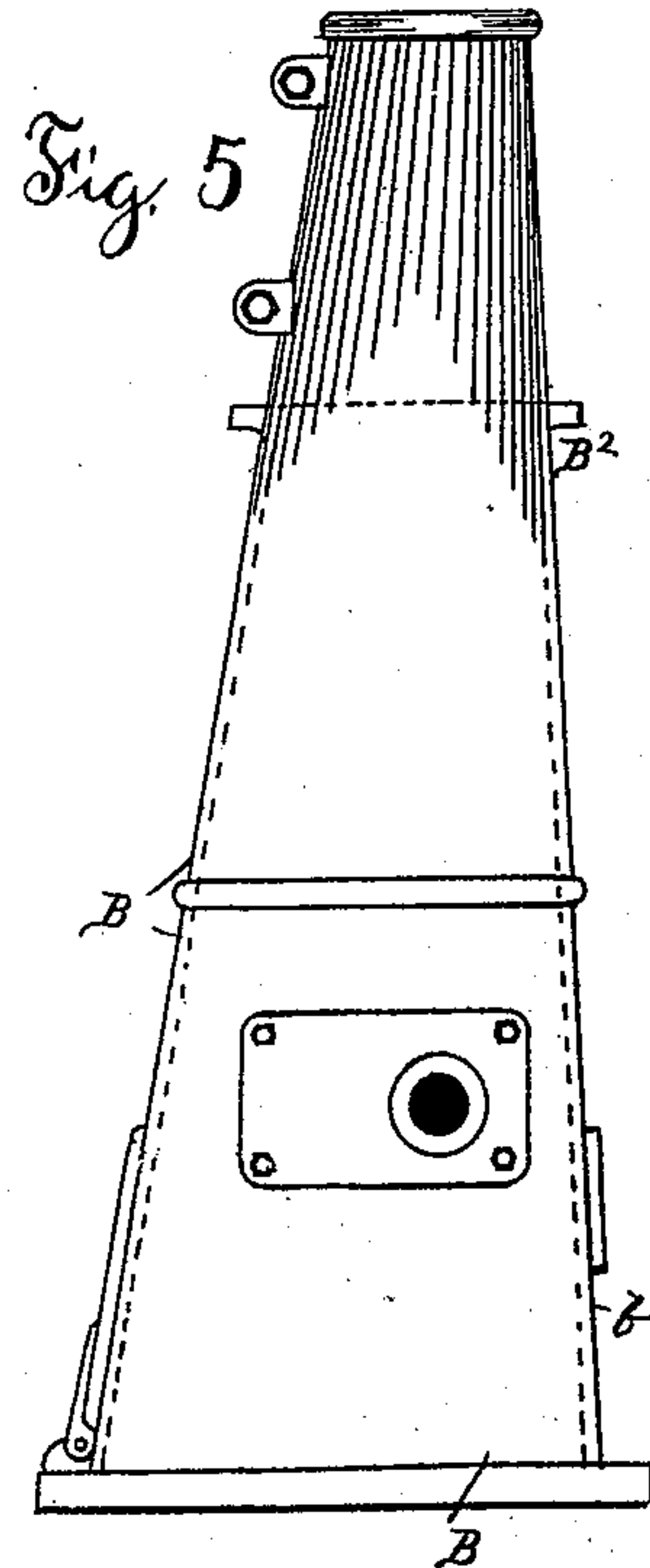
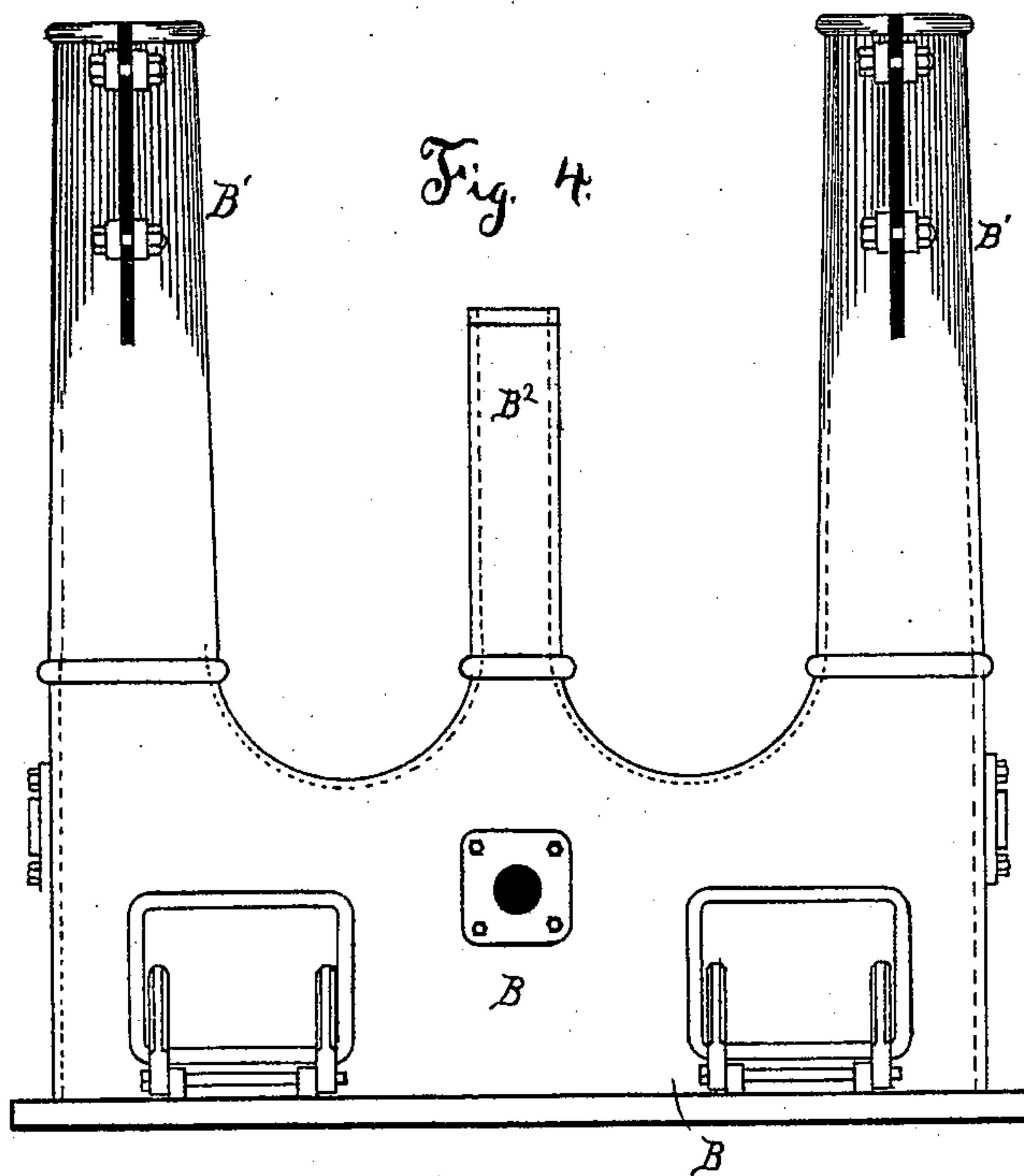
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WITNESSES:

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INVENTOR.

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UNITED STATES PATENT OFFICE.

WILLIAM M. WILKIN, OF ERIE, PENNSYLVANIA.

BAND-SAW MILL.

SPECIFICATION forming part of Letters Patent No. 539,320, dated May 14, 1895.

Application filed April 26, 1894. Serial No. 509,088. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. WILKIN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Band-Saw Mills; 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.

This invention relates to band saw mills and consists in certain improvements in the construction thereof, as will fully appear in the following specification and claims.

The invention relates more particularly to the construction of the frame work and the means for straining the saw.

The accompanying drawings illustrate the invention, as follows:

Figure 1 shows the framework in vertical section and the working parts in elevation. Fig. 2 shows a detail construction. Fig. 3 shows the framework in perspective with the working parts removed. Fig. 4 shows a side elevation of the upper part of the frame. Fig. 5 shows an end view of the same. Fig. 6 shows a side view of the base of the frame. Fig. 7 show the ends of the base of the frame, looking from the left of Fig. 6 and the rear of Fig. 3.

The frame proper consists of but two pieces of cast metal, the base, A, and the top B. The base, A, has a pedestal, A', to receive the top, B, and the top, B, has two upwardly extending prongs, B' B', to receive the upper shaft supports, and a shorter middle prong, B², to hold the saw guide fixtures, but these prongs and the pedestal are cast integral with the part to which they belong. One side, b, of the top, B, is nearly vertical, while the other side is at considerable of an angle. The side, b, faces the log-carriage way, or, in other words, the cutting point of the saw. The base, A, is alike in form at all like points on either side of the pedestal.

The top, B, may set on the pedestal with the vertical face, b, facing either the one side or the other of the pedestal, or, in other words, the log-carriage way may be on either side of the pedestal, A', according to whether the mill is what is called right or left, and the top, B, may be fixed to the pedestal with its verti-

cal side, b, facing the carriage whether the carriage is on the right or the left of the pedestal. The top, B, extends over the pedestal in the direction of the rear of Fig. 3, or the left of Fig. 6, and which would be toward the front of Fig. 7, and is so shown at the right of Fig. 1, and the lower shaft's outer hanger, C, extends down from the overhanging part. The hanger, C, is attached to the top piece, B, by bolts and directly below the outer post, B'.

There is considerable advantage in constructing the frame as shown, for one set of patterns serves to build either right or left hand mills, and one kind or the other can be built from a common stock of castings, and there is no difference in the finishing up of parts, for they come together properly in either case, and a mill that is assembled intended for a right hand mill can be taken apart and re-assembled as a left hand mill. To do this the only change necessary would be to take out the upper shaft, loosen the hanger, C, turn the part, B, around end for end, and put the removed parts back into place (and change the position of the saw guide, which is not shown, and some other minor parts).

The means for straining the saw are as follows: The upper band wheel shaft, E', is journaled, as commonly, on the top of posts, D D, which are telescopically fitted in the posts, B' B', and are adjusted primarily by screw rods, D', operated by worm wheels, d, worm shaft, d', and hand wheel, d². The lower ends of the screw rods, D', are pointed and set in bearings on the short ends of "L" formed levers, G, which are fulcrumed on points, g', and the long ends of the levers, G, are connected by links, g, with arms, h, on a shaft, H, which has an arm, H', from which hangs a weight, H², on a pendent rod, h², and the seat of the weight, H², is on a spring, H³. (See Fig. 2.) The weight, H², acting through the leverage described keeps the saw on the wheels F F', under constant strain or tension. The object of the spring, H³, is to afford a quick yielding relief to the saw when it is suddenly impeded from any cause. The spring H³, will yield and allow an upward movement of the rod, h², before the inertia of the weight, H², can be overcome. The points of the rods, D', are seated in the bottoms of cups, g², formed on

the levers, G, in which cups a quantity of oil is kept to maintain a sure lubrication. It is desirable that the bearing points of the rods, D', be, as nearly as possible, on a level with the points of the bearings, g', so that the levers, G, can lift the rods, D', the necessary distance, which is usually about one fourth of an inch, without pulling the rods, D', side-wise to any objectionable extent.

10 What I claim as new is—

1. In a band saw-mill, the combination in the frame work thereof, of a base, A, having a pedestal, A', formed integral therewith; a top part, B, having the posts, B' B', formed
15 integral therewith, and made attachable to said pedestal with its face side, b, facing either to the right or the left as required; and a hanger, C, for the outer end of the lower

band-wheel-shaft, attached to the end of the top piece, B, that extends out beyond the pedestal and over the lower band wheel. 20

2. In a band saw mill, the combination with the vertically movable supports for the upper band wheel; of "L" formed levers G, having one arm upright and the other arm as a seat
25 for said supports; the shaft H, with arms h, and weight lever H'; the links g, connecting the arms h, with the levers G; and the weight H², on the arm H'.

In testimony whereof I affix my signature 30 in presence of two witnesses.

WILLIAM M. WILKIN.

Witnesses:

JNO. K. HALLOCK,
C. B. HAYES.