

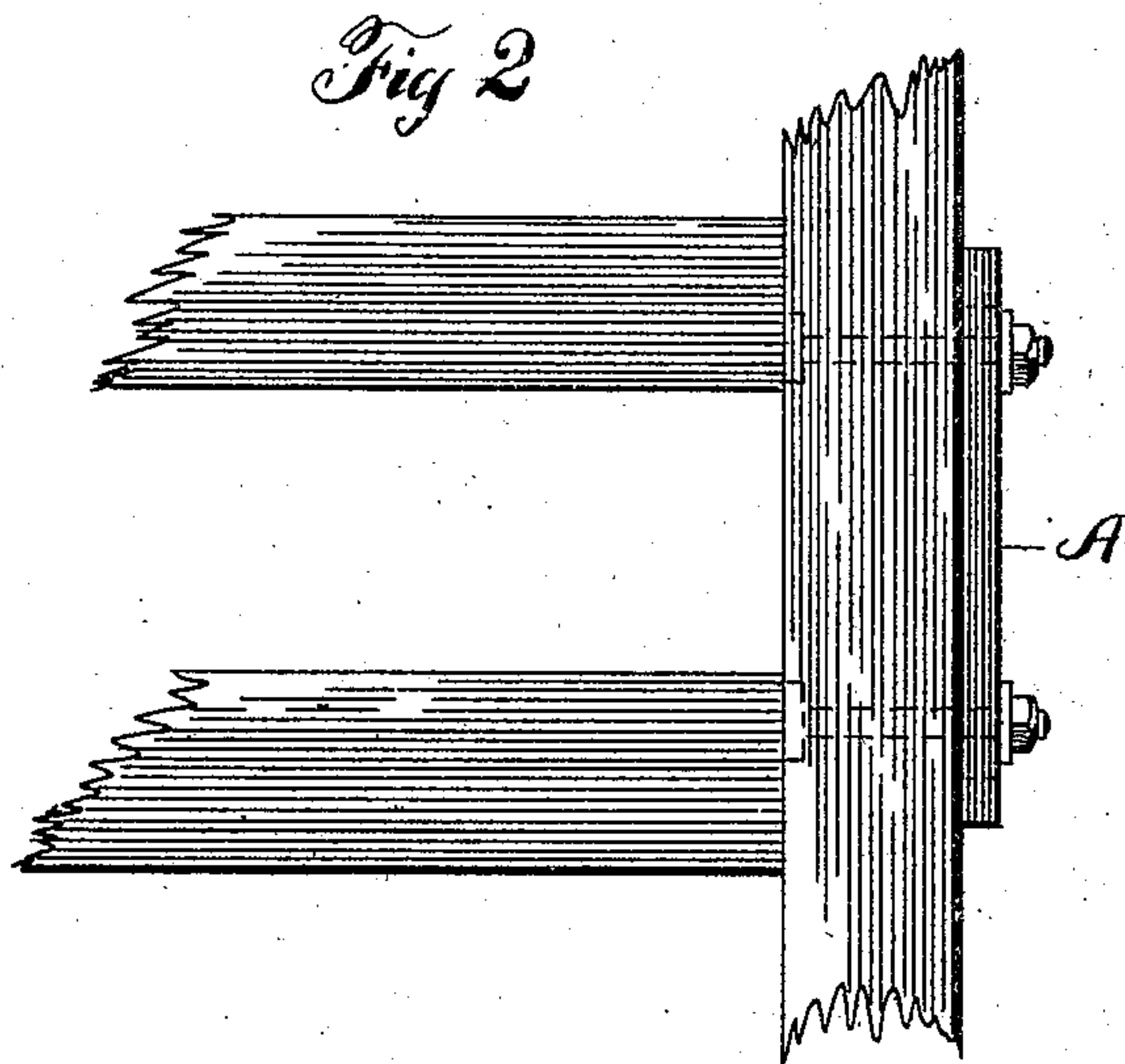
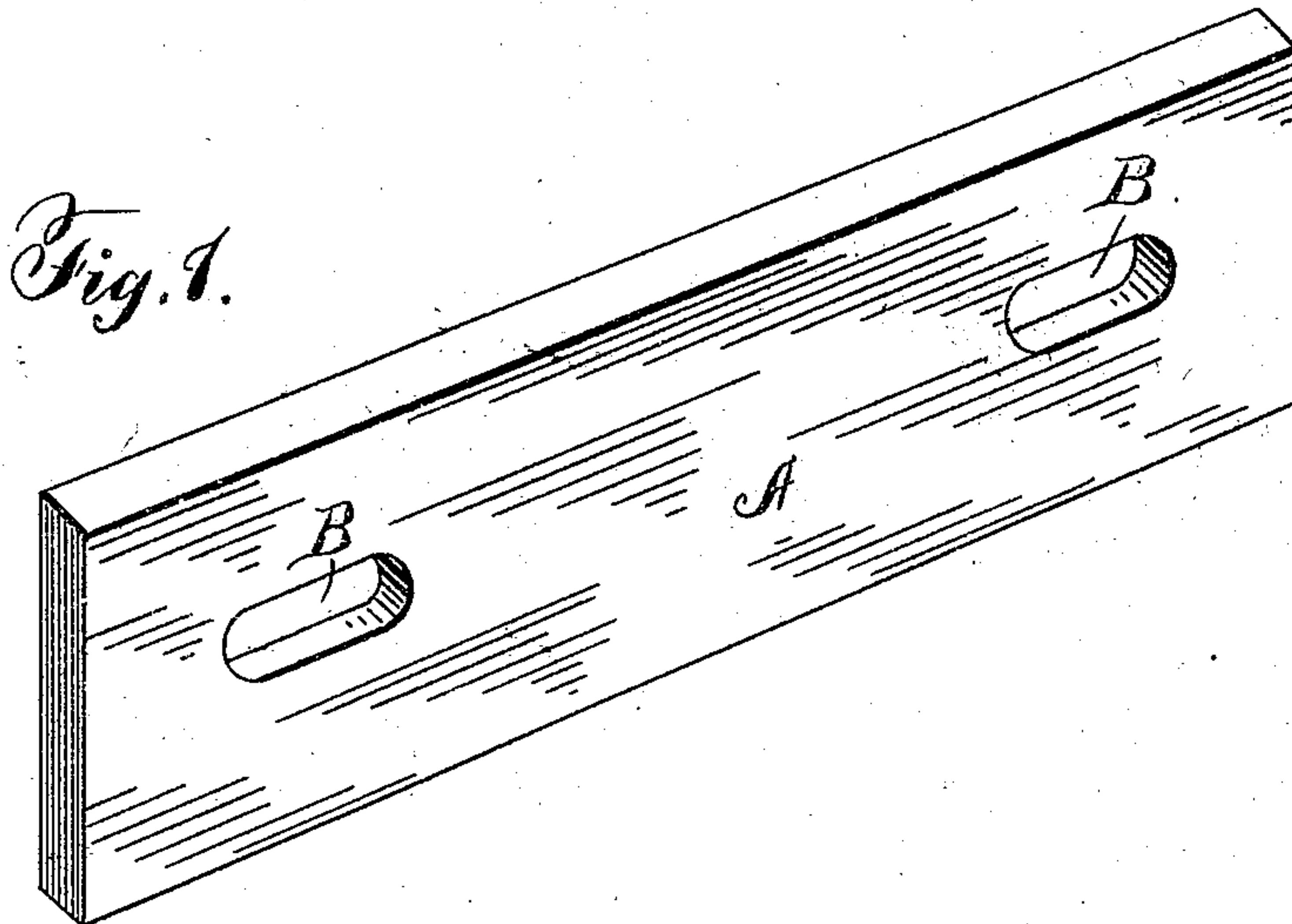
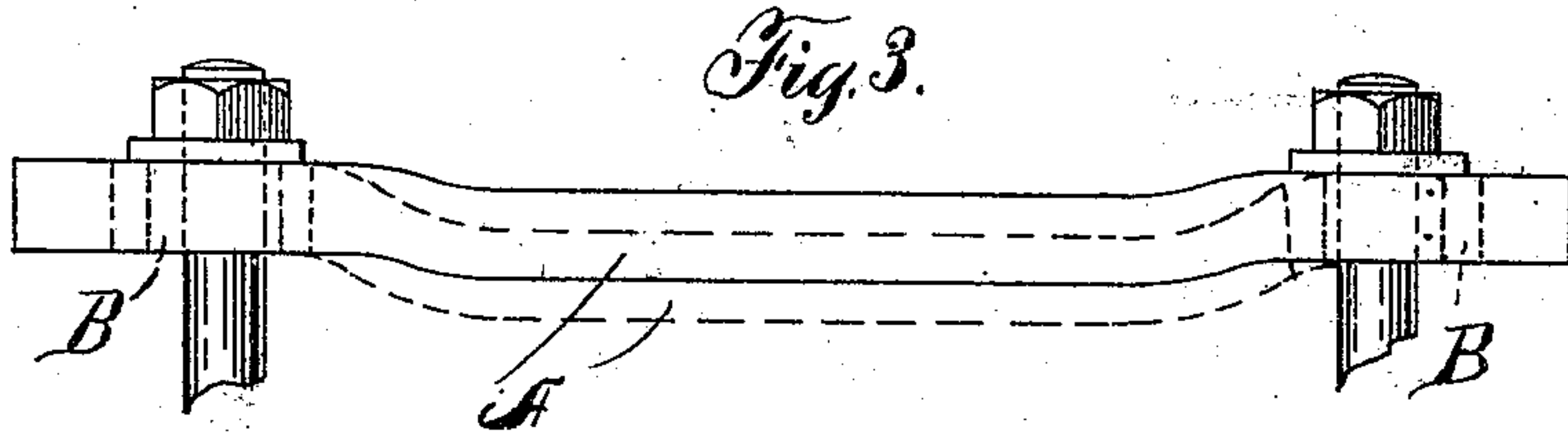
(No Model.)

J. B. SAFFORD.

WEAR PLATE FOR HEAD BLOCKS OF CAR COUPLINGS.

No. 501,963.

Patented July 25, 1893.



Witnesses.

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# UNITED STATES PATENT OFFICE.

JAMES B. SAFFORD, OF CHICAGO, ILLINOIS.

## WEAR-PLATE FOR HEAD-BLOCKS OF CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 501,963, dated July 25, 1893.

Application filed August 23, 1892. Serial No. 443,849. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES B. SAFFORD, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Wear-Plates for Head-Blocks of Car-Couplers, of which the following is a specification.

The object of my invention is to make a chafing or wear plate used on the head blocks of car couplers, which will always be firmly and securely fastened in place, notwithstanding the bending or distortion in shape that is occasioned in use; and my invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my improved wear plate. Fig. 2 is a plan view of the same in position as first applied; and Fig. 3 is a plan view of a wear plate as the same appears after use.

As is well known, the wear or chafing plates used on the head blocks of car couplers are subjected to heavy shocks or blows as the cars come together in the operation of coupling. As a consequence, they are gradually worn or beaten back into the wood on which they are mounted, until they draw out or break the bolts by which they are fastened, so that they fall to the ground, thereby occasioning liability to accident by the derailing of cars and in other ways. It is to obviate this difficulty and to make a wear plate that, no matter how much it be battered or beaten out of shape, or bent back at its central portion, will still allow the bolts by which it is fastened to remain in place and unbroken, so that it will always be in position for use and prevented from falling or getting into position where it would occasion inconvenience or liability of accidents.

In making my improved wear or chafing plate to obviate the objections now existing in its use, and to secure the advantages above pointed out, I provide the plate, A, with elongated holes B. These holes may be made as long as desired, and it is intended that when they are first attached to the head block, the bolts will pass through the holes at their inner edges, as shown in Fig. 2. This will leave the unoccupied portion of the holes outside of the fastening bolts, as shown in dotted lines in this figure. As the bolts are battered and

bent back by use so that they gradually assume the position shown in Fig. 3, the inner edges of the holes will be drawn away from the bolts, as shown by dotted lines in Fig. 3. In other words, the holes will move across the bolts so that, no matter how much the plate be bent or distorted, no strain will thereby be brought to bear on the bolts, until the outer edges of the holes are reached; but it is intended that the holes will be sufficiently long to permit all of the bending back ever occasioned in use, without their outer edges bearing against the bolts to draw them out or break them.

In Fig. 2 I have shown the front side of the wearing plate as straight, which is its initial position.

In Fig. 3 I have shown by full lines the front edge of the plate as it will appear after considerable use, and by dotted lines I have shown the front edge of the plate, as it will appear in the latter stages of its use. In all these different positions, it will be seen that there is still an unoccupied portion of the holes outside of the holding bolts, so that no undue strain has been imparted to the bolts by the shocks or blows of the cars coming together, so as to bend back or distort the chafing plate.

What I regard as new, and desire to secure by Letters Patent, is—

In a railroad car the combination of a head block, a wear plate secured thereto by means of bolts, such bolts passing through the head block and out through elongated holes in the wear plate, the major axes of such holes being arranged in a substantially horizontal plane transverse to the car, and retaining nuts upon the outer ends of the bolts, whereby as the plate becomes bent and driven in in use it will be afforded sufficient play upon the bolts to prevent the plate or either of the bolts from being torn out notwithstanding how distorted such plates may become, thereby preventing accident consequent upon the displacement or tearing out of such plates or bolts and diminishing the dangers of transportation, substantially as described.

JAMES B. SAFFORD.

Witnesses:

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