No. 653,064. Patented July 3, 1900.

D. CARROLL.

DEVICE FOR STRAIGHTENING CHAIN LINKS.

(Application filed Apr. 16, 1900.)

(No Model.)

Fig. 1

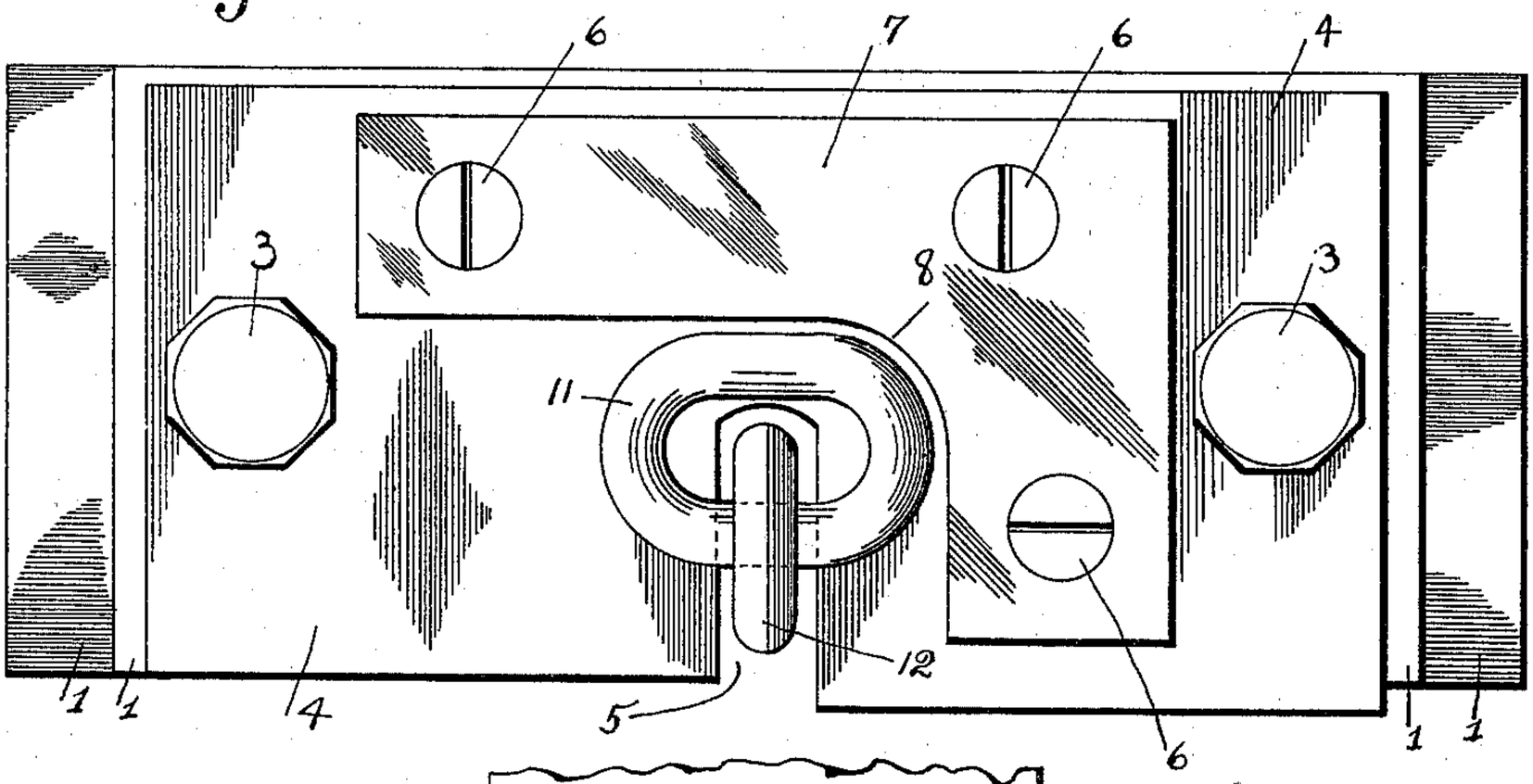
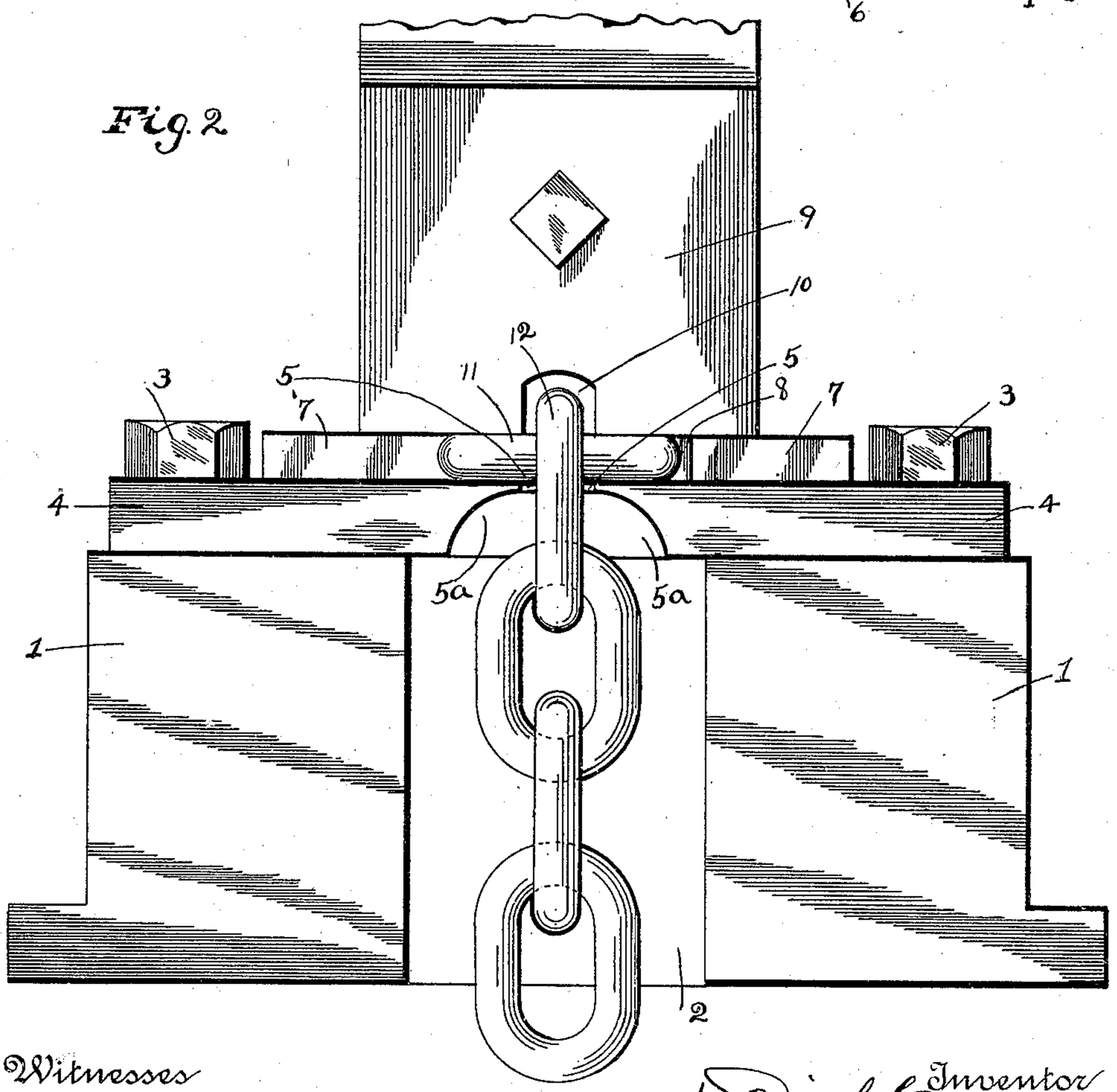


Fig. 2.



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DANIEL CARROLL, OF COLUMBUS, OHIO.

DEVICE FOR STRAIGHTENING CHAIN-LINKS.

SPECIFICATION forming part of Letters Patent No. 653,064, dated July 3, 1900.

Application filed April 16, 1900. Serial No. 13,124. (No model.)

To all whom it may concern:

Be it known that I, DANIEL CARROLL, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Devices for Straightening Chain-Links, of which the following is a specification.

My invention relates to the improvement of devices for straightening chain-links; and the objects of my invention are to provide a simple, reliable, and inexpensive device whereby wound or scarf chain-links may be readily and accurately straightened and to produce other improvements in details of construction and arrangement of parts, which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the link-supporting block, showing the last link of the chain thereon in position for straightening; and Fig. 2 is a front elevation of the same, showing the hammer in its position at the completion of the blow.

Similar numerals refer to similar parts throughout both views.

In carrying out my invention I employ a suitable base-block 1, which is provided with a central vertical opening 2. Upon the block 1 I secure, through the medium of suitable screws or bolts 3, a detachable top plate 4, of suitable hard metal, this top plate being provided at the center of its length with a recess or slotted way 5, which extends inward to a point near the center of the width of said plate. The width of the recess 4 in its upper portion is such as to permit a chain-link to pass loosely therethrough, while the lower or under side portion of said plate-recess is enlarged, as indicated at 5^a.

Upon the upper side of the plate 4 is detachably secured, through the medium of screws 6, an angular plate 7, this angular plate having its inner side at the junction of its arms rounded, as shown at 8. The angular plate 7 is so arranged on the plate 4 as to cause the inner side of its shorter forwardly-extending arm to extend parallel with the longer sides of the recess 5, while the longer arm of said angular plate extends in the direction of the length of the plate 4 and transversely of the length of the recess 5.

9 represents a suitably-constructed hammer body or head, the under side of which is formed with a central recess 10. This hammer-body 9 is adapted to be raised and dropped or forced downward over the angular plate 7 and recess of the plate 4 in any suitable or well-known manner, or by any desirable form of hammer-head-operating mechanism.

In utilizing my invention the last link of the chain to be straightened, which in the drawings is indicated at 11, is placed upon the plate 4, so that one of its longer sides extends transversely across the recess 5 and its opposite parallel side rests upon the plate 4 beyond the inner end of said recess 5, the inner side of said link being thus parallel, or substantially parallel, with the inner arm of the angle-plate 7 and one end of said link being adjacent to the forwardly-extending arm of said angle-plate. When the link 11 is supported in this position, it is obvious that the next adjoining link thereto, which is indicated at 12, may depend within the opening or recess 5 and into the under portion of the opening 2. The thickness of the angle-plate 7 employed depends upon the thickness of the link to be straightened, said plate and link being of corresponding thickness. The hammer-head 9 being now caused to descend to impart a blow, which is partly received by the plate 7 and partly by the link 11, it is obvious that any twist or bend of the link which exists therein will from the force of said blow be removed and the upper and lower surfaces of said link driven to parallel horizontal planes throughout. It will readily be seen that the recess 10 of the hammer-head will serve to receive the upper end portion of the depending link 12 and that this link will in no wise be interfered with by the blow of the hammer, as described.

From the above operation it will be seen that the angle-plate 7 will serve as a stop to limit the downward movement of the hammer and that this plate being of equal thickness or height with the body of the link 11 the upper surface of the latter will thus be brought on the same plane with the upper surface of said angle-plate. When it is desired to operate upon chain-links of increased

thickness, angle-plates 7 of correspondingly-increased thickness are employed.

It is well known that in the formation of the links of certain classes of chain the links, owing to previous winding of the wire or rod from which the same are formed, are so twisted or bent as not to lie in complete contact with a horizontal surface, and it is obvious that this defect may be readily removed in the manner hereinbefore described.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a chain-link-straightening device, the combination with a horizontal link-supporting plate 4 and means for supporting an end link of a chain thereon, of a plate 7 detachably secured upon said supporting-plate and a hammer adapted to impart a blow on a link supported on said plate 4 and upon the plate 7, substantially as specified.

2. In a device for straightening chain-links, the combination with a horizontal plate 4 having a lateral recess 5, of an angular plate 7 detachably secured upon said plate 4 and extending on two sides of said recess, substantially as specified.

DANIEL CARROLL.

In presence of—
C. C. SHEPHERD,
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