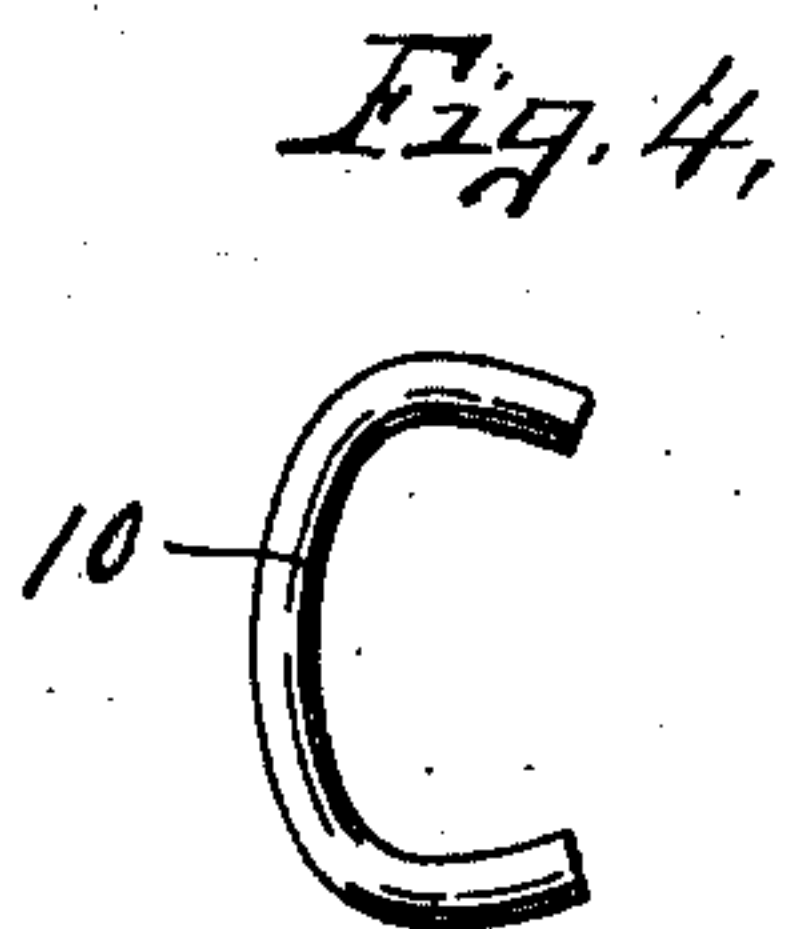
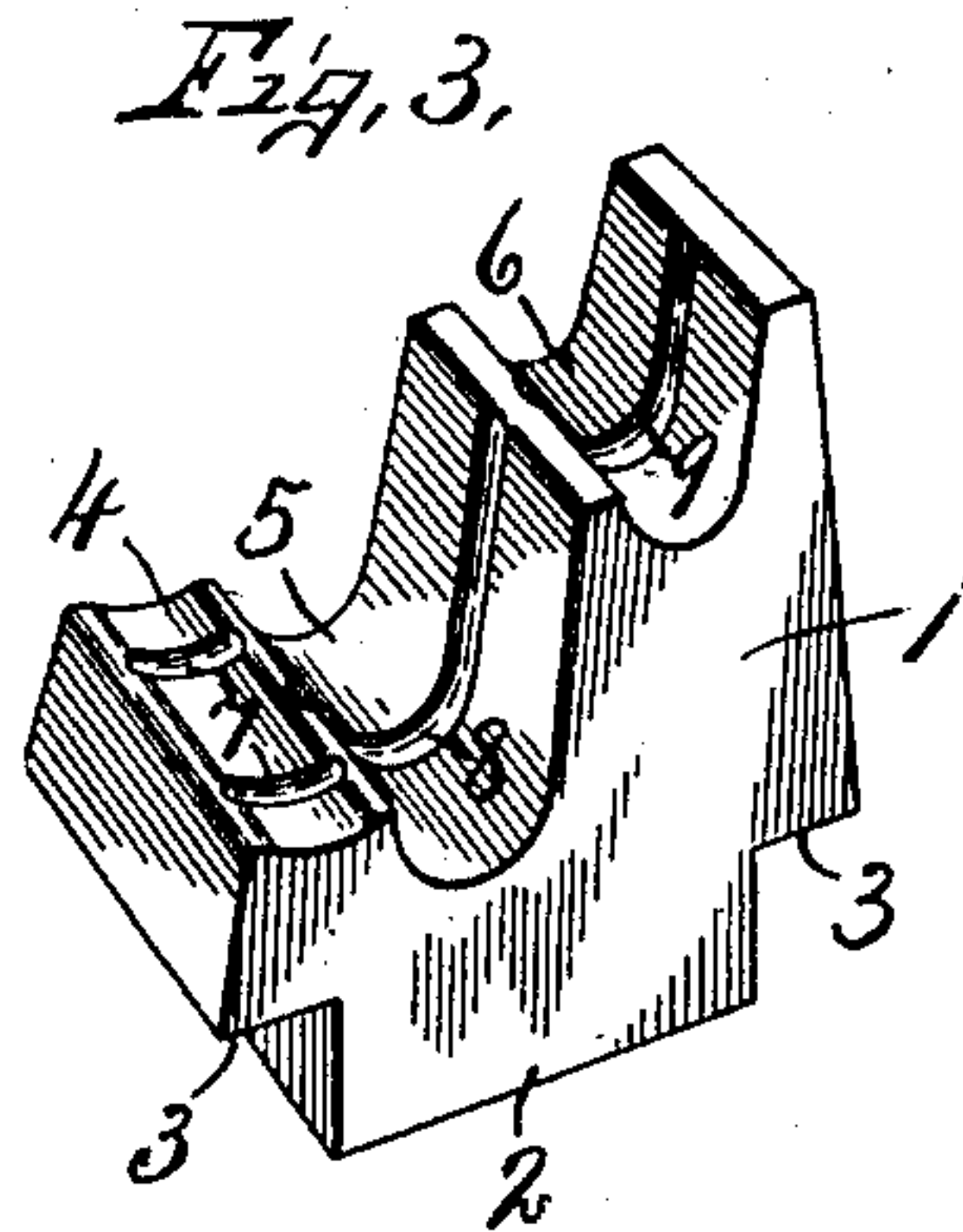
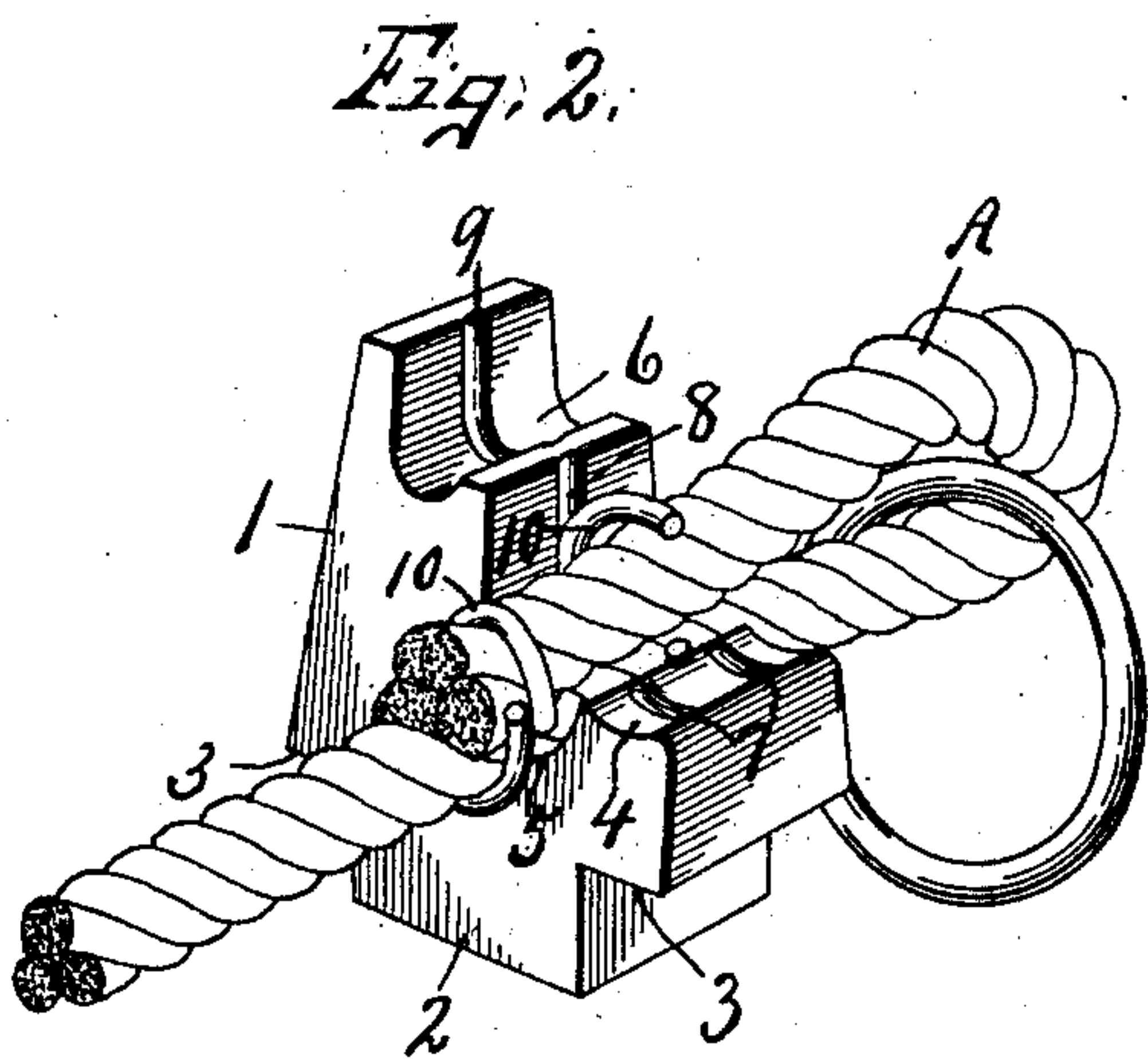
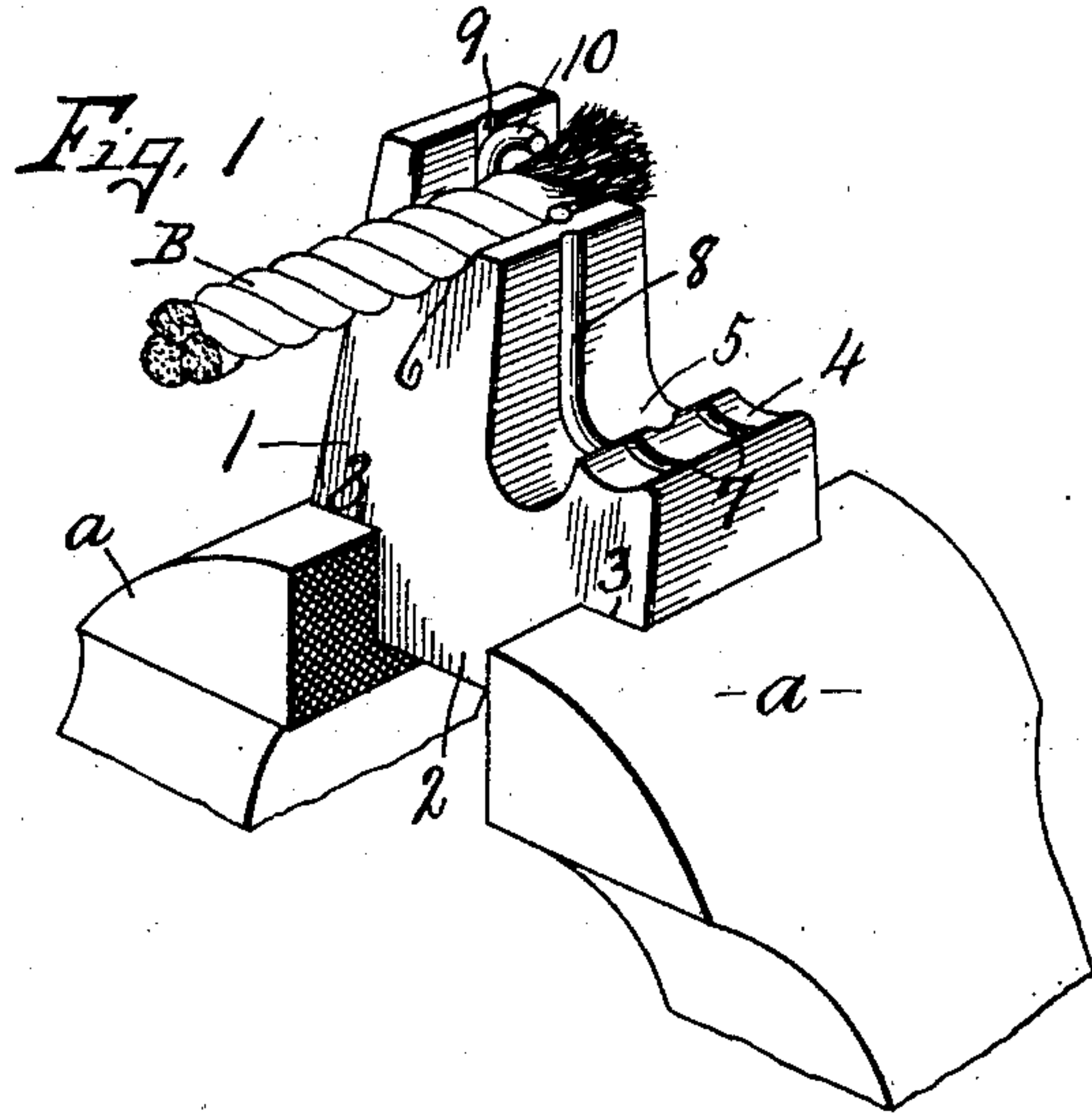


No. 826,766.

PATENTED JULY 24, 1906.

E. COVERT.
DIE FOR ROPE CLAMPS.
APPLICATION FILED JAN. 3, 1906.



WITNESSES:
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DIE FOR ROPE-CLAMPS.

No. 826,766.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed January 3, 1906. Serial No. 294,467.

To all whom it may concern:

Be it known that I, ENOCH COVERT, of Interlaken, in the county of Seneca, in the State of New York, have invented new and useful Improvements in Dies for Rope-Clamps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improvements in dies for holding and forming wire clamps for ropes.

My object is to provide a comparatively light portable die as a separate article of manufacture adapted to be clamped in any ordinary vise and provided with intersecting channels or grooves, some for receiving the rope and the others for receiving and retaining the wire clamp during the operation of bending the same around the rope.

These clamps are used for various purposes—viz., to bind the ends of the rope to prevent fraying of the strands and also to bind the end of the rope upon the main body for forming a loop to receive various instruments—such as rings, snaps, hooks, and other attachments for horse and cattle ties, halters, and similar metal parts—which are adapted to be fastened to a rope.

These clamps are also used to splice the ends of the ropes together and are usually manufactured in the form of open loops in which the portion or portions of the rope to be inclosed are clamped by pressing or hammering one end of the clamp toward the other until the rope is tightly impinged in the clamp.

Other objects relating to the specific details of my invention will be brought out in the following description.

In the drawings, Figure 1 is a perspective view of my improved die, showing it as clamped between the jaws of an ordinary vise and also showing the end of a rope and clamp seated in the die in position to bind the end of the rope to prevent fraying of the ends of the strands. Fig. 2 is a perspective view of the same die, showing the manner of forming a rope loop therein. Fig. 3 is a perspective view of the detached die. Fig. 4 is a perspective view of one of the wire clamps used for tying the parts of the rope together.

In order to clearly demonstrate the practicability of my invention, I have shown a die 1 as provided with a reduced lower end 2 of rectangular cross-section adapted to be clamped between the jaws, as *a*, of an ordi-

nary vise, whereby the die is rigidly held in an upright position, the reduced portion 2 forming horizontal shoulders 3, projecting in opposite directions therefrom and resting upon the upper faces of the jaws *a* to afford additional bearing for the die and prevent it from rocking or downward displacement when clamped in the vise.

The front, rear, and sides of the die are preferably tapering upwardly, or rather flaring downwardly, to give it strength and still leave ample room at the top for the formation of a series of transverse rope-receiving channels or grooves 4, 5, and 6 and additional comparatively narrow intersecting channels or grooves 7, 8, and 9, the latter being adapted to receive and retain the wire clamps or ties, as 10, Fig. 4.

The transverse grooves or channels 4, 5, and 6 are disposed in different horizontal planes, the channel 5 being interposed between and in a plane beneath the channels 4 and 6, while the rear portion of the die at the back of the channel 5, in which the channel 6 is formed, extends some distance above the base of the channels or grooves 4 and 5, and therefore the groove 6 or channel 6 is disposed in a plane some distance above the channel 4. This arrangement of the transverse channels or grooves in different horizontal and vertical planes affords separate working surfaces for the reception of different sizes of ropes and clamps—as, for instance, when it is desired to merely bind the ends of the rope to prevent fraying of the strands they may be placed either in the channel 4 or 6, each of which is provided with an intersecting groove or channel, as 7 or 9, for receiving and retaining the wire clamp, as 10. These wire-receiving grooves 7, 8, and 9 are formed in the bottom, front, and rear sides, and at substantially right angles to their respective rope-receiving grooves 4, 5, and 6.

The rear face of the groove 5 and also the rear portion of the groove 8 extend upwardly some distance above the plane of the groove 4 for the reception of one or more folds of the rope, as in forming a loop, as *A*, like that seen in Fig. 2, in which case the wire clamp or tie 10 is somewhat longer than it would be for merely tying the ends of the rope *B* together to prevent fraying, as seen in Fig. 1.

In the operation of my invention the wire tie or clamp, which come in the form of open loops, like that seen in Fig. 4, is placed in an

upright position in one of the grooves or channels 7, 8, or 9, with its open side facing toward the front of the die, after which the rope to be tied or clamped is inserted in the open side of the loop or clamped end and rested in one of the transverse grooves 4, 5, or 6. This leaves the lower and rear portion of the wire clamp 10 resting in one of the grooves 7, 8, or 9, while the upper portion projects forwardly over the underlying rope, said overhanging portion being then bent forwardly and downwardly by pressure or by a suitable hammer, thereby closing or wrapping the wire clamp upon and around the rope, as seen in Figs. 1 and 2, the curved bottom and front and rear sides of the grooves 7, 8, and 9 serving to deflect or turn the lower end of the wire clamp inwardly around the rope, while the upper end of said clamp is being bent or pressed downwardly.

What I claim is—

1. A one-piece die for facilitating the binding of wire clamps upon ropes, said die having a reduced lower end adapted to be clamped in a vise and having its upper surface provided with intersecting grooves of different size, larger groove being adapted to receive the rope and the smaller groove being adapted to receive and retain the wire clamp.

2. A die for facilitating the binding of wire clamps upon ropes, said die consisting of a one-piece metal block adapted to be clamped in a vise and having its upper face provided with a series of transverse grooves

in different horizontal planes, said upper face being also formed with narrower grooves intersecting the first-named groove for receiving the wire clamps.

3. A one-piece metal die for facilitating the binding of wire clamps upon ropes, said die having its upper face provided with a plurality of parallel grooves and with intersecting grooves of different dimensions, the larger grooves serving to receive the rope and the smaller grooves adapted to receive and retain the wire clamp.

4. A one-piece die for facilitating the binding of wire clamps upon ropes, said die having its upper face provided with a plurality of large parallel grooves, each groove being in a different plane from the adjacent groove, and each such large groove being provided with an intersecting groove of smaller size.

5. A one-piece metal die for facilitating the binding of wire clamps upon ropes, said die having its upper surface provided with three grooves disposed at different heights in the die, the rear face of certain of said grooves extending upwardly above the plane of the groove, and intersecting grooves of smaller dimensions than the first-named grooves.

In witness whereof I have hereunto set my hand this 28th day of December, 1905.

ENOCH COVERT.

Witnesses:

F. L. RAPPEYE,
O. G. WHEELER.