

No. 639,520.

Patented Dec. 19, 1899.

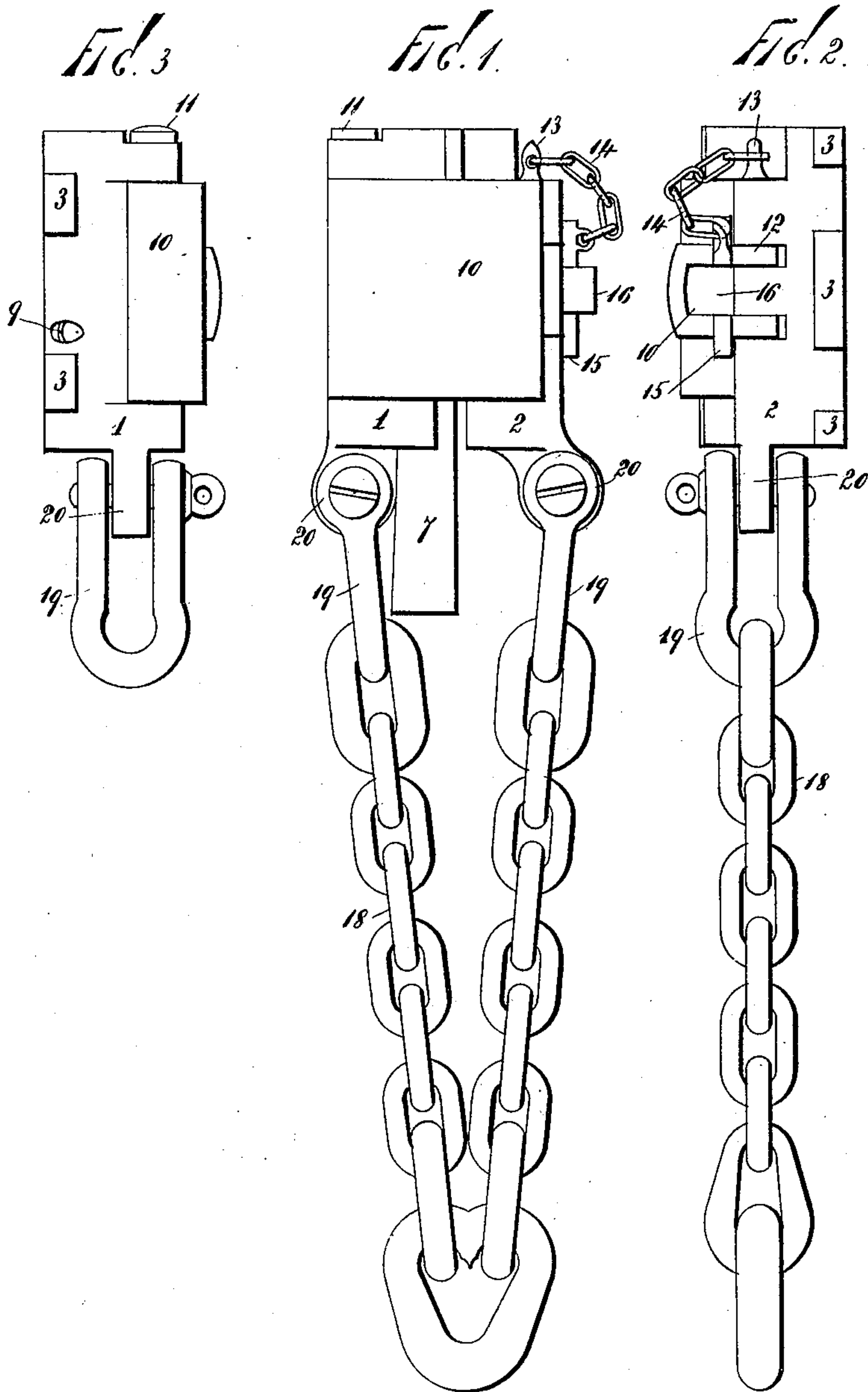
J. CARPENTER.

APPARATUS FOR HOLDING CABLES, WIRE ROPES, &c.

(Application filed Sept. 2, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES  
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FIG. 5.

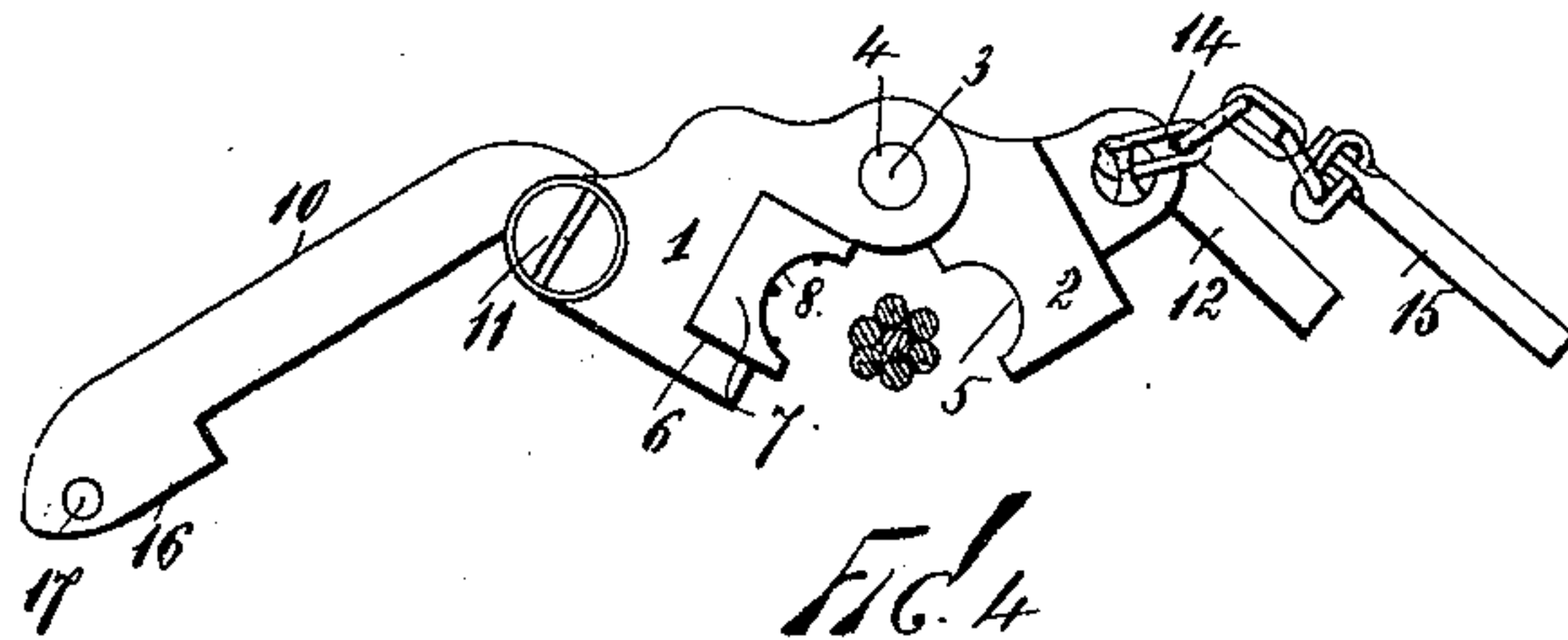


FIG. 4.

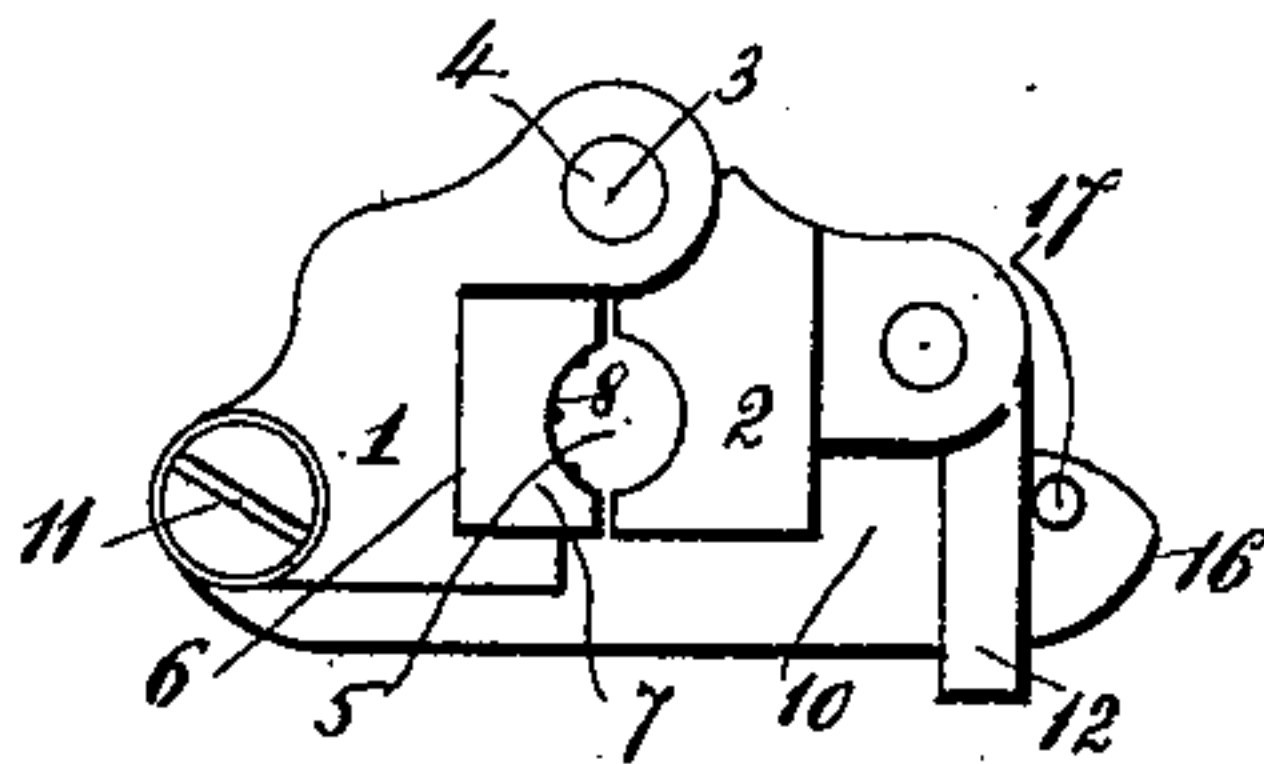


FIG. 6.

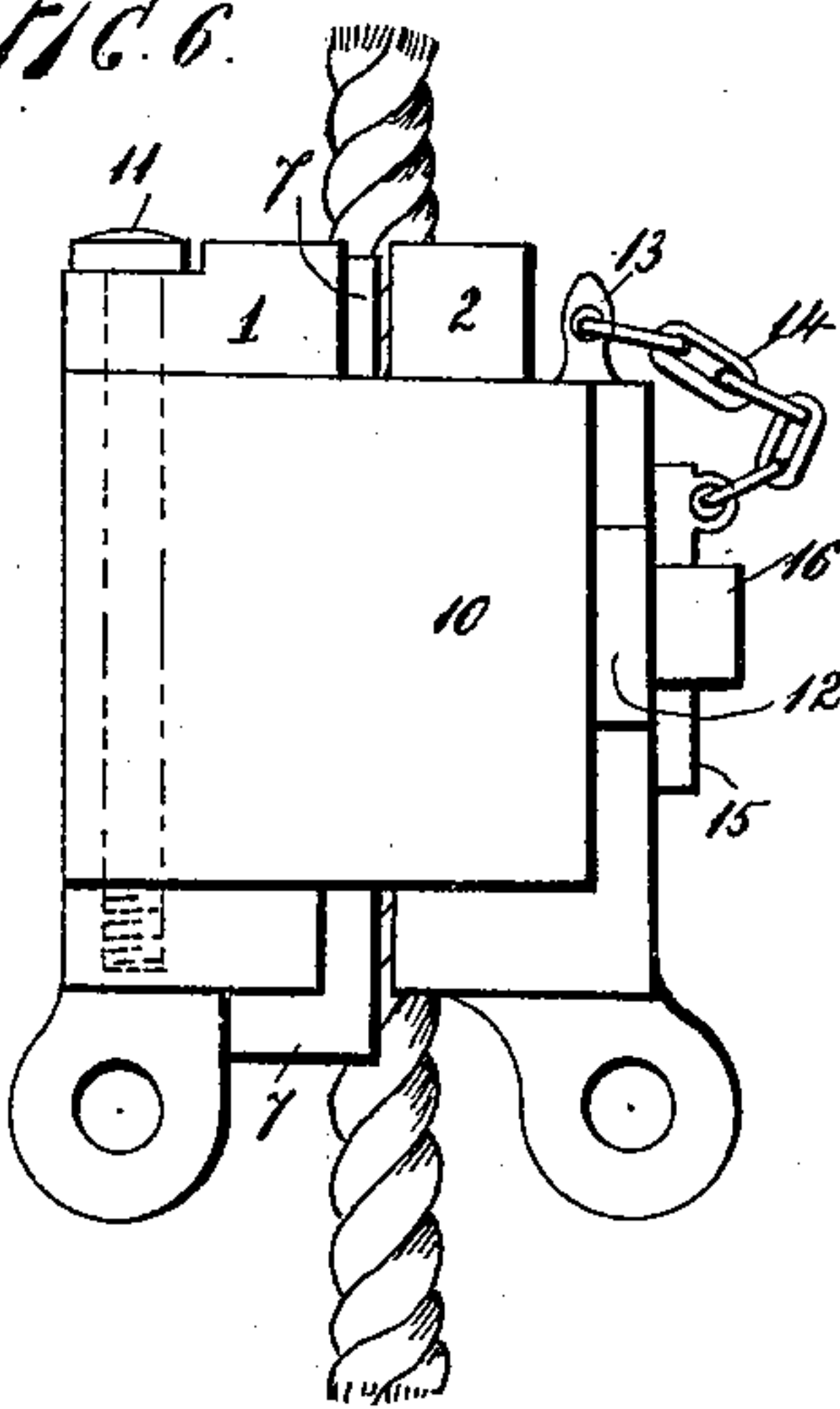
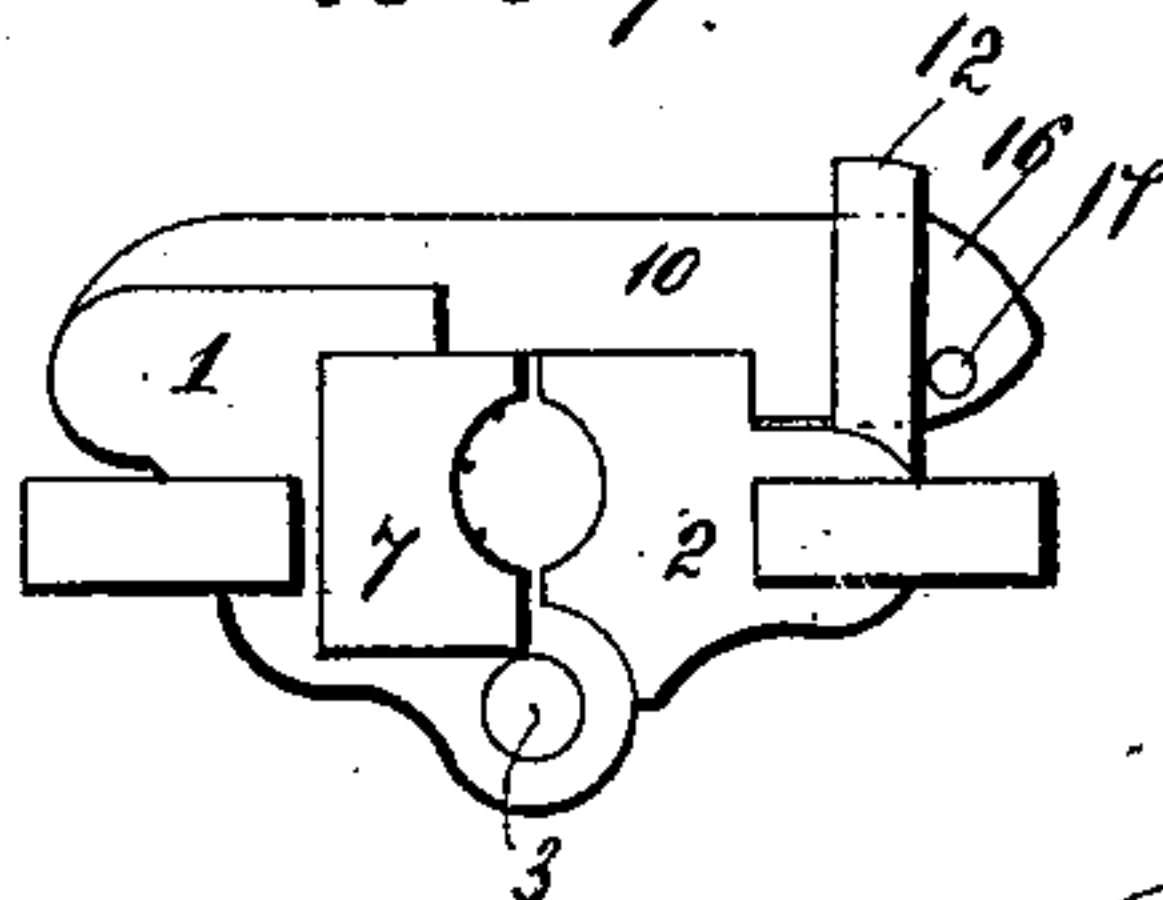


FIG. 7.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES CARPENTER, OF PORTSMOUTH, ENGLAND.

## APPARATUS FOR HOLDING CABLES, WIRE ROPES, &c.

SPECIFICATION forming part of Letters Patent No. 639,520, dated December 19, 1899.

Application filed September 2, 1899. Serial No. 729,288. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES CARPENTER, a subject of the Queen of Great Britain, residing at Kingston, Portsmouth, in the county of Hants, England, have invented certain new and useful Improvements in Methods of Holding Wire Ropes, Hawasers, &c., of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to devices for holding wire rope; and it has for its object to provide a simple and improved device of this character which will effectively and automatically adjust itself to variations in the strain on the rope and which can be readily disengaged under the heaviest strain without any injury to the rope.

In its general application my improved device is especially adapted for convenient use as a holder for all kinds of steel and iron or wire rope, towing-hawsers, cables, mooring-ropes, ropes for bringing up to buoys or for working guys while securing to bollards or bringing to or taking off from capstans, and for various other purposes. It is also adapted to secure in any position wire ropes for hydraulic elevators, mining and electrical purposes, &c.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in which—

Figure 1 is a plan view of the device constituting my invention, and Fig. 2 a front elevation thereof. Fig. 3 is a rear elevation. Fig. 4 is an end elevation showing the device closed. Fig. 5 is a corresponding end elevation showing the device open with the rope released. Fig. 6 is a plan view showing the rope in position, and Fig. 7 an end view showing the edge opposite to that shown in Fig. 4.

In the drawings forming part of this specification, 1 and 2 designate, respectively, jaws, which may be formed of malleable cast-iron or steel and are pivotally hinged together at one edge, as at 3, by means of a pin 4, passing through suitable lugs upon said jaws. This pin may be riveted at both ends. The jaw 2 has a longitudinal concave recess 5 at its in-

ner face opposite the jaw 1, while in the opposing face of the jaw 1 is provided a longitudinal squared or angular recess 6, adapted to receive a wedge-shaped pin 7, which forms the inner face of the jaw 1 and is preferably constructed of phosphor-bronze. Said wedge 7 is provided with a longitudinal concave face-groove 8, corresponding to the groove 5 of the jaw 2. The wedge is provided with a suitable guide-slot engaged by a slot-pin 9 to prevent the wedge from being detached from or coming out of the jaw 1 and at the same time permit of its sliding operation with relation thereto. Said pin 9 passes through the wall of the jaw 1.

10 designates a locking-plate which is preferably constructed of malleable cast-iron or steel and is hinged by a bolt, as at 11, to the rear edge of the jaw 1 and is adapted to project over the face of the jaws and across the joint between the same, as clearly illustrated in the drawings. The pin 11 may have a slotted screw-head and have an inner threaded end, which enters the body of the jaw 1, as indicated in dotted lines in Fig. 6.

A buckle 12, which is preferably constructed of mild steel, is connected with the jaw 2 by means of a pin 13, to which is connected a chain 14, carrying a locking-pin 15. When the device is closed, (see Fig. 4,) the nose 16 of the locking-plate 10 is received by the buckle 12 and is secured by the pin 15 passing through an eye or perforation 17 in said reduced end 16.

The device may be carried by a chain 18, having its ends connected with links 19, which are respectively pivotally connected to lugs 20 upon the respective jaws.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The rope to be held or clamped is inserted between the jaws 1 and 2 in the concave grooves 5 and 8, the device being adapted to be opened, as shown in Fig. 5, for this purpose. The device is then closed and locked in the position shown in Fig. 4, when the wedge 7 will automatically operate to adjust itself to the strain or tension on the rope and correspondingly clamp or bind the latter. It will be noted that by reason of the improved construction and relative arrangement of the



parts comprising the improved device the same can be readily and conveniently unlocked and opened to the position shown in Fig. 5, even when the tension or strain of the rope is at its maximum, to release said rope, it being understood that the strain or tension of the rope is received by the self-regulating wedge and will not affect the operation of the locking mechanism by which the jaws are held in closed position.

It will be understood that the recess 6 in the jaw 1 for the wedge 7 has a corresponding inclined or wedge bottom.

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

1. An improved device for holding and clamping wire ropes or the like, comprising the jaws having a hinge or pivotal connection, one of said jaws being provided with a recess accommodating an automatically-operating wedge, substantially as and for the purpose set forth.

2. An improved device for holding and clamping wire ropes or the like, comprising the jaws having a hinge or pivotal connection, the automatically-operating wedge carried in one of said jaws, and means for locking the jaws in relatively-closed position, substantially as and for the purpose set forth.

3. An improved device for holding and clamping wire ropes or the like, comprising the jaws having a hinge or pivotal connection, and provided with the grooved or recessed opposing faces, the automatically-operating wedge carried at the face of one of the jaws,

the locking-plate pivoted or hinged to one of the jaws, the buckle connected with the other jaw, and means for locking the buckle and locking-plate in connection, substantially as and for the purpose set forth.

4. An improved device for holding and clamping wire ropes or the like, comprising the jaws having a hinged or pivotal connection and the opposing clamping-faces between which the rope is received, the locking-plate pivoted or hinged to one of the jaws, the buckle connected with the other jaw and adapted to receive the end of the locking-plate, and means for locking the buckle and locking-plate in connected position, substantially as and for the purpose set forth.

5. An improved device for holding and clamping wire ropes or the like, comprising the two jaws having a hinge or pivotal connection and carrying means for locking them in closed position, the rope being adapted to be received and bound between said jaws, one of the jaws being provided with a longitudinal recess at its inner face, a wedge received by said recess and automatically operating therein, and means for limiting the movement of said wedge, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 14th day of August, 1899.

JAMES CARPENTER.

Witnesses:

JAMES WILLIAM WHITE,  
THOMAS BURKE.