

W. J. MALEY.
CLIMBING DEVICE.
APPLICATION FILED MAY 27, 1915.

Patented Jan. 18, 1916.

1,168,321.

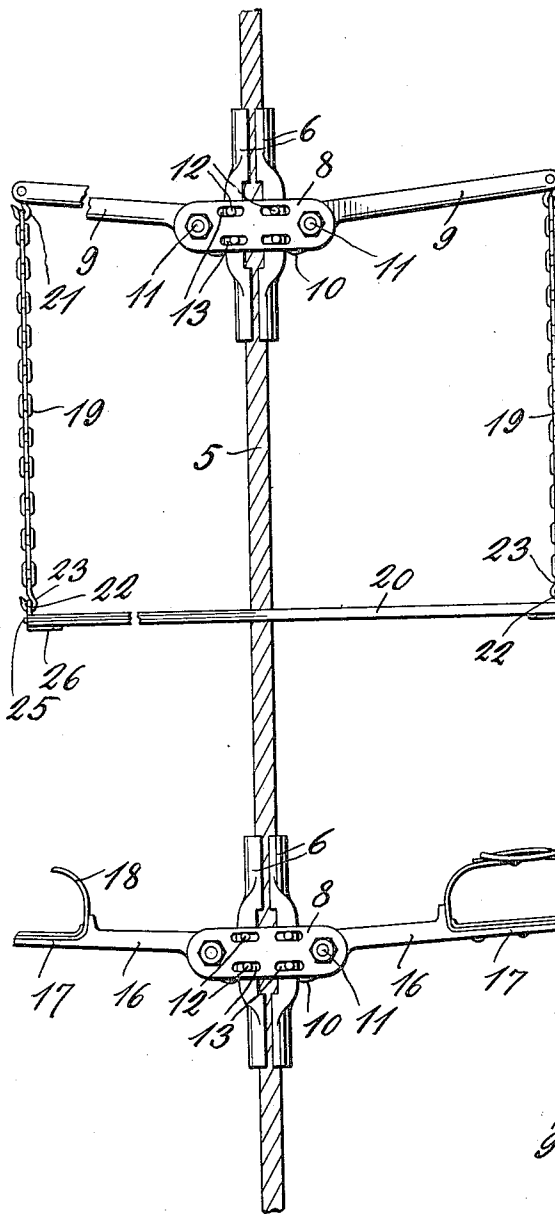


Fig. 1.

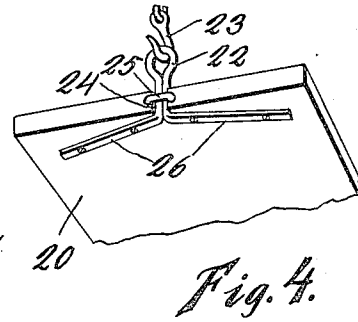


Fig. 4.

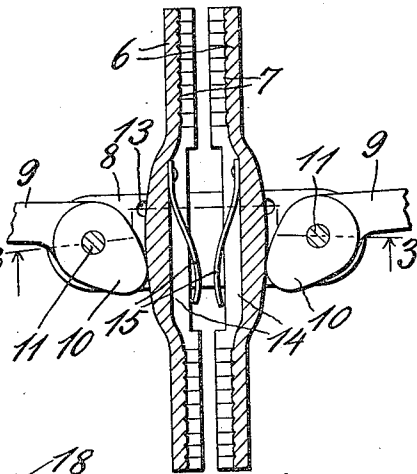


Fig. 2.

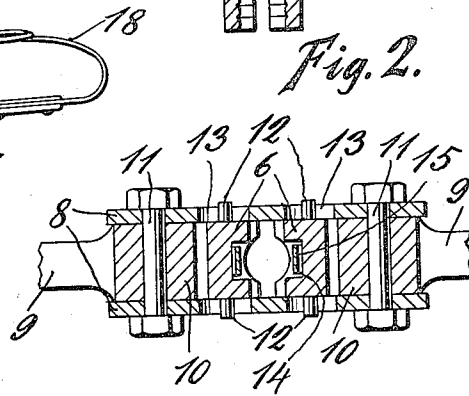


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM J. MALEY, OF CHICAGO, ILLINOIS.

CLIMBING DEVICE.

1,168,321.

Specification of Letters Patent.

Patented Jan. 18, 1916.

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To all whom it may concern:

Be it known that I, WILLIAM J. MALEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Climbing Devices, of which the following is a specification.

The device which is the subject matter of the present application for patent is designed to enable a person to easily climb a cable or rope, and the invention has for its object to provide a simple, safe and easily operated device of this kind.

The object stated is attained by means of a novel combination and arrangement of parts to be hereinafter described and claimed and in order that the invention may be better understood, reference is had to the accompanying drawing in which—

Figure 1 is a side elevation of the device; Fig. 2 is a sectional detail of one of the clamping members; Fig. 3 is a horizontal section on the line 3—3 of Fig. 2, and Fig. 4 is a perspective detail.

In carrying out the invention there is provided a pair of cable clamps, which are operated alternately to grip the cable, one clamp being operated by the person's hands and the other clamp by the person's feet.

In the drawing, 5 denotes a rope or cable to which the invention is applied.

The hand-operated clamp comprises two opposite jaw members 6 between which the cable 5 seats, said jaws having means for clamping the same to the cable. The jaws are of suitable length to obtain a firm grip and their inner faces are concave to fit the cable and also corrugated or serrated transversely, as indicated at 7 in order that a better hold on the cable may be obtained. The jaws are enlarged intermediate their ends and formed with opposite and adjacent flat faces on which are mounted plates 8 projecting a short distance from the jaws. These plates are located on opposite sides of the jaws, and between their outer projecting ends are mounted hand levers 9 having cam-shaped inner ends 10. The levers are pivoted between the plates 8 by bolts 11 passing therethrough, said bolts also serving to secure the plates to the jaws. A sliding connection is provided between the plates 8 and the jaws 6, the latter carrying pins 12 and the former having slots 13 into which the pins extend. These slots extend transversely, and the jaws are therefore free to

approach each other to grip the cable 5 and to recede to let go the same. The cam-shaped ends 10 are opposite the back of the jaws, and they are so arranged that they are jammed thereagainst when the levers are swung down, whereby the jaws are advanced to grip the cable. The gripping faces of the jaws 6 have recesses 14 in which are mounted flat springs 15 which press at their free ends against the cable 5 and operate to separate or spread the jaws when the levers 9 are swung upward to back the cam ends 10, thereby releasing the jaws from the cable.

The foot-operated clamp is the same in construction as the hand-operated clamp hereinbefore described, except that its levers 16 have flattened outer ends 17 to provide a foot hold, the latter also carrying securing straps 18.

In operation, the person alternately grips the cable with the hand and the foot clamps to obtain a support, and the clamp which is released from the cable is slid upward, or downward according to whether the person is ascending or descending.

The hand-operated clamp can also be used as a scaffold support for painters, window washers and other persons, by attaching chains or other suspension devices 19 to the outer ends of the levers 9 and suspending a seat or platform 20 from the chains, the outer ends of the levers carrying pivoted hooks 21 for making connection with the chains. The weight of the person on the seat 20 pulls the levers down to apply the jaws 6 to the cable and to grip the same in the manner hereinbefore described. To ascend or descend, the operator may temporarily suspend himself from the cable while he is shifting the clamp to another position. On the ends of the seat 20 are secured eyes 22 for attachment of the chains 19, the same having hooks 23 at their lower ends to engage the eyes. The ends of the seat have notches 24 in which the shanks of the eyes seat. Staples 25 are driven into the seat ends, across the shanks of the eyes. Beneath the seat, the shanks of the eyes have diverging branches 26 which are secured to the under side of the seat.

I claim:—

1. In a climbing device, a clamp comprising opposite gripping jaws having recesses in their gripping faces, springs mounted in said recesses to open the jaws,

plates located on opposite sides of the jaws, a sliding connection between said plates and the jaws, the ends of the plates projecting beyond the back of the jaws, and levers pivoted between the projecting ends of the plates and having cam-shaped inner ends adapted to engage the back of the jaws.

2. In a climbing device, a clamp comprising opposite gripping jaws, plates located on opposite sides of the jaws, a sliding connection between said plates and the jaws, the ends of the plates projecting beyond the back of the jaws, and levers pivoted between the projecting ends of the plates and having cam-shaped inner ends adapted to engage the back of the jaws.

3. In a climbing device, a clamp comprising opposite gripping jaws, plates located on opposite sides of the jaws, a sliding connection between said plates and the jaws, the ends of the plates projecting beyond the back of the jaws, levers pivoted

between the projecting ends of the plates and having cam-shaped inner ends adapted to engage the back of the jaws, and foot supporting and securing means at the outer ends of the levers.

4. In a climbing device, a clamp comprising opposite gripping jaws, plates located on opposite sides of the jaws, a sliding connection between said plates and the jaws, the ends of the plates projecting beyond the back of the jaws, levers pivoted between the projecting ends of the plates and having cam-shaped inner ends adapted to engage the back of the jaws, suspension members carried by the outer ends of the levers, and a seat carried by the suspension members.

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

WILLIAM J. MALEY.

Witnesses:

S. J. LEHRER,

H. G. BATCHELOR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."