

No. 895,397.

PATENTED AUG. 4, 1908.

B. BRAZELLE.
ROPE CLAMP.

APPLICATION FILED APR. 6, 1907.

Fig. 1.

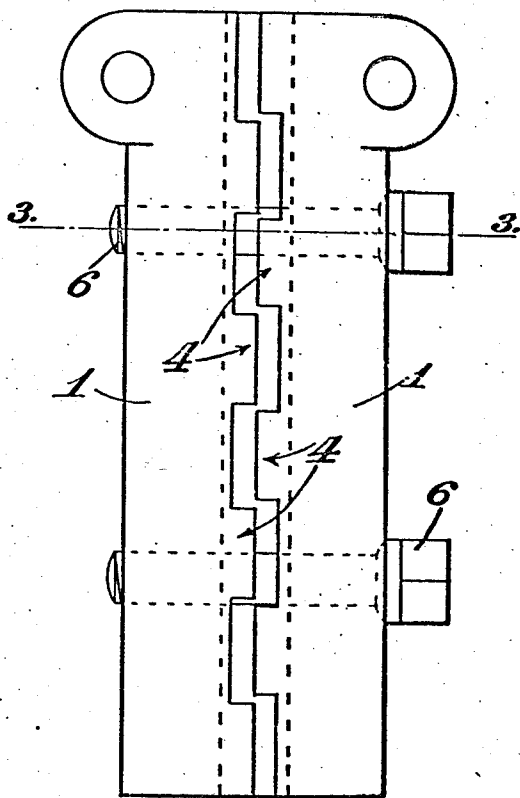
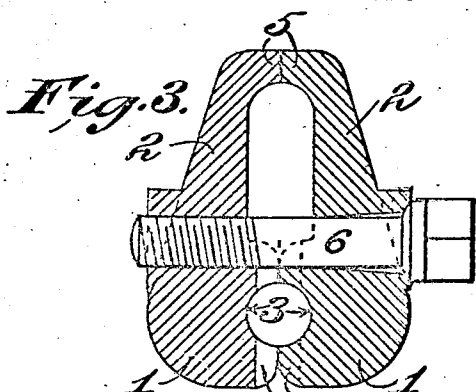
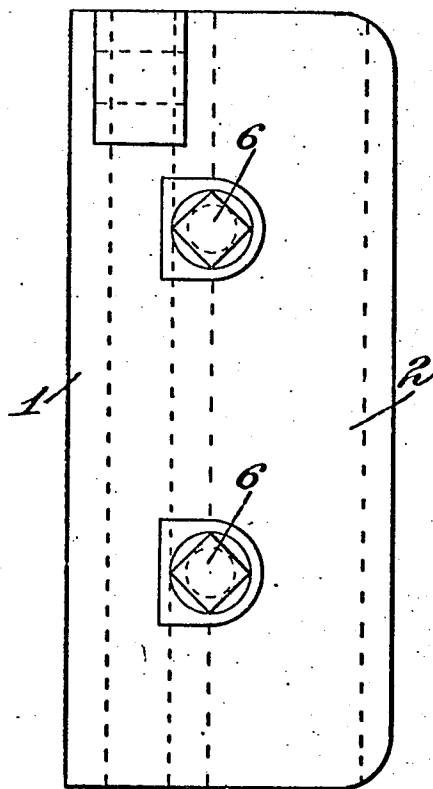


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

BENJAMIN BRAZELLE, OF KIRKWOOD, MISSOURI, ASSIGNOR TO A. LESCHEN & SONS ROPE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

ROPE-CLAMP.

No. 895,397.

Specification of Letters Patent.

Patented Aug. 4, 1908.

Application filed April 6, 1907. Serial No. 366,694.

To all whom it may concern:

Be it known that I, BENJAMIN BRAZELLE, a citizen of the United States, and a resident of the city of Kirkwood, county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Rope-Clamps, of which the following is a specification.

Rope clamps of the kind commonly used have a tendency to flatten the rope transversely and to squeeze the side portions thereof outwardly in the space between the clamping jaws. The effect is to strain and even to break the fibers or strands at the points of greatest displacement. This result is most likely to develop and is most objectionable with long wire ropes used in pumping or drilling deep wells.

My invention relates to rope clamps and has for its principal object to overcome the tendency to strain or break the outer fibers or strands of the rope and to secure other advantages hereinafter more fully appearing.

The invention consists principally in providing a substantially continuous lateral support for the rope along the meeting portions of the jaws.

It also consists in providing the jaws with staggered projecting portions arranged to overlap each other so as to constitute side supports for the rope.

It also consists in the arrangement and construction of parts hereinafter described and claimed.

In the accompanying drawing, which forms part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is an edge view of my rope clamp; Fig. 2 is a side view thereof; and, Fig. 3 is a transverse section thereof on the line 3—3 of Fig. 1.

My clamp comprises two counterpart members each of which comprises a clamping jaw 1 and a lateral extension 2. The face of each jaw has a longitudinal groove 3 of nearly semicircular section and a series of transverse projections 4, the projections of one jaw being staggered with respect to the projections on the opposing jaw, so that each projection is opposite a depression.

The endmost portions 5 of the lateral extensions are turned toward each other to space the members apart and to serve as a fulcrum for the leverage action when the screw bolts 6 force the members together. The bolts or headed screws 6 extend through

holes provided therefor in one member and work in threaded holes provided therefor in the other member. The members are also provided near their upper ends with transverse holes adapted to receive rope shackles.

The operation of the device is as follows: The screw bolts 6 are loosened and the rope is inserted edgewise between the jaws so as to rest in the grooves provided therefor in the jaws. The bolts are then tightened to clamp the jaws on the rope. In this operation, the projections on the respective jaws overlap each other and fit loosely in the opposite depressions and thereby furnish a lateral support for the rope and prevent the undue spreading thereof outside of the longitudinal groove in the space between the jaws. By this arrangement, the overlapping projections furnish a substantially continuous lateral support for the rope peripherally as well as longitudinally, and the stresses, which in the old construction were concentrated on the outer fibers or wires along the meeting edges of the jaws, are distributed in the present construction more or less radially throughout the entire circumference of the rope. Consequently, the tendency of my clamp is to reduce the diameter of the rope by subjecting all portions thereof to comparatively uniform pressure, and the tendency to tear the outer fibers or strands is minimized.

Obviously, my device admits of considerable modification without departing from my invention, and I do not wish to be limited otherwise than as specified in the appended claims to the particular construction shown and described.

What I claim as my invention and desire to secure by Letters Patent is:

1. A rope clamp comprising two members, each member having a longitudinally grooved jaw and a lateral extension, and means for clamping said members together, each of said jaws having a series of transverse projections along the margins of the groove arranged to fit loosely between the projections on the other jaw to form a substantially continuous lateral support for the rope.

2. A rope clamp comprising two members, each member having a jaw and a lateral extension, and means for clamping said members together, each of said jaws having a longitudinal groove conforming to the shape of the rope and a series of transverse pro-

jections along the margins of said groove, the projections on one jaw being arranged to fit loosely between the projections on the other jaw and thereby furnish a substantially continuous lateral support for the rope, said clamping means comprising screw bolts extending transversely through such lateral extensions close to said jaws.

3. A rope clamp comprising two members, each member being arranged for engagement with a rope shackle and having a jaw and a lateral intumed extension, and means for clamping said members together, each of said jaws having a longitudinal groove of substantially semicircular section and

a series of transverse projections along the margins of said groove, and the projections on one jaw being staggered with relation to the projections on the other jaw to interlock with each other and form a substantially continuous lateral support for the rope. 20

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 3rd day of April, 1907, at St. Louis, Missouri. 25

BENJAMIN BRAZELLE.

Witnesses:

JULIA B. MEGOWN,
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