

No. 702,214.

Patented June 10, 1902.

W. N. HULL.

ROPE CLASP.

(Application filed Dec. 28, 1901.)

(No Model.)

Fig. 1.

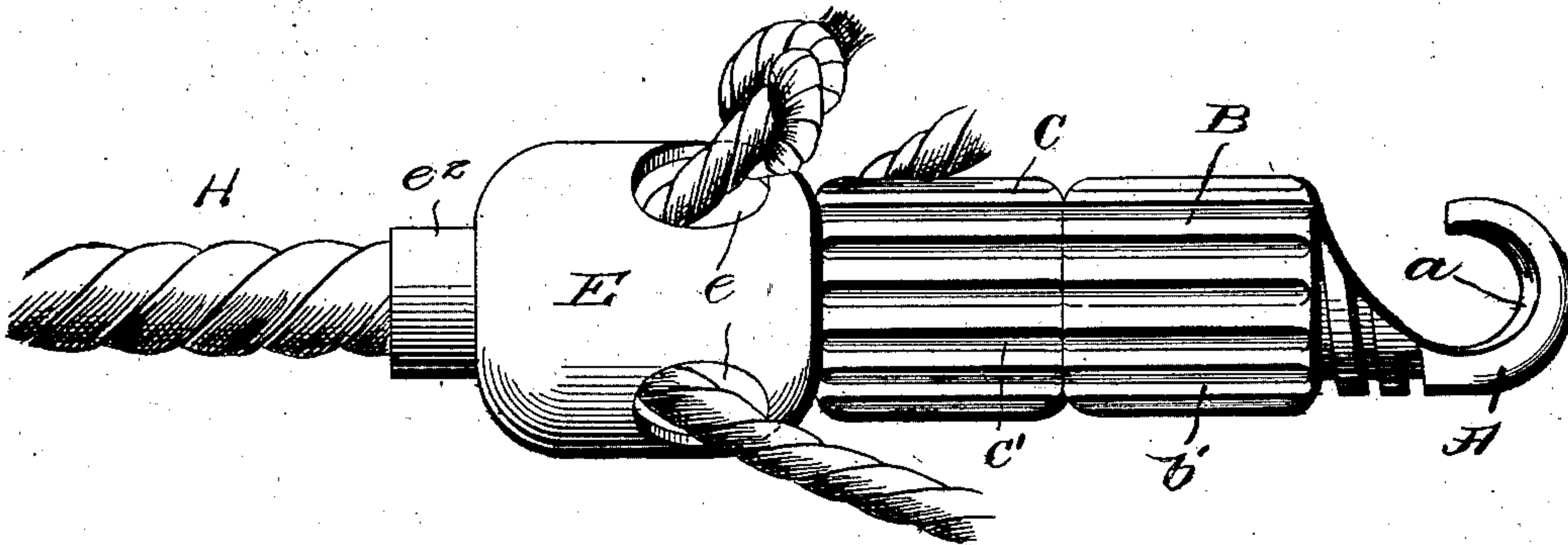


Fig. 2.

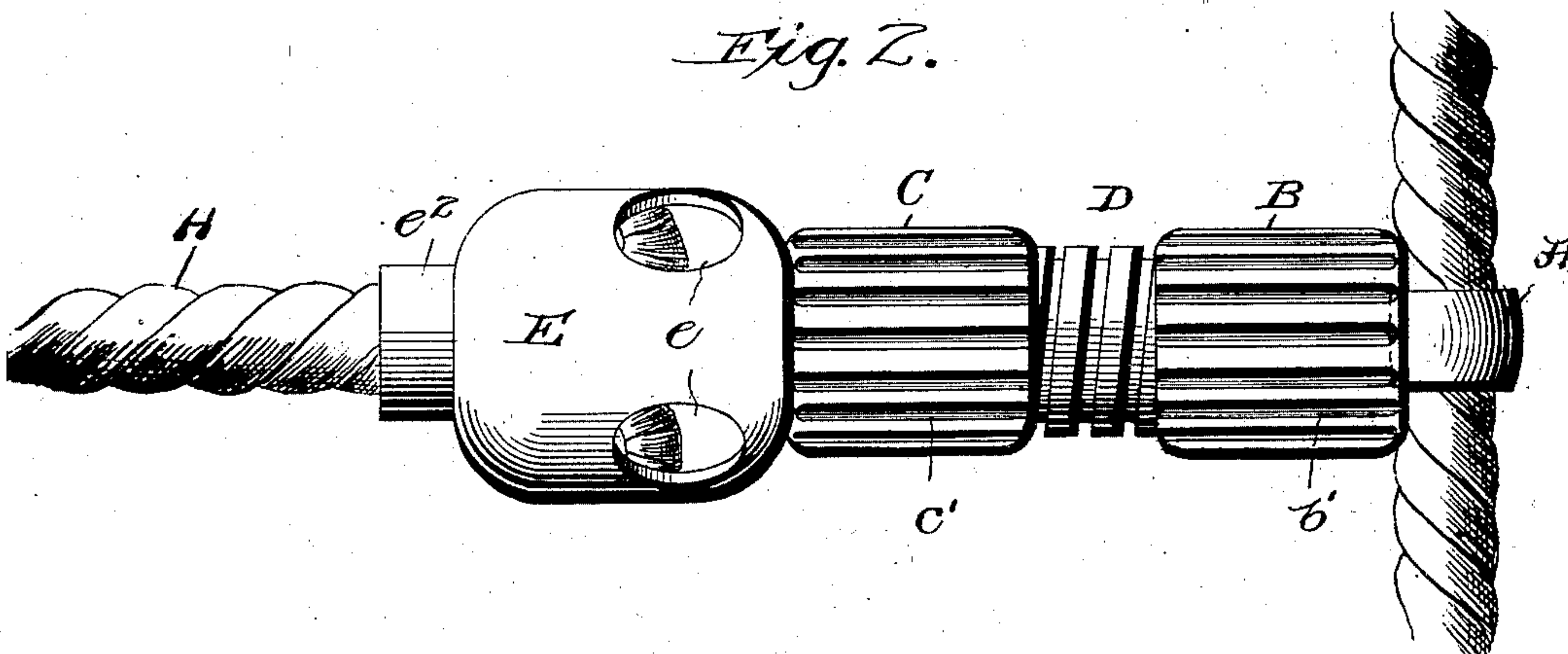
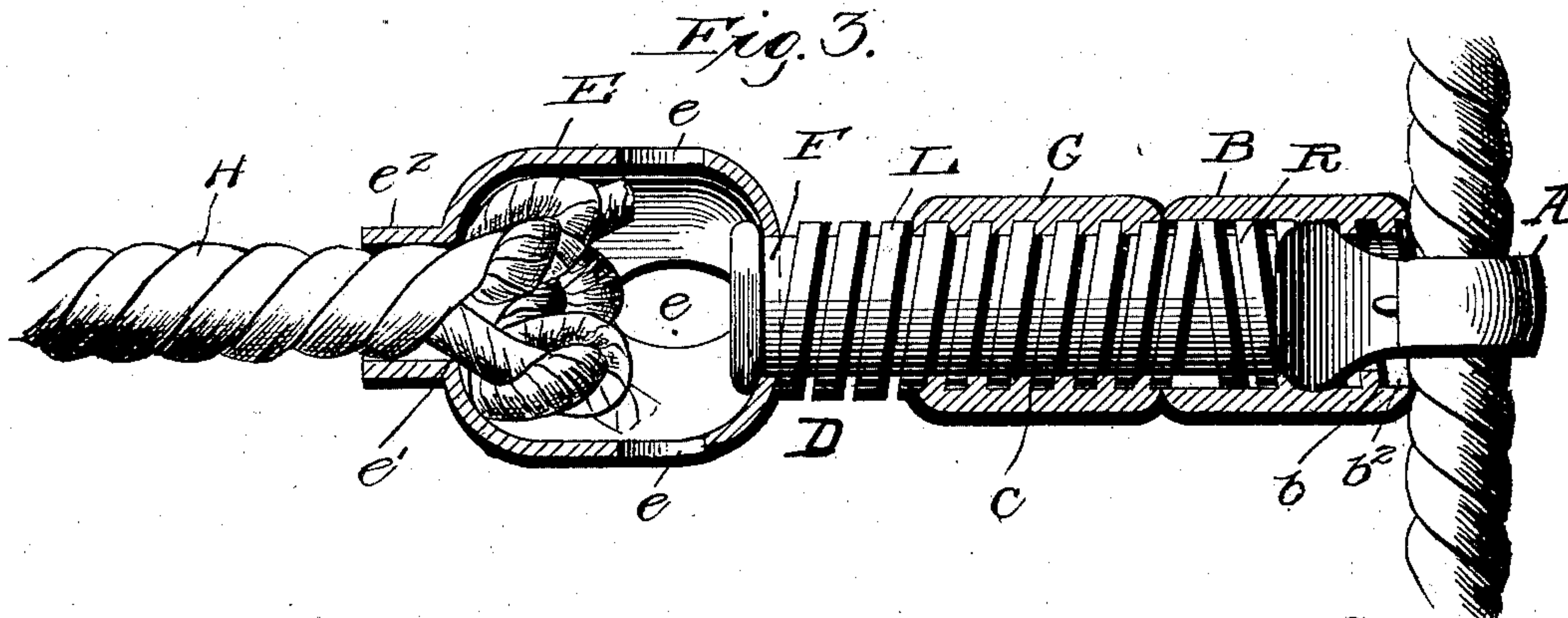


Fig. 3.



Witnesses

D. L. Mooker
D. P. Mooker

Inventor

William N. Hull

By

H. C. Carman
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM N. HULL, OF YOUNGSTOWN, OHIO.

ROPE-CLASP.

SPECIFICATION forming part of Letters Patent No. 702,214, dated June 10, 1902.

Application filed December 28, 1901. Serial No. 87,580. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. HULL, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Rope-Clasps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to clasping or gripping devices, particularly of the type generally known as "rope-clasps" and designed for a variety of uses.

To this end the invention contemplates a simple, effective, and novel form of rope-clasp or equivalent device, comprising simple and practical means for securely gripping at any desired point a rope or equivalent connection and also embodying novel means for effecting a secure coupling connection with the end of a rope or flexible member which is designed for the clasp or device to be fitted thereto as an attachment.

In carrying out the above general objects the invention is not only useful in any way that an ordinary rope-clasp may be employed, but also possesses special utility as a stock-tie, in which the rope is fastened around the horns or neck of the stock; also, for handy use in connection with swings, hammocks, clothes-lines, trolleys, fire-escapes, binders for loads, and the like, for well-ropes, as well as for such other uses as may be desired or required.

From a structural standpoint the invention contemplates a construction which is materially stronger than the rope, involves no springs, rivets, screws, or bolts, and is easily and quickly manipulated.

With these and many other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts which will be herein-after more fully described, illustrated, and claimed.

The structural features of the clasp may necessarily be modified to some extent without departing from the spirit or scope of the invention; but a preferred embodiment thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a rope-clasp constructed in accordance with the present invention and showing a rope end whose strands are untwisted to illustrate the method of coupling the end of the rope with the clasp. Fig. 2 is a similar view of the clasp, showing the same not only coupled or fitted to one end of the rope, but clasped upon the body portion of a rope. Fig. 3 is a longitudinal sectional view of the clasp, showing the binding member or nut turned into engagement with the rope within the hook and also showing the locking-nut in locking engagement with the binding member or nut.

Like letters of reference designate corresponding parts throughout the several views of the drawings.

The clasping part of the device includes an engaging member A in the form of a hook, preferably of the conventional U shape, and designed to take over or receive therein the rope to be clasped or held by the device. The said engaging member or hook A is provided at its inner side with a gripping element *a*. This gripping element is designed to afford a gripping surface or projection for positively preventing slipping of the rope within the hook and is preferably in the form of a projecting rib disposed centrally between the side edges of the hook A and extending longitudinally of the hook and following the curvature thereof.

The engaging member or hook A of the clasp or device is carried at one end of a main clasp-stem D and is preferably formed integrally therewith and lies within the longitudinal plane of the stem, although slight variations in this structural feature may obviously be resorted to. The main clasp-stem D, in addition to the engaging member or hook A, is provided with separate right and left threaded portions R and L, respectively, the portion R of the stem being cut with right-hand threads and the portion L being cut with left-hand threads, for the purposes to be explained. The right-hand-threaded portion R of the clasp-stem is preferably disposed nearest the engaging member or hook and is designed to receive thereon the binding member B. This binding member is in the form of a sleeve-nut, having interior threads *b*, engaging and matching the right-hand threads R, so that the mem-

ber B may run toward the engaging hook A by the ordinary right-hand turning thereof. The sleeve-nut constituting the binding member B is preferably of a cylindrical form with the exterior ribbed grip-surface b' and is further provided at one end with an annular biting-flange b^2 , which biting-flange is adapted to meet and preferably overlap the point of the hook A, besides biting directly into the rope held within the said hook A upon the gripping element or rib a thereof. By reason of the disposition of the hook A with reference to the stem D the biting end of the binding-nut B works directly over the mouth of the hook, and therefore also constitutes the opening and closing element for the hook.

Coöperating with the binding-nut B is a locking-nut C, preferably in the form of a cylindrical sleeve, with interior threads c , matching and engaging the left-hand threads L of the stem, so as to work in a contrary direction to the binding-nut B and exert the influence and action of a jam or locking nut to secure the nut B against loosening when moved against the rope. The locking-nut C, with the exception of the disposition of its threads, is preferably a duplicate of the binding-nut B and, like the latter, is provided with an exterior ribbed grip-surface c' .

To provide for connecting the clasp with a rope end, such as H, there is preferably associated with the clasp-stem D a hollow globular coupling-basket E, preferably having a swivel connection F with the end of the stem opposite the engaging hook. The said hollow globular coupling-basket E is also provided in the body portion thereof with a plurality of strand-holes e , a rope-opening e' , and a receiving-collar e^2 . Through the collar e^2 and the opening e' is inserted the rope end H, which is first untwisted for a suitable distance, so that the individual strands may be passed outward through the strand-holes e and knotted. After the individual strands have been thus knotted the knotted terminals are pushed back through the holes e into the basket, and at the same time the rope is twisted, so as to get the full strength and benefit of the torsion. This provides a secure and effective coupling for connecting the clasp with the rope end.

From the foregoing it is thought that the construction, use, and many advantages of

the herein-described rope-clasp will be readily apparent without further description, and it will be understood that various changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. A clasp of the character described, comprising a stem having a coupling device at one end and an engaging hook at the other, a binding member adjustable upon the stem and provided at one end with a biting-flange adapted to work over and past the nose of the hook, and a locking member also adjustable upon the said stem and adapted to work against the end of the binding member opposite the biting-flange of the latter.

2. A device of the class described, comprising a stem having separate right and left threaded portions, and at one end an engaging hook provided with an inner gripping element, a sleeve binding-nut engaging one of the threaded portions of the stem and provided at its outer end with an annular biting-flange designed, in its active position, to overlap and receive within itself the nose of the engaging hook, and a sleeve lock-nut engaging the other threaded portion of the stem and working against the inner end of the binding-nut.

3. A device of the class described comprising a threaded stem provided with means for engaging and clasp the rope, and a separate hollow globular coupling-basket receiving and swiveled directly on one end of the threaded stem, said coupling-basket being provided with a rope-receiving opening aligned with the threaded stem, and also with a plurality of side strand-holes to permit of the knotting of the individual strands of a rope end exterior to the basket after the insertion of said rope end therein.

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

WILLIAM N. HULL.

Witnesses:

W. H. WOOLF,
C. F. BEARD.