To all whom it may concern:

Be it known that we, HARRY H. WILSON and HOWARD H. ROSS, both citizens of the United States, and residents of NASEL, in the county of Pacific and State of Washington, have invented a new and improved Apparatus for Splicing Ropes and Cables, of which the following is a full, clear, and exact description.

The object of our invention is to provide a conveniently portable apparatus, by means of which the ends of ropes and cables may be securely held while being spliced, and also to provide means whereby sufficient pull may be exerted on the spliced strands to draw them into position in the splice.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 shows a perspective view of the apparatus illustrating its operation. Fig. 2 is an enlarged detail of the vise for holding and compressing the rope while being spliced, showing a portion of the vise and the base or support in action; and Fig. 3 is a vertical section taken on the line 3—3 in Fig. 2.

The base or support A is preferably made of some suitable hard wood of sufficient length and width to support the operating parts in convenient juxtaposition to each other, and of sufficient thickness to sustain the strains incident to splicing heavy ropes and cables. Upon the upper surface of the base or support A and at a point approximating the central portion thereof and near one edge, is a vise for holding the rope or cable during the splicing operation and compressing the splice. This vise comprises a base or anvil member B, which is made of some suitable metal, preferably steel, and has the general shape of a horseshoe, the legs b being of sufficient length to receive and permit the operation between them of the clamping lever G. The base part B is provided with shoulders b' upon the upper surfaces of the leg portions against which the rope to be spliced will be clamped, as will be hereinafter set forth. The anvil member B is fixed to the base or support A over a slot a in said support, and it is held in fixed position by means of a bolt a'.

The clamping member C of the vise consists of a head c having a hook-shaped gripping claw c' and a downwardly-extending nose c", and is of a thickness corresponding substantially to the width of the space between the legs b of the anvil member B. The nose portion c" is provided with perforations c" to receive a pivotal pin c' by means of which the clamping member of the vise is held in position and may also be adjusted to accommodate ropes and cables of varying diameters. Extending rearwardly from the head c is a long lever e' provided with a handle e", by means of which the clamping member of the vise may be operated to clamp and release the rope or cable.

It is, of course, essential that the rope or cable be held without requiring the use of the hands of the operator for that purpose in order that he may have both hands free to make the splice, and in order to hold the lever e' with the clamping claw in contact with the rope or cable there is provided a curved ratchet bar E, which is pivoted mounted at e so as to freely swing as the lever is raised or lowered and which bar passes up through a slot a' in the lever e' near the handle e". This ratchet bar E has ratchet teeth e' arranged to be engaged by a pivoted spring-pressed paw e" mounted upon the upper surface of the lever e" in position to engage the ratchet teeth e'.

At the opposite edge of the base or support A, and preferably directly opposite the vise is a check F, of the usual form and arrangement, and having hooked arms f beneath which the rope to be spliced may be passed and about which it will be drawn by the gripper to place upon the strands of the rope sufficient strain to cause them to be drawn into proper position. The gripper G comprises a hook-shaped claw g and a pivoted clamping jaw g' which is pivoted within the slot or space of the claw g by a pin g". The lower end g" of this gripping member is arranged to forcibly engage the rope or cable when the upper end is drawn backward. To draw backward the upper end of the lever g" it is provided with a pivoted pull rod g' which passes through a bearing g" in the upturned end g" (see Figs. 1 and 4 of the drawings).

The gripper G is arranged to be connected to a lever H which is pivoted at h' upon a stand h" attached to the upper surface of the base or support A and at its upper end the
lever H is provided with a grip or handle G. Preferably the grip G is detachably connected to the lever H by means of a hook K carried by a short length of chain attached to the pull rod N of the gripper, the said hook being arranged to engage a bail L carried by the lever H. Preferably, there will be two of the levers H mounted upon the upper surface of the base or support A, one at each end, as shown clearly in Fig. 1 of the drawings, and this in order that the strand-positioning pull may be imparted in the direction as shown in the drawing or in the opposite direction, it being only necessary to disconnect the gripper G from one lever H and connect it to another to secure this result. Of course, in the event of the use of the lever H at the right of Fig. 1, the rope or cable will pass under the hooked arm F adjacent to said lever.

In use, the rope or cable R to be spliced is passed within the vise so that the end to be spliced will project therefrom, as shown in Fig. 1 of the drawings, and from thence it passes about one of the hooked arms f of the chock F in position for the convenient engagement of the gripper C with the strands of the splice.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. An apparatus for splicing ropes and cables, comprising a base or support, a chock at or near one edge thereof, a clamping vise at or near the opposite edge, a gripper for engaging the strands, and means for exerting a pull on the said gripper.

2. An apparatus for splicing ropes and cables, comprising a base or support, a chock at or near one edge thereof, a clamping vise at or near the opposite edge, a gripper for engaging the strands, a lever pivoted to the base or support, and means for connecting the gripper to the lever.

3. An apparatus for splicing ropes and cables, comprising a base or support, a slot therein, a rope-clamping vise attached to said base over the slot and comprising a fixed base plate having a shoulder, a lever pivoted to said base plate, a claw on said lever for engaging the rope, and a holding device for said lever.

4. An apparatus for splicing ropes and cables, comprising a base or support, a slot therein, a rope-clamping vise attached to said base over the slot and comprising a fixed base plate having a shoulder, a lever pivoted to said plate, a claw on said lever for engaging the rope, a pivoted ratchet passing through said lever, and a pawl on said lever for engaging said ratchet.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HARRY H. WILSON.
HOWARD H. ROSS.

Witnesses:
A. B. LEASON.
CHARLIE AKO.