Oct. 21, 1930. F. B. STONER 1,779,053

SPLICING CLAMP TOOL

Filed Jan. 29, 1930

Fig. 1

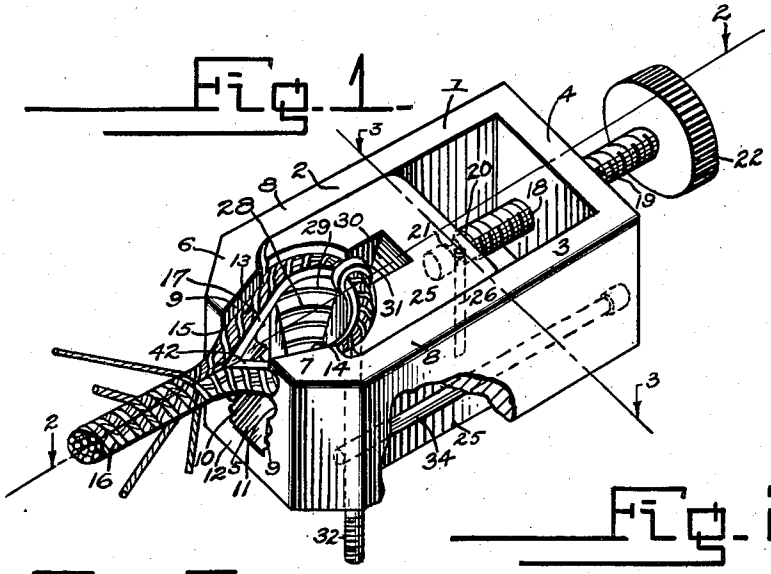


Fig. 2.

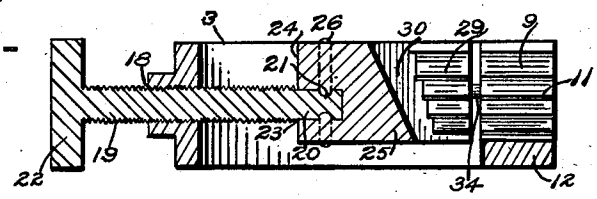
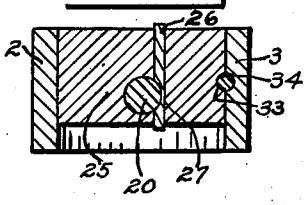


Fig. 3.



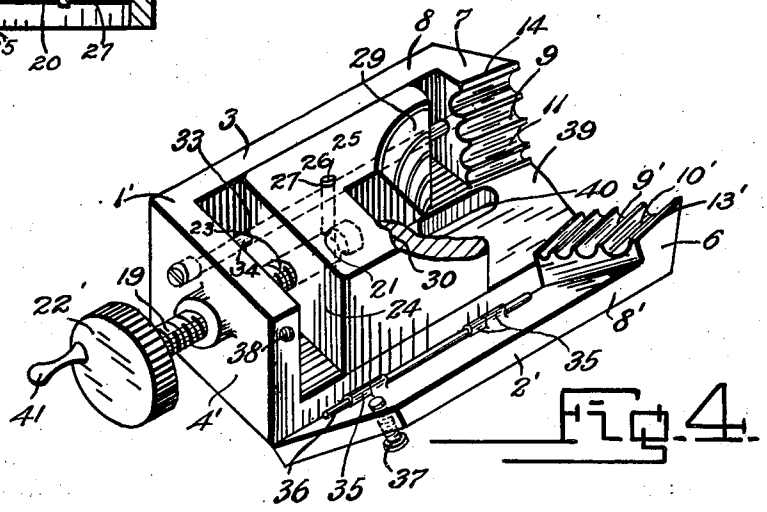


Fig. 4.

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UNITED STATES PATENT OFFICE

FREDERICK B. STONER, OF MARCH FIELD, CALIFORNIA

SPLICING-CLAMP TOOL

Application filed January 29, 1930. Serial No. 424,436.

(GRANTED UNDER THE ACT OF MARCH 3, 1883, AS AMENDED APRIL 30, 1928; 370 O. G. 757)

This invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to a clamping tool for use in splicing ropes or cables and particularly to tools of this character adapted for use to retain the bight of a rope or cable around a thimble while the cable is being spliced.

One object of my invention is to provide a splicing clamp tool with means for readily securing the bight of a rope or cable around a thimble.

Another object of my invention is to provide a splicing clamp tool which is adapted to receive and hold any size thimble surrounded by the bight of any size rope or cable.

Another object of my invention is to provide a splicing clamp tool, having its major portion in one piece which permits the tool to be easily and cheaply manufactured and at the same time provides one of durable and rugged construction.

Still another object of my invention is to provide a splicing clamp tool adapted to hold a rope or cable firmly pressed in at the point of a thimble so that the throat of the spliced portion lies snugly against the point.

The usual type of splicing clamp ools now employed for holding a rope or able about a thimble are made in numerous sections thus making the tools expensive to construct, difficult to secure to a rope or cable, and are attached to the cable in such a manner as to require the use of pliers or wrenches, thereby making the operation thereof clumsy and difficult.

It is therefore the aim and purpose of this invention to devise a splicing clamp tool which is simple and cheap to construct, efficient in use, readily applied to and removed from a cable to which it may be attached and is not liable to get out of order.

With the above and other objects and advantages in view the invention preferably consists in the arrangement and combination of parts to be hereinafter more fully described and claimed and illustrated in the accompanying drawing; it being understood however, that various changes in form and proportion and other details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Referring more particularly now to the accompanying drawing in which corresponding parts are indicated by similar reference characters,

Fig. 1 is a perspective view of one form of my invention showing how my clamp engages the cable or rope for splicing;

Fig. 2 is a longitudinal sectional view taken on line 2—2 of Fig. 1 with the cable and its adjuncts removed;

Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 1, and

Fig. 4 is a perspective view of a modified form of my invention.

In the illustrated embodiment characterizing this invention, the yoke shaped member 1 is made of a single casting of metal or other suitable material comprising side walls 2 and 3 and a rear wall 4. The open end 5 of the yoke shaped member 1 is V shaped being formed by the extensions 6 and 7 of the ends 8 of the side walls 2 and 3.

Formed in the surfaces 9 of the ends 8 of the yoke shaped member 1 are series of grooves 10 and 11, which series of grooves 10 and 11 converge from dimensions corresponding to a maximum size thimble surrounded by the bight of a cable down to dimensions of a minimum size thimble surrounded by the bight of a cable, where they are joined by the cross piece 12 for connecting the ends 8 of the yoke shaped member 1 together. The surfaces 9 of the ends 8 diverge inwardly as shown at 13 and 14 to accommodate the bight 15 of a rope or cable 16 surrounding the thimble 17.

The rear wall 4 of the yoke shaped member 1 is provided with a screw threaded opening 18 through which a clamping screw 19 is threaded.

Near the inner end 20 of the clamping screw 19 is a peripheral groove 21 and the outer end thereof is provided with a knurled

handle 22 for the purpose of normal rotation.

The inner end 20 of the clamping screw 19 enters an aperture 23 in the rear surface 24 of the follower member 25 as shown in Fig. 2 of the drawing and is attached thereto by means of a securing pin 26 which enters a vertically formed passage way 27. The securing pin 26 engages the peripheral groove 21 on the inner end 20 of the clamping screw 19 to lock the screw 19 against longitudinal motion relative to the follower member 25 and to rotatably engage said screw 19.

The face 28 of the follower member 25 adjacent the open end 5 of the yoke shaped member 1 comprises a series of superimposed grooves 29 registering with the above mentioned grooves 10 and 11 in the open end 5 of the yoke shaped member 1 and are interrupted by a recess 30 to receive the eye 31 of a turnbuckle 32 attached to the rope or cable thimble 17.

The side 3 of the follower member 23 is provided with a longitudinally extending groove 33 to slidably engage a locking and guiding member 34 fixed in said yoke shaped member 1.

The modification illustrated in Fig. 4 is similar to that already described but has the side wall 2′ hingeably mounted on the yoke shaped member 1′ by means of the bosses 35 through which a pintle 36 extends, by this construction the wall 2′ is permitted to fall down out of the way when desired. The folding wall 2′ is held in closed position by means of locking screw 37 which cooperates with the threaded aperture 38 in the side of the rear end 4′ of the yoke shaped member 1′. The bottom of the yoke shaped member 1′ is closed by the floor member 39 which contains a longitudinally extending aperture 40 to receive the free end of a turnbuckle not shown. The knurled handle 22′ is provided with the hand grip 41 to manipulate with a better purchase the follower member against the bight of a rope or cable not shown.

In operating my clamping tool, the rope or cable 16 to be spliced is placed around a thimble 17 and positioned within the pair of grooves 10 and 11 of the V shaped opening 5 of the yoke shaped member 1 which corresponds in size to the dimensions of a thimble surrounded by the bight of the cable to be spliced. The point 42 of the thimble 17 projects outwardly of the yoke shaped member 1. The knurled handle 22 is now operated causing the clamping screw 20 to move the follower member 25 in a forward direction until one of the grooves 29 on the face 28 of the follower member 25 engages the rear portion of the bight 15 of the cable 16. This operation will make it possible to secure a tight splicing and a proper throat seizing at the point 42 of the thimble 17, the cumbersome method of splicing cables is eliminated and an expeditious tool is provided for holding the bight of any size rope or cable surrounding any size thimble.

Now that I have disclosed my invention what I claim as new and useful is:

1. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member and a follower member therein, and means for operating said follower member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of a thimble.

2. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member and a follower member therein, and means for operating said follower member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of complementary grooves converging from dimensions to fit the bight of a rope or cable around a thimble of maximum size down to dimensions to fit the bight of a rope or cable around a thimble of minimum size.

3. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member provided with a bottom, an elongated aperture in said bottom to receive one end of a turnbuckle linked with the bight of the rope or cable on said thimble, a follower member seated on said bottom within said yoke shaped member, and means for operating said follower member toward the open end of said yoke shaped member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of a thimble surrounded by the bight of a rope or cable.

4. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member having one of its sides movably mounted to fold down out of the way when desired, a follower member within said yoke shaped member, and means for operating said follower member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of the bight of a rope or cable.

5. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member having one of its sides movably mounted to fold down out of the way when desired, means for securing

said movable side into fixed normal position, a follower member within said yoke shaped member, and means for operating said follower member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of the bight of a rope or cable surrounding a thimble.

6. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member and a follower member therein, and means for operating said follower member, the said operating means having a peripheral groove near its inner end and said follower member having a recess to receive said end and peripheral groove, and a securing pin in said follower member slidably engaging the peripheral groove of said operating means, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of the bight of a cable surrounding a thimble.

7. A splicing clamp tool adapted to retain the bight of a rope or cable around a thimble to be secured therein upon splicing, comprising a yoke shaped member, a locking and guiding member fixed in said yoke shaped member, a follower member within said yoke shaped member having a groove to slidably engage the said locking and guiding member of said yoke shaped member and means for operating said follower member, the open end of said yoke shaped member and the side of said follower member adjacent thereto having a series of grooves, each groove complementary to the shape of the bight of a cable surrounding a thimble.

FREDERICK B. STONER.