

Sept. 2, 1958

E. Z. BUKOWSKI

2,849,772

CLOTHESLINE CLAMP

Filed Sept. 9, 1955

FIG-2.

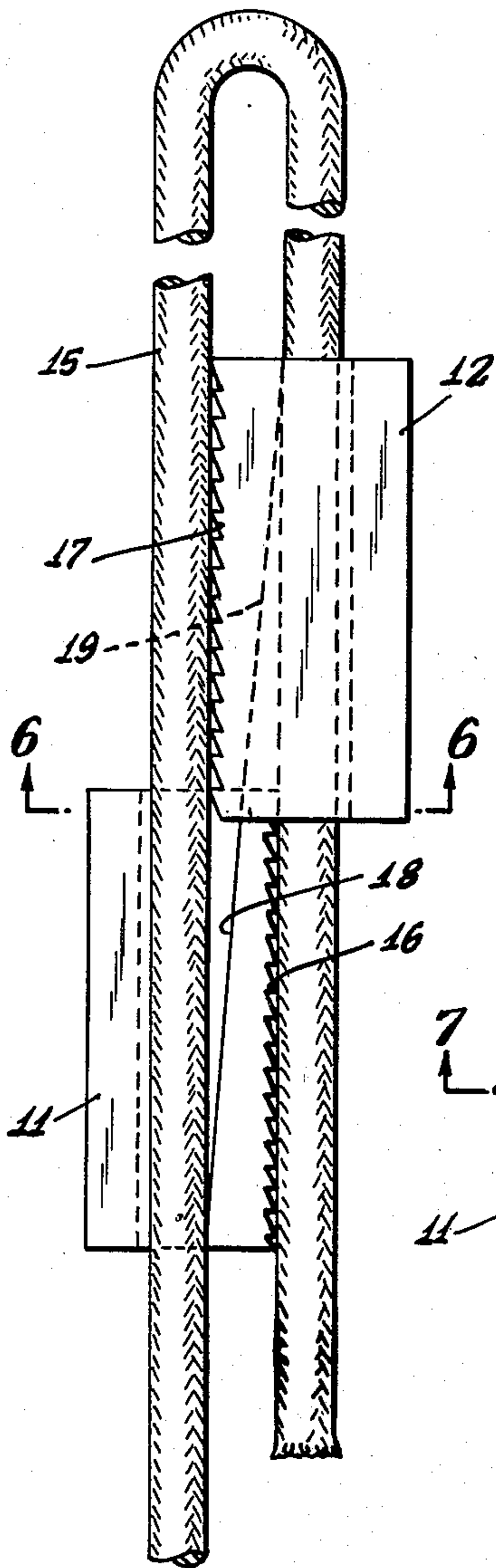


FIG-1.

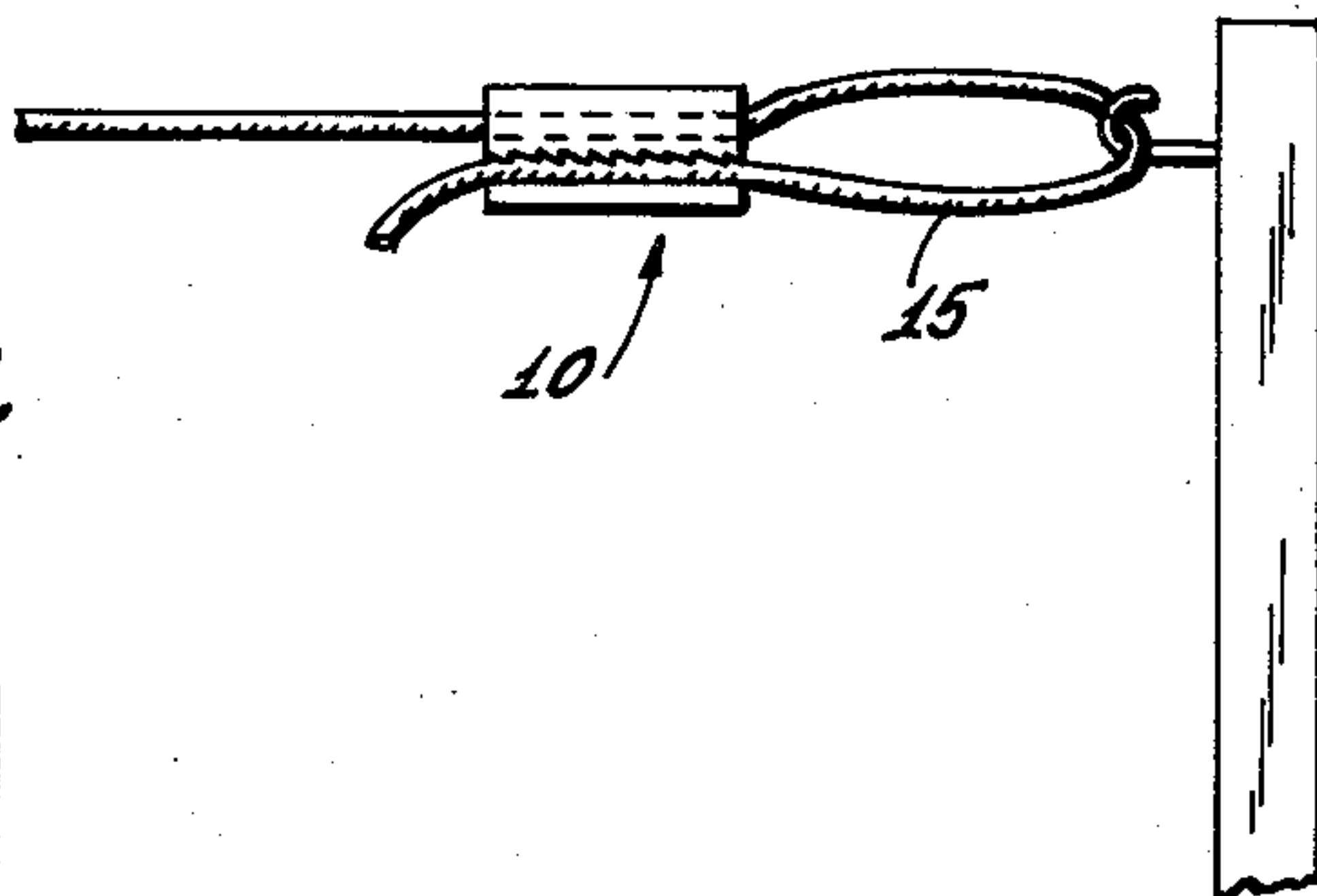


FIG-3.

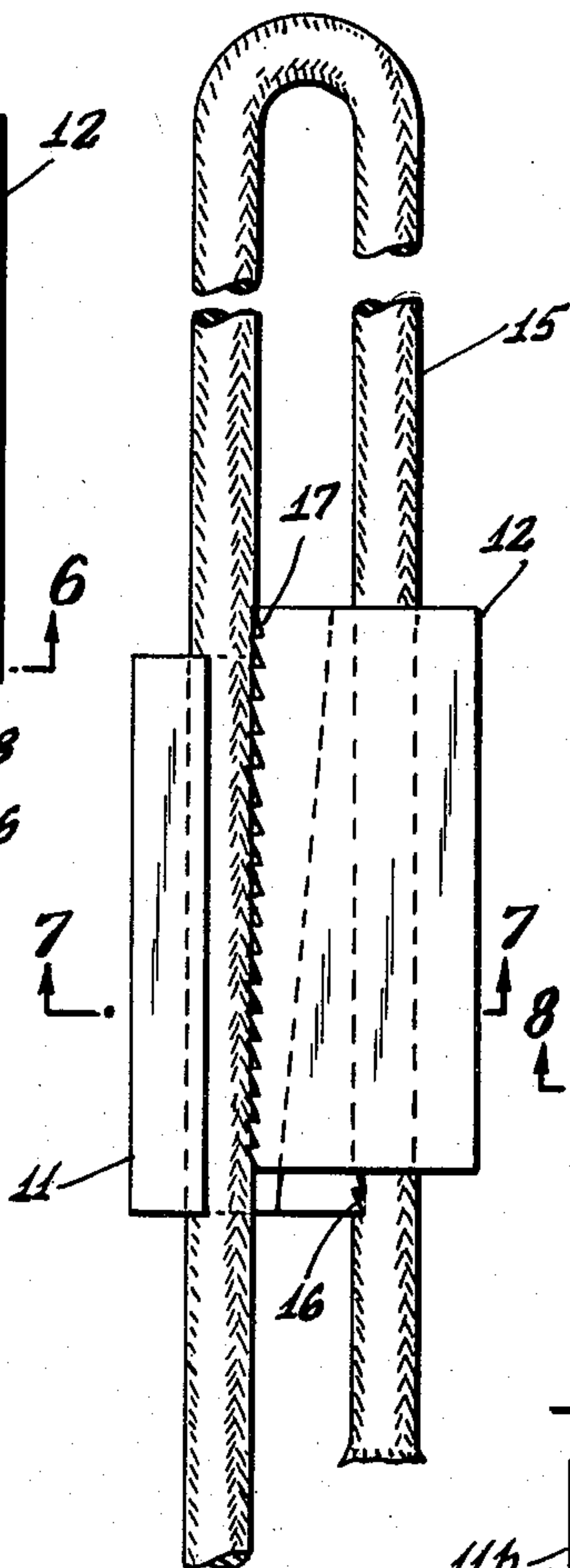


FIG-4. FIG-5.

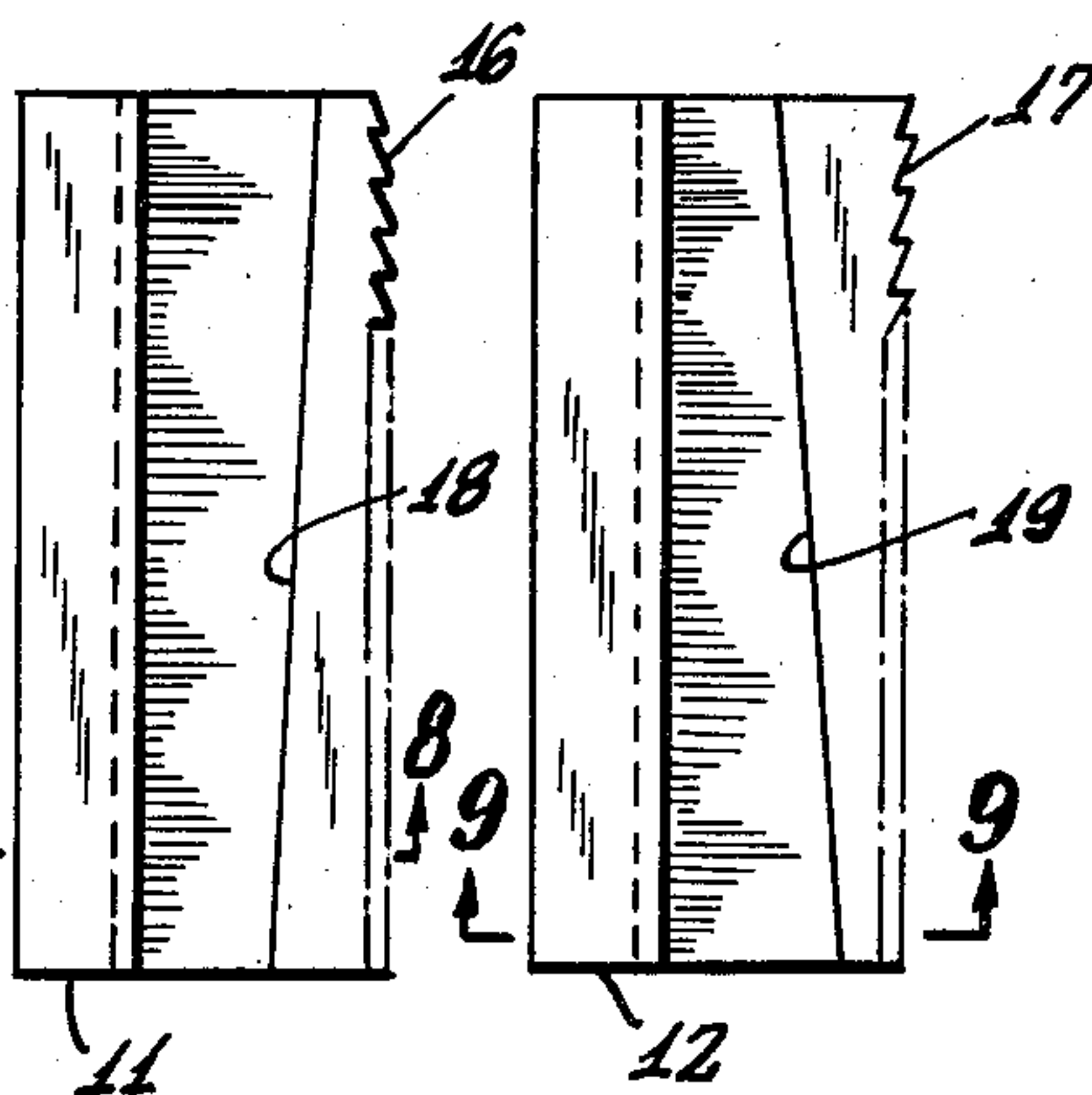


FIG-8. FIG-9.

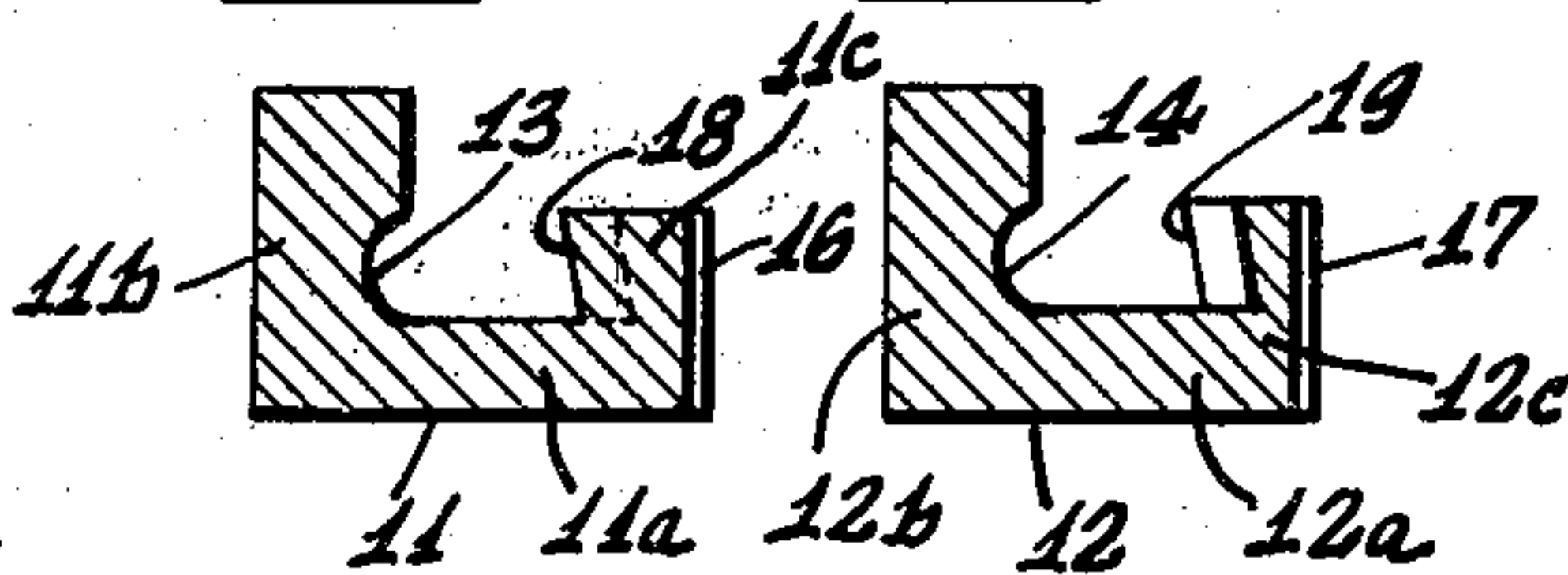


FIG-6.

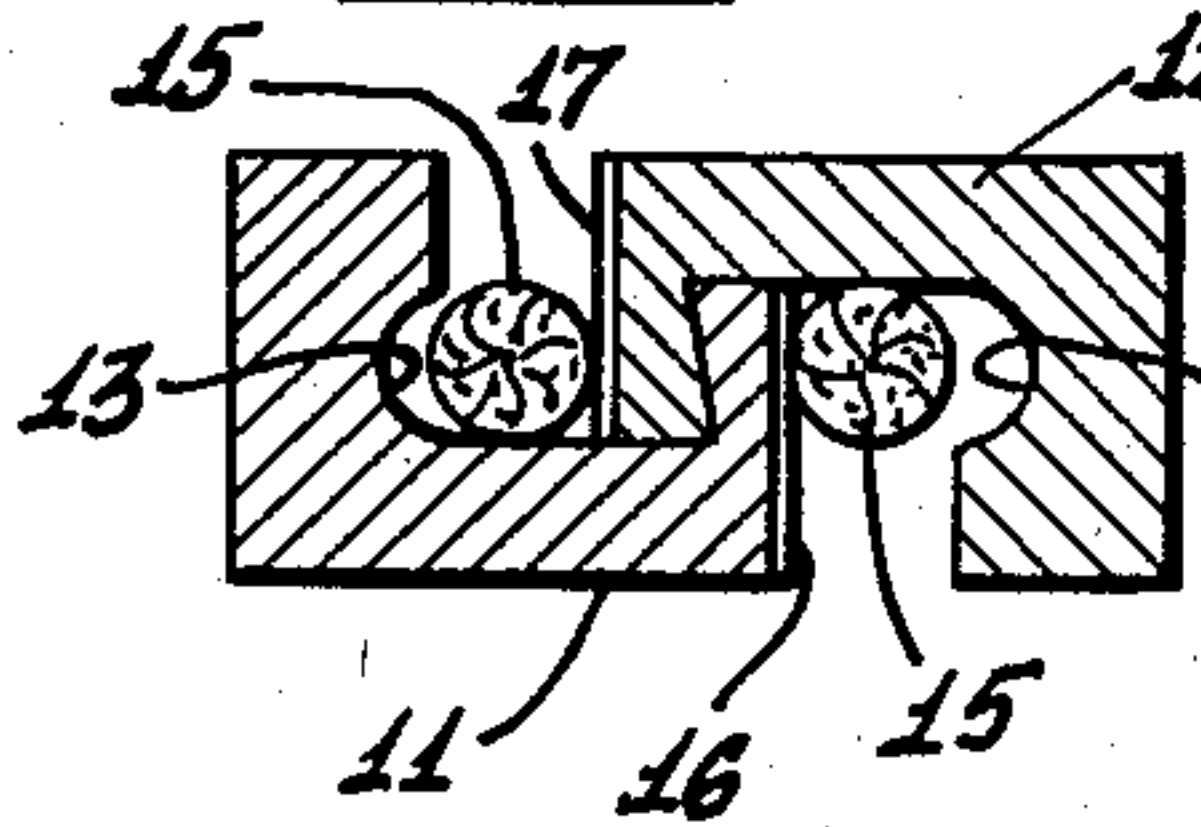
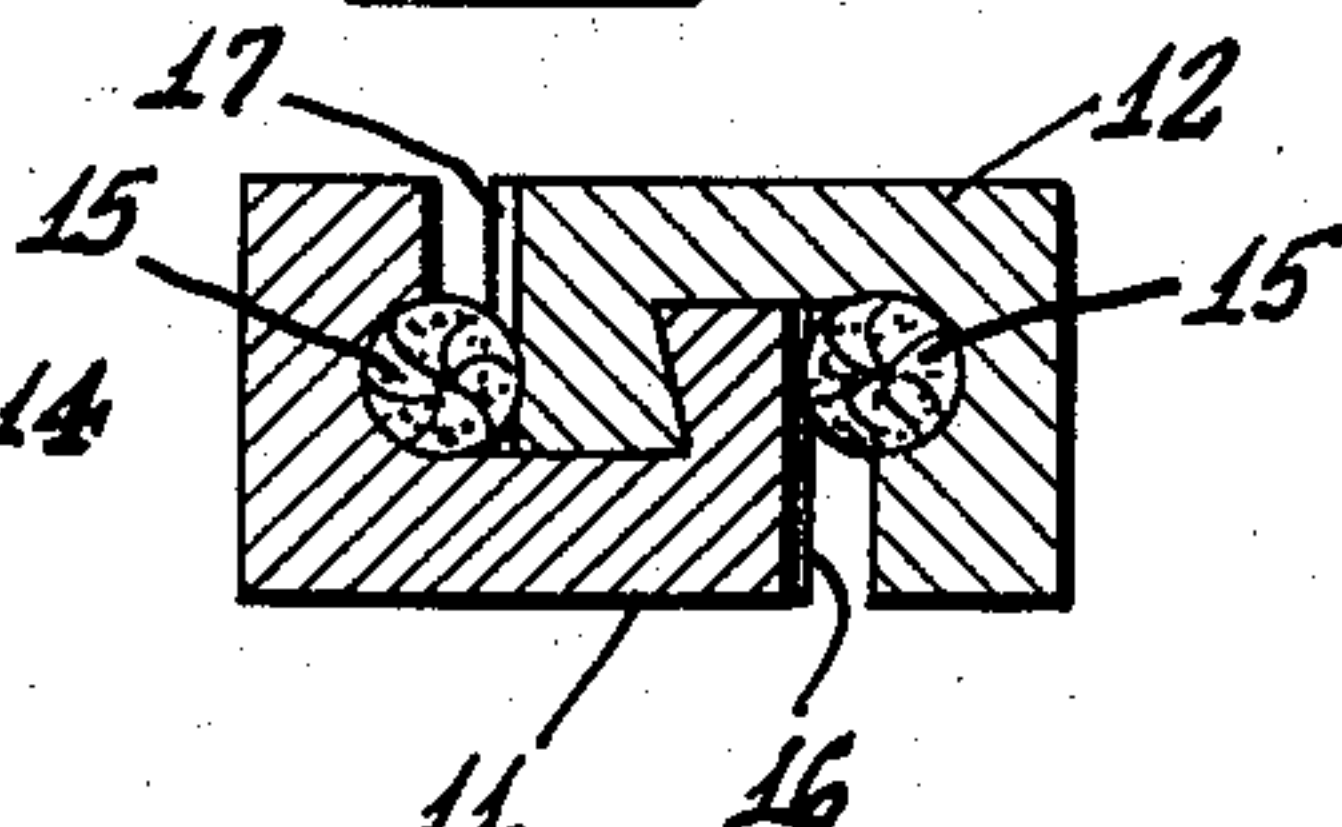


FIG-7.



INVENTOR.
EDWARD Z. BUKOWSKI
BY
H. G. Manning
ATTORNEY.

1

2,849,772

CLOTHESLINE CLAMP

Edward Z. Bukowski, Wallingford, Conn.

Application September 9, 1955, Serial No. 533,389

6 Claims. (Cl. 24-126)

This invention relates to clamping devices and more particularly to a clamp for a loop at the end of a single line, or for detachably holding a pair of lines together.

One object of this invention is to provide a clamping means of the above nature by means of which the length of the line may be quickly and easily adjusted.

A further object is to provide a device of the above nature, which will be simple in construction, inexpensive to manufacture, easy to install and manipulate, compact, ornamental in appearance and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing one form in which the invention may conveniently be embodied in practice.

In the drawing,

Fig. 1 represents a side view of one form of clamping device embodying the present invention when used to form a loop at the end of a line.

Fig. 2 is a plan view of the clamping device on an enlarged scale, illustrating an initial step in the attachment of the device to a line.

Fig. 3 is a view similar to Fig. 2 illustrating the parts in line-gripping position.

Fig. 4 is a plan view of one of the two slidable members forming the clamping device.

Fig. 5 is a plan view of the other slidable member.

Fig. 6 is a cross-sectional view, taken on the line 6-6 of Fig. 2.

Fig. 7 is a cross-sectional view, taken on the line 7-7 of Fig. 3.

Fig. 8 is a cross-sectional view, taken on the line 8-8 of Fig. 4.

Fig. 9 is a cross-sectional view, taken on the line 9-9 of Fig. 5.

Referring now to the drawing, in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates generally a line clamp embodying the present invention, comprising a pair of rectangular U-shaped mating slidable block members 11 and 12, which may be made of wood, metal, plastic or other material. These block members include horizontally extending base web portions 11a and 12a respectively, and two pairs of upstanding generally parallel longitudinal spaced-apart ribs 11b, 11c and 12b, 12c respectively. The inside faces of each of the ribs 11b and 12b adjacent their respective webs 11a and 12a are provided with undercut concave channels 13 and 14, of semi-circular cross-section, which are intended to receive portions of a rope or line 15 which is to be clamped therebetween. The inner faces 18, 19 of the ribs 11c and 12c are beveled to prevent the blocks 11, 12 from separating during use, and are also slightly inclined with respect to said ribs so as to provide a wedging action when the two members 11 and 12 are in operative engagement with each other, as shown in Figs. 2 and 3. The angular inclinations of the wedge faces 18 and 19 are

2

reversed with respect to each other, as shown by Figs. 4 and 5. The outer vertical faces of the ribs 11c and 12c are each provided with a plurality of vertically extending zig zag serrations 16 and 17 respectively, which serrations are preferably oriented in a saw-tooth arrangement having a one-way "bite." This "bite" becomes effective when gripping the line 15, to urge movement of the respective block members 11 and 12 in a direction such as to increase the wedging action of the faces 18 and 19.

Operation

In operation, the block members 11 and 12 will first be placed in engagement with each other so that their webbed sections 11a and 12a respectively are outwardly disposed, and with the ribbed section 11c of block 11 received between the ribs 12b and 12c of block 12. The respective wedge faces 18 and 19 will thus lie in slidable wedging engagement with each other prior to the insertion of the line 15 between the channels 13 and 14. Preferably, the block members 11 and 12 should first be offset laterally with respect to each other, as shown in Fig. 2, so that the line 15 may easily be inserted in the channels 13 and 14, after which said members may be moved longitudinally with respect to each other, causing the serrations 16 and 17 to move increasingly closer to the channels 14 and 13 and thereby to exert a biting action on the line 15, as indicated in Fig. 4.

In the embodiment of the invention herein shown, the clamping device 10 has been used to form a loop at the end of a single line 15, which as shown in Figs. 2 and 3, extends upwardly above the clamping device. The left-hand portion of the line 15 will be connected to a point of attachment, not shown. Under these conditions, it will be obvious that the effect of any increase in the tension in the left hand portion of the rope 15 will tend to urge the block 12 downwardly with respect to the block 11, due to the fact that the serrations 17 are partially embedded in biting engagement with the rope 15.

It should also be understood that instead of forming a loop at the end of a single line as herein disclosed, the device 10 may, if desired, be used to effect a splice between two separate lines. In that case, a similar wedging action will be produced if the end of one line were disposed in the channel 13 and the end of the other line were disposed in the channel 14. The tension exerted in the respective lines, will of course be exerted in opposing directions so as to increase the relative wedging action of the two block members 11 and 12.

While there has been disclosed in this specification, one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only and that the invention is not limited to the specific disclosure, but may be modified and embodied in various other equivalent forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent is:

1. In a line clamp, the combination including a pair of relatively slidable U-shaped block members, each of said members having an outwardly disposed longitudinally extending serrated edge face for gripping engagement with a length of line, an interiorly facing channel extending parallel to and spaced from said serrated face, and a horizontal inclined wedging face disposed between said serrated face and said channel.

2. The invention as defined in claim 1, in which the inclination of the wedging face of one block member is oppositely disposed with respect to the inclination of the wedging face of said other block member.

3

3. The invention as defined in claim 1, in which said serrated faces comprise a plurality of transversely disposed saw tooth indentations.

4. In a line clamp, the combination including a pair of elongated members each of which comprise a horizontally disposed web section provided with a pair of spaced generally parallel upstanding ribs, one of said ribs being provided along its inner side with a concave channel to receive a line to be gripped, the other of said ribs having serrations extending along its outer side for gripping engagement with a line, the inner side of said last mentioned rib being inclined horizontally with respect to said channel, whereby relative longitudinal slidable movement between said members will tend to increase the gripping engagement between the serrations on one of said members and a line disposed in the channel of the other of said members.

5. In a line clamp, the combination comprising a pair of juxtaposed relatively slidable U-shaped block members, each of said members having an outer flat web provided with an upstanding straight rib on one side edge,

4

the opposite edge of each web being provided with an upstanding rib having an inwardly inclined wedge face on its inner side and a serrated outer face, whereby relative slidable movement between said block members will provide a clamping engagement upon a line disposed between said straight ribs and the serrated faces of said block members, respectively.

6. The invention as defined in claim 5, in which said inclined wedge faces are provided with undercut bevels to prevent separation of said blocks when the line is in place.

References Cited in the file of this patent

UNITED STATES PATENTS

15	373,789	Trovillion	Nov. 22, 1887
	1,288,986	Proctor	Dec. 24, 1918
	1,408,230	Slaymaker	Feb. 28, 1922

FOREIGN PATENTS

20	595,563	Great Britain	Dec. 9, 1947
----	---------	---------------	--------------