

(No Model.)

W. C. BURNS.
ADJUSTABLE ROPE CLAMP.

No. 254,795.

Patented Mar. 14, 1882.

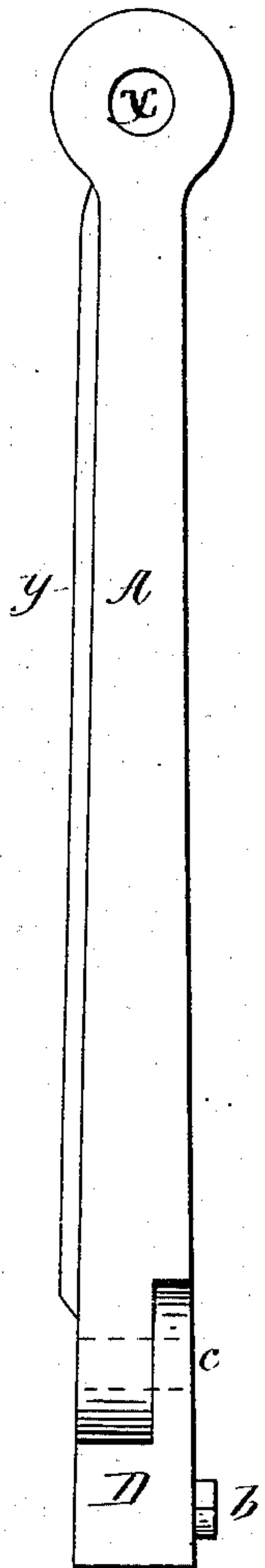


Fig. 2.

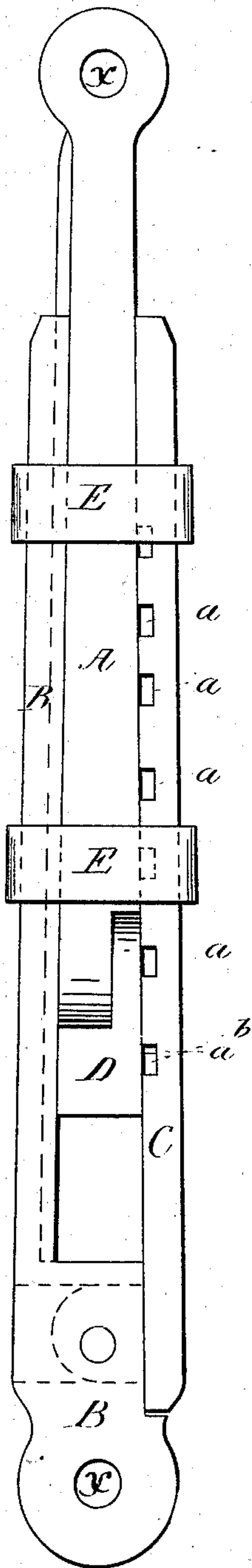


Fig. 1.

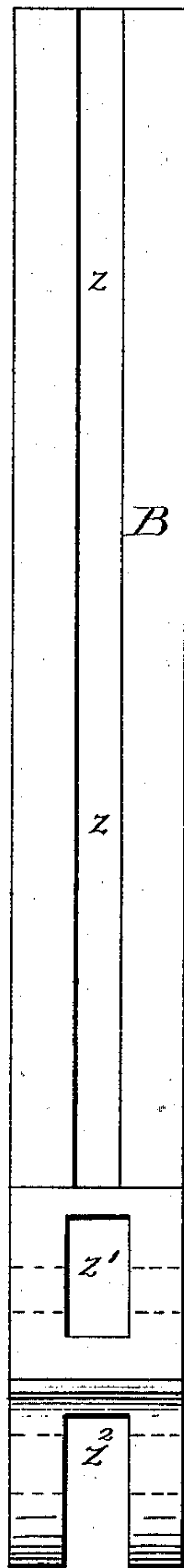


Fig. 4.

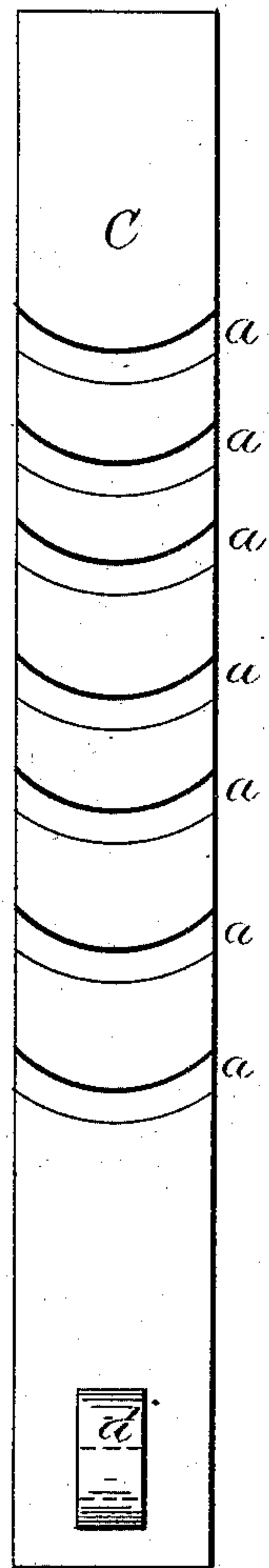


Fig. 3.

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WILSON C. BURNS, OF SOMERVILLE, ASSIGNOR OF FOUR-FIFTHS TO FRANK HASEY, JOSEPH W. SMITH, WILLIAM E. WOODBURY, AND JAMES L. SMITH, ALL OF BOSTON, MASS.

ADJUSTABLE ROPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 254,795, dated March 14, 1882.

Application filed December 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILSON C. BURNS, of Somerville, in the county of Middlesex and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Adjustable Clamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 represents a side view, A being the tapering center piece or tongue; B and C, the side plates; E E, the bands. D is a piece riveted to the lower end of the tongue, having a lip, *b*, which engages in the slots *a a a* of the side plate, C.

Fig. 2 represents the tongue or center piece detached from the side plates, in which is shown the part D, which is fastened to the tongue A by a rivet, *c*. *y* is a rib formed on the side of the tongue-piece. *x x* are holes, by means of which the clamp is attached, when used, through the slots in each end of the clamp, as shown at *z*², Fig. 4.

Fig. 3 represents the inside of the plate C, having circular grooves *a a a* and a projection, *a'*.

Fig. 4 represents the inside of the side plate B, in which *z* is a slot. *z*² is also a slot at the lower end.

The object of my invention is to provide an adjustable clamp which can be used in place of lanyards in setting up shrouds or stays of vessels, also a clamp that can be used in connection with the guys or ropes of derricks and similar purposes where it is necessary to adjust the tension of supporting stays or guys.

I preferably make the clamp in three parts, consisting of the tapering tongue A and the side plates, B and C. When these are placed together, as shown in Fig. 1, and the bands E E are slid down over them, it will be seen that it is impossible to remove the tongue A from the embrace of the side plates by any strain applied at *x x* so long as the bands E E are not broken. The rib *y* upon the tongue A is fitted to slide in the groove *z* of the plate B. The plate C is fastened to the plate B by the

projection *a'* entering the slot *z'* and being there riveted together.

The method of operating this clamp is as follows: The bands E E being loosened, and the attachment D, which is pivoted to the lower end of the tongue A, being thrown to one side, disengages the projection *b* from the slot *a*. The clamp is then drawn together by pressing the tongue A farther down into the side plates, B and C. When the stays or guys, or whatever the clamp is attached to, is drawn sufficiently taut the bands E E are slid down over the tongue and side plates, and the part D is returned to its place, carrying the projection *b* into one of the circular slots *a*.

It is not intended that the part D, with the projection *b* entering the circular slot *a*, should support the strain; but it is simply intended to hold the parts together, and to facilitate the tightening up of the clamp or the loosening of the clamp in practical operation. This is not an essential element in the working or in the practical efficiency of the clamping device, and some other means may therefore be employed which will serve the same purpose. For instance, nuts or set-screws may be placed in the side plate C at the points indicated by *a a a*. These would equally facilitate the adjustment of the clamp, although they would be more likely to get out of order from natural wear and from other causes than the device represented by D.

The peculiar construction of the side plates and the manner in which they are fastened together are of course not essential in the practical working of this device; but it preferably being made of some stiff metallic substance, I have found this a very practical and convenient form of bringing the side plates and the tapering tongue together.

It will be further observed that the side plates are so constructed as to fit the shape of the tapering tongue A, so that when the bands E E are applied they make a close contact with each other from end to end. This gives a bearing-surface upon the inside of the plates B and C with the corresponding sides of the tapering tongue-piece A.

As I have said, this clamp is peculiarly fitted for taking the place of the ordinary lanyards used in vessels; and it is also designed to be used for the purposes specified in all places where by reason of the strain it is necessary to draw up or tighten from time to time the guys, stays, or supports to which this clamp is intended to apply.

The holes x are formed so that the clamp can be readily connected with the guys or lanyards and easily detached at one or both ends. This may be done by the use of the pin and link or hook or any other suitable device. If a pin is used, it would be inserted at x and hold or support the link or hook inserted at z . Almost any one of the well-known devices for this purpose may be employed at each end of the clamp—that is, one on the outer end of the tongue and one on the outer end of the plates.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In an adjustable clamp, the tapering tongue A, having a rib, y , in combination with the side plate B, having a slot, z , the side plate C, and bands E E, substantially as and for the purposes set forth.

2. In an adjustable clamp, the tapering tongue A, with the attachment D, having a projection, b , in combination with the side plate C, with the circular slots $a a a$, the plate B, and the bands E E, substantially as and for the purposes set forth.

3. In an adjustable clamp, the tapering tongue A, having a rib, y , with the attachment D, having a projection, b , in combination with the side plate B, having a slot, z , and the side plate C, with circular slots $a a a$, and the bands E E, all substantially as and for the purposes described.

4. An adjustable clamp consisting of a movable central piece or tongue having a guiding-rib, two side plates, one provided with a slot to receive the guide-rib of the tongue, the other having suitable devices for temporarily holding the movable tongue during adjustment, and bands encircling and inclosing the said tongue and side plates, all combined and operating substantially as and for the purposes described.

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Witnesses:

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