

(Model.)

F. KRUEGERMANN.
CLEAT OR ROPE FASTENER.

No. 359,538.

Patented Mar. 15, 1887.

Fig. 2.

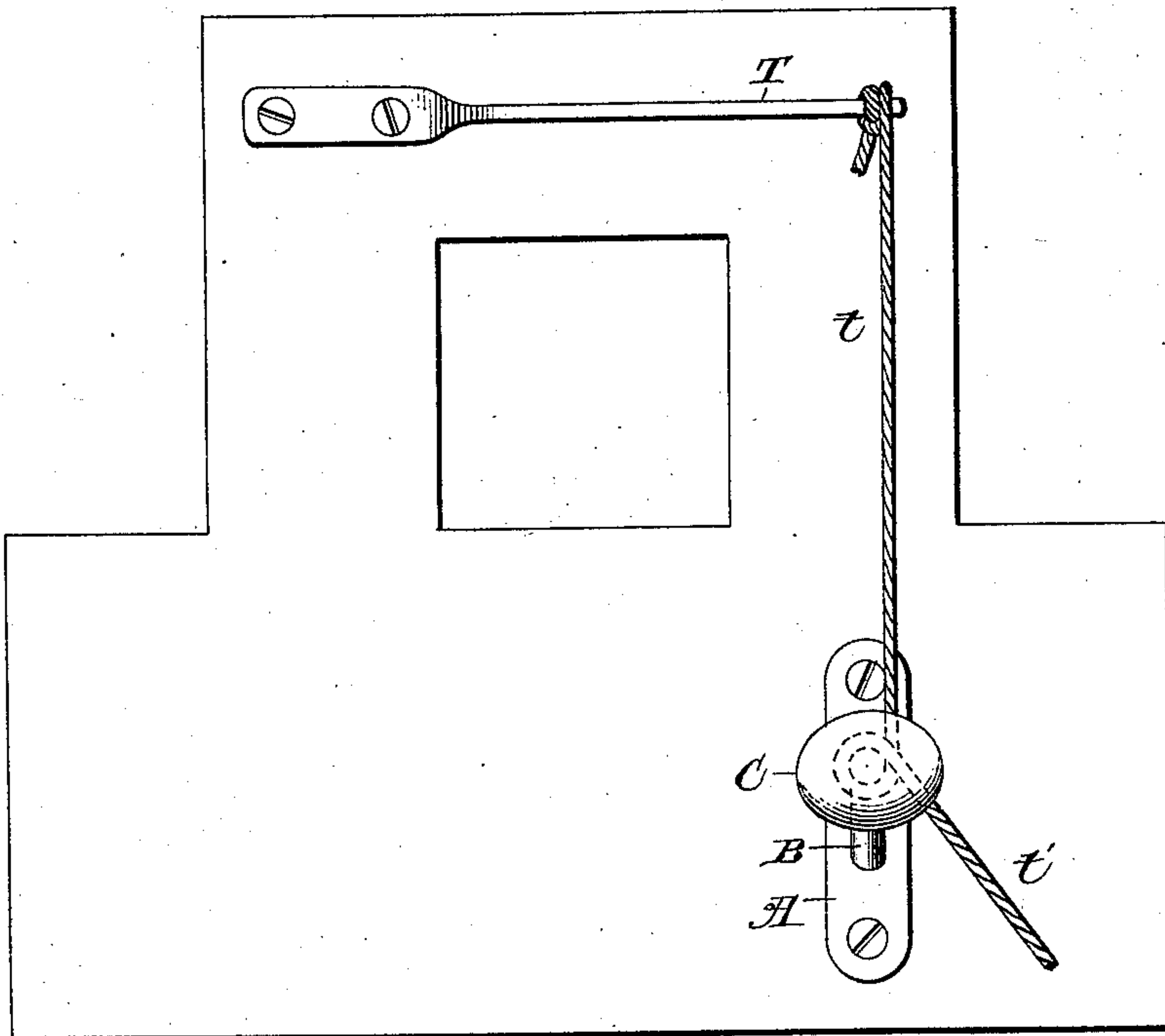


Fig. 1.

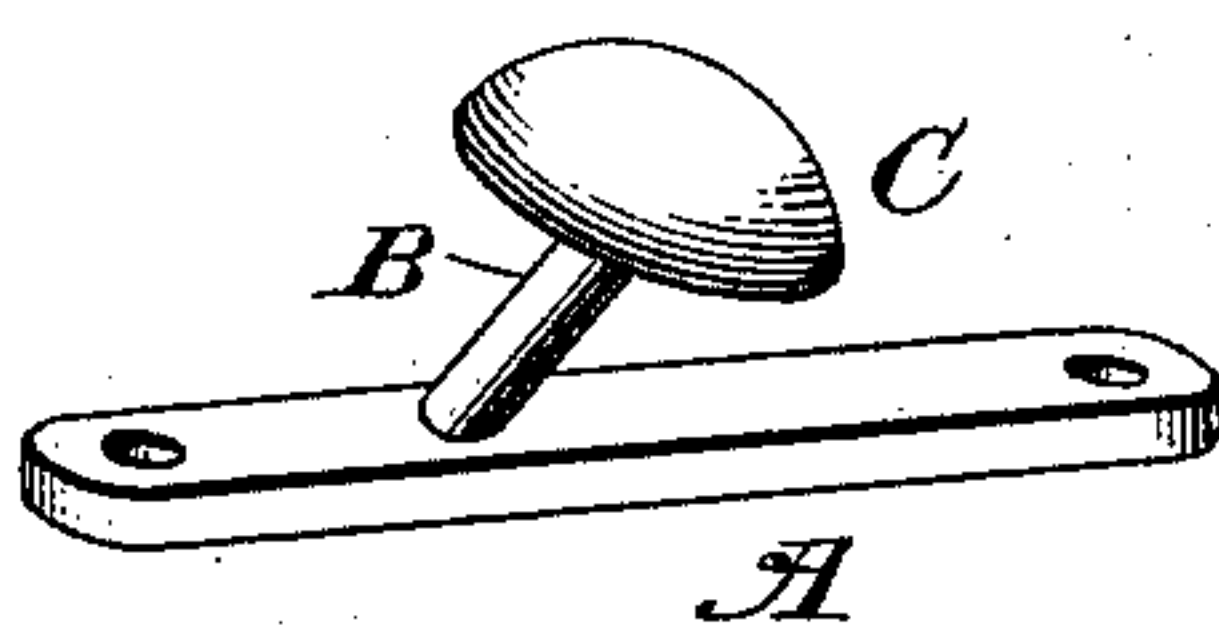
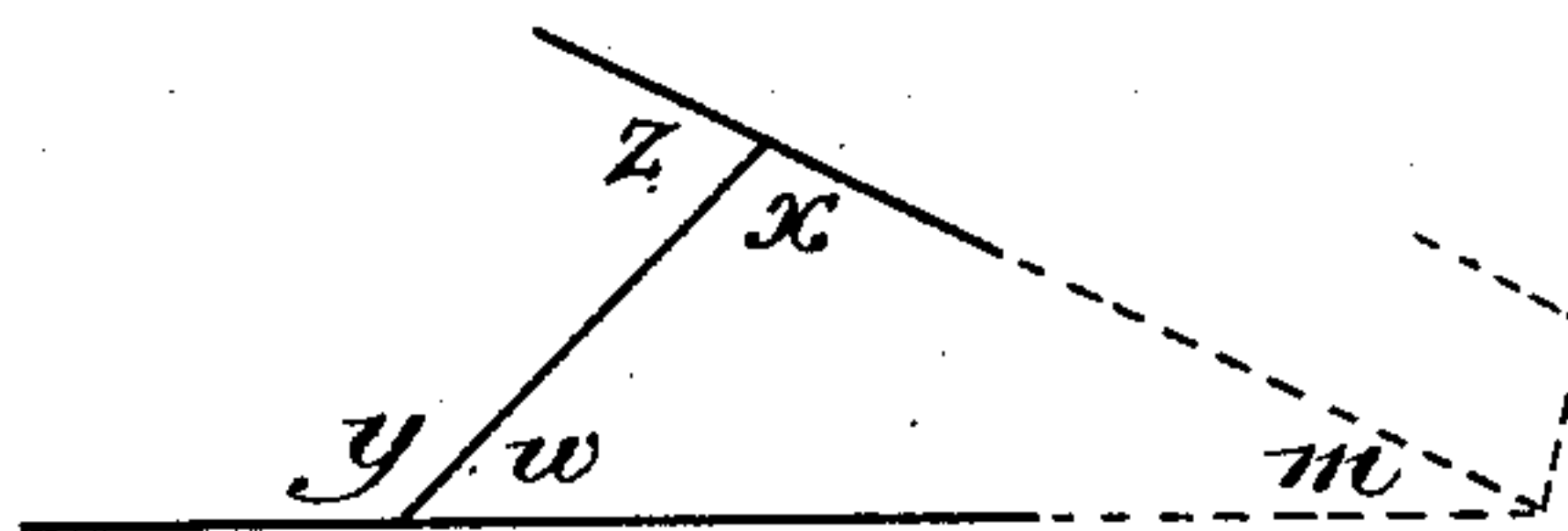


Fig. 3.



Witnesses:

S. J. Duggan
H. C. Fippen

Inventor:

Friedrich Kruegermann
per J. P. Hoban,
Attorney.

UNITED STATES PATENT OFFICE.

FRIEDRICH KRUEGERMANN, OF SCRANTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THOMAS P. HOBAN, OF SAME PLACE.

CLEAT OR ROPE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 359,538, dated March 15, 1887.

Application filed October 14, 1886. Serial No. 216,294. (Model.)

To all whom it may concern:

Be it known that I, FRIEDRICH KRUEGERMANN, a citizen of Prussia, Germany, who have declared my intention to become a citizen of the United States, residing at Scranton, Lackawanna county, in the State of Pennsylvania, have invented a new and useful Cleat or Rope-Fastener, of which the following is a specification.

My invention relates to improvements in cleats or rope-fasteners; and the objects of my improvements are to produce a cleat upon which a rope or cord may be fastened more expeditiously, more firmly, and with less effort than on any that are now in use, which will hold a cord or rope more firmly as the strain or tension on the cord increases, and from which the cord or rope can be instantaneously and with slight effort released. I attain these objects by means of the cleat illustrated in the accompanying drawings, in which—

Figure 1 is a view of the cleat in perspective. Fig. 2 is a view of the cleat attached to a plane surface and showing the manner of fastening the cord or rope; and Fig. 3 shows the amount of divergence of the angles of the cleat, the divergence of these angles being a very important feature of this invention.

Similar letters refer to similar parts throughout all the views.

In the drawings, A represents the base or plate by which the cleat may be secured upon or otherwise fixed to any desired surface. From the plate A rises the stem B at an angle of about forty-five degrees, or at any other acute angle. The stem B meets the center of the lower surface of the button C at an angle of about one hundred and ten degrees, or any other obtuse angle. Both of these angles are on the same side of the stem B, and together form interior angles on the same side. The amount of divergence in all of the angles is shown in Fig. 3. All of the lines shown in Fig. 3 lie in the same plane, which passes longitudinally through the middle or axis of the plate A through the axis of the cylindrical stem B and cutting the button C through the center, making the angle formed at w about forty-five degrees, or any other acute angle; at x , about one hundred and ten degrees, or any other obtuse angle, and at z about seventy degrees, or any other acute angle, and at y

about one hundred and thirty-five degrees. From this it will be seen that if the lower plane surface of the button C and the upper plane surface of the plate A were prolonged they would meet at m , forming an acute diedral angle of about twenty-five degrees, or any other acute diedral angle. These angles may vary, but those designated by degrees, as above, are considered the most desirable and best adapted to the purpose of the cleat.

The lower surface of the button C may be either a plane or curved surface, the edge of the button being rounded, so as to lessen the friction and prevent the fraying of the cord or rope.

The method of fastening the cord or rope to the cleat and the manner of holding it in position may be readily understood from Fig. 2. The cord or rope being pulled taut at T and then wound once around the inclined cylindrical stem B, as shown by the dotted lines in Fig. 2, and the slack cord t' being then drawn between the taut cord t and the inclined button C, is there caught and held. The cord t being pulled toward the point T, the coil around the stem B will slide upward toward the button C, and the greater the strain or tension on the cord t the more firmly it will be caught and held by the cleat.

This cleat may be used for holding awning-cords, for fastening cords or ropes of every description, for nautical purposes, &c.

I am aware that prior to my invention cleats have been made with plate at right angles to the stem, and with projecting arms parallel to the plate and perpendicular to the stem. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

In a cleat, the combination of plate A, stem B, and button C, the stem forming an acute angle with the plate, and the button meeting the stem at an obtuse angle, both of said angles being on the same side of the stem and in the same plane, substantially as and for the purpose set forth.

FRIEDRICH KRUEGERMANN.

Witnesses:

M. F. SAUDO,
E. J. KEULING.