(No Model.)

C. H. O. STROHBACH.

ROPE HOLDER.

No. 421,328. Patented Feb. 11, 1890.

Fig. 1.

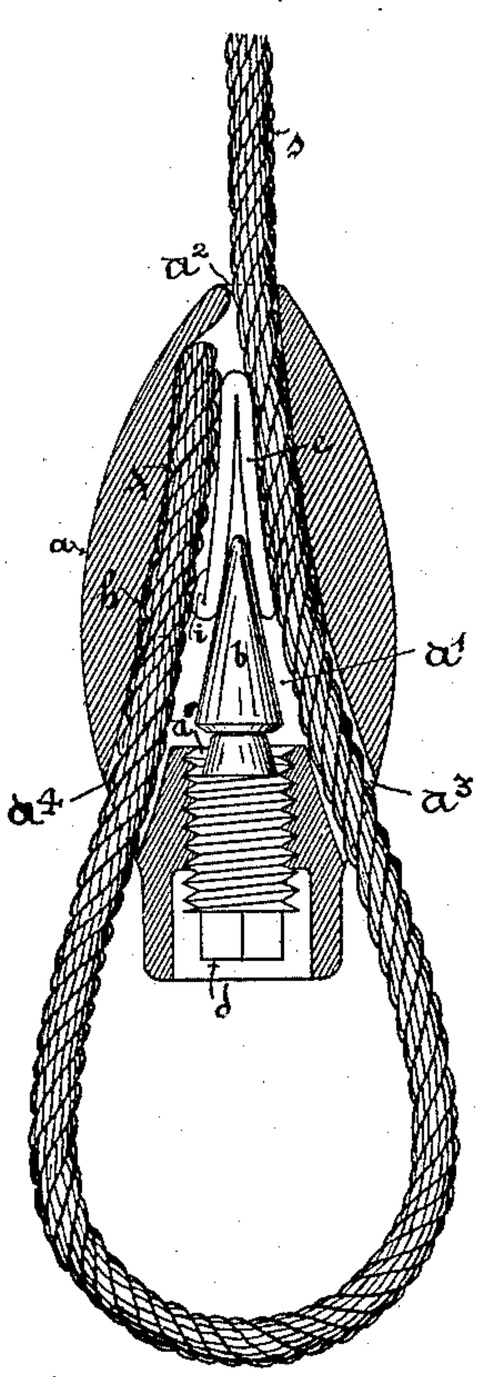


Fig. 2.

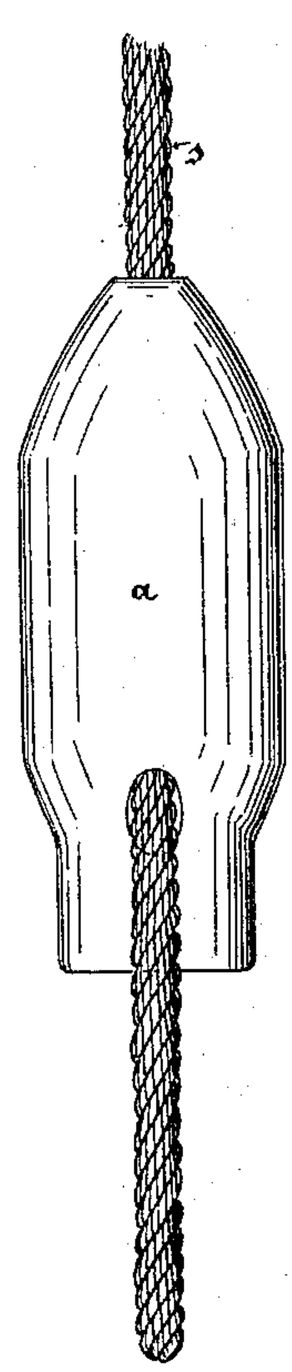


Fig. 3.

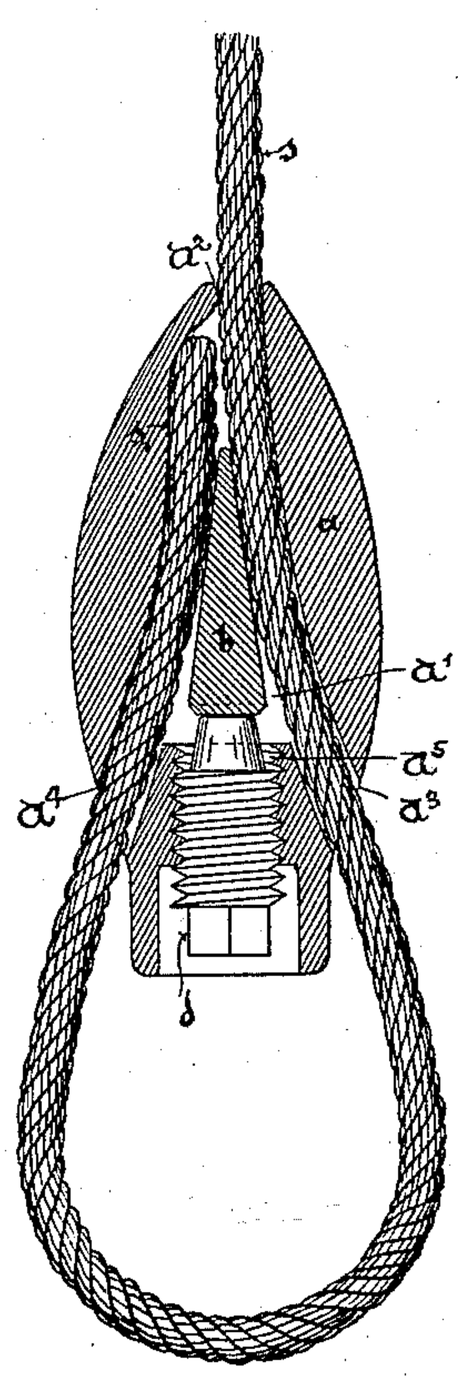


Fig. 4.

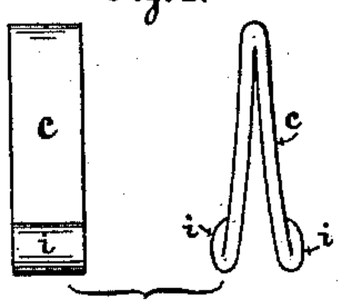


Fig. 6.

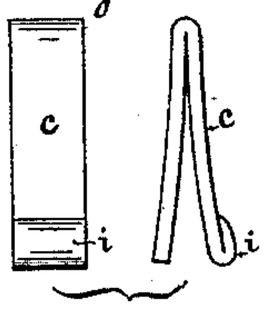


Fig. 9

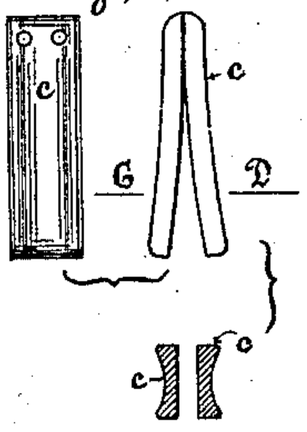


Fig. 5.

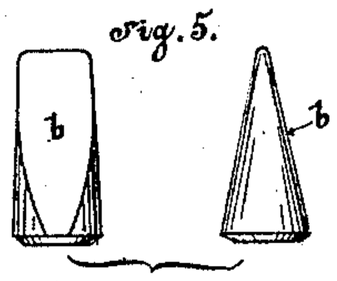


Fig. 7.

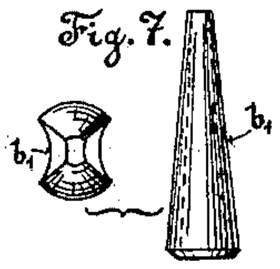
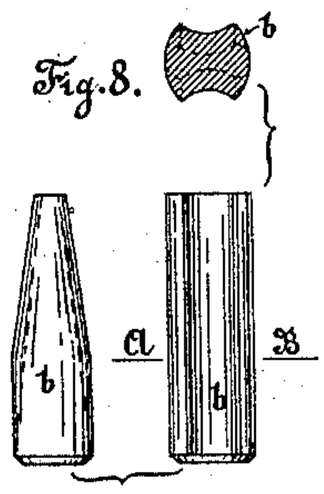


Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

CARL HERMANN OTTO STROHBACH, OF LEIPSIC, GERMANY.

ROPE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 421,328, dated February 11, 1890.

Application filed August 25, 1888. Serial No. 283,780. (No model.) Patented in England June 8, 1888, No. 8,421; in Belgium September 29, 1888, No. 83,427; in Austria-Hungary October 28, 1888, No. 24,072 and No. 44,678; in Italy December 31, 1888, No. 24,341, and in Denmark January 31, 1889, No. 1,155.

To all whom it may concern:

Be it known that I, CARL HERMANN OTTO STROHBACH, a subject of the Emperor of Germany, and a resident of Leipsic, in Germany, have invented a new and useful Improvement in Rope-Fasteners, (for which I have obtained Letters Patent in Great Britain, No. 8,421, dated June 8, 1888; in Austria-Hungary, No. 24,072 and No. 44,678, dated October 28, 1888; in Belgium, No. 83,427, dated September 29, 1888; in Italy, No. 24,341, dated December 31, 1888, and in Denmark, No. 1,155, dated January 31, 1889,) of which the following is a specification.

The object of this invention is to provide a lock or fastener for connecting the end of a rope to the standing part so as to form a loop. It is principally intended for use with wire ropes, where, in looping the end, the connecting of the end to the standing part in a proper and secure manner is usually a tedious and difficult operation of splicing. The improved lock is intended to save the time and trouble of this operation and to form a perfectly secure fastening as strong as the rope itself.

Reference being made to the accompanying drawings, Figure 1 is a sectional view of the lock with the rope looped therein. Fig. 2 is a side view thereof. Fig. 3 is a sectional view showing a slight modification in the lock. Figs. 4, 6, and 9 are detail views of one part of the lock and modifications thereof. Figs. 5, 7, and 8 are detail views of another part of the lock and modifications of the same.

The lock consists, first, of a block a, having within it a space a', extending in the direction of the length of the block, the breadth of the space in one direction being somewhat larger than the diameter of the rope and in the other direction of comparatively large breadth below and tapering gradually toward the other end, where it may be said to end with a breadth equivalent to about twice the diameter of the rope. The said space is open to the outside of the block at this end through a passage a^2 sufficient to receive the standing part of the rope, such passage being preferably so directed that the rope without undue flexure passes down through the same and along one of the inclined walls of the space. At the base of the block the space a' is open through two passages a^3 a^4, each of a diameter somewhat larger than that of the rope and extending in alignment, respectively, with the tapering walls of the space a'. The "standing part" so-called of the rope passes along the one inclined wall of the space a', through the passage a^3, and thence, sufficient rope being left to form a loop, the end is passed up through the passage a^4 along the other inclined wall of the space a' to the upper end thereof. The ropes thus lying against the inclined walls, respectively, will lie toward each other, and it is obvious that by driving up a wedge between them they will be jammed outward against the walls and securely held in the block. This may be a simple wedge, as b in Fig. 3, and of rectangular cross-section, or with plane faces, as shown in Fig. 5, or, preferably, with concave faces, as in Figs. 7 and 8, for the better grasp of the wedge on the rope.

To drive the wedge, a screw-threaded hole a^5 may be made through that end of the block lying between the passages a^3 and a^4, the same being of large enough diameter to enable the wedge b to be passed through it into the space a'. A screw-threaded bolt d, having a square head or other suitable means for turning the same, is fitted in said hole a^5, and abuts upon the base of the wedge for driving the same. The tapering sides of the space a' may be slightly curved, as shown in Fig. 3.

In place of using a wedge acting direct on the rope, a spring-wedge c, as in Figs. 4, 6, and 9, may be previously inserted and distended by the wedge b. Such a spring-wedge would maintain a substantially stationary position, distending more or less, according to the position of the wedge b.

On the lower end of one or each of the limbs of the wedge c may be arranged the re-enforce or projection i, and at a suitable or corresponding place along the inclined wall or walls of the space a' may be a corresponding hollowing h, Fig. 1.

The construction of the wedge c is visible from Figs. 4, 6, and 9. It may be a bent piece

of metal or two pieces of metal riveted together at one end. It may have plane or concave faces.

Having now described my invention, I claim as new and desire to secure by Letters Patent—

1. A block a, having an interior space a', with tapering walls and passages a^3 a^4 aligned with said walls and adapted to receive a rope or ropes, in combination with a wedge in said space, and means for driving said wedge to jam said rope against said tapering walls.

2. A block a, having an interior space a', with tapering walls, a passage a^2, aligned with one of said walls at the tapered end of the space, passages a^3 and a^4, aligned with said walls at the broad end of the space, adapted to receive a looped rope, substantially as described, in combination with a wedge in said space, and a screw-bolt d, bearing on said wedge for driving same for the jamming of said rope against said tapering walls.

3. The combination, substantially as illustrated and described, of a block a, having space a' and passages a^2, a^3, and a^4, as set forth, with a spring-wedge c located in said space, a wedge b, adapted to distend said spring-wedge, and a screw-bolt for driving said wedge b.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARL HERMANN OTTO STROHBACH.

Witnesses:
JULIUS MARGNER,
CARL BORNGRAEBER.