

No. 770,062.

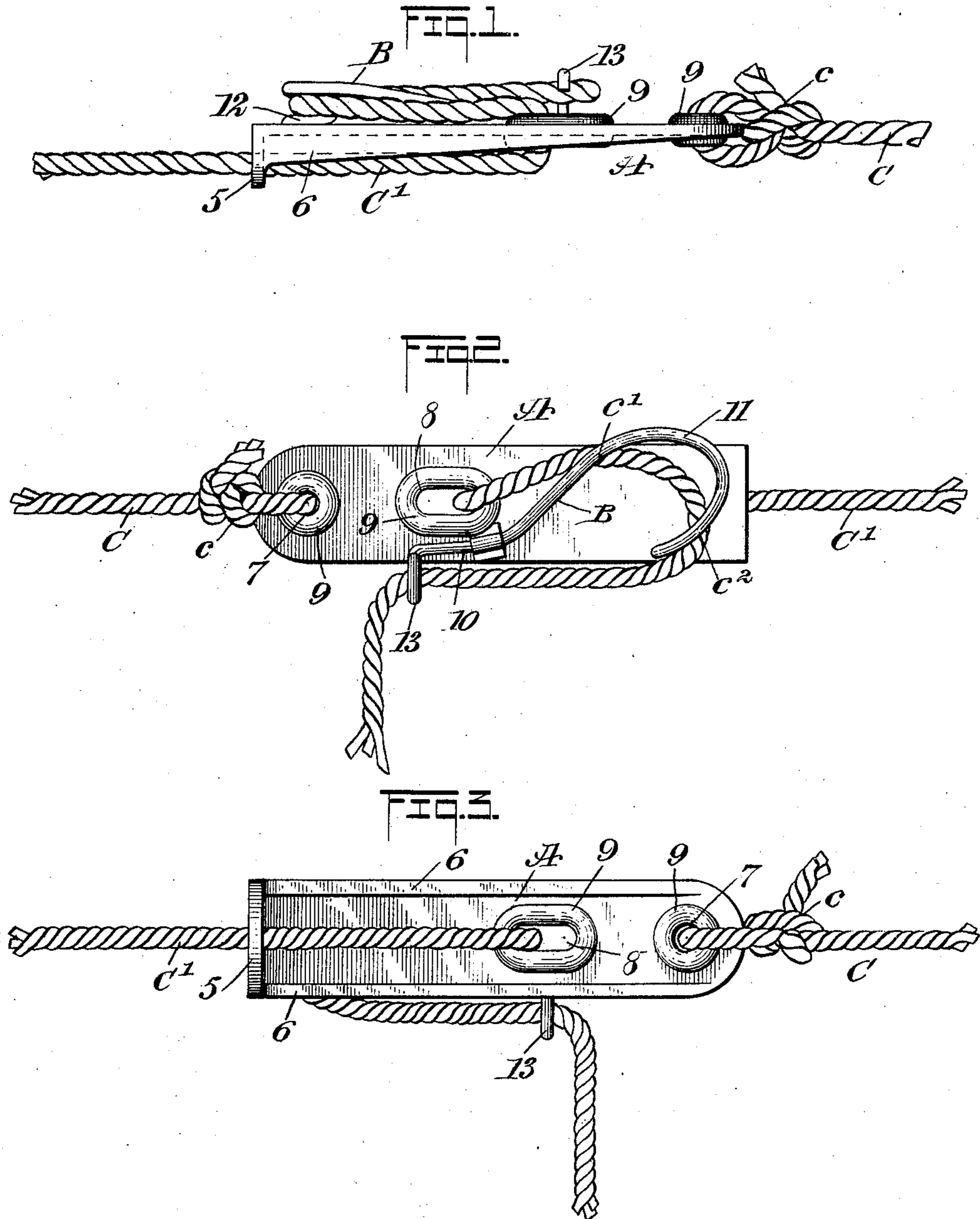
PATENTED SEPT. 13, 1904.

H. GARTELMAN & P. E. SCHNITGER.

ROPE FASTENER.

APPLICATION FILED DEC. 29, 1903.

NO MODEL.



WITNESSES:

W. H. McGee
N. J. Berchard

INVENTORS

Henry Gartelman
Paul E. Schnitger

BY

Mumford
ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY GARTELMAN AND PAUL E. SCHNITGER, OF NEW YORK, N. Y.

ROPE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 770,062, dated September 13, 1904.

Application filed December 29, 1903. Serial No. 186,997. (No model.)

To all whom it may concern:

Be it known that we, HENRY GARTELMAN and PAUL E. SCHNITGER, both citizens of the United States, and residents of the city of New York, borough of the Bronx, in the county and State of New York, have invented a new and Improved Rope-Fastener, of which the following is a full, clear, and exact description.

Our invention relates to improvements in rope-fasteners, the same being especially designed for use in coupling and fastening the adjacent end portions of an endless clothes-line, although the fastener may be used for a variety of other purposes.

In this invention we seek to produce a simple and inexpensive device which is especially designed to securely fasten a rope or cord without chafing or cutting the same and at the same time permit the rope to be pulled out of place easily and quickly, the rope being so manipulated that it will not double or "kink" during the operations of fastening or releasing the same.

Further objects and advantages of the invention will appear in the course of the subjoined description, and the actual scope thereof will be defined by the annexed claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a rope-fastener embodying our invention. Figs. 2 and 3 are elevations looking at the respective sides of the fastener.

A designates the body of the fastener, which is provided at one end with a flange 5, the latter being disposed at right angles to the length of the fastener and joined thereto by longitudinal ribs 6, the latter decreasing in thickness and running into the body A, substantially as indicated by Figs. 1 and 3. The body is provided at the end portion opposite to the flange 5 with an eye 7, and it is furthermore provided at a point intermediate of its length with another eye, 8, said eyes 7 8 being reinforced by bosses 9, which are disposed on the face of the body, as shown by the drawings. The body and the flange, the ribs, and the eye-reinforcements are cast in a single piece of metal

having the requisite strength, shape, and dimensions.

An important feature of our invention is the employment of a keeper B, the same being preferably made of a single piece of wire, which is twisted in the form shown more clearly by Fig. 2 of the drawings. This keeper is bent to produce a shank 10 and an arched or bowed member 11, one end of said member terminating in an arm 12. The shank 10 of the wire keeper is bent or doubled upon itself to produce an eye or loop 13, the latter being at an opposite end of the keeper from the arm 12. The keeper is applied laterally to one side of the body A, so that it will assume the position thereon represented by Fig. 2, and the arm 12 and the shank 10 of this keeper are attached or fastened in any suitable way to the body—as, for example, by soldering one part to the other, although we do not intend to strictly confine ourselves to this particular way of uniting the parts A B. The bowed member 11 of the keeper has a laterally-spaced relation to one side of the body A, as indicated by Figs. 1 and 2, and sufficient space is provided between the keeper and the body for the passage of the rope or cord which it is desired to fasten to the device. The keeper is curved and gradually recedes from the side surface of the fastener, (shown in Fig. 2,) so as to hold the rope by frictional contact between itself and said surface. The edge surface (shown in Fig. 1) is smaller in extent than this side surface.

As hereinbefore described, our improved device is especially intended for use in uniting the end portions of an endless rope such as is employed in the manufacture of clothes-lines, and in the drawings one end portion, C, of the rope is shown as passing through the eye 7 and knotted, as at c. The other end portion, C', of the loop is threaded through an opening in the flange 5 and laid alongside of the body A, said portion C' being passed through the eye 8, after which the rope is passed between the body A and the keeper B, and finally the rope is slipped into the eye 13 of the keeper, as represented by the drawings. It will be observed that the end portion C' of the rope is formed into a bight at its point of attachment to the parts A B of the fastener,

thereby bringing the strain of the rope directly on the body A. The rope C' engages at two points (indicated at c' c'' in Fig. 2) with the keeper B, and this portion of the rope is also doubled upon itself, so as to produce a bight, the free end of the rope C' being suspended or hung from the eye 13, thus allowing a looped or coiled surplus length of the line or rope to be readily suspended from the fastening when it is used on an endless clothes-line.

The operation of fastening the end portion C and of attaching the end portion C' of the rope to the fastener may be easily and quickly accomplished and the end portion C' of the rope may be easily and quickly disengaged from the eye 13 and the bowed member 11 of the keeper B, thus permitting the operator to take in or pay out the line through the eye 8 of the body A. After the rope shall have been adjusted it may be easily slipped into place between the keeper and the body to have frictional engagement at c' c'' with the keeper and thereafter be slipped into the eye 13. It is evident also that the loop may be easily disengaged by slipping it out of the eye 13 and pulling it away from the keeper without requiring the operator to slacken the rope, and during these manipulations of the rope it is not liable to kink or twist, which is a very serious objection to some prior types of rope-fasteners.

The flange 5 at one end of the body A is reinforced by the provision of the longitudinal ribs 6, and these ribs, with the flange, provide a secure finger hold or grip for the operator in holding the body A during the manipulation of the rope. The employment of the rounded bosses 9 adjacent to the eyes 7 8 of the body prevents the rope from cutting or chafing by contact with the metallic surface of the body, thus overcoming a practical objection to devices of this class.

Our improved article is extremely simple and durable in construction, and it can be manufactured at a low cost.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A rope-fastener comprising a body provided with a side surface and an edge surface, having an eye passing through said side surface and through the body, and having means for holding a rope by frictional engagement against said side surface, said means comprising a curved keeper gradually receding from said side surface.

2. A rope-fastener comprising a body hav-

ing eyes near one end and at a point intermediate of its length, said eyes being bounded by rounded bosses, a perforated flange at one end of the body, and a keeper spaced laterally with relation to the body and fastened thereto, said keeper having a bowed member affording two points of contact for a rope.

3. A rope-fastener comprising a body having rope-eyes, and a keeper bent from a length of wire to afford a shank, a bowed member and an arm, said shank and the arm of the keeper being fastened to the body, and the free end of the shank being bent into a loop or eye.

4. A rope-fastener comprising a flat body having an eye passing transversely there-through, and a keeper having a curved portion gradually receding from the surface of the body through which the eye passes and so located as to hold a rope between itself and said flat body by frictional contact.

5. A rope-fastener comprising a body having eyes for the passage of a rope, a keeper mounted on the body and having a bowed member spaced from the body, and a loop integral with said keeper for retaining the rope.

6. A rope-fastener comprising a body having two rope-eyes, a flange at an angle to the body having a rope-eye, and a keeper on said body having means for holding a rope between itself and said body at two points.

7. A rope-fastener comprising a body having a rope-eye, and a stationary resilient keeper mounted on the body at one side thereof and extending toward the other side but gradually receding from the surface of the body.

8. A rope-fastener comprising a body having a rope-eye, and a stationary resilient keeper having a bowed portion affording two points for receiving a rope between itself and the body, said keeper being mounted at one side of the body and extending toward the other side, but gradually receding from the surface thereof.

9. A rope-fastener comprising a body having two rope-eyes near one end thereof, a flange at right angles to the body at the other end thereof having a rope-eye located near the surface of the body, and a keeper located on the body between the eyes thereof and the flange.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HENRY GARTELMAN.
PAUL E. SCHNITGER.

Witnesses:

JNO. M. RITTER,
H. F. BERNHARD.