(No Model.)

T. P. INGLESBY & T. J. DAVIS.

ROPE CLAMP AND STOPPER.

No. 475,115. Patented May 17, 1892.

Fig 1

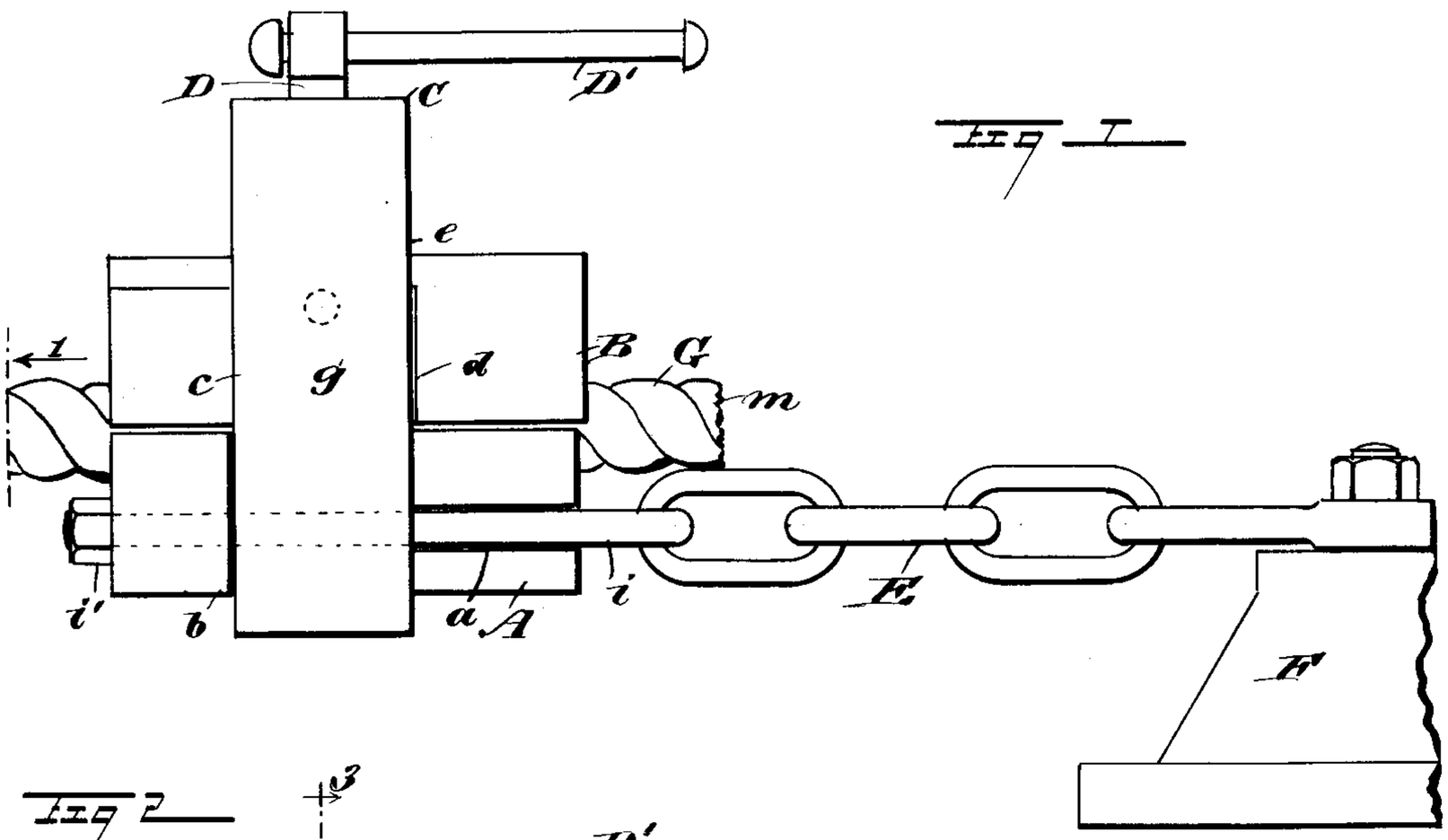


Fig 2

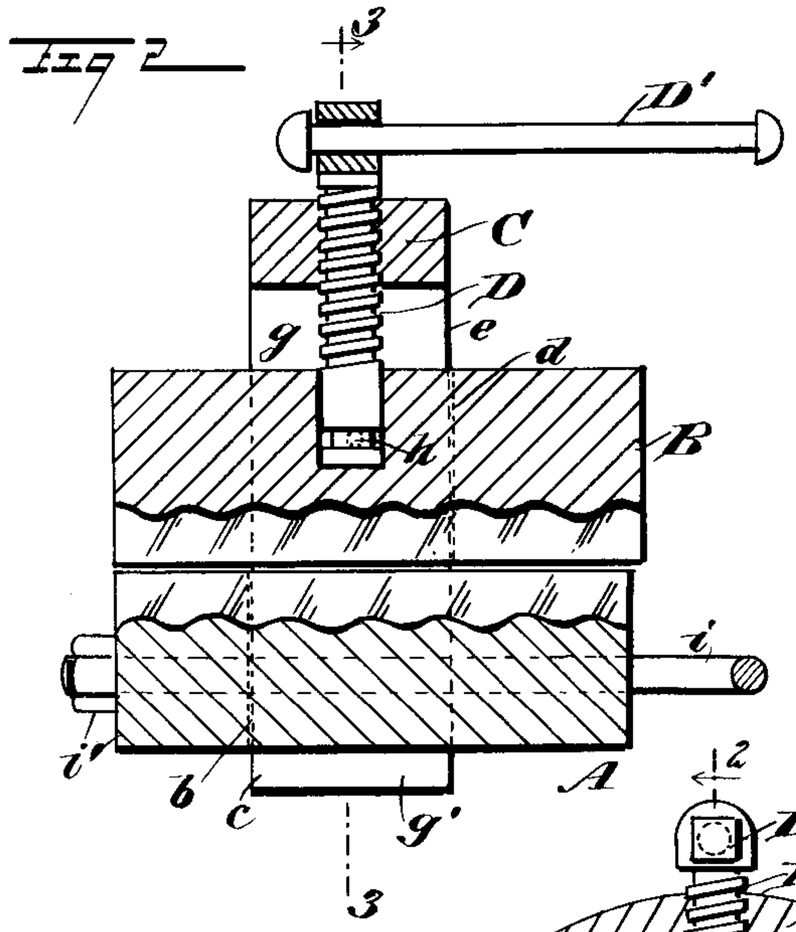
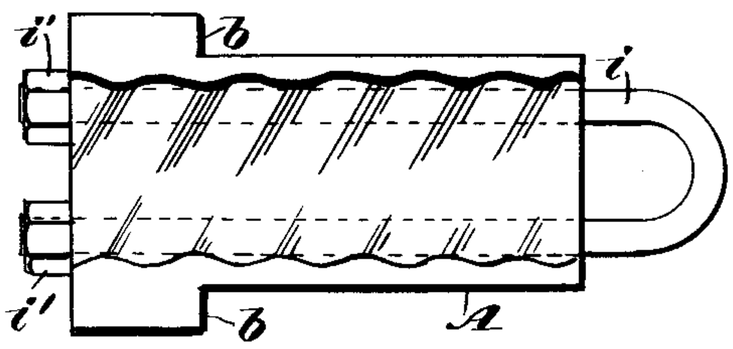


Fig 4



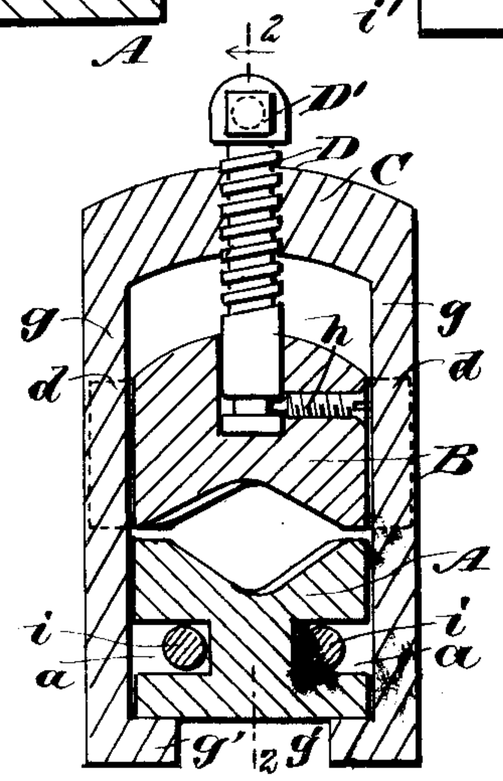


Fig 3

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UNITED STATES PATENT OFFICE.

THOMAS P. INGLESBY, OF ST. LOUIS, MISSOURI, AND THOMAS J. DAVIS, OF RICHMOND, VIRGINIA.

ROPE CLAMP AND STOPPER.

SPECIFICATION forming part of Letters Patent No. 475,115, dated May 17, 1892.

Application filed January 19, 1892. Serial No. 418,589. (No model.)

To all whom it may concern:

Be it known that we, THOMAS P. INGLESBY, of St. Louis, in the State of Missouri, and THOMAS J. DAVIS, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Rope Clamp and Stopper, of which the following is a full, clear, and exact description.

The object of our invention is to provide a simple and reliable device which will afford means to clamp and hold the end portion of a rope against load strain on the rope.

To this end our invention consists in the construction and combination of parts, as is hereinafter described and claimed.

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

Figure 1 is a side view of the device in service. Fig. 2 is a longitudinal section on the line 2 2 in Fig. 3. Fig. 3 is a transverse section of the parts shown in Fig. 2 completed, taken on the line 3 3 in said figure; and Fig. 4 is a detached plan view of the lower section of the clamp.

The device is adapted to clamp and hold cords and ropes of different dimensions which are subjected to load strain longitudinally applied, the preferred use being to securely hold a hoisting-rope to permit its release from the drum of a hoisting-machine, so that another similar rope may be applied to the drum) not shown) while the clamping-rope is held with its load suspended.

The device consists, essentially, of two oblong blocks A B, that are held together detachably by a yoke or bail-clamp C. The lower grip-block A is longitudinally grooved at opposite points on the sides, as shown at *a* in Figs. 1 and 3, and is increased in width near one end, so as to produce opposite shoulders *b*, (shown in Fig. 4,) which shoulders abut against the edge *c* of the clamp C, and thus determine the sliding movement of the clamp on said block when the parts are assembled. Opposite shoulders *d* are produced on the top grip-block B at such a distance from its ends as will locate these shoulders against the edge surface *e* of the clamp C when all parts are in position for use, as indicated in Fig. 1.

The clamp C is formed, preferably, of a single piece of metal having two parallel limbs *g*, that have inwardly-extending lugs *g'* formed at their lower ends, which are adapted to hook onto the lower side of the block A when it is slid between the limbs of the clamp, said limbs being sufficiently separated to allow the blocks A B of equal breadth to loosely pass between them, as shown in Fig. 3.

The clamp C is perforated in its web that joins the limbs *g* centrally between and in a plane parallel therewith, which hole is tapped to produce a thread that is engaged by the threaded body of an adjusting-screw D, the lower end portion of which is not threaded and is inserted loosely in a vertical socket-hole formed at the center of length and width of the top grip-block B, and is therein held free to rotate by a laterally-inserted screw-bolt *h*, the end of which loosely engages an encircling channel formed in the screw-body D, so that a rotation of the screw D will elevate or depress the top grip-block B, as may be required, there being a transverse handle-bar D' provided which loosely engages a perforation in the projecting head of the screw D and facilitates its adjustment manually.

The grooves *a* in the lower grip-block A are occupied by a staple-link *i*, the limbs of which also pass through aligning perforations made in the thicker portion of the block and project sufficient to receive the nuts *i'* on their threaded ends, the bow portion of the link projecting at the opposite end of the block to have engagement with an anchor-chain E, that is affixed by its opposite end to the bed-plate F of a hoisting-engine or other fixed object that will sustain draft strain put upon the rope-clamp.

The grip-blocks A B are longitudinally grooved on the faces that are adjacent when in service, the walls of the grooves being preferably made V-shaped in cross-section, as indicated in Fig. 3, so as to adapt the blocks to forcibly grip an engaged rope G, and to render the grip more assured the longitudinal grooves in the grip-blocks are ribbed in series

diagonally across from end to end, and thus rendered capable of receiving the twisted strands of the rope in the depressions that intervene between the ribs, causing an interlocking of the ribs with the strands, which will prevent slipping of the rope when it is gripped between the blocks.

In service, the lower block A being hitched by the anchor-chain E to a stable object near to the rope G, which is to be held from longitudinal movement in the direction of an arrow in Fig. 1, the clamp C is slipped in place upon the lower block until the edge *c* of the clamp strikes against the shoulders *b* of the lower block. This will locate the upper block B properly above the block A. Then by rotating the screw D these blocks are made to grip the rope G forcibly, which will permit the end portion *m* of said rope, that has been by extension (not shown) engaged with a drum on a hoisting-machine, (not shown,) to be released from the drum, that may be thus rendered free to receive another hoisting-rope, while the rope G, that is strained in the direction indicated by the arrow 1 in Fig. 1, will be secured against longitudinal movement until the clamp is released by a reverse movement of the screw D.

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

1. The combination, with two longitudinally-grooved grip-blocks, and means to anchor one block to a stable object, of a bail-clamp loosely secured to the other block and adapted to slide endwise upon and removably hook fast to the anchored block and an adjusting-screw engaging the clamp and one of the grip-blocks, substantially as described.

2. The combination, with two longitudinally-grooved oblong grip-blocks having shoulders on their sides, a staple-link engaging one block, and an anchor-chain fast to the staple-link, of a bail-clamp adapted to slide upon and hook fast to the grip-block that is engaged by the staple-link and an adjusting-screw having threaded engagement with the yoke-clamp through its bow portion and loosely secured in the other grip-block, substantially as described.

3. The combination, with a lower grip-block having opposite shoulders on the sides and a longitudinal groove on its top face, which groove is V-shaped in cross-section and diagonally ribbed in series, a staple-link engaging its limbs, with grooves longitudinally and oppositely extended in the sides of the lower block, and an anchor-chain fast by one end to the link, of an upper grip-block also shouldered on the sides and longitudinally grooved on its lower surface, which groove is diagonally ribbed in series, an adjusting-screw having threaded engagement with the bow portion of the bail-clamp and loosely secured in a socket-hole in the top grip-block, and a handle-bar to rotate the screw, substantially as described.

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