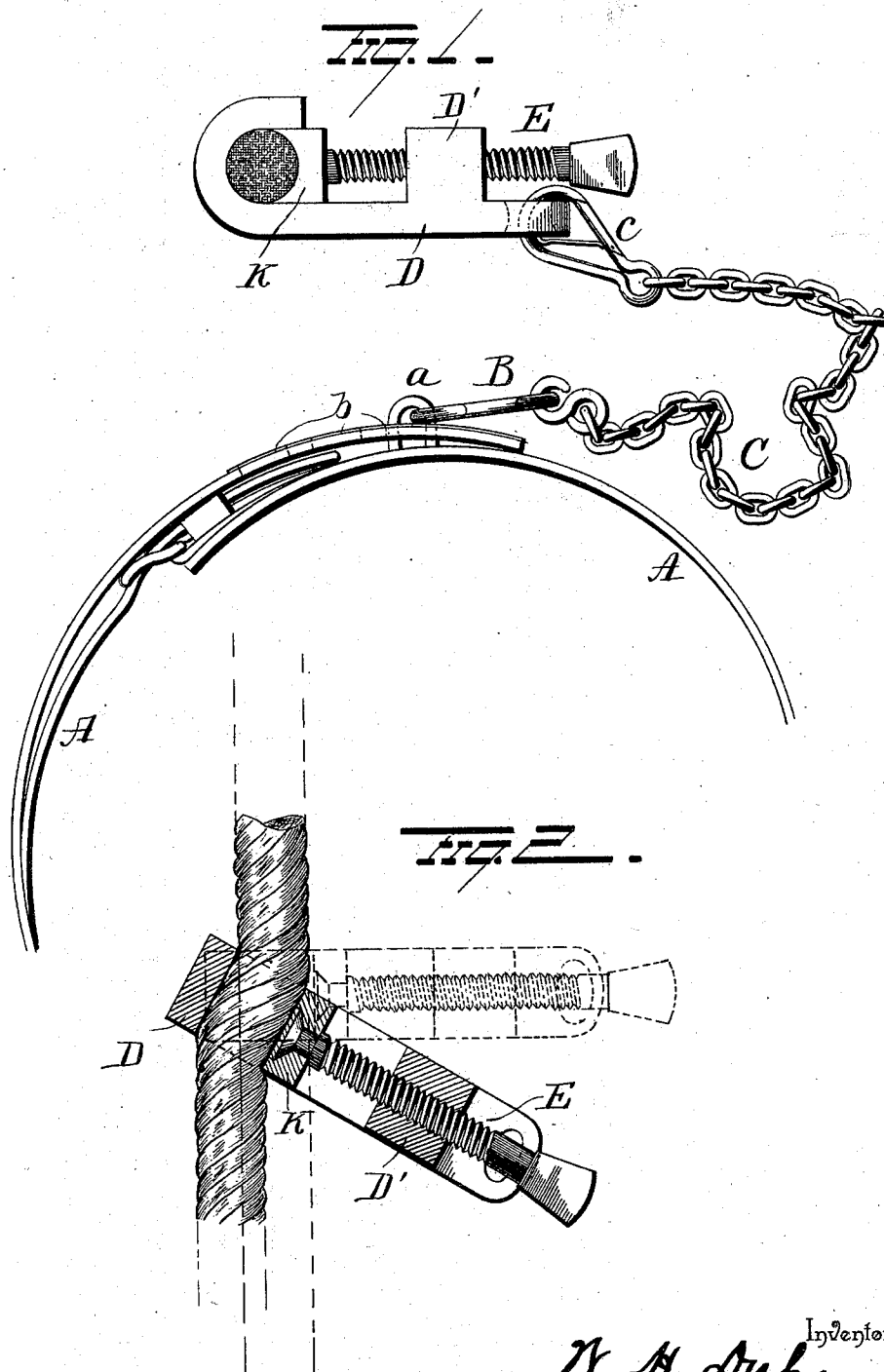


(No Model.)

W. H. DUHY.
SAFETY ROPE CLAMP.

No. 559,443.

Patented May 5, 1896.



Witnesses
E. J. Nottingham
G. F. Downing

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UNITED STATES PATENT OFFICE.

WILLIAM HENRY DUHY, OF NEW YORK, N. Y.

SAFETY ROPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 559,443, dated May 5, 1896.

Application filed January 28, 1896. Serial No. 577,154. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY DUHY, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Safety Rope-Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in safety belts and clamps, designed, primarily, as a means for protecting men working in dangerous places, such as house-painters, roofers, sailors, &c., the object being to provide an appliance one portion of which is adapted to be secured around the body of the workman and the other to a guide or safety rope, so that in the event of the breakage of the scaffold or ropes holding same or other accident the workman would be held suspended by the safety-rope.

My invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings; Figure 1 is a view of the device with a clamp attached to a safety-rope, and Fig. 2 is a view in longitudinal section through the clamp.

A represents a belt made of any suitable material and of sufficient strength to safely carry the weight of a man. While the ends of the belt may be fastened together by a buckle or any other equivalent device, I prefer to provide one end of the belt with a staple *a*, securely attached thereto, and the other end with a series of slots *b* for the passage of the staple. By this construction the belt can be adjusted to comfortably fit the body of the wearer. After the staple *a* has been passed through one of the slots *b* it is locked therein by the snap-hook B, which latter carries a chain C.

Secured to the other end of the chain, by a snap-hook *c* or otherwise, is the rope-clamp D. This clamp D is preferably made of metal, forged or cast, and is provided at one end with an opening for the attachment of the chain or snap-hook *c*, and the opposite end of the plate, constituting the body of the clamp, being bent upon itself and in a plane parallel

with the main body of the clamp, the bend in the plate being in the arc of a circle, so as to accommodate the guide or safety rope without presenting angles which would tend to chafe or cut the same.

Formed integral with the body of the clamp is the abutment D', which latter is provided centrally with a female-threaded opening for the passage of the screw E. This screw is provided on its outer end with a thumb or finger piece used for turning it, and carries on its inner end the sliding clamping-block K. The thumb-screw is of metal, with point planed down to fit hole in the clamping-block. The thumb-screw is passed through the abutment, and is then fastened to the clamping-block by flattening the point into the countersink formed in curved face of the plate, which holds it in permanent position. Should the scaffold or scaffold-supporting device fall or break or should the workman become ill from vertigo, heat, or other cause and fall or make a misstep, he would still remain suspended from the safety-rope, and could regulate his descent by operating the thumb-screw or remain suspended until rescued. The movable clamping-jaw rests solidly on the body of the clamping-plate and snugly fits between adjacent parallel faces of the hook-shaped end of clamping-plate when clamped to a rope, and hence is prevented from turning. The abutment is sufficiently removed from the curved end of the plate, so that when the movable clamping-jaw is withdrawn and in contact with the abutment there is ample room for the introduction of a safety-rope into the hook or curved end of the clamping-plate.

To use the device, the workman first securely fastens the belt around his body, and as he steps onto the scaffold or other support he attaches the clamp to the safety or guide rope, which is and should be independent of the scaffold-supporting devices.

Should the scaffold or scaffold-supporting devices fall or should he become ill from vertigo, heat, or other cause and fall or make a misstep, he would still remain suspended from the safety-rope and could be readily rescued.

The chain is sufficiently long to permit of all the freedom of movement necessary, and

by the use of the device the workmen need not cling to the safety-rope as they now do when working on swinging scaffolds.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

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

1. A safety attachment consisting of a clamp comprising a plate having a hook-shaped end, an abutment, a screw adapted to turn in the latter, and a sliding clamping-block swiveled on the end of the screw adapted to clamp the rope in the hook and to have sufficient movement between the hook and abutment to allow the rope a lateral outlet between the hook and block when it is desired to attach or detach the clamp, substantially as set forth.

2. The combination with an attaching-belt, and a flexible connection connected there-

with, of a clamp comprising a main portion having a hook formed at one end, a slide-block adapted to open and close the hook and receive and hold a rope therein, an abutment, and a screw carrying the block and operating in the abutment for moving and locking said block, substantially as set forth.

3. A safety rope-clamp comprising the main portion having a hook at one end, a block guided in its movements by the main portion and constructed to enter the hook, and a screw operating in connection with threads on the main portion and swiveled to and extending through the block whereby the block and screw are connected together and capable of being removed from each other, substantially as set forth.

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

WILLIAM HENRY DUIY.

Witnesses:

J. P. RATH,

PATRICK H. CROWE.