

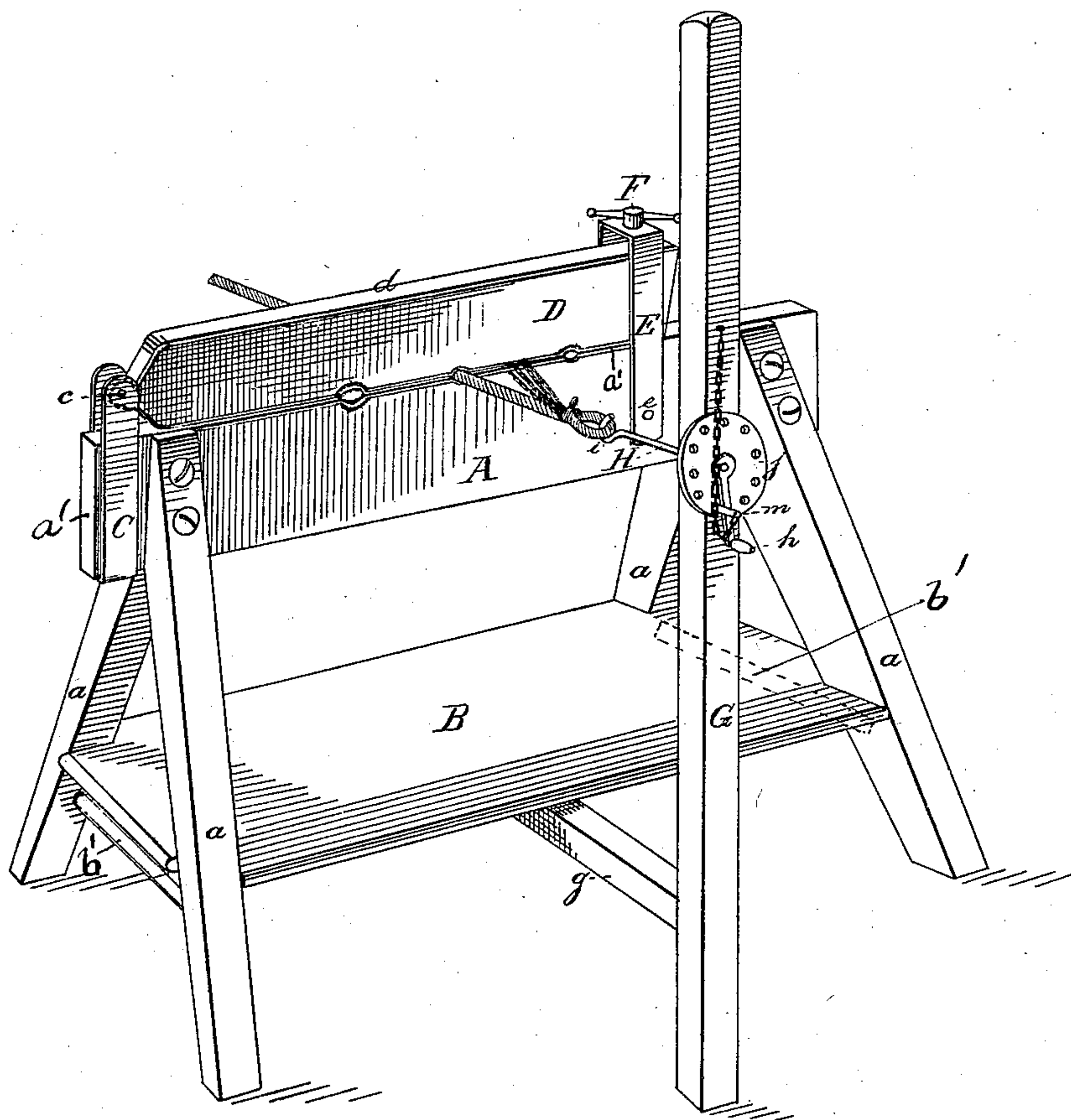
(No Model.)

H. CHANNON.

WIRE ROPE SPLICING BENCH.

No. 253,909.

Patented Feb. 21, 1882.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY CHANNON, OF CHICAGO, ILLINOIS.

WIRE-ROPE-SPLICING BENCH.

SPECIFICATION forming part of Letters Patent No. 253,909, dated February 21, 1882.

Application filed September 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY CHANNON, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Wire-Rope-Splicing Benches, of which the following is a specification.

This invention consists in certain improvements in wire-rope-splicing benches, which will be hereinafter described, and pointed out in the claims.

The accompanying drawing represents a perspective view of the device, in which—

A denotes a beam supported by four divergent legs, *a*, in the manner of a trestle or horse. Near the base each pair of legs is braced by a strut, *b'*, and upon these struts is secured a shelf, B, that steadies the legs longitudinally, and will be the support for holding the necessary hand-tools, as marlin-spikes, &c.

C is a stirrup-shaped plate secured over one end of beam A, the upwardly-projecting ends of which are perforated for a pin, *c*.

D is the clamp-bar, being secured between an iron strap, *d*, which at the rear chamfered end of the bar forms an eye that is inserted between the ends of stirrup-plate C, and is pivotally connected therewith by the pin *c*.

E is a yoke, shaped like an inverted U. This yoke is pivotally secured to beam A by a pin, *e*, passed through holes in the ends of the yoke, and through a hole in said beam. The upper end of the yoke E is tapped for holding a screw, F. This yoke E, when swung forward so that its upper end will lean upon the beam A, will entirely disengage the end of the clamp-bar D, so that the same can be lifted for inserting a rope, which is then securely held by swinging the yoke over the end of the clamp-bar D, and then contracting it toward the beam A by tightening the screw F. The beam A is lined on its top face with plate metal, *a'*, and both the beam A and the clamp-bar D have arc-like recesses in their adjoining faces and at meeting-points. These recesses are of different dimensions for accommodating different sizes of rope that is to be spliced.

G is a post or standard, which is secured to the shelf B of the trestle-frame by a brace, *g*. A spindle, H, having a hook, *i*, formed upon one end, and a hand-crank, *h*, on its opposite end, is passed through a hole in post G, horizontally in line with the top of beam A, and

an annular plate, *j*, is secured against post G, concentric with and behind crank *h*, which plate *j* is perforated for inserting a pin, *m*, that is attached to the post by a chain. This pin is for the purpose of locking the crank at any desired point after untwisting the rope sufficiently and during the time that the splice is made.

The *modus operandi* for making an eye-splice in this bench is as follows, to wit: The end of a wire rope or cable being clamped between the beams A and D by screw F, the rope is bent over the hook *i* to the form of the desired eye, and is temporarily secured by tying it with a cord, as shown by the drawing. Next the strands of the loose end of the rope are unlaied, and then that portion of the rope or cable between the eye and the point where it is clamped is untwisted by turning the crank *h* until the strands are sufficiently opened, when the crank is locked by inserting the pin *m* in the hole of plate *j* that is next behind it. Now the end strands are inlaid for a convenient length, and each passed over one and under another of the corresponding strands of the untwisted rope portion for a sufficient distance, and finally the crank is unlocked and turned in the opposite direction until the strands have closed tight upon each other, when the eye-splice is completed.

It makes no material difference whether the rope while being untwisted is on a diagonal or on a rectangular line with the clamp. The differently-sized openings may be placed so close to each other that the angle the rope would be at will not interfere with its manipulation. There is simply a torsional stress on the crank and rope when untwisting the latter, and no tensile, and therefore the relative position of the clamping-point of the rope to the crank is of no importance.

With the above arrangement one man can handle the heaviest wire cable, and can splice it without further assistance, and in less time than was possible heretofore, considering the great force required for opening the strands.

Another advantage gained by the above device is that the wires are not damaged by the operation, since the strands can be sufficiently opened for admitting the end strands to be inlaid without maltreatment.

This whole apparatus, although very simple

in its construction, is complete in its operation, and effects a great saving in the making of eye-splices.

What I claim as my invention is—

5 1. The clamp for holding wire rope, composed of beam A, having stirrup C, yoke E, and screw F, and of bar D, in combination with the crank-hook H, for opening the strands of the rope, as and for the purpose of making
10 eye-splices in the manner set forth.

2. A splicing-bench composed of beam A, with legs *a*, hinged beam D, and yoke E, with screw F, in combination with crank-hook H,

all substantially as and for the purpose set forth.

15 3. A splicing-bench composed of beam A, with legs *a*, hinged clamp-bar D, and yoke E, with clamp-screw F, in combination with post G, having perforated plate *j*, pin *m*, and crank-hook H, all constructed and arranged sub-
20 stantially as and for the purpose set forth.

HENRY CHANNON.

Witnesses:

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