

(No Model.)

2 Sheets—Sheet 1.

A. F. MARTEL.

NUT LOCK.

No. 246,893.

Patented Sept. 13, 1881.

Fig. 1.

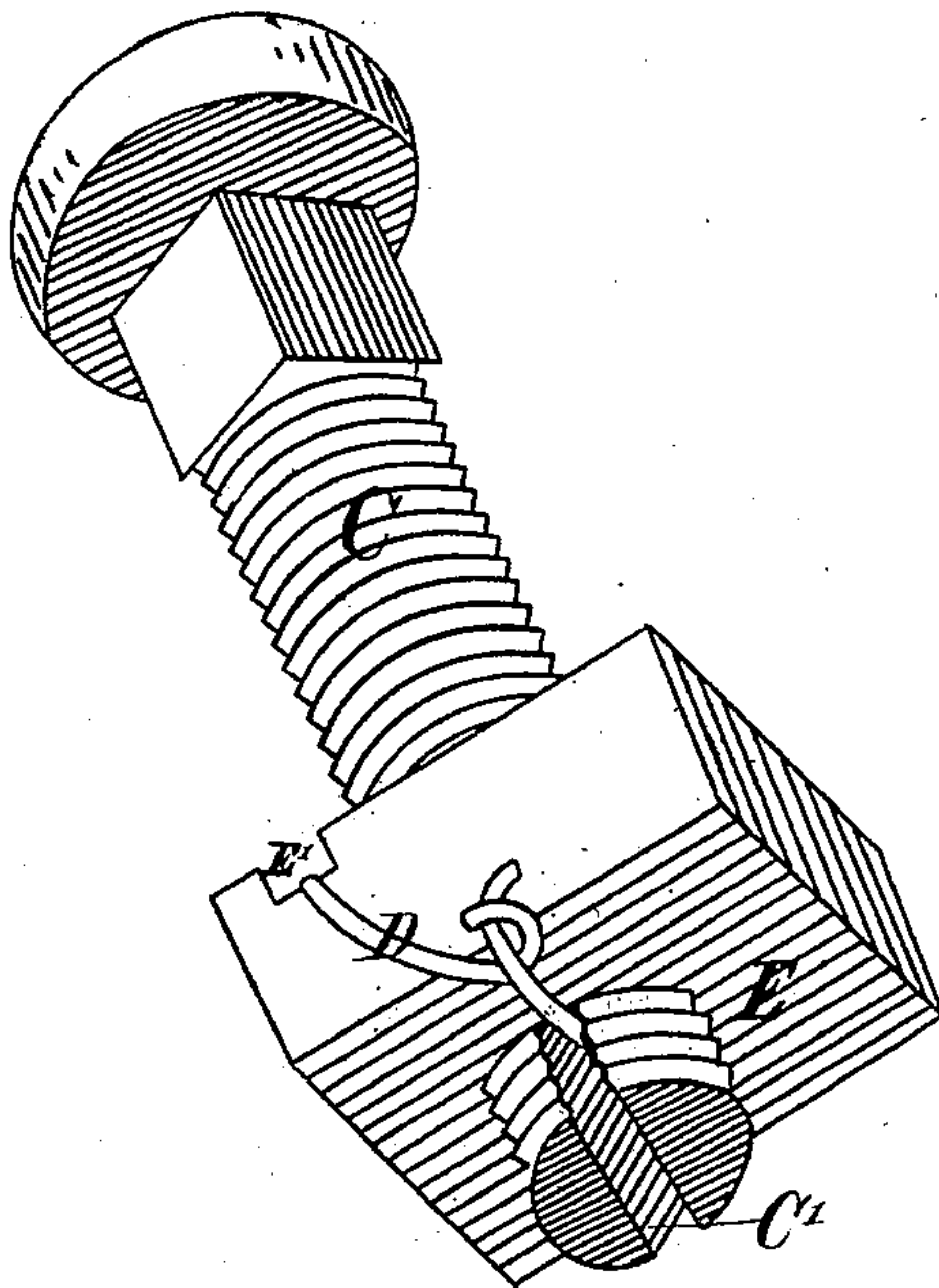
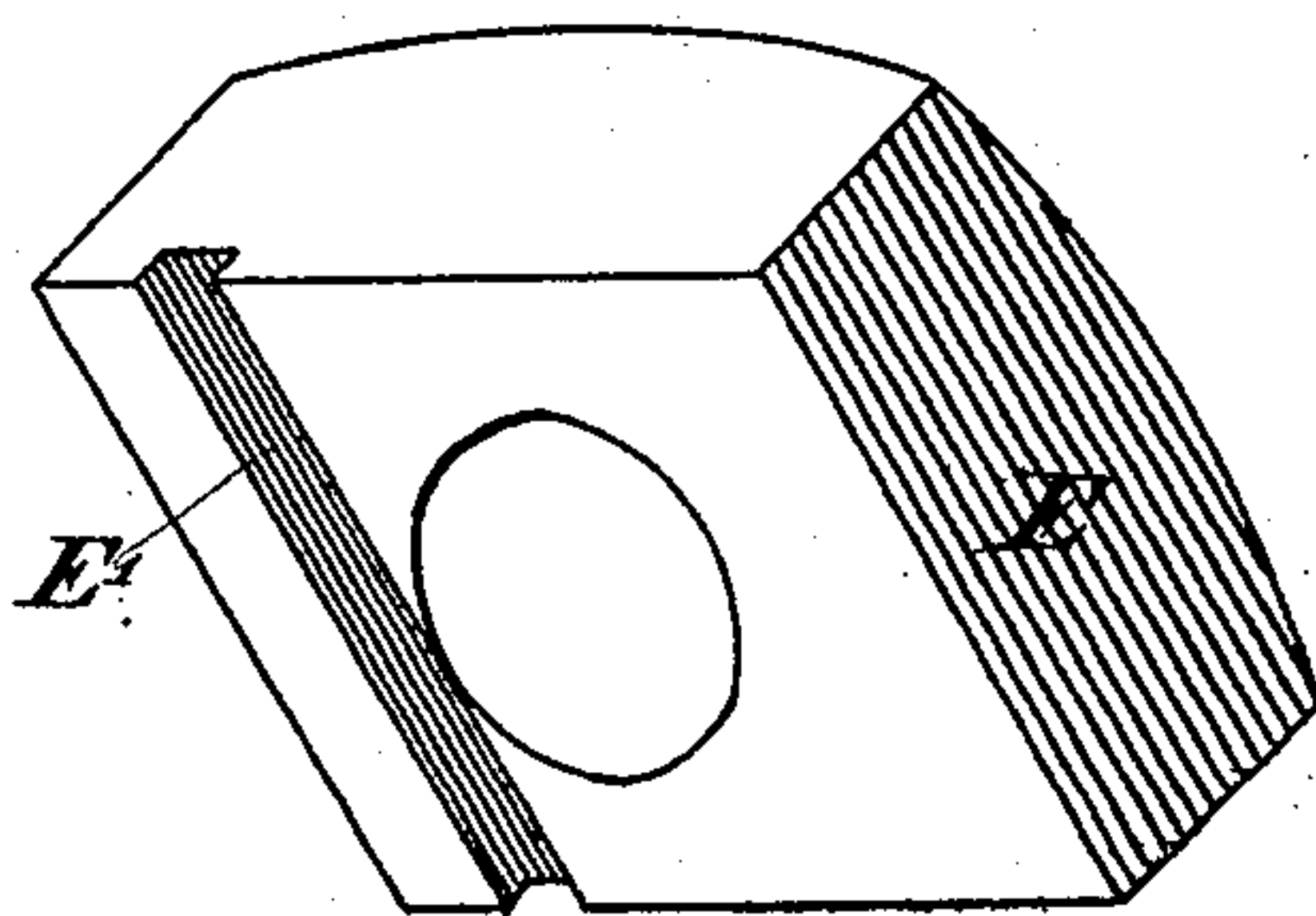


Fig. 2.



Witnesses.

G. L. H. M. C. C.

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Inventor.

A. F. Martel

(No Model.)

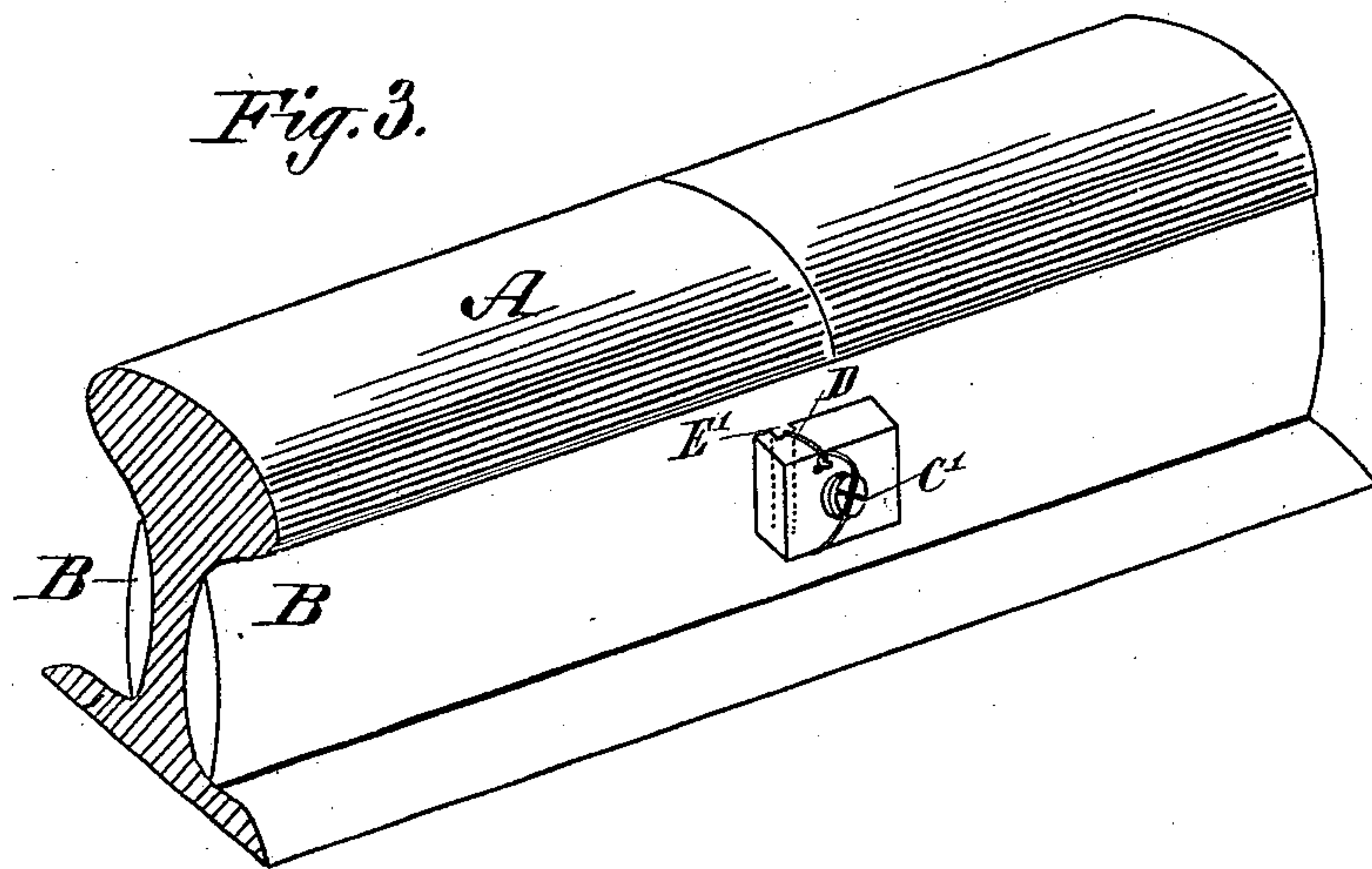
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WITNESSES.

A. J. Boisseau

W. J. Kenny

A. F. Martel
INVENTOR.

UNITED STATES PATENT OFFICE.

ADÉLARD F. MARTEL, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF
ONE-FOURTH TO CHARLES AUGUSTE MARTEL, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 246,893, dated September 13, 1881.

Application filed August 25, 1880. (No model.)

To all whom it may concern:

Be it known that I, ADÉLARD FRANK MARTEL, of the city of Montreal, in the county of Hochelaga, province of Quebec, Canada, have
5 invented certain new and useful Improvements in Nut-Locks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to nut-locks; and it consists in forming the nut with a groove on its inner face, and the bolt with a transverse slot in its threaded end, and seating a wire in said groove, carrying the same into and through the slot, and finally securing its ends, as here-
15 inafter more fully explained.

In the accompanying drawings, Figure 1 represents a perspective view of a bolt and nut provided with my improved nut-lock; Fig. 2, a perspective view of the nut detached; Fig. 3, a perspective view of a railroad-rail provided with fish-plates and having my improved locking device applied to the fastening-nut of the latter.

The object of my invention is to produce a
25 simple and efficient means of locking nuts upon bolts, and especially to furnish a locking device adapted for use in connection with the fastening-bolts of fish-plates used on railroad-rails.

30 In order to produce such a device at a cost that will not interfere with its general adoption, it is desirable that any special preparation of the nut or bolt that may be necessary shall be effected in the act of producing them, thus avoiding all extra work thereafter. With this end in view, I form a groove or recess preferably in the inner face of the nut, and a transverse slot in the threaded end of the bolt, and apply the fastening-wire to them in the man-
40 ner presently described. The groove and slot may both be formed during the operation of forming the nut and bolt, the dies being formed with suitable raised or projecting portions for that purpose.

45 Referring, now, to the drawings, A represents a section of rail or a rail-joint, to which are applied fish-plates B, held in place by bolts C and nuts E, as usual. As shown more clearly in Fig. 2, the nut E is formed with a groove or depression, E', in its inner face, the purpose of which is to afford a seat for the wire D, by which the nut is locked. The shape or form of the groove or depression is immaterial, but

it should be of sufficient size to readily receive the wire.

55 As seen in Fig. 1, the end of the bolt is slotted or formed with a transverse notch or depression, C', in its end, the bolt being of such length as to project a short distance beyond the face of the nut when the latter is turned
60 to place, and thereby to expose the slotted or notched end.

The fastening-wire, which may be of any suitable size and form, may be applied to the groove of the nut before the latter is turned
65 to place, or subsequently, it being in the latter case passed lengthwise into and through the groove and bent up at the sides of the nut, as shown. One end of the wire D is carried across the end of the bolt and pressed into the
70 slot or notch C' therein, and is then bent over toward the opposite end of the wire.

When the wire is of considerable size or stiffness, the ends may be simply bent closely against the side of the nut; but ordinarily I
75 prefer either to twist the ends together, as shown, or to bend them around the projecting end of the bolt.

In some cases it may be desirable to form two or more slots or notches in the end of the
80 bolt, crossing each other, as shown in Fig. 3, to permit the ready application of the fastening-wire with the nut in any position to which it may be turned.

I am aware that a wire has been passed
85 through perforations formed in the end of the bolt and through the nut, and I lay no claim to such construction or arrangement, which is objectionable, in that it requires special pre-
90 paration of the nut and bolt after they are otherwise completed, and thereby renders the nut-lock expensive.

These objections are entirely overcome by my improvements.

The side of the nut may be grooved instead
95 of its face.

Having thus described my invention, what I claim is—

In combination with a bolt having a slotted end, a nut having a groove in its inner face,
100 and a wire extending through the groove and slot, substantially as shown and described.

A. F. MARTEL.

Witnesses:

A. F. BRISSEAU,
W. L. KENOS.