

(No Model.)

R. S. GLADDING.
NUT FOR SCREW BOLTS.

No. 414,519.

Patented Nov. 5, 1889.

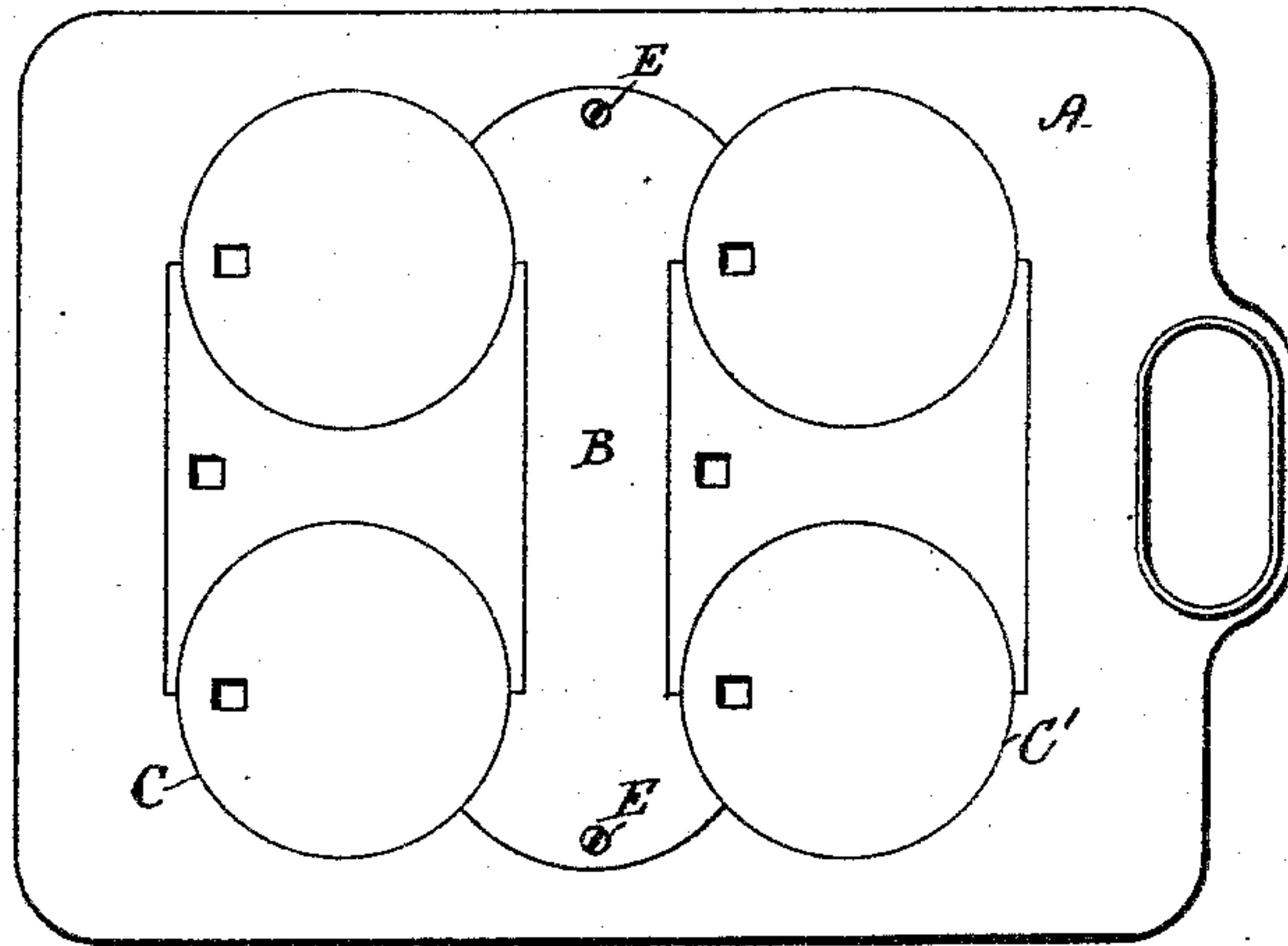


Fig. 1.

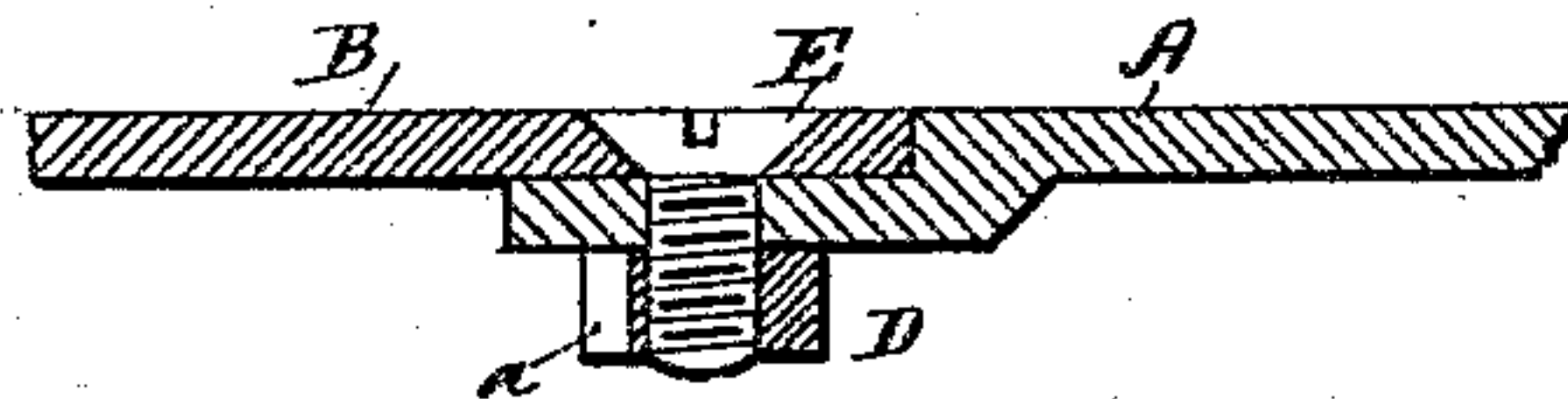


Fig. 2.

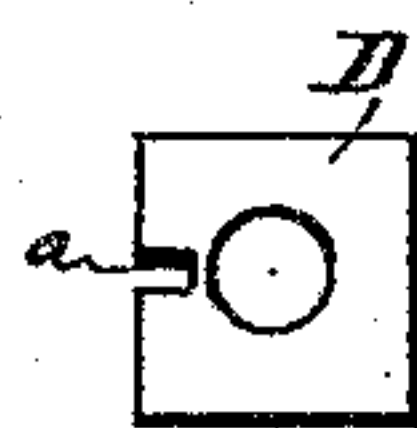


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

RICHARD S. GLADDING, OF BRISTOL, RHODE ISLAND.

NUT FOR SCREW-BOLTS.

SPECIFICATION forming part of Letters Patent No. 414,519, dated November 5, 1889.

Application filed April 13, 1888. Serial No. 270,541. (No model.)

To all whom it may concern:

Be it known that I, RICHARD S. GLADDING, a citizen of the United States, residing at Bristol, in the county of Bristol and State of Rhode Island, have invented a new and useful Improvement in Nuts for Screw-Bolts, of which the following is a specification.

In making repairs upon stoves and furnaces the plates of which are secured to each other by means of the ordinary screw-bolts, it is extremely difficult to loosen the nuts from the screws which extend into the fire-chamber or flues of the stove or furnace, owing to the expansion of the bolt by rust and the usual inaccessibility of the nut to be removed; and when the chisel as ordinarily employed is used for the purpose of cutting the wrought-iron bolt or nut there is extreme danger of breaking the comparatively thin cast-iron plates of which the stove or furnace is formed; and it is the object of my invention to provide a fastening device for the stove or furnace plates in which the plates can be readily disengaged from each other under all circumstances; and my invention consists in a fastening-bolt provided with a nut having an entire screw-thread, the said nut being provided with a slit or groove extending in the direction of its axis from the exterior to near the screw-thread, whereby when the bolt and nut become rusted together and are to be removed a slight blow upon a chisel inserted in the slit or groove will suffice to effect the ready removal of the nut, as hereinafter fully set forth.

Figure 1 represents a plan view of the top of a cooking-stove. Fig. 2 represents an enlarged detail section of the attached plates of the stove-top and of the nut. Fig. 3 is a plan view of the nut.

In the accompanying drawings, A is the top plate of a cooking-stove, having the center piece B, which forms the bridge between the front and rear pot-holes C C', the said center piece being secured to the top plate A by means of the screw-bolts E, having nuts D, which are located either in the flue or in the fire-chamber of the stove. The center piece B in ordinary cooking-stoves soon becomes warped or cracked, and therefore requires removal from the stove in order that a new center piece can be inserted in its place; and in order that the nuts D can be readily removed from the screw-bolts E, I provide them with a slit or groove *a*, which may be prefer-

ably made about a sixteenth of an inch in width and extend to within about a thirty-second of an inch from the screw-thread of the nut, as shown in Fig. 3; and when the center piece B is secured to the plate A by means of the screw-bolt E, having the slit or grooved nut D, a slight tap with a hammer upon a chisel inserted into the slit or groove *a* will suffice to fracture the nut, thus loosening the nut on the screw, so that thereafter the screw-bolt can be readily removed from the plates and the desired repairs be made, such repairs being often required in almost every stove or furnace, so that the use of such improved fastening for stove-plates will operate as a great saving of time to stove-repairers. The screw-bolts E can in nearly every instance be readily turned in the plate, so that the slit or groove *a* in the side of the nut can be brought to the most convenient side for operation.

I am aware that screw-nuts have heretofore been cut entirely through to one side for the purpose of a lock-nut; but I do not claim a nut when cut entirely through so as to expose the thread of the screw at the slit of the nut, thus adding materially to the trouble of removal on account of the swelling of the unprotected screw-thread by the rust.

In my invention the slit is made without cutting through the screw-thread of the nut, so that when the chisel cracks the thin web left between the bottom of the slit and the cavity of the nut the nut can be readily turned upon the screw, the threads of which will be in proper uniform condition throughout their whole extent to allow the nut to be turned.

Screw-bolts provided with my improved nut can also be advantageously employed on any contrivance where the bolt and nut are subjected to rust, their advantageous use not being limited to the plates of a stove.

I claim as my invention—

A bolt provided with a nut having an entire screw-thread, the said nut being provided with a slit or groove extending in the direction of its axis from the exterior to near the screw-thread, substantially as and for the purpose specified.

RICHARD S. GLADDING.

Witnesses:

JOHN S. LYNCH,
SOCRATES SCHOLFIELD.