

(No Model.)

Z. F. JONES.

NUT LOCK.

No. 360,699.

Patented Apr. 5, 1887.

Fig. 1

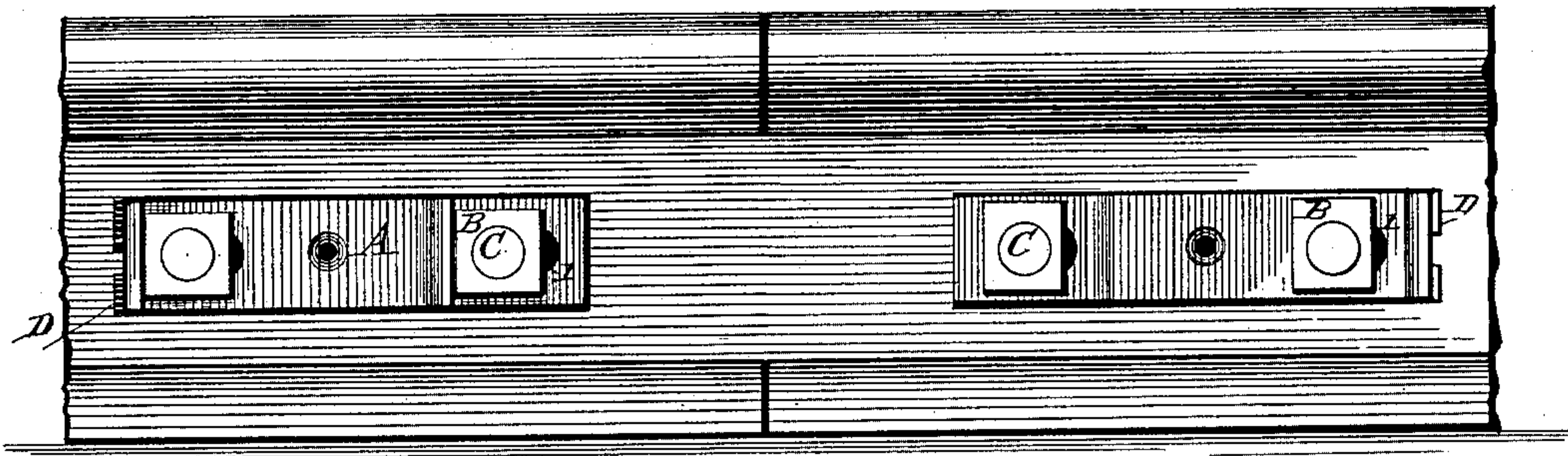


Fig. 2.

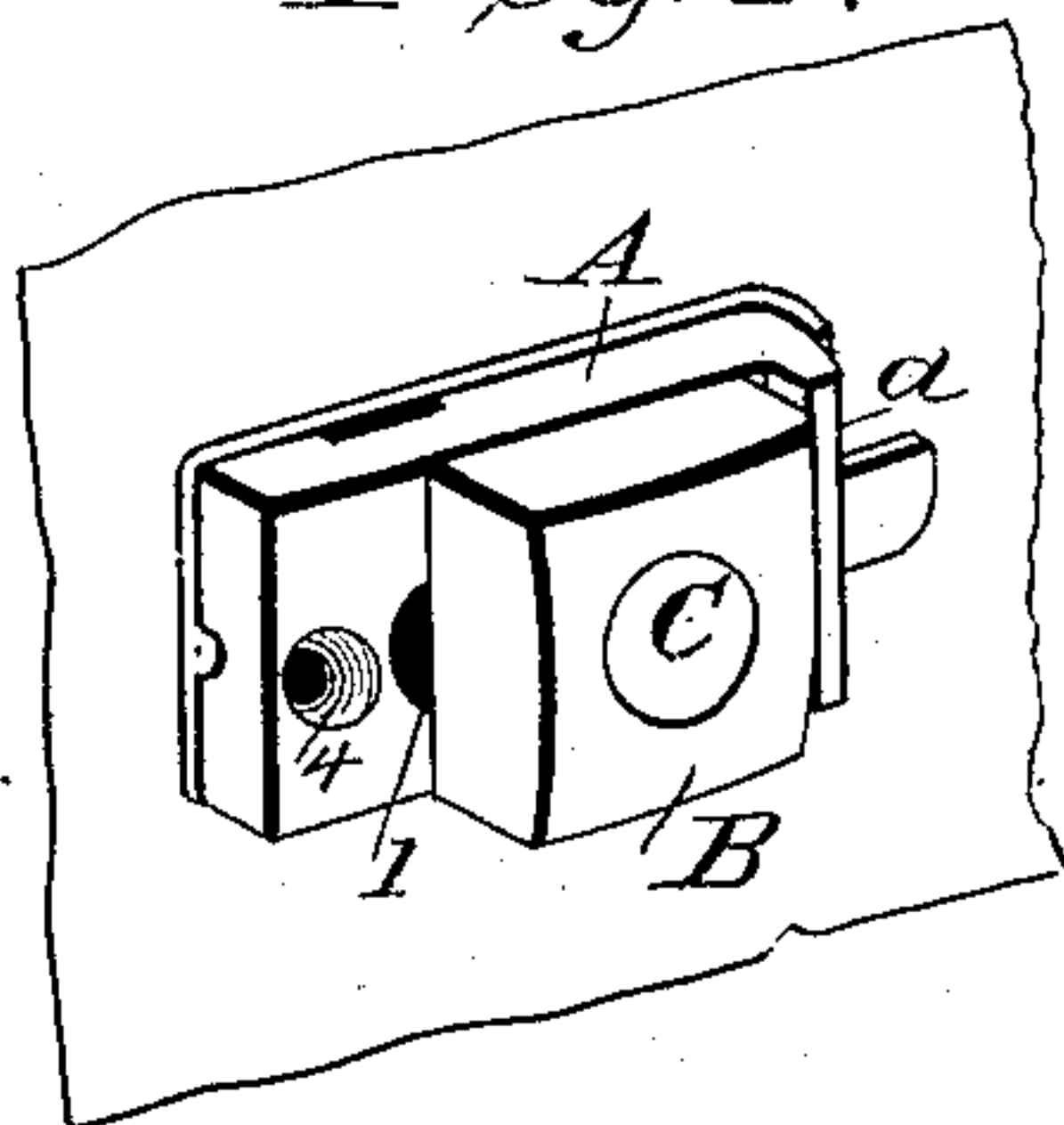


Fig. 4.

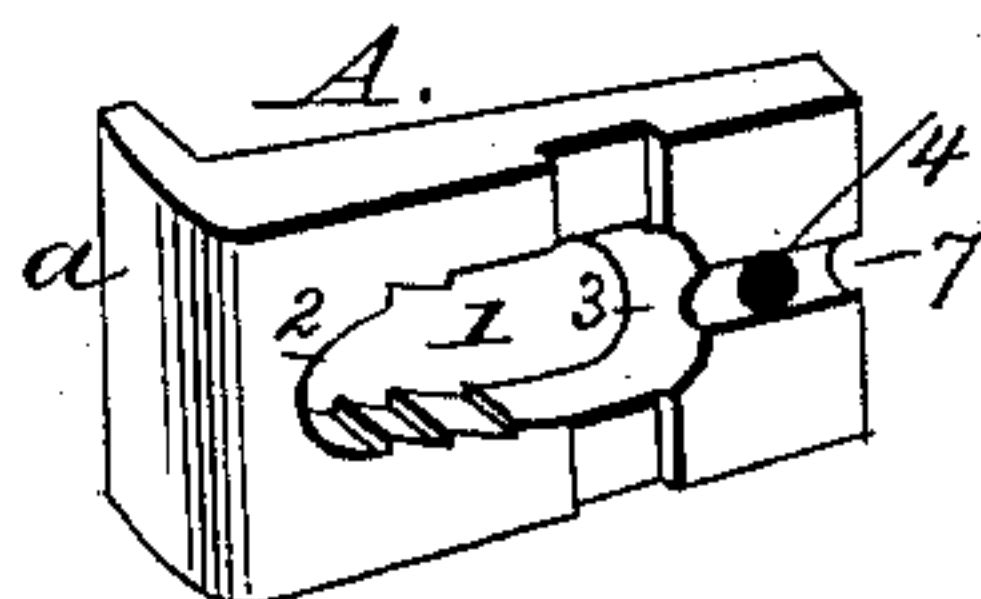


Fig. 5.

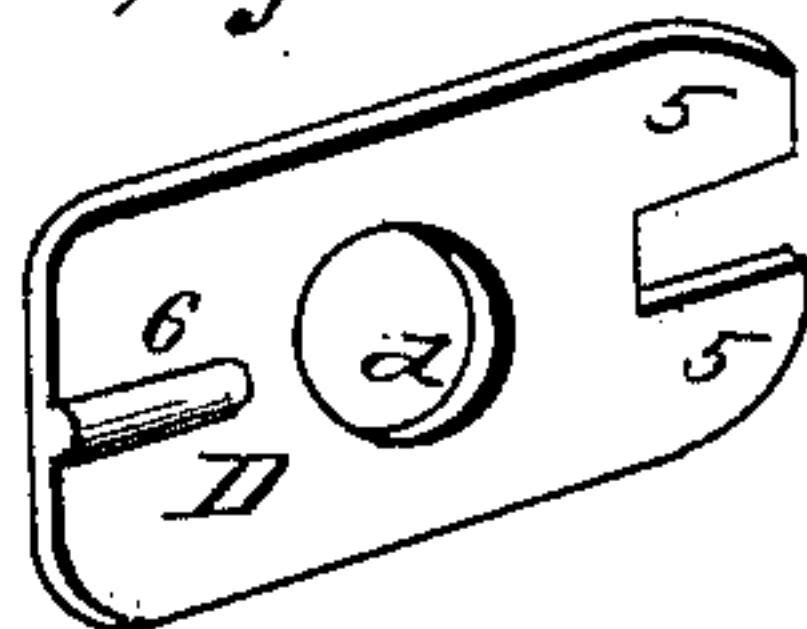


Fig. 3.

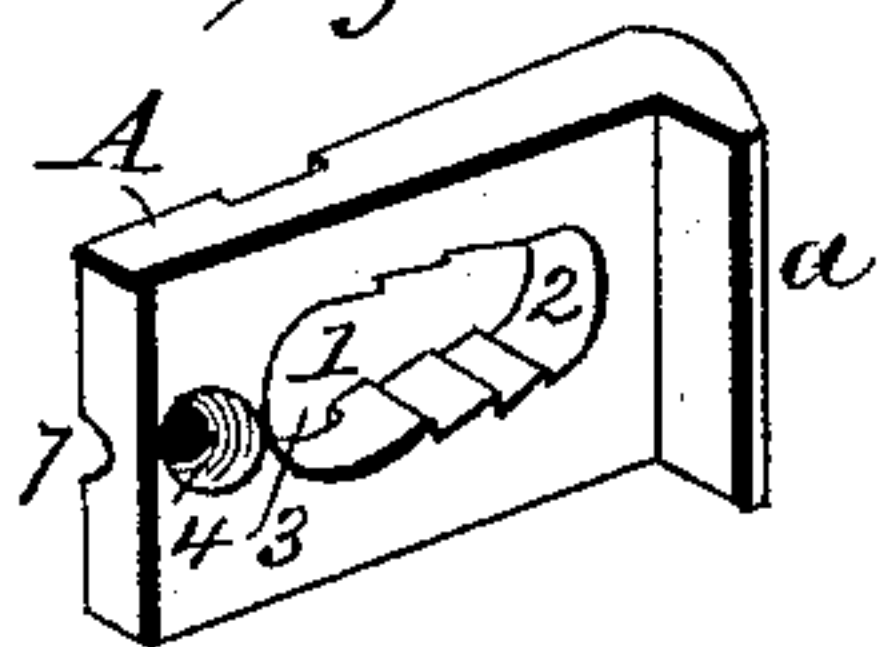
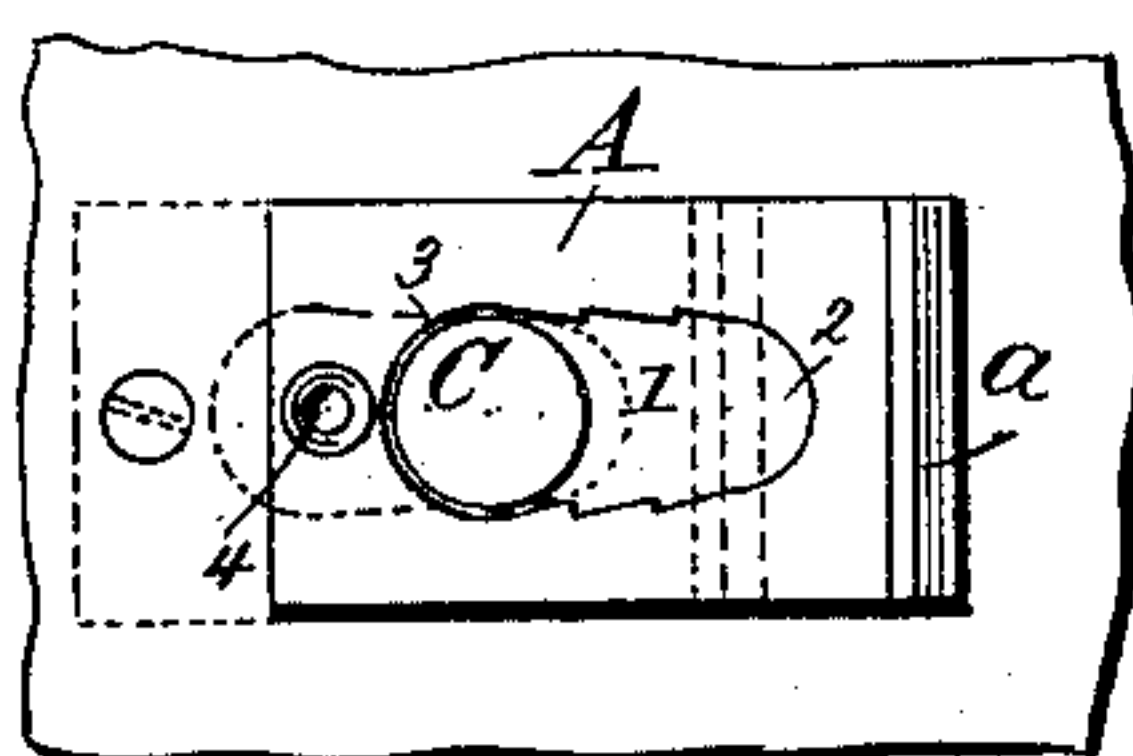


Fig. 6.



WITNESSES:

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ZACHARIAH F. JONES, OF SCOTTSVILLE, VIRGINIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 360,699, dated April 5, 1887.

Application filed September 22, 1886. Serial No. 214,236. (No model.)

To all whom it may concern:

Be it known that I, ZACHARIAH F. JONES, of Scottsville, in the county of Albemarle and State of Virginia, have invented a new and useful Improvement in Nut-Locks, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of a part of a rail-joint having my improved nut-lock, shown in its adaptation to two adjacent bolts and nuts. Fig. 2 is a perspective view of the improvement as applied to a single bolt and nut, the parts being shown in position to lock the nut. Fig. 3 is a perspective front view of the locking-plate. Fig. 4 is a perspective rear view of such plate. Fig. 5 is a perspective view of the securing-plate; and Fig. 6 is a front view of my improvement, the nut being removed and the locking-plate being shown in full lines in position for application to and removal from the bolt and in dotted lines in position to lock to the bolt.

The invention consists in certain features of construction and novel combinations of parts, as will be described.

The locking-plate A is adapted, when properly arranged, to lock the nut B from turning independently of said plate. This is preferably attained by forming the plate with a flange, *a*, to project alongside of the nut. Through the plate I form an opening, 1, adapted to fit over a bolt, C, and such opening is contracted or reduced in width toward one end at 2, its main portion 3 being of sufficient size to fit easily over the bolt, while such part 2 is made of less width than the diameter of the bolt. By this construction, when in use, the plate A is fitted over a bolt and the nut is properly turned on the bolt in part 3 of opening 1. When the parts are so arranged and it is desired to lock the nut, the plate A should be struck by hammer or other suitable implement on its flanged end with sufficient force to drive it transversely of the bolt in such manner that it will flatten the bolt at diametrically-opposite points, and such flattened portions will rest in the narrowed portion 2 of the opening 1. This operation will

bring the flange *a* alongside the nut, so that the latter will be held from turning, while the plate A will be locked from turning on the bolt by the latter's being flattened and fitting the contracted portion of opening 1. Thus it will be seen that the nut and bolt are locked so that one cannot be moved independently of the other as long as the nut, bolt, and locking-plate are in the relative position shown in Figs. 1 and 2. To provide for so securing the parts when the nut is intended to be turned up against wood, the locking plate may be provided with a screw-opening, 4, through which a screw may be passed into the wood when the plate A is adjusted into position for locking the nut and bolt. Where, however, the object to be secured by the nut is metal, I prefer to use the securing-plate D, which has an opening, *d*, to fit over the bolt and a portion or portions, 5, to turn up alongside the flanged end of the plate A when the nut is locked. This securing-plate is provided with a rib or projection, 6, and the locking-plate has a groove, 7, which fits over this projection and preserves the relation between the locking and securing plates, so that the parts will be retained in proper position for turning up against the locking-plate. Except for this groove and rib, the locking-plate might be turned by the friction of the nut at a right or other angle to the securing-plate, whereas the said groove and rib secure the parts in line, as is desired.

It will be noticed that the flange *a* of the locking-plate is arranged at right angles with the direction of length of the opening 1.

The operation is as follows: The locking-plate is placed over a nut, and the nut is turned home against the locking-plate, which is then driven longitudinally to bring its flange *a* against the side of the nut and to flatten the bolt by the converging portion of opening 1.

When used against wood, a screw is now passed through opening 4 into the wood. When used against metal, the securing-plate is turned up at 5 alongside the locking-plate. (Such securing-plate has been previously applied, as shown.)

In the construction shown in Fig. 1 the se-

curing-plate and locking-plate need not be provided the one with rib 6 and the other with groove 7, as in such case the plates cannot turn out of line with each other.

5 Having thus described my invention, what I claim as new is--

1. The combination, with the locking-plate having an opening contracted or reduced in width toward one end, of a securing-plate having an opening formed to fit over the bolt and a portion adapted to be turned alongside the locking-plate, substantially as described, and for the purposes specified.

15 2. The improved nut-lock herein described, consisting of the locking-plate having an opening contracted or reduced in width toward

one end and having a groove, 7, formed in its under side, the said plate being adapted to be placed on the bolt and moved longitudinally therealong, the securing-plate having an opening formed to fit the bolt and provided with a rib, 6, and with portions 5 fitted to enter the groove 7 of the locking-plate, all being substantially as described, and for the purposes specified.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

Z. F. JONES.

Witnesses:

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