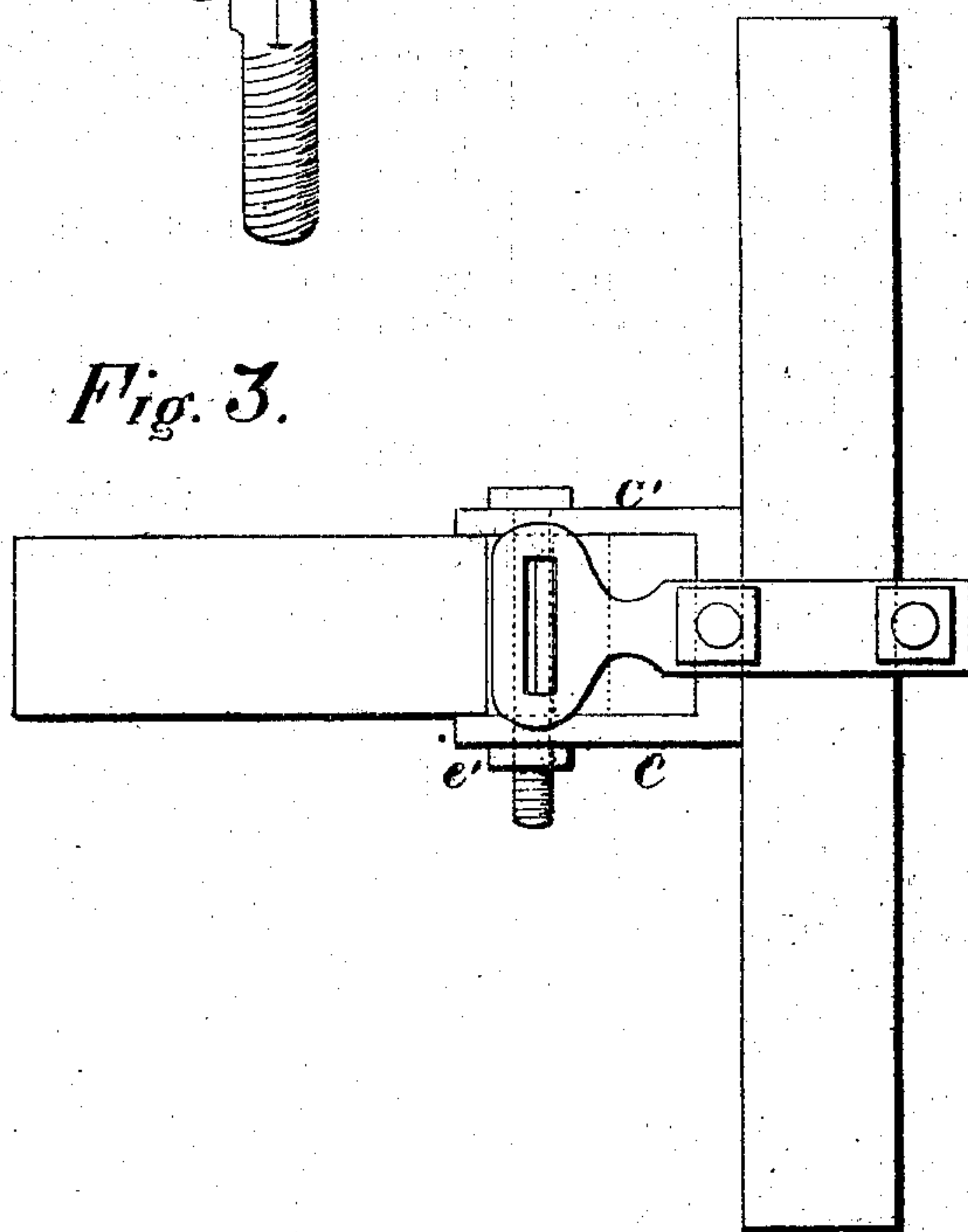
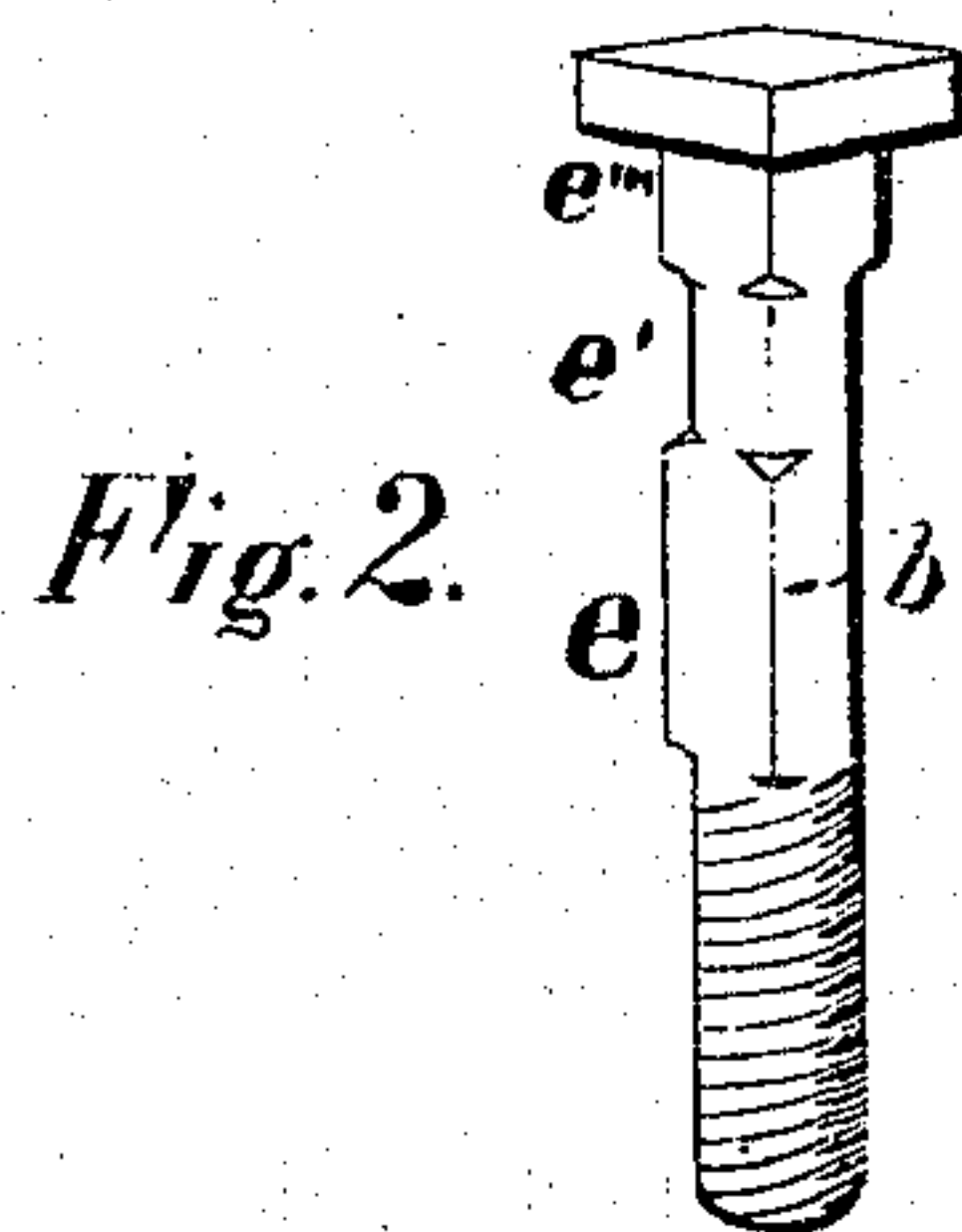
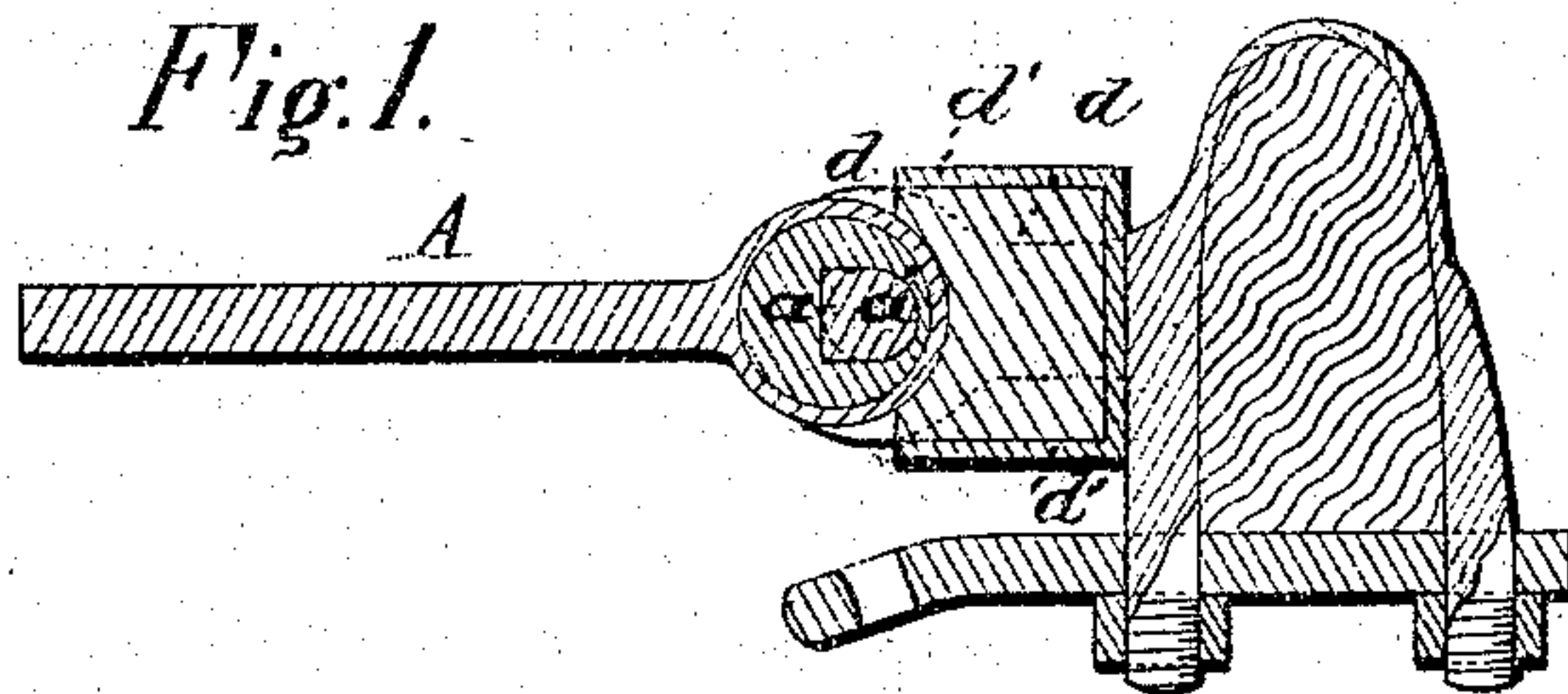


A. O. NELSON.

Improvement in Thill Coupling.

No. 118,383.

Patented Aug. 22, 1871.



Witnesses.

Villette Anderson.  
E. H. Bates.

Inventor.

A. O. Nelson,  
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Attys.

## UNITED STATES PATENT OFFICE.

ALEXANDER O. NELSON, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 118,383, dated August 22, 1871.

*To all whom it may concern:*

Be it known that I, ALEXANDER O. NELSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and valuable Improvement in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical longitudinal section of my invention. Fig. 2 is a detached view. Fig. 3 is a top view.

This invention has relation to thill-couplings; and it consists in a combination of devices for that purpose; the object being to guard against rattling, by the peculiar use of a rubber block and an eccentric, and to protect the rubber.

The thill-iron A has fitted within its eye an eccentric, *a*, having an opening, *a'*, for the passage of the connecting-bolt *b*, both the opening and the bolt having one flat side, so that by turning the bolt the eccentric is turned with it. The rubber block *d* is fitted to the thill-iron, and for protection within the guard *d'* and the ears *c* and *c'*. The bolt *b* has a square shoulder

adapted to a square opening in the ear *c'*, to prevent the turning of the bolt and the eccentric when both are in place; but by removing the nut *e* and driving the bolt back to the neck *e'* on the bolt, the bolt and eccentric may be turned, and the bolt having its bearings in the ears *c* and *c'*, the turning of the bolt and the eccentric presses the thill-iron back more or less against the rubber block, and thus rattling is prevented and the wear of the rubber block compensated for.

I claim as my invention—

In a thill-coupling, the combination, with the eccentric *a* having the opening *a'* rounded out toward the rubber and flat on the opposite side, of the bolt *b* having its opposite sides made, respectively, rounded and plane to correspond with the form of said opening, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALEXANDER O. NELSON.

Witnesses:

W. J. KOWEAN,  
HENRY O. AUSTIN.