

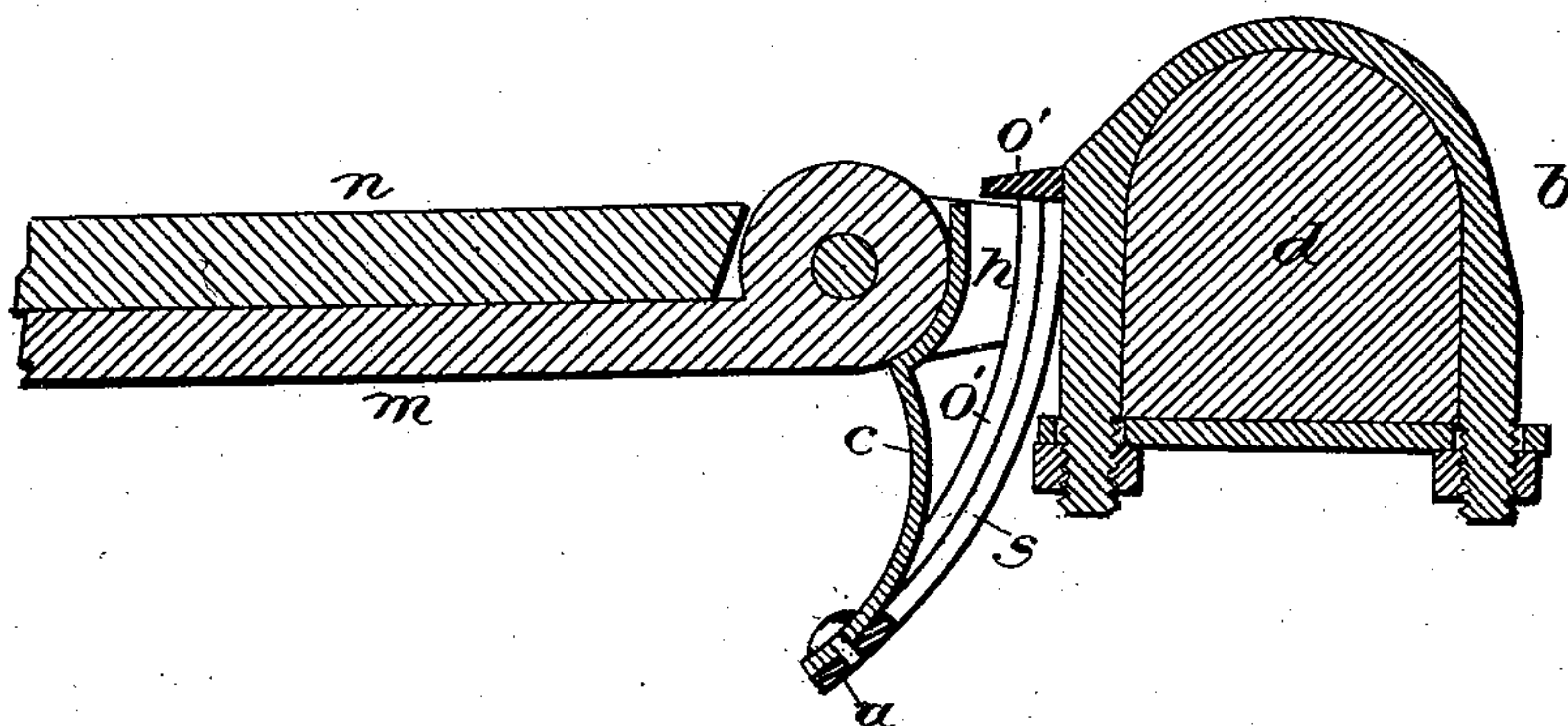
(No Model.)

A. KRAISS.  
ANTIRATTLER FOR THILL COUPLINGS.

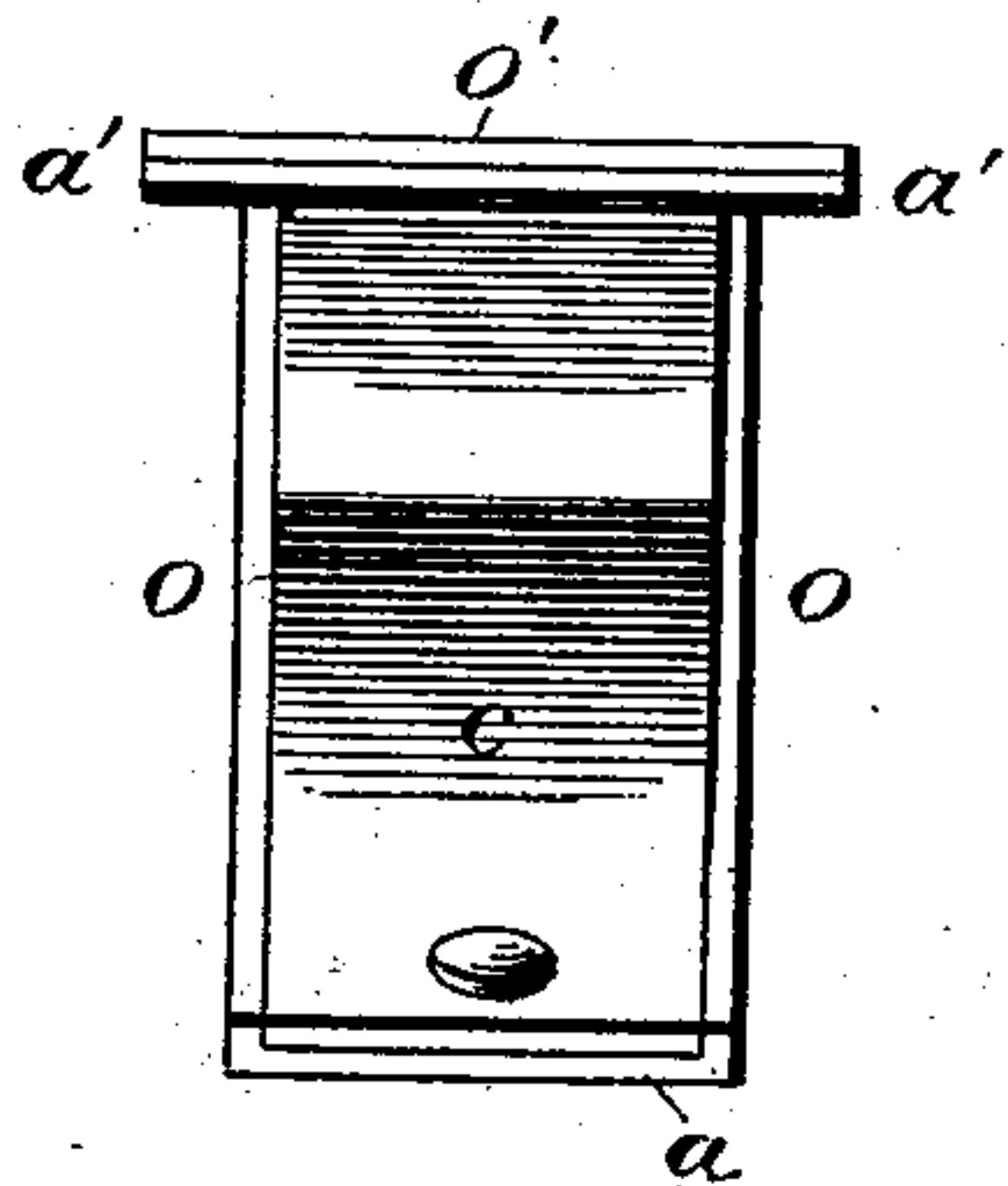
No. 506,822.

Patented Oct. 17, 1893.

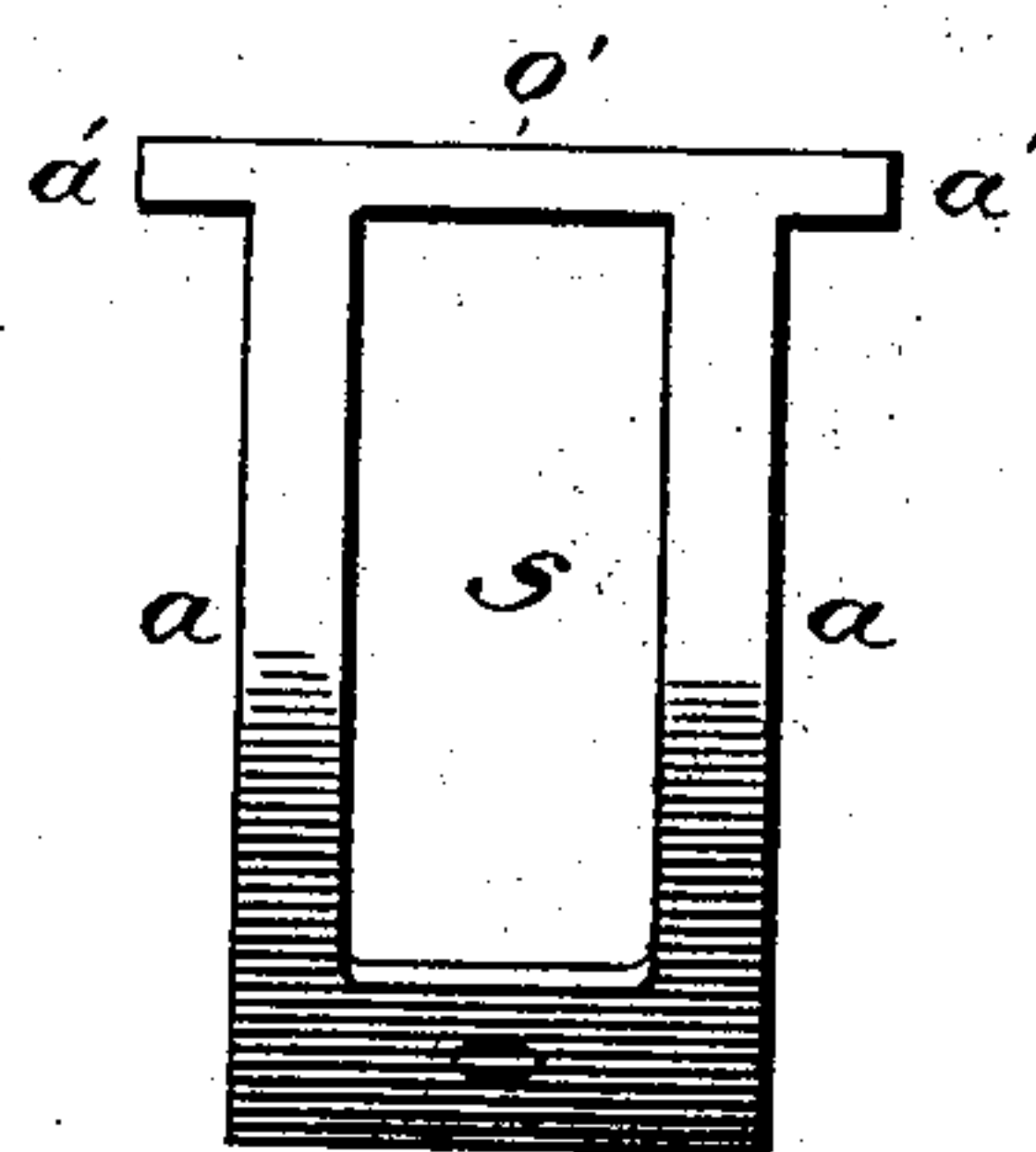
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ANDREW KRAISS, OF NEW MILFORD, OHIO.

## ANTIRATTLER FOR THILL-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 506,822, dated October 17, 1893.

Application filed August 6, 1892. Serial No. 442,379. (No model.)

### *To all whom it may concern:*

Be it known that I, ANDREW KRAISS, a citizen of the United States, residing at New Milford, Portage county, Ohio, have invented a new and useful Improvement in Antirattlers for Thill-Couplings, of which the following is a specification.

In the annexed drawings forming a part hereof, Figure 1 represents a vertical section of said anti-rattler. Fig. 2 is a face view of the same; and Fig. 3 is a view of the reverse side of the same.

The anti-rattler consists of a slotted bar *a*, and spring *c* attached thereto at or near their lower ends. The clip *b* on the vehicle shaft *d* formed with ears *h*, and the support *m* of thill *n* are constructed and hinged together in the usual manner.

The anti-rattler is to be forced down into the position shown in Fig. 1, between the hinge and clip *b*, thereby pressing spring *c* against the hinged end of support *m*. The nibs or slight projections *a'* of bar *a* resting on ears *h* support the bar which is formed with side flanges *o* to strengthen it and also to retain spring *c* in position between them. It is also formed with an upper end flange *o'* for greater strength with lightness, and tending to prevent mud and earth from falling between spring *c* and bar *a*. When such material thus falls it drops through slot *s* in bar *a*, as the slot extends down to where the spring is in close contact with the bar at the lower end of the slot. The upper part of spring *c* has a concave form to substantially fit the convex end of thill support *m* under which it projects sufficiently to hold down the anti-rattler. The upper end of spring *c* is also concave to cause earth or mud falling thereon to be conducted

down the central part of the back side of the spring and through slot *s*; and also to permit the upper corners of the spring to be slightly away from the convex end of support *m*, while the central part of the concave end is in contact with the support. In this form of the upper end of the spring its corners will pass over any slight projection or ridge on the convex end of support *m*, or if the ends of their points should come in contact with such ridge they will more easily bend back than would the spring if the entire length of its end came in contact with such ridge.

As support *m* is usually formed by a die it is liable to have a slight ridge across its end. The end of a thill is usually convex and by making the end of the spring concave it may extend up higher than if straight, without contact with the convex end of the thill when the thills are turned up.

I, claim as my invention—

1. In an anti-rattler for thill couplings, the combination of a spring and a slotted support therefor, attached together and upwardly divergent from each other,—the lower end of the slot being in close proximity to the spring, substantially as described.

2. The combination of spring *c* and its support *a* formed with flanges *o* and nibs *a'*, substantially as described.

3. In an anti-rattler for thill couplings, the combination of the spring *c* formed with a concave upper end, and the slotted support *a* therefor, substantially as described.

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Witnesses:

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