

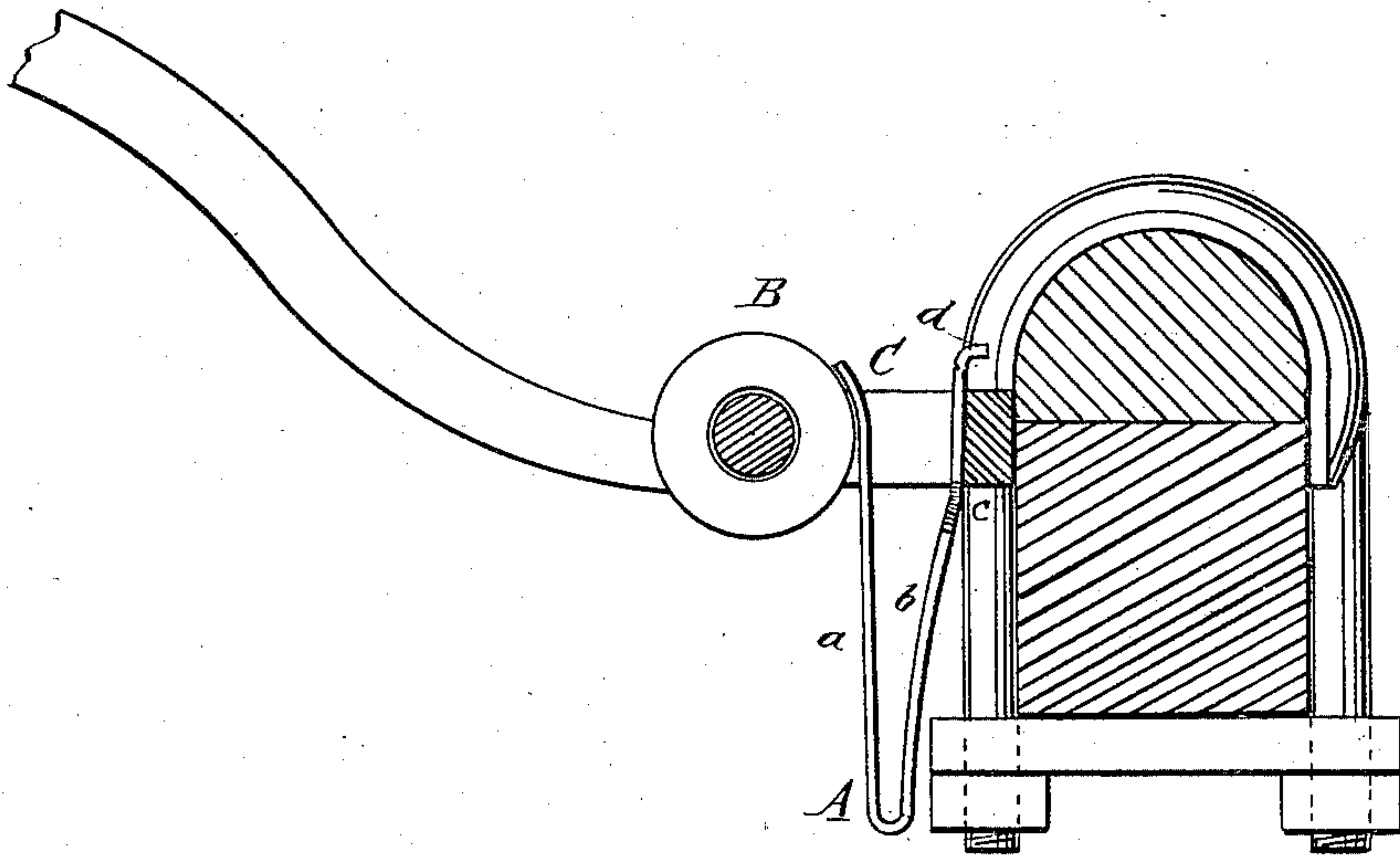
(No Model.)

F. A. BAKER.  
SPRING FOR THILL COUPLINGS.

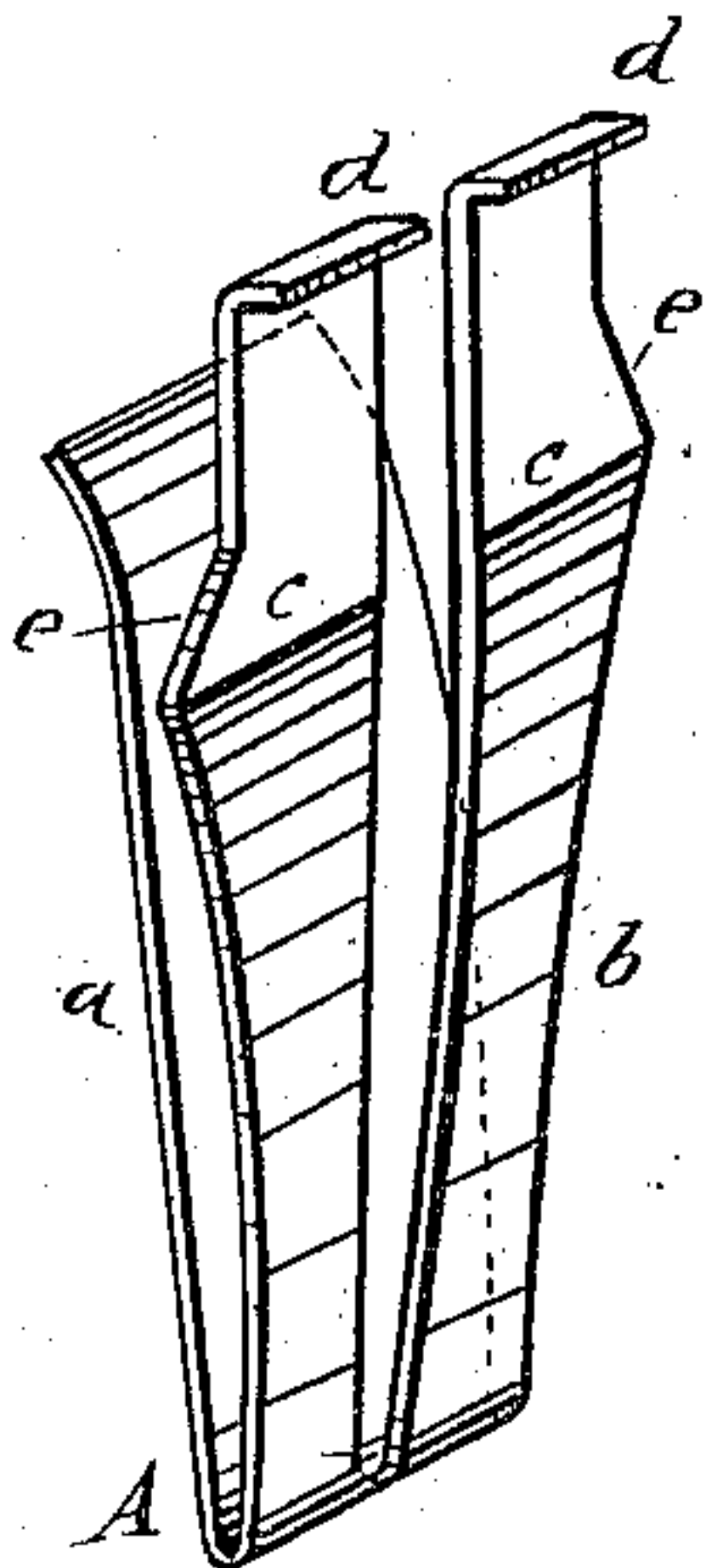
No. 343,750.

Patented June 15, 1886.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FREDRICK A. BAKER, OF CAYUGA, NEW YORK.

## SPRING FOR THILL-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 343,750, dated June 15, 1886.

Application filed January 15, 1886. Serial No. 188,700. (No model.)

*To all whom it may concern:*

Be it known that I, FREDRICK A. BAKER, of Cayuga, in the county of Cayuga and State of New York, have invented a new and useful  
5 Improvement in Springs for Thill-Couplings, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a transverse section of a thill-  
10 coupling, showing my improved spring in position for use. Fig. 2 is a perspective view of the spring detached from the thill-coupling.

Similar letters of reference indicate corresponding parts in both figures of the drawings.

15 The object of my invention is to provide a spring to be used in connection with thill-couplings to prevent the rattling of the thill-iron on the coupling-bolt.

My invention consists of a V-shaped spring, preferably formed of steel, with one of the  
20 arms of the spring split longitudinally, to allow it to spring laterally, and provided with shoulders, to engage the arms of the fork of the thill coupling, to hold the spring in place.

25 The spring A is made of a plate of sheet-steel, doubled or returned upon itself to form the arms *a b*. The arm *a* is curved outward near its extremity, to engage the rear and upper surfaces of the cylindrical part of the thill-iron B. The arm *b* is curved outward slightly,  
30 and then inward near its free end, to form a shoulder, *e*, the extremity of the arm *b* being bent outward at right angles to form a stop, *d*, which engages the clip of the thill-coupling and prevents the spring from dropping  
35 through the coupling. The arm *b* is split longitudinally through the center from its free end to a point near its juncture with the arm *a*. The outer edges of the two parts of the  
40 arm *b* are curved outwardly and notched, to form shoulders *e*, which are capable of engaging the arms of the fork C of the thill-coupling when the spring is in position for use.

My improved spring can be inserted in the

thill-coupling without detaching the thills 45 from the coupling, by inserting its narrow end into the space behind the thill-iron and between the arms of the fork of the thill-coupling, and driving it down by means of a hammer, until the shoulders *e* are below the arms 50 of the fork C of the thill-coupling, when the two parts of the arm *b* will spring outward in opposite directions, bringing the shoulders *e* under the arms of the fork C, thus retaining the spring securely in its place in the thill- 55 coupling. The shoulders *e* are beveled, so that by driving the spring upward it may be removed from the thill-coupling without detaching the thills.

When the spring is in position in the thill- 60 coupling, the split arm *b* abuts against the back of the fork C of the coupling, and the arm *a* presses against the rear and upper surfaces of the thill-iron B and keeps the thill-iron in close contact with the coupling-bolt. 65

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A spring for thill-couplings made of a sheet of spring material doubled or returned 70 upon itself, forming the arms *a b*, the arm *a* being curved outward at its extremity, the arm *b* being split longitudinally and provided with side shoulders, *e*, and with the angled ends *d*, substantially as herein shown and de- 75 scribed.

2. The combination, with the thill-coupling formed of the thill-iron B and fork C, of the spring A, made of a plate of spring material doubled or returned upon itself, forming arms 80 *a b*, the arm *a* being curved outwardly at its extremity, the arm *b* being split longitudinally and provided with beveled shoulders *e*, as herein shown and described.

FREDRICK A. BAKER.

Witnesses:

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H. S. WILEY.