

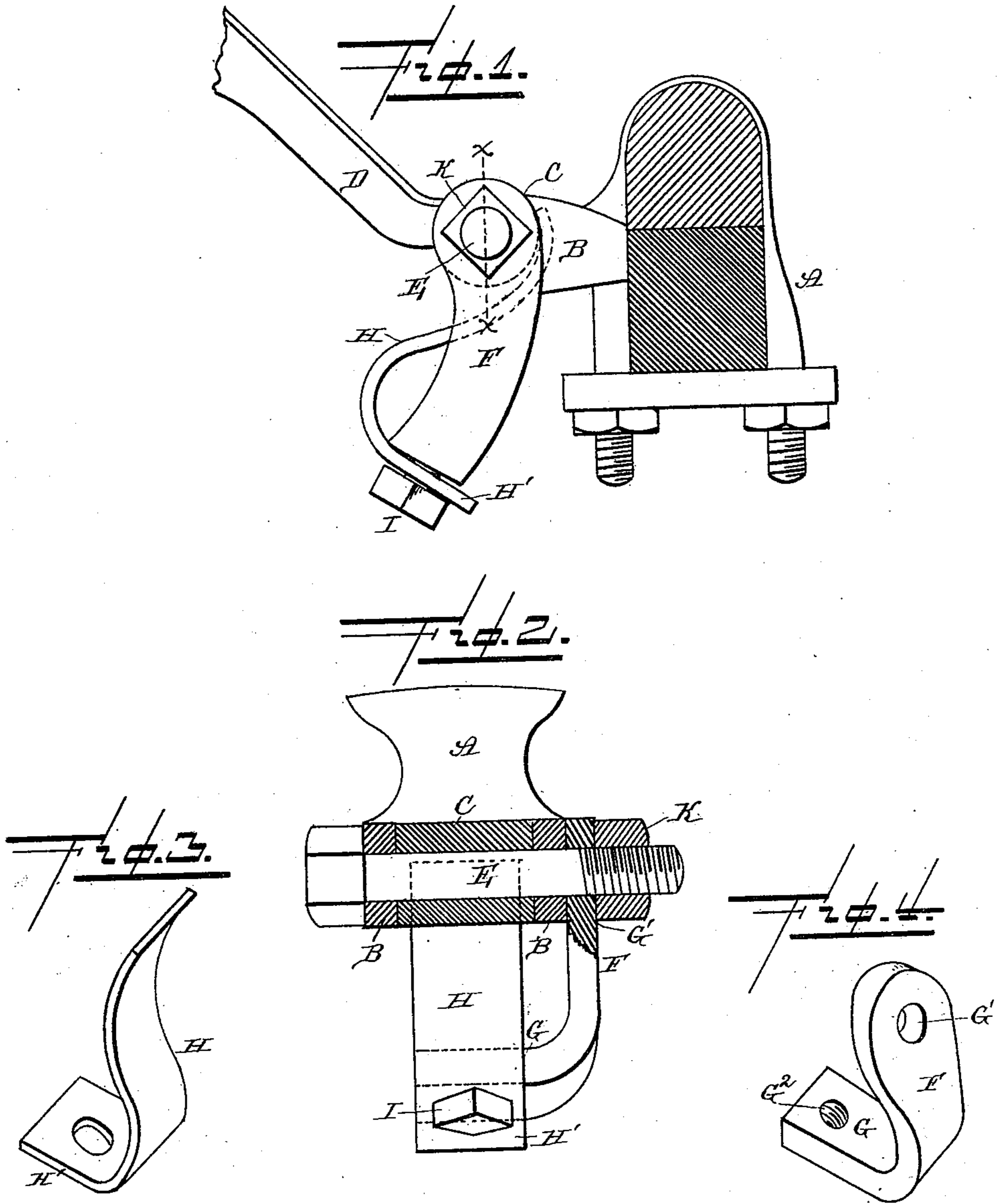
(No Model.)

E. P. ALEXANDER.

THILL COUPLING.

No. 300,750.

Patented June 24, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

EDWARD P. ALEXANDER, OF CLINTON, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 300,750, dated June 24, 1884.

Application filed August 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. ALEXANDER, of Clinton, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Anti-Rattlers for Thill-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification,

My invention relates to an improvement in anti-rattlers for thill-couplings; and it consists, first, in the combination of a thill-coupling with a spring that is adapted to have one end secured to the clip, and its free end to bear against the barrel of the draft-iron; second, in the combination, with a shaft-coupling of any desired construction, of an arm that is adapted to be secured to one end of the coupling-bolt, and a spring that is secured to the arm, the upper end of which spring bears against the barrel of the draft-iron, and thus effectually prevents the rattling of the coupling, as will be more fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a cross-section of the same on the line $x x$ of Fig. 1. Figs. 3 and 4 are detailed perspectives.

A represents an ordinary clip having the ears B, between which ears the barrel C of the draft-iron D is secured by means of the coupling-bolt E.

F represents an arm, which has its lower end, G, bent at right angles, and which is provided with an opening, G' , in its upper end, for the coupling-bolt E, and a screw-threaded opening, G^2 , in its inner bent end for the screw I.

H represents a spring, which is preferably of the shape shown in Figs. 1 and 3, but which may be of any suitable form. The lower straight end H' of this spring is secured to the bent portion G of the arm F by means of the screw I, which passes through an opening formed in the spring, and through

the opening G^2 of the arm. The upper end of the spring H bears against the barrel of the draft-iron.

It will be seen by reference to Fig. 1 that the lower straight end H' of the spring H is not normally pressed tightly against the under side of the bent end of the arm, but is secured at a slight angle thereto, thus allowing for greater compression to be applied to the barrel by tightening the screw I. This causes the spring H to bear only against one side of the enlarged head of the screw I, and exerts a side pressure on the screw, which effectually prevents it from working loose.

Heretofore springs have been placed immediately between the clip and the barrel of the draft-iron, and have also been formed as an extension of the clip-tie; but all such devices necessitate the use of a clamp in order to bring the draft-iron back into place between the ears in position to have a coupling-bolt passed through it; but by having an arm which is adapted to be placed upon the end of the coupling-bolt, and by having a spring secured to the arm, I am enabled to apply my anti-rattler to a thill-coupling of any ordinary construction without the use of any clamping mechanism whatever, and thus effect not only a saving of labor, but a saving of time. Moreover, the spring H, upon being compressed against the barrel of the draft-iron, exerts a lateral pressure upon the arm F, which causes the arm to pinch unevenly against the nut K, and thus acts as a lock to keep the nut in position upon the coupling-bolt.

I do not desire to limit myself to the precise construction hereinbefore described, as it is obvious that many modifications may be made therein without departing from the spirit of my invention.

Having thus described my invention, I claim—

1. The combination of a clip, a draft-iron secured therein, arm F, and spring H, secured to said arm, and having its free end bearing against the barrel of the draft-iron, substantially as shown and described.

2. The combination of the clip A, draft-

iron D, coupling-bolt E, arm F, secured to said bolt at one end, spring H, and screw I, substantially as set forth.

3. The combination of the clip A, draft-
5 iron D, coupling-bolt E, arm F, secured to said bolt at one end and having its free end bent at right angles, spring H, having the lower straight end H', and screw I, all com-

bined and arranged to operate substantially as described. 10

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD P. ALEXANDER.

Witnesses:

J. W. GARNER,
W. S. D. HAINES.