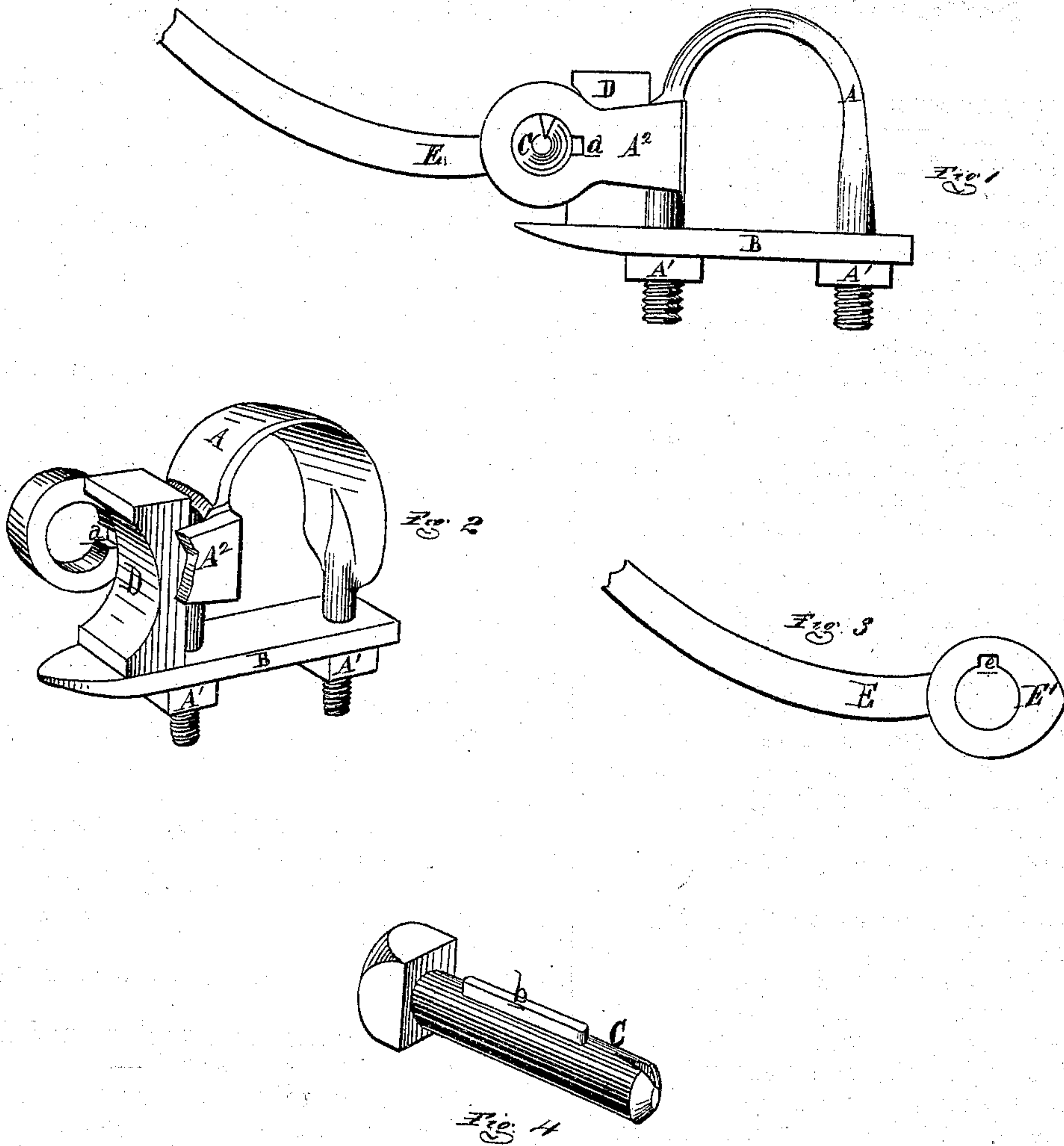


J. DEVEREAUX & R. H. DAVIS.

Improvement in Thill-Couplings.

No. 127,317.

Patented May 28, 1872.



ATTEST :

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UNITED STATES PATENT OFFICE.

JAMES DEVEREAUX AND ROSEVELT H. DAVIS, M. D., OF JACKSON, MICHIGAN.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 127,317, dated May 28, 1872.

To whom it may concern:

Be it known that we, JAMES DEVEREAUX and R. H. DAVIS, M. D., of Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Improvement in Thill-Couplings; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a side elevation of our device. Fig. 2 is a perspective of the clip, plate, and rubber cushion. Fig. 3 is a side elevation of the thill-iron; and Fig. 4 is a perspective view of the pin.

Similar letters of reference indicate corresponding parts in the several figures.

This invention has for its object to provide a pole or thill coupling which will effectually prevent the pole or thills from becoming accidentally detached from the fore axle of the vehicle, which shall be noiseless and easy of operation; and it consists in the novel and peculiar construction and arrangement of the several parts, as more fully hereinafter set forth.

In the drawing, A represents the clip which straddles the front axle, having the nuts A¹ threaded on its ends; but above these nuts a plate, B, is slipped on the legs of the clip, and which plate is carried forward to come under the ears A² forged on the front part of the clip. The ears have each a circular opening made in them to receive the headed pin C, and also in the back part of said opening a key-way or slot, *a*, to pass the feather *b* forged on the central part of said pin. D is a prism or block of elastic rubber, concaved on its front or face side, placed on the plate B and between the ears of the clip. E is the thill-iron, the eye of which has a cam-like projection, E', formed on its rear end, at draft-line. In the upper part of the eye a transverse key-way, *c*, is cut.

When the shafts or pole is thrown up and back of a vertical position the key-ways *c* and *a* will be in line, when the pin may be inserted through both ears and the eye of the thill-iron. When lowered the pin is carried around on its axis by the thill-iron, and is prevented from moving laterally by its feather *b* coming

in contact with the ears of the clip. Thus it will be seen that the pin will always be held in place, without the use of screw-nuts or other devices for that purpose.

To facilitate its removal, the point of the pin may have an index-notch filed in it on a line with the feather, to show the position of the latter with reference to the slots in the ears.

If the rubber block be concaved just enough to allow the eyes of the iron to come back to a line with those of the ears of the clip when the irons are vertical, when the latter are brought down to the draft-line their cams will compress the rubber, and thereby prevent rattling in the couplings.

This improvement can readily be applied to nearly every form of thill-coupling now in use.

When the thills are raised up to the proper position for withdrawing the pins from the couplings, the thills may be maintained in their erect position by partially withdrawing said pins until their feathers are in the slots of the ears.

If preferred, the cam may be made or arranged on the eye of the thill-iron, so as to press down upon the block of rubber resting upon the plate B, which, in fact, would be necessary in altering over some of the older styles of thill-coupling to adapt them to our improvement.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a thill-coupling, the arrangement of the feathered pin C and the key-seated thill-iron E with the ears A² of the clip A, provided with slots *a*, as and for the purpose set forth.

2. The construction and arrangement of the clip A, nuts A¹, slotted ears A², extended plate B, feathered pin C, rubber block D, and the thill-iron E, provided with the internal transverse key-way *c* and external cam E', substantially as described and shown, for the purposes set forth.

JAMES DEVEREAUX.
ROSEVELT H. DAVIS.

Witnesses:

WM. H. PALMER,
CHAS. WARD.