

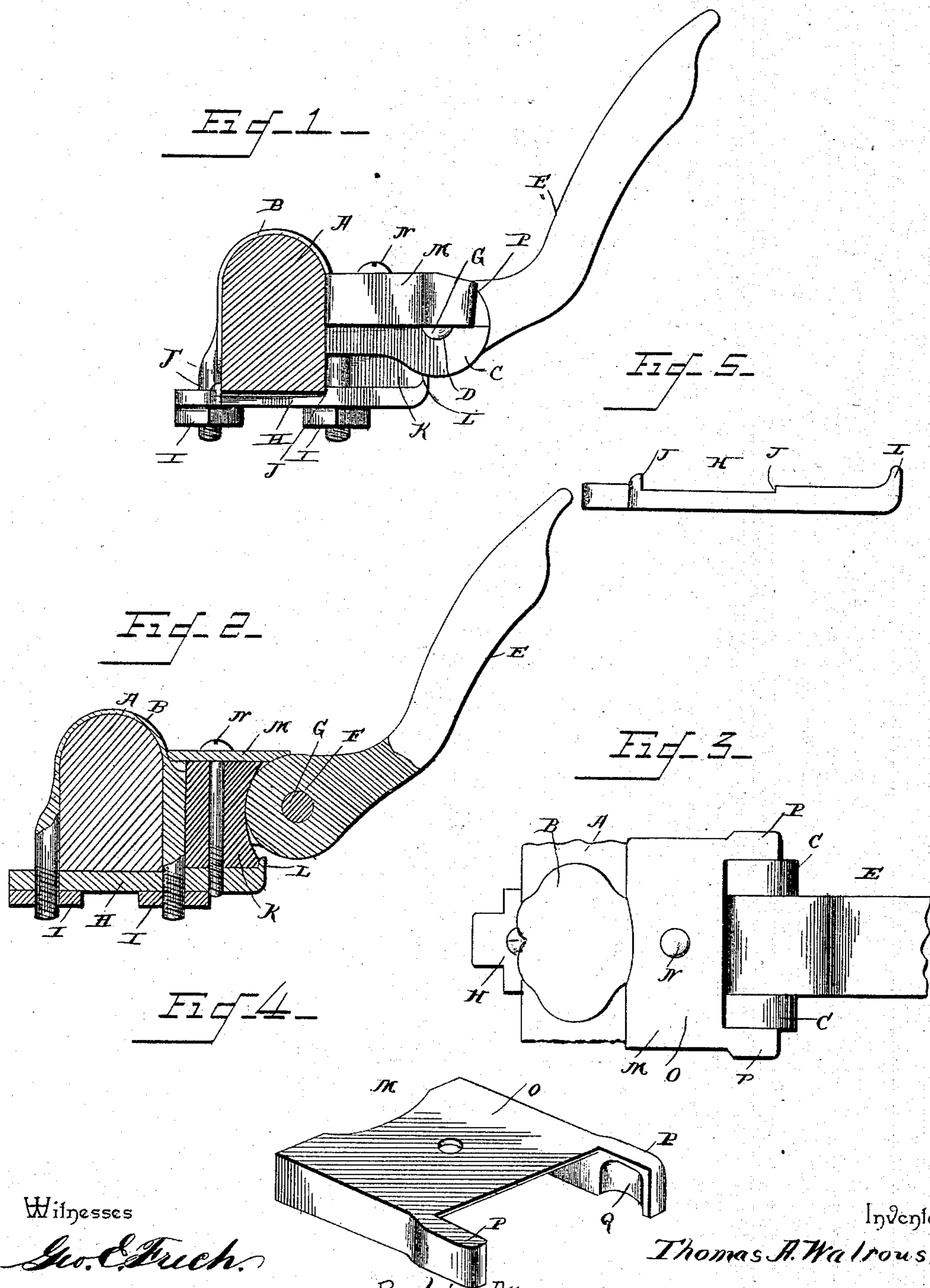
(No Model.)

T. A. WATROUS.

THILL COUPLING.

No. 413,379.

Patented Oct. 22, 1889.



Witnesses
Geo. C. Frick.

R. M. Bishop.

By his Attorneys,

C. A. Snow & Co.

Inventor
Thomas A. Watrous.

UNITED STATES PATENT OFFICE.

THOMAS A. WATROUS, OF ELMIRA, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 413,379, dated October 22, 1889.

Application filed June 19, 1889. Serial No. 314,829. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. WATROUS, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented a new and useful Thill-Coupling, of which the following is a specification.

My invention relates to improvements in thill-couplings; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of my improved thill-coupling. Fig. 2 is a longitudinal section of the same. Fig. 3 is a plan view. Fig. 4 is a perspective view of the cap, looking at the under side of the same. Fig. 5 is a detail view of the clip-plate.

Referring to the drawings by letter, A designates the axle, and B is the clip fitted over the same in the usual manner and provided on its front side with the bearing-arms C C, having the transverse openings D near their front ends. The thill-iron E is fitted between the bearing-arms, and is provided with an eye F, through which and the openings D the coupling-pin G is inserted, the said coupling-pin having beveled ends.

The clip-plate H is fitted over the ends of the clip B in the usual manner, and is secured thereon by the nuts I I, as shown. The clip-plate projects somewhat in advance of the axle and is provided on its upper side with the shoulders J J, between which the axle rests. The front end of the clip-plate forms a support for the rubber cushion or anti-rattler K, and is provided with a shoulder or rib L, which prevents the cushion from spreading, as will be readily understood. The cushion is arranged between the bearing-arms and in rear of the eye on the thill-iron, and it is compressed, so as to bind firmly around the said eye, by a cap M, which is fitted over the bearing-arm and is secured in position by a screw N passed vertically downward through the cap, the cushion, and the front end of the clip-plate, as clearly shown. The cap consists of the cross-bar or plate O and the side

flanges P, which fit against the outer sides of the bearing-arms, and are provided in their inner faces with the recesses Q, which fit over the ends of the coupling-pin to prevent the accidental withdrawal of the same.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a very simple and efficient thill-coupling, and its advantages are thought to be obvious. By turning the screw N home the cap will be secured firmly over the anti-rattler cushion and the said cushion will be compressed, so as to bind around the eye of the thill-iron and consequently hold the same firmly in place and prevent rattling and wear thereof. The cap will also be secured over the ends of the coupling-pin, so that it cannot be accidentally withdrawn, while the cushion is effectually protected against splitting and thereby rendered more durable.

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

As an improvement in thill-couplings, the combination, with the clip having the bearing-arms, the thill-iron pivoted between the bearing-arms, the clip-plate provided on its upper side with the shoulders J J, between which the axle rests, and having its front end extended and provided with the rib L, of the cushion resting on the extended end of the clip-plate and against the rib L, and the cap secured over the cushion and provided at its side edges with depending flanges fitting over the bearing-arms, and provided at their ends, in their inner sides, with recesses adapted to engage the ends of the pivotal pin of the thill-iron, as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS A. WATROUS.

Witnesses:

LEROY A. BAKER,
H. V. RANSOM.