

(No Model.)

C. D. HUFF.
THILL COUPLING.

No. 455,284.

Patented June 30, 1891.

Fig. 1.

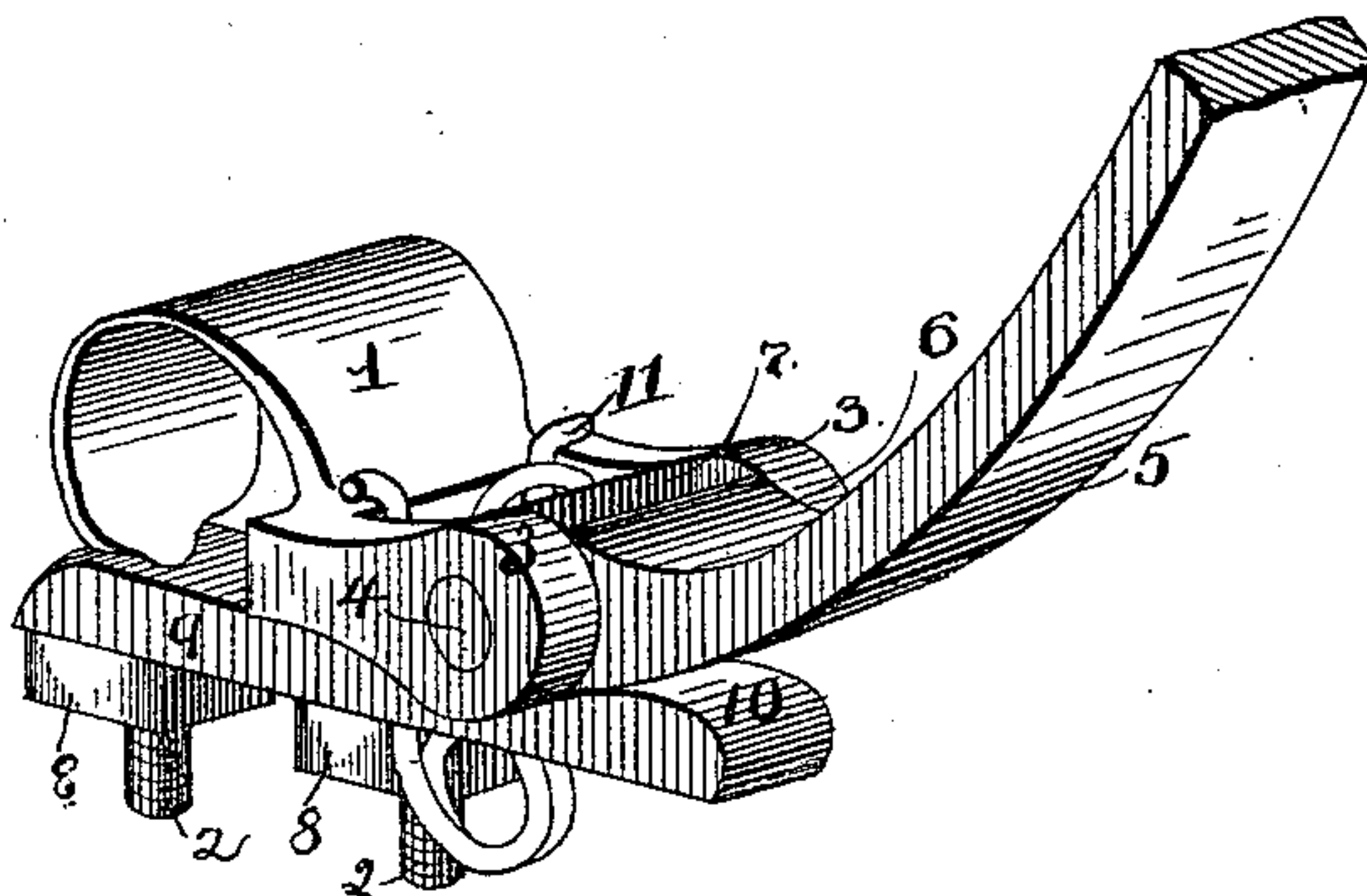


Fig. 2.

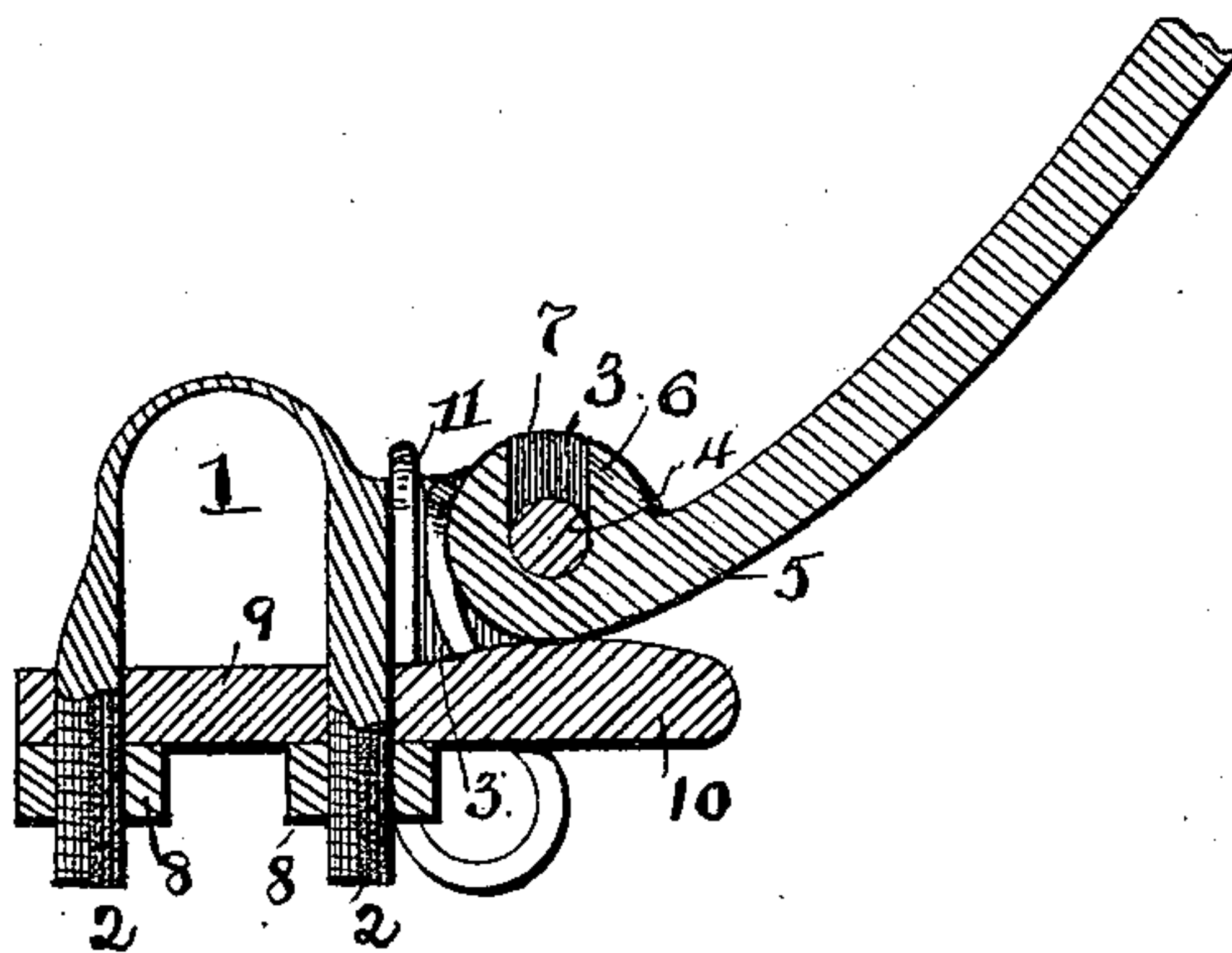
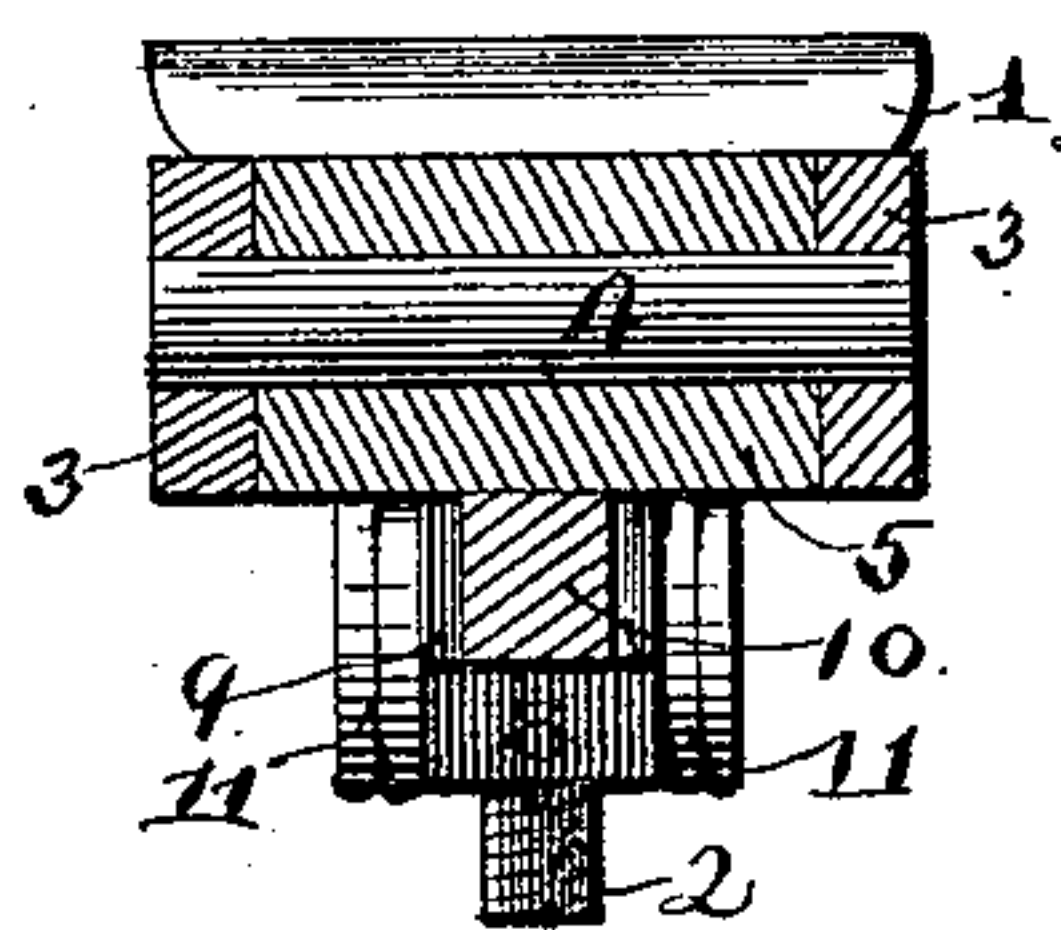


Fig. 3.



Witnesses

W. G. Bantz
H. F. Riley

— Chas. D. Huff, — Inventor

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES D. HUFF, OF DALLAS, ASSIGNOR OF ONE-HALF TO HENRY SHOLES,
OF AVOCA, PENNSYLVANIA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 455,284, dated June 30, 1891.

Application filed September 30, 1890. Serial No. 366,650. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. HUFF, a citizen of the United States, residing at Dallas, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Thill-Coupling, of which the following is a specification.

The invention relates to improvements in thill-couplings.

The object of the present invention is to simplify and improve the construction of thill-couplings, increase their strength and durability and enable the shaft-irons to be readily separated from their pivots, and to facilitate the attachment of anti-rattler springs.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a thill-coupling embodying the invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view.

Referring to the accompanying drawings, 1 designates an axle-clip of the usual construction, having depending threaded ends 2 and provided with parallel forwardly-extending ears 3, connected by a transverse rivet 4, which forms the pivot of a shaft-iron 5. The shaft-iron 5 has its eyes 6 provided with a transverse opening 7, by means of which the thill-iron when elevated can be readily brought into engagement with and disengaged from the rivet 4. The threaded ends of the clip 1 are engaged by nuts 8, which secure the clip-plate 9 on the ends, and the said plate 9

is provided with openings to receive the threaded ends 2 and has a forward extension 10, which is arranged beneath the ears and forms a bearing for the thill-iron 5. An anti-rattler spring 11 is interposed between the thill-iron and the clip and it straddles the forward extension of the clip-plate and is arranged between the ears of the clip.

It will be seen that the thill-coupling or anti-rattler is simple and inexpensive in construction, is strong and durable, and is capable of enabling the shaft to be readily removed and replaced.

What I claim is—

In a thill-coupling, the combination of the clip provided with the forwardly-extending ears and having the rigid transverse rivets connecting the ears, the thill-iron having its eye provided with a transverse opening adapted to engage the transverse rivet, the clip-plate having the straight rigid unyielding extension arranged beneath the transverse rivet and projecting forward beyond the rivet and said eye and having a raised convex upper face and forming a bearing or support for the same, and the approximately U-shaped anti-rattler spring interposed between the clip and the thill-iron and straddling the extension of the clip, substantially as described.

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

CHARLES D. HUFF.

Witnesses:

WM. H. WHIPP,
IRA D. SHAVER.