

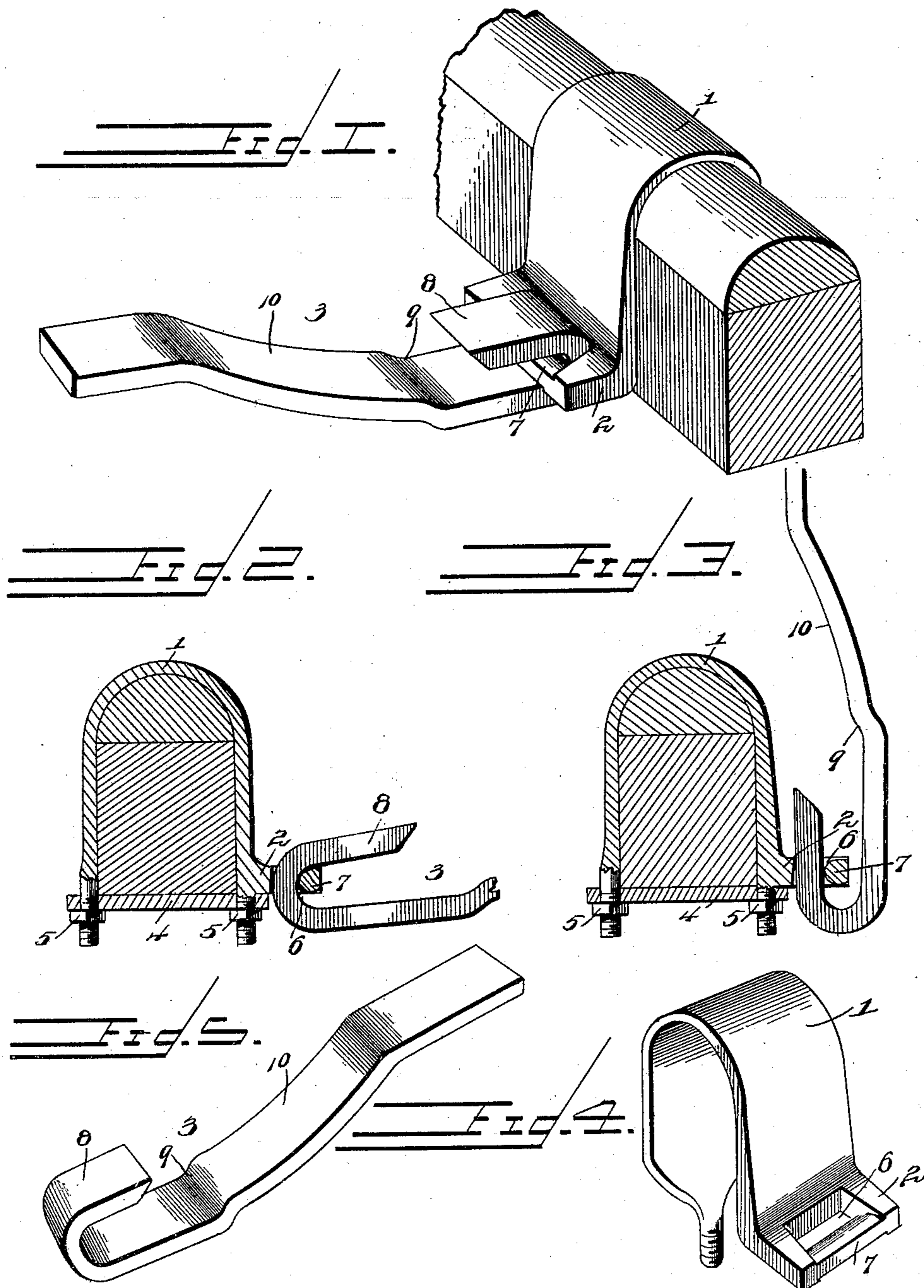
No. 624,329.

Patented May 2, 1899.

I. F. HAUFF.
THILL COUPLING.

(Application filed Nov. 8, 1898.)

(No Model.)



Witnesses

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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

ISAAC F. HAUFF, OF TEMPLE, TEXAS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 624,329, dated May 2, 1899.

Application filed November 8, 1898. Serial No. 695,868. (No model.)

To all whom it may concern:

Be it known that I, ISAAC F. HAUFF, a citizen of the United States, residing at Temple, in the county of Bell and State of Texas, have
5 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
10 improve the construction of thill-couplings and to provide a simple, strong, and inexpensive one designed to dispense with bolts, nuts, and antirattlers and capable of enabling a
15 pair of shafts or a pole to be quickly applied to a vehicle and readily removed therefrom without the use of a wrench or other tool and by simply raising and lowering such shafts or pole.

The invention consists in the construction
20 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
25 view of a thill-coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view, the thill-iron being in its normal position. Fig. 3 is a similar view, the thill-iron being elevated for uncoupling it. Fig. 4 is a detail perspective view of
30 the axle-clip. Fig. 5 is a similar view of the thill-iron.

Like numerals of reference designate corresponding parts in all the figures of the drawings.
35

1 designates an axle-clip provided at its front with a horizontal extension 2, projecting forward and adapted to be engaged by a thill-iron 3, and the said clip 1, which is adapted to
40 embrace an axle in the usual manner, is secured to the same by means of an ordinary clip-plate 4 and nuts 5. The horizontal extension 2, which is formed integral with the front side of the clip 1, is provided with a transverse opening 6, and the portion 7 in advance
45 of the opening is rounded at its top, bottom, and inner faces to form a bearing.

The transverse bearing portion 7 at the front of the horizontal extension 6 is engaged
50 by the thill-iron 3 and has its rear end extended upward and forward to provide a hook

8 for engaging the said bearing portion 7. The bend or engaging portion of the hook 8 is rounded, as shown, and it fits snugly within the transverse opening of the extension 6, so
55 that there is no occasion for employing an antirattler. The hook is engaged with the extension of the thill-iron when it is in an upright position, as illustrated in Fig. 3 of the accompanying drawings, and when it is in its
60 normal position, as shown in Fig. 3, its bill extends a considerable distance in advance of the bearing portion 7 and lies above the body portion of the coupling-iron and there is no liability of its becoming accidentally
65 uncoupled from the extension of the axle-clip.

The shank of the thill-iron is provided in advance of the hook with a transverse shoulder 9, and its front portion 10 is curved to conform to the configuration of a shaft; but
70 it may be readily shaped so that it can be applied to a pole or tongue, as will be readily understood. The transverse shoulder 9 forms a stop for the shaft and is located a sufficient distance in advance of the bill or engaging
75 portion of the hook to enable the bearing portion 7 to be readily introduced into and removed from the said hook.

The invention has the following advantages: The thill-coupling, which is applicable
80 to both shafts and poles, is simple, inexpensive, strong, and durable, and it may be made either light or heavy to suit the character of the vehicle to which it is to be applied. It will automatically uncouple itself from the
85 axle-clip when the shafts or pole is raised, and it is capable of being quickly and conveniently coupled. It is adapted to dispense with antirattlers, it obviates the employment of bolts or similar pivots, and as it is uncou-
90 pled so readily it also avoids the use of tongue and shaft supports. As the shafts can be readily uncoupled, they may be placed out of the way, so that there is no liability of them being tread on and broken or otherwise
95 injured, and a vehicle is enabled to occupy a minimum amount of space.

What I claim is—

A device of the class described comprising an axle-clip having a forward extension 2
100 provided with a narrow transverse opening and rounded at the front thereof to provide

a front bearing portion, and a coupling-iron having its rear end extended upward and forward to form a hook engaging the front bearing portion of the extension and adapted to
5 abut against the back thereof, said hook being inserted into and removed from the opening of the extension when a pole or shaft is elevated, and having its bill extending in advance of the said front bearing portion and

lying above the body portion of the coupling-iron, substantially as described.

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

ISAAC F. HAUFF.

Witnesses:

C. P. DODGE,
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