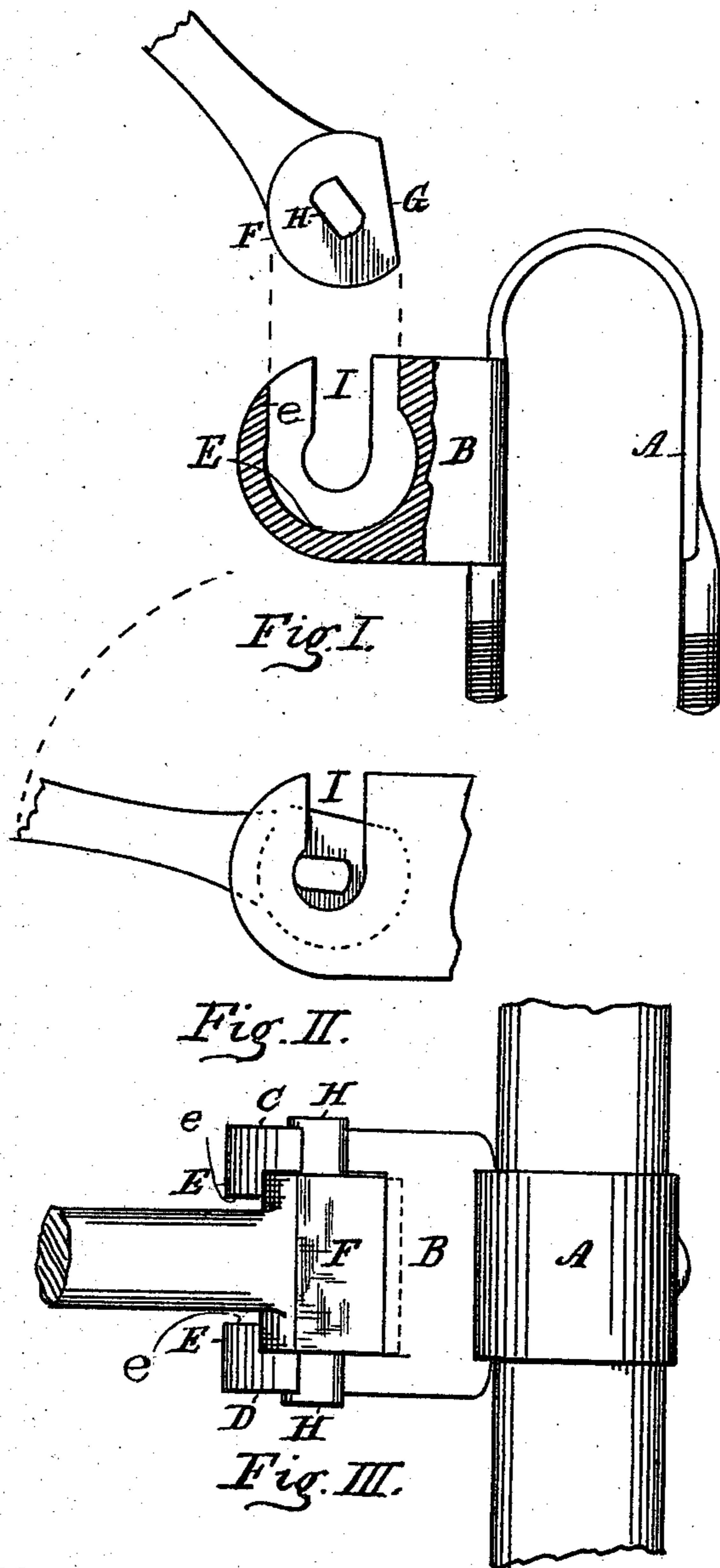


(No Model.)

G. W. DICKEY.
THILL COUPLING.

No. 413,614.

Patented Oct. 22, 1889.



WITNESSES:

R. S. Millar
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By

INVENTOR :

Geo. W. Dickey
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UNITED STATES PATENT OFFICE.

GEORGE W. DICKEY, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO
JOHN GALSTER, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 413,614, dated October 22, 1889.

Application filed March 7, 1889. Serial No. 302,329. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DICKEY, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Thill-Couplings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a side view, partly in section, of my improved thill-coupling; Fig. II the same with the thill-head introduced in the chuck, and Fig. III a top view of the device.

My invention relates to improvements in thill-couplings; and its object is to provide a simple, cheap, compact, and durable device so constructed that the parts may be instantaneously coupled without preliminary manipulation of nuts, bolts, or other appliances, and when desired may be detached with equal facility.

The invention consists of only two parts, which are so adjusted one to the other that all the bearings co-operate, thereby distributing and reducing the wearing process to the lowest practicable limits.

Referring to the accompanying drawings, A designates an axle-clip provided on its forward side with a yoke or chuck B, having integral jaws C D, the inner faces of which are recessed, so as to form lips or flanges E, and the vertical interior shoulders *e e*. The inner surface of the chuck between the jaws is also recessed transversely in conformity with the rear end of the thill-head F, which is made in cylindrical form, having a segment cut away at G. The head is also provided with flattened pivots H, which are adapted to slots I. These slots incline slightly forward from the perpendicular and are enlarged below, as shown in the drawings.

In the process of fitting the parts of the device they are so adjusted that the pivots and

the shoulders of the thill-head engage their respective bearings simultaneously. By this arrangement the several bearing-surfaces, when the device is in use, are kept in contact, thereby preventing noisy vibration and consequent wear. When the vehicle is backed, the thill-head engages the transverse recess in the body of the chuck between the jaws, and is thus securely retained.

The easy application of the device and its various advantages will be obvious. In attaching the thills it is only necessary to raise the outer ends sufficiently to permit the flattened pivots to pass into the slots. When the thills are lowered into position, they cannot become disengaged by accident or otherwise when an animal is attached to the vehicle. The shoulders *e e* support the front side of the thill-head when the latter is in position.

What I claim as new is—

In a thill-coupling, the combination, with the yoke B, attached to the clip A, provided with the inwardly-standing flanges E, and the vertical shoulders *e*, extending up from said flanges, having its inner surfaces between its joints recessed for the reception of the thill-head, and provided with the engaging-slots I, inclining slightly downward and forward and enlarged and rounded at their bottoms, of the thill-head F, cut away at G and provided with the flattened journals or bearings H to engage in the slots I, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand, this 28th day of February, 1889, in the presence of witnesses.

GEORGE W. DICKEY.

Witnesses:

J. B. CHILDE,
R. S. MILLAR.