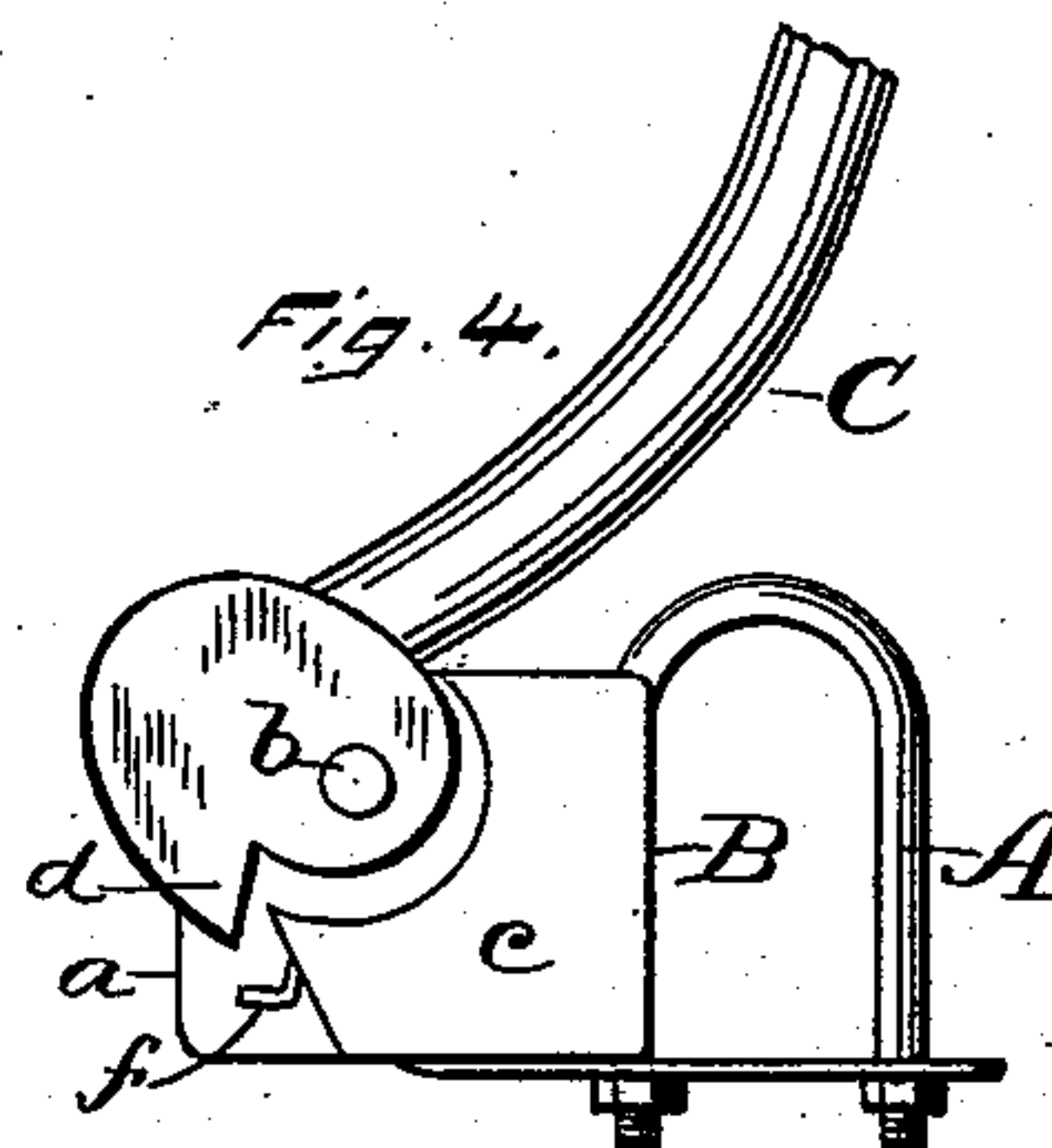
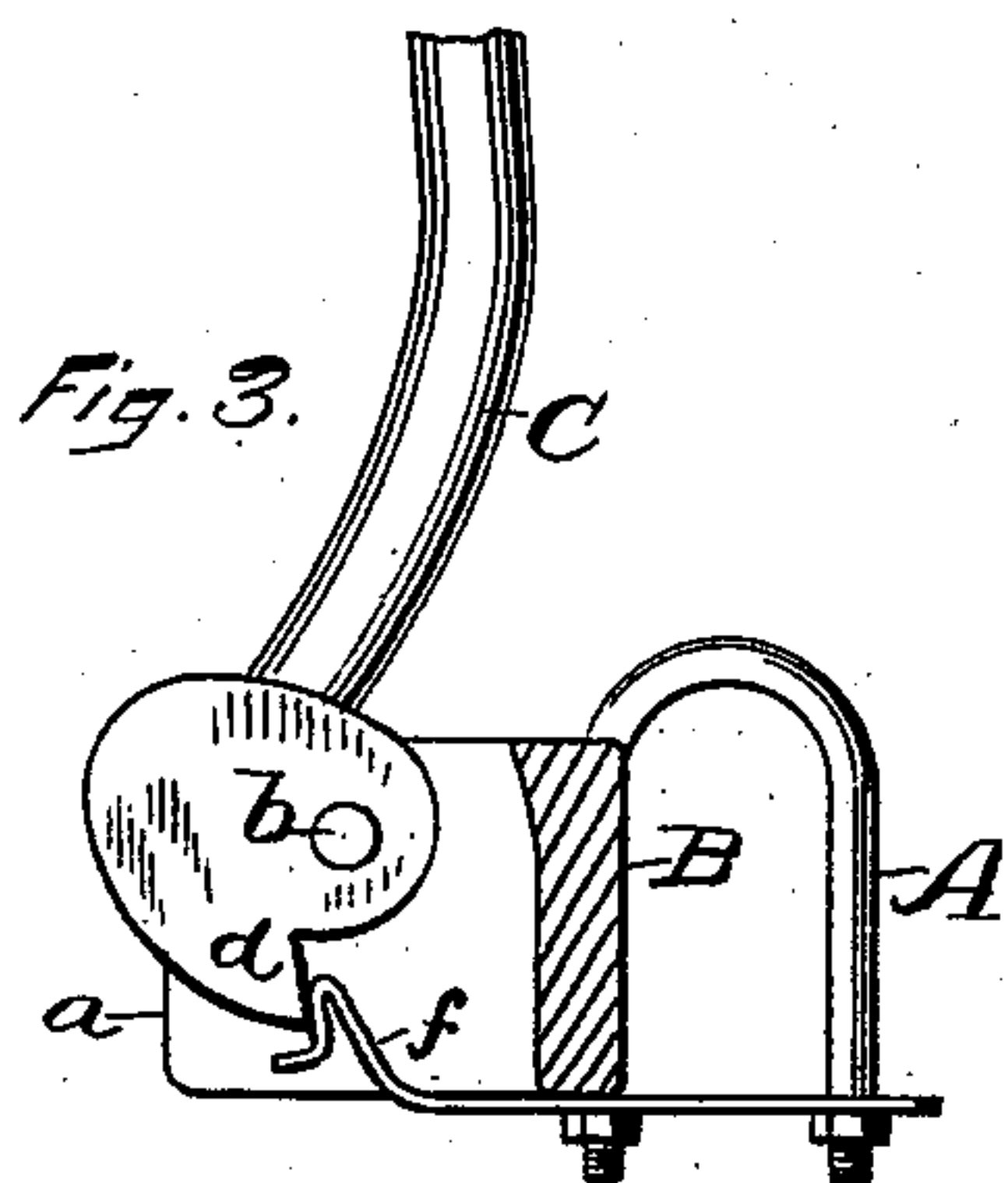
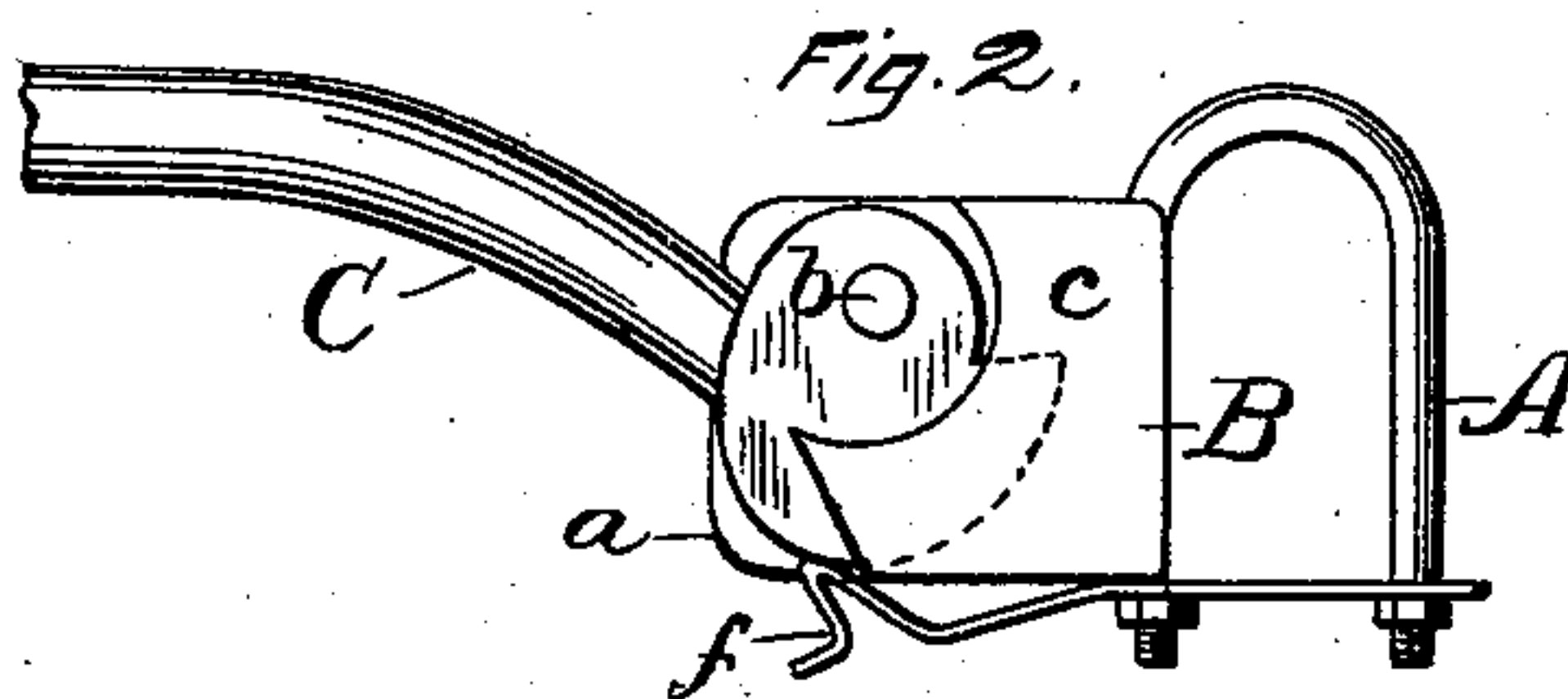
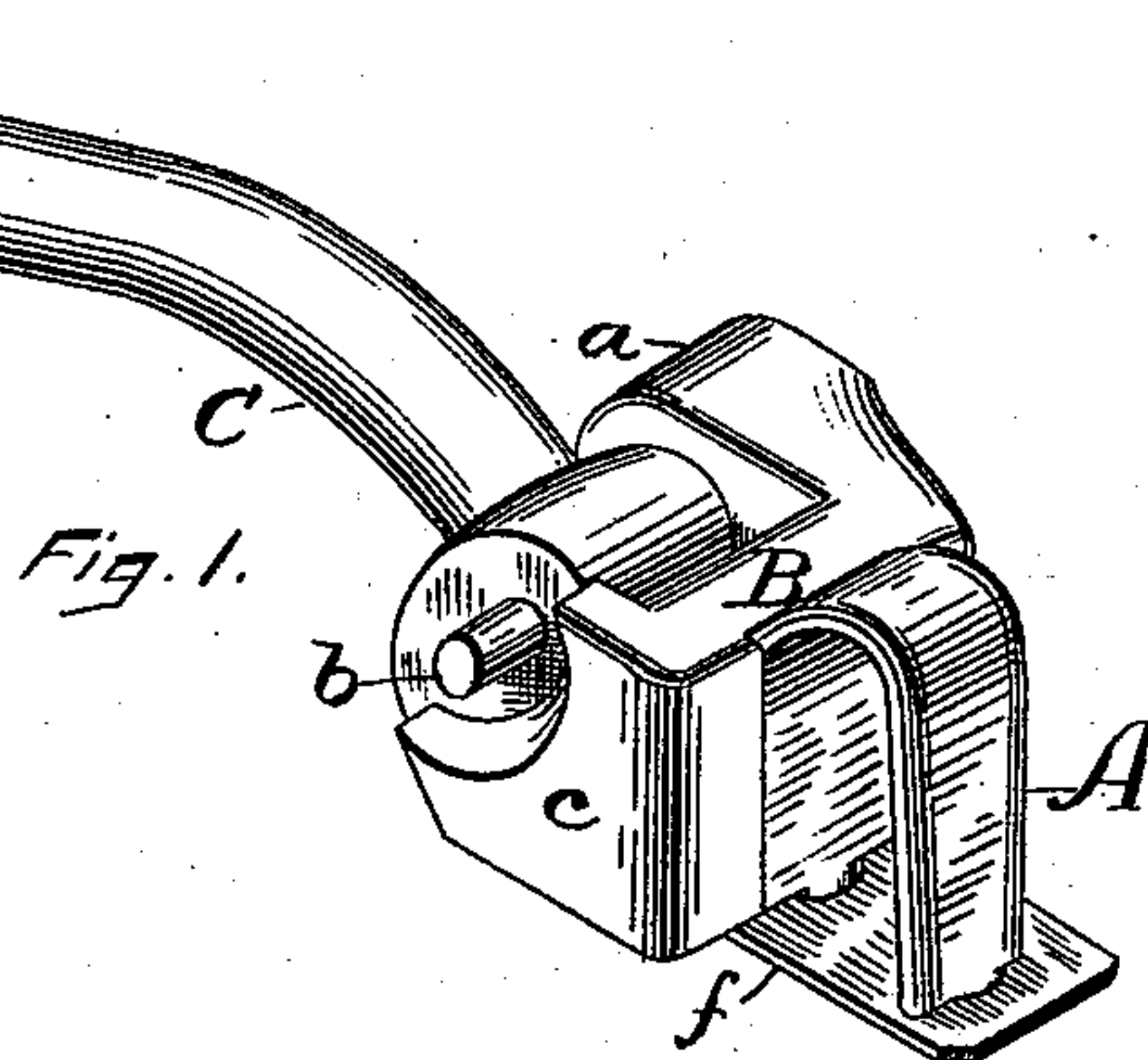


(No Model.)

W. HINE.
THILL COUPLING.

No. 378,052.

Patented Feb. 14, 1888.



WITNESSES.
John Edwards Jr.
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Atty.

UNITED STATES PATENT OFFICE.

WILLIAM HINE, OF BETHLEHEM, CONNECTICUT.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 378,052, dated February 14, 1888.

Application filed November 1, 1887. Serial No. 253,978. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HINE, a citizen of the United States, residing at Bethlehem, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Thill-Couplings, of which the following is a specification.

My invention relates to improvements in thill-couplings; and the main objects of my improvements are to provide simple and convenient means for holding up the shafts when the vehicle is not in use, and to provide for the speedy removal of the shafts or pole.

In the accompanying drawings, Figure 1 is a perspective view of my thill-coupling, together with an axle-clip. Fig. 2 is a side elevation of the same. Fig. 3 is a partial sectional view of the same, showing the thill-iron elevated and held up by the spring; and Fig. 4 is a side elevation showing the thill-iron raised far enough for removal by slipping it sidewise off from the coupling pin.

A designates an axle-clip for securing the coupling to the wagon-axle, B the shackle or frame, and C the thill-iron. The shackle B is provided with one long ear, *a*, bearing the coupling-pin *b*, which is rigidly secured in place, and one short ear, *c*. The short ear is notched or cut away at its upper and forward corner, as shown, thereby leaving an open space immediately surrounding the end of the coupling-pin. The thill-iron is provided with an eccentric head having a hole to fit over the coupling-pin, which head is made of a width from side to side that will substantially fill the space between the ears *a c*. The head of the thill-iron is provided with a projection, *d*, (see Figs. 3 and 4,) shouldered on one side, as shown. Upon the under side of the shackle B, preferably secured to the clip A, is a spring, *f*, with a bent shoulder near its free end.

When the thill-iron is down, as shown in Figs. 1 and 2, the projection *d* extends backward far enough to lie by the side of the solid portion of the short ear *c*, while the spring presses upon the under side of the head of the thill-iron, as shown in Fig. 2, and thereby checks its tendency to rattle.

When the vehicle is not in use, the pole or

thills are turned up out of the way, and the shoulder of the spring *f* snaps into place back of the shoulder on the projection *d* and holds the pole or thills thus elevated. By bearing down on the lip in front of the bent shoulder on the spring said spring is depressed to disengage it from the shoulder on the thill iron, and the pole or thills can be let down again into position for use. If desired to shift the thills or pole, it is only necessary to raise the iron C into the position shown in Fig. 4, when the portion of the head back of the projection *d* will register with the space at the forward end of the short ear, and the iron C can be slipped sidewise off from the pin *b* to detach the thills or pole.

Although I have shown only one coupling, it will of course be understood that they are to be used in pairs.

I claim as my invention—

1. The herein-described thill-coupling, consisting of the frame or shackle B, having one long ear bearing the coupling-pin and one short ear cut away to leave a space around that end of the coupling-pin for the lateral passage of the thill-iron, and the thill-iron C, fitted to said coupling-pin and space at the end of the short ear, and having the projection *d*, for entering the space between said long and short ears when said thill-iron is in position for use, substantially as described, and for the purpose specified.

2. The combination of the frame or shackle B, having one long ear bearing the headless coupling-pin and one short ear cut away to leave a space around that end of the coupling-pin, the thill-iron C, adapted to slip laterally through said cut-away space on and off said coupling-pin, and having a shouldered projection, *d*, on its head at a point opposite the body of the thill-iron, and the spring *f*, secured at the under side of the frame or shackle, substantially as described, and for the purpose specified.

WILLIAM HINE.

Witnesses:

MARY S. BLOSS,
SAMUEL L. BLOSS.