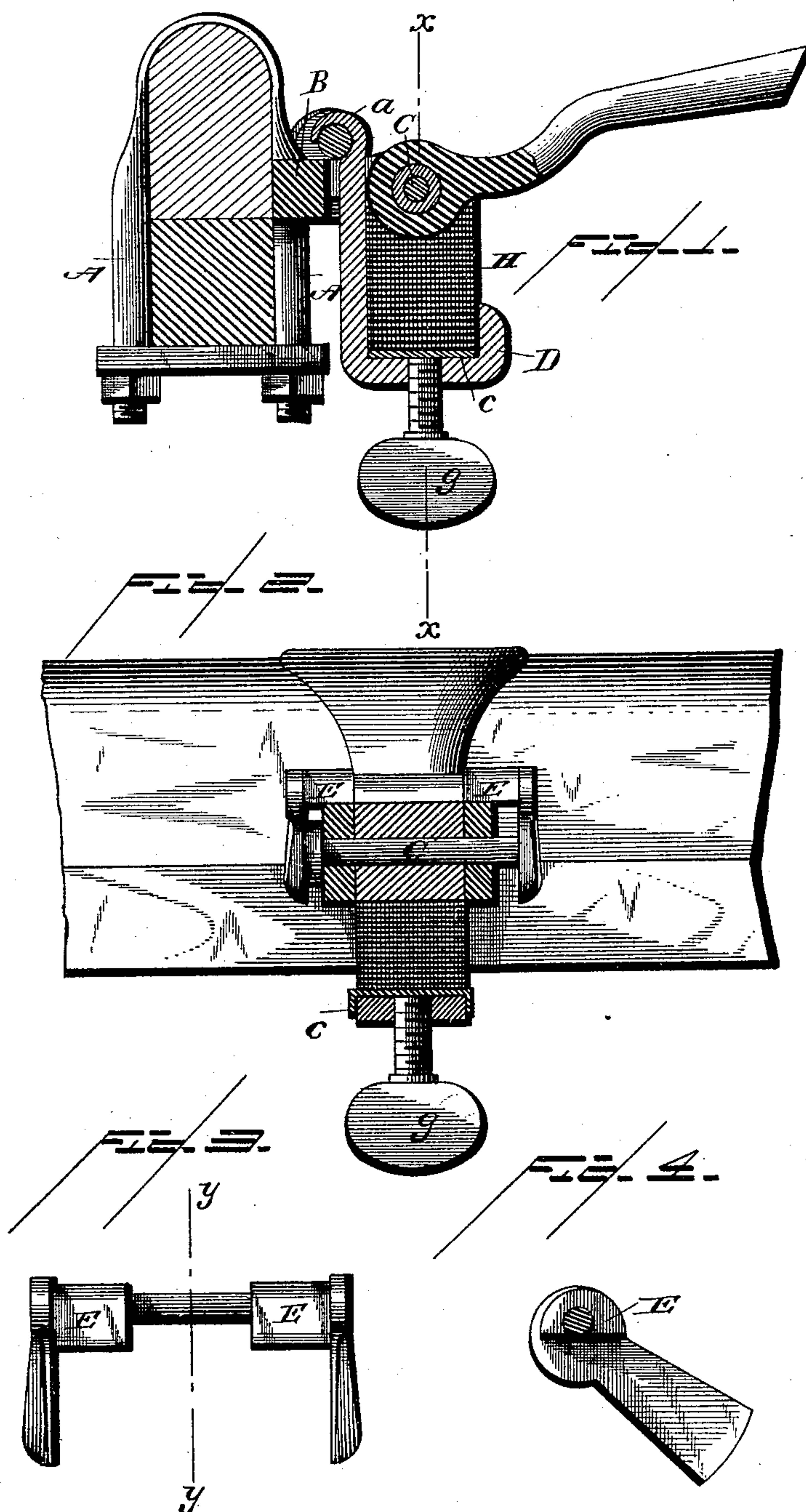


(No Model.)

J. L. COOK.
THILL COUPLING.

No. 371,428.

Patented Oct. 11, 1887.



WITNESSES

T. Edwards Turpin

INVENTOR

James L. Cook.

By Smith & Sheehy
Attorneys

UNITED STATES PATENT OFFICE.

JAMES L. COOK, OF SPRINGFIELD, ILLINOIS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 371,428, dated October 11, 1887.

Application filed June 30, 1887. Serial No. 243,054 (No model.)

To all whom it may concern:

Be it known that I, JAMES L. COOK, a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Thill-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in thill-couplings; and it consists in the novel construction and arrangement of devices, as hereinafter specified and claimed.

In the accompanying drawings, Figure 1 is a longitudinal vertical sectional view of a thill-coupling constructed according to my improvements. Fig. 2 is a transverse sectional view of the same on line *xx*, Fig. 1. Fig. 3 is a view of the double-armed lever removed, and Fig. 4 is a cross-section taken on the lines *yy* of Fig. 3.

The letter A of the drawings represents a clip attached to the axle-tree in the usual manner by nuts and screws. This clip is constructed with a bifurcated front extension, (marked B,) which is adapted to receive the rear end of a thill and hold it securely by means of a pin or bolt, C, as shown in Fig. 1 of the drawings, the bolt requiring no thread or nut.

The letter D represents a casting, the upper end of the rear wall of which is curved rearwardly, as shown at *a*, and adapted to clasp the eccentric-shaped and double-armed lever, hereinafter described, and the bottom portion of said casting constitutes a rectangular recess for holding a rubber block, also hereinafter mentioned.

The letter E represents a lever provided with two arms, as shown in Fig. 3. The central portion of this lever, which is clasped by the curved extension of the casting D, is made round in cross-section, while its ends between said round portion and handles are cam-shaped, as shown in Figs. 2 and 3 of the drawings.

The letter H represents a block of rubber which rests in the rectangular recess formed in casting D, and is constructed with a concave upper face, which, when on duty, rests against

the lower side of the thill, as shown in Fig. 1. I usually provide a plate, (marked *c*,) which is interposed between the bottom of the recess in casting D and the rubber block H.

The letter *g* represents a thumb-screw, which is passed through the bottom of the casting D, in a threaded opening, with its point resting against the bottom of plate *c*, the point being riveted into a countersink to prevent the thumb screw from coming out.

My invention is operated as follows, namely: After the several parts have been placed in position the arms of the cam-lever E are turned downwardly, each arm of which fits closely over the ends of the pin or bolt C and holds the same securely. The thumb screw *g* is then turned until the desired pressure is obtained against the lower side of the thill, and the work is completed.

It is obvious that by this construction the cam-shaped lever will hold its arms securely over the ends of the pin or bolt C, and by means of the thumb-screw *g* the rubber block can be given such a pressure against the thill that all rattling and noise will be avoided. The pin or bolt C, being held in position by the cam-lever E, (which can be raised or lowered by loosening the thumb screw,) does away with the necessity of a nut on the bolt, enabling the operator to uncouple the thill with ease and rapidity.

I claim as my invention—

1. In a thill-coupling, the combination, with the clip having the perforated lugs, of the angular casting adapted to receive the rubber, the thill-bolt, and the cam-bolt having the levers or arms adapted to embrace the ends of the thill-bolt, substantially as specified.

2. The combination, in a thill coupling, of the casting adapted to receive the rubber block, and the cam-bolt forming a fulcrum for the said casting and having lateral arms adapted to prevent the displacement of the thill-bolt, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES L. COOK.

Witnesses:

SHELBY C. DORWIN,
HENRY BURNS.