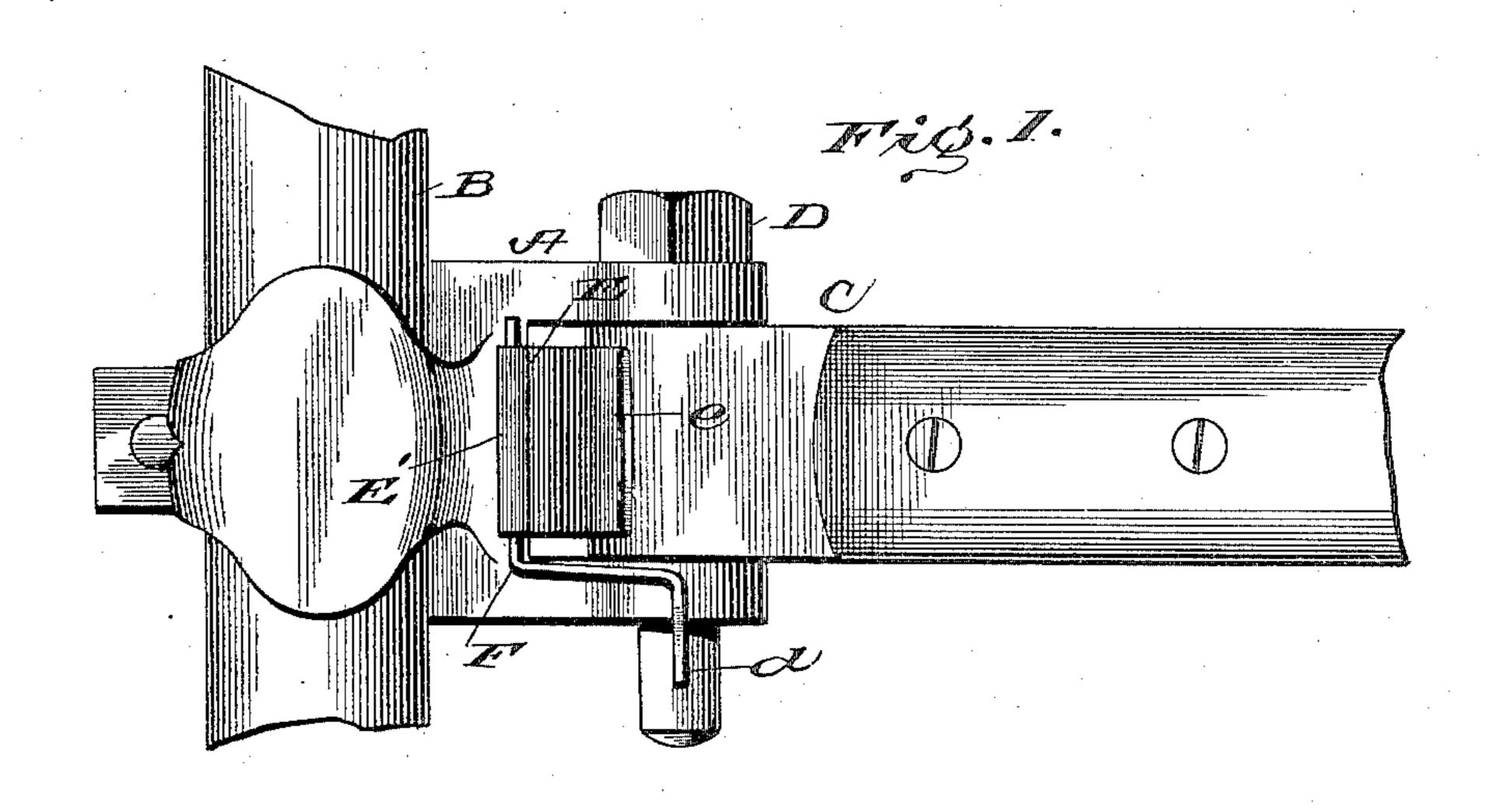
(No Model.)

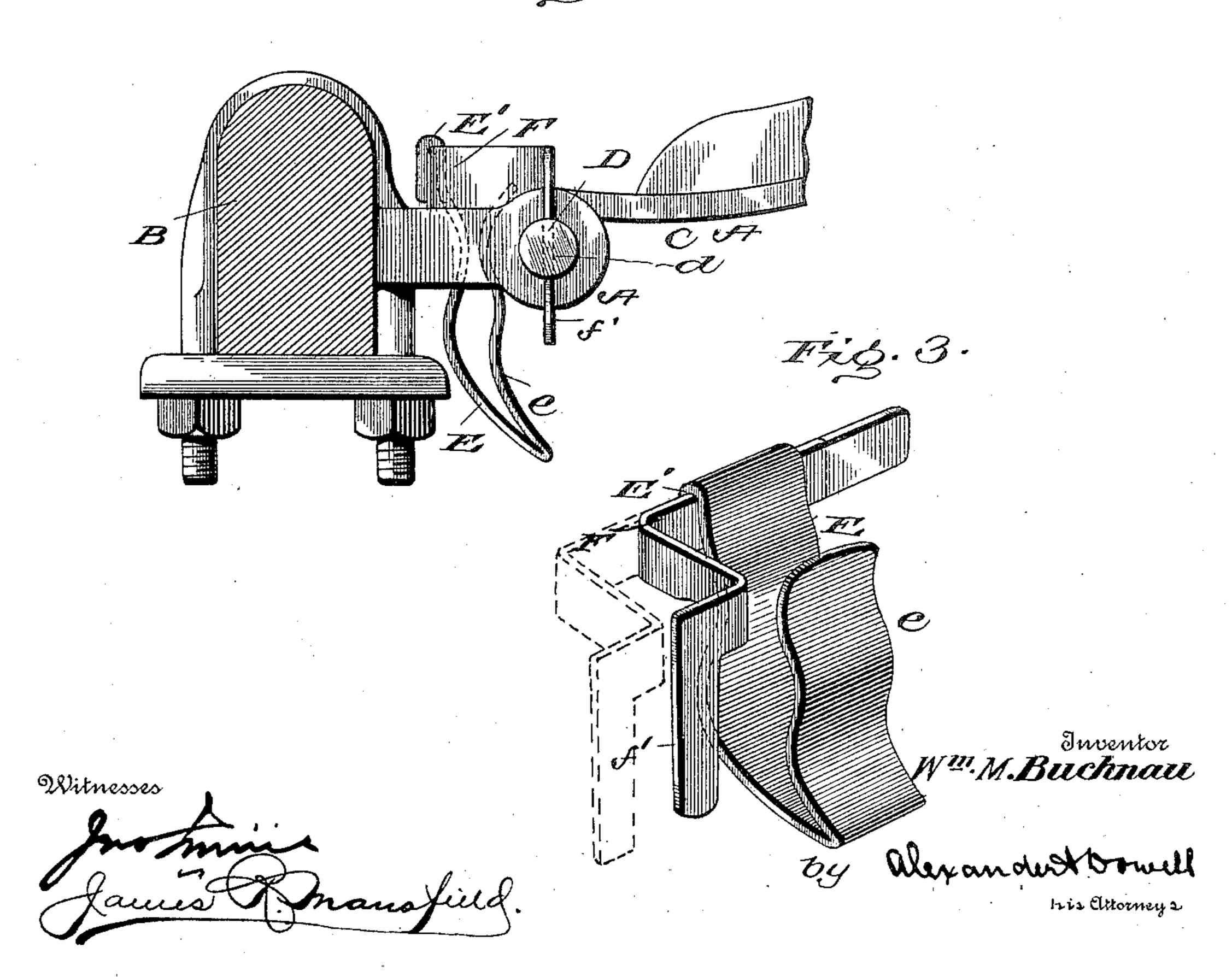
## W. M. BUCHNAU. ANTIRATTLING THILL COUPLING.

No. 599,218.

Patented Feb. 15, 1898.



100.2.



## UNITED STATES PATENT OFFICE.

WILLIAM M. BUCHNAU, OF COLUMBIA, TENNESSEE.

## ANTIRATTLING THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 599,218, dated February 15, 1898.

Application filed June 8, 1897. Serial No. 639,865. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. BUCHNAU, of Columbia, in the county of Maury and State of Tennessee, have invented certain new and useful Improvements in Antirattling Thill-Couplings; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement upon the antirattling thill-coupling shown and described in my Letters Patent No. 577,232,

granted February 16, 1897.

The objects of this invention are to improve the construction of the spring, and especially to enable the device to be readily fitted to any size of draw-jack or thill-iron; and the invention consists in the improved novel construction and combination of parts hereinafter described and claimed.

Referring to the drawings, Figure 1 is a plan view of the device. Fig. 2 is a side view thereof, and Fig. 3 is a perspective view of the

25 spring and plate detached.

The parts of this device similar to those of the device in my aforesaid patent are similarly lettered, and in the drawings A designates the thill-clip or draw-jack of ordinary construction, B the axle, and C the thill-iron, fastened to clip A by bolt D, said bolt having a head on one end, as usual, and a slot d in its other end for the passage of the wedge-key f'.

The antirattling-spring is shaped substantially like those shown and described in my said patent, the front and rear leaves E e being made of one piece of metal bent into the proper form. The rear leaf E of the spring, however, is made longer than the front leaf e, so that it projects above the clip, and its upper end is bent downward upon itself, forming a clasp E", adapted to adjustably engage and retain the plate F for the purpose hereinafter explained.

shown in Figs. 1 to 3 of my said patent, but is somewhat larger, and instead of riveting it to the rear leaf E of the spring it is slipped into the clasp E" of the spring and retained thereby. The clasp E" can be formed upon either leaf and bent either backward or forward, as desired, as the principle is the same and will work with equally as good results in both instances. This construction enables the antirattler to be readily fitted to any size

or width of clips or shaft-jacks in a moment by sliding plate F endwise in clasp E", so that the spring will be held in proper position within the clip. My patented device was not applicable to various sizes of draw-jacks be- 60 cause of the plate being riveted to the spring. This adjustable feature of the plate F is of great practical utility, as I do not have to make a number of sizes of antirattlers for the trade, as the improved antirattlers can be 65 fitted readily to any draw-jack. The clasp E" prevents the spring dropping down and, moreover, can be made to fit very tightly by a slight tap thereon with the hammer after the plate is adjusted. It, moreover, allows the 70 spring and plate a slight lateral play in relation to each other, so that the spring will not be displaced by hammering upon the plate F to drive key f' into the slot of the bolt.

Having thus described my invention, what 75 I therefore claim as new, and desire to secure

by Letters Patent thereon, is—

1. In an antirattling device for thill-couplings, the combination of the thill-clip, thill-iron, and the securing-bolt D having a head 80 on one end and a slot in the other end, with the antirattling-spring E, e, constructed substantially as shown and described, having a clasp E" on one of its leaves, and the bolt-securing plate F having a tapered end adapted 85 to engage the slot in the bolt, and a horizontally-extending portion overlying the thill-iron, and adjustably engaged by said clasp E", so as to suspend the spring in place, all substantially as and for the purpose described.

2. The combination of the thill-clip, thill-iron, the bolt for securing the thill-iron to the clip, and the plate F constructed substantially as described, having a depending end engaging the bolt for holding the plate in position, and a horizontal portion overlying the thill-iron; with an antirattling-spring E, e, formed of one piece bent substantially as described, and having the upper end of its rear leaf bent to form a clasp E" which engages the horizontal part of plate F and adjustably suspends the spring thereon, all substantially as and for the purpose set forth.

as and for the purpose set forth.
In testimony that I claim the foregoing as

my own I affix my signature in presence of 105 two witnesses.

WILLIAM M. BUCHNAU.

Witnesses: G. W. HAYES,

A. L. THOMAS.