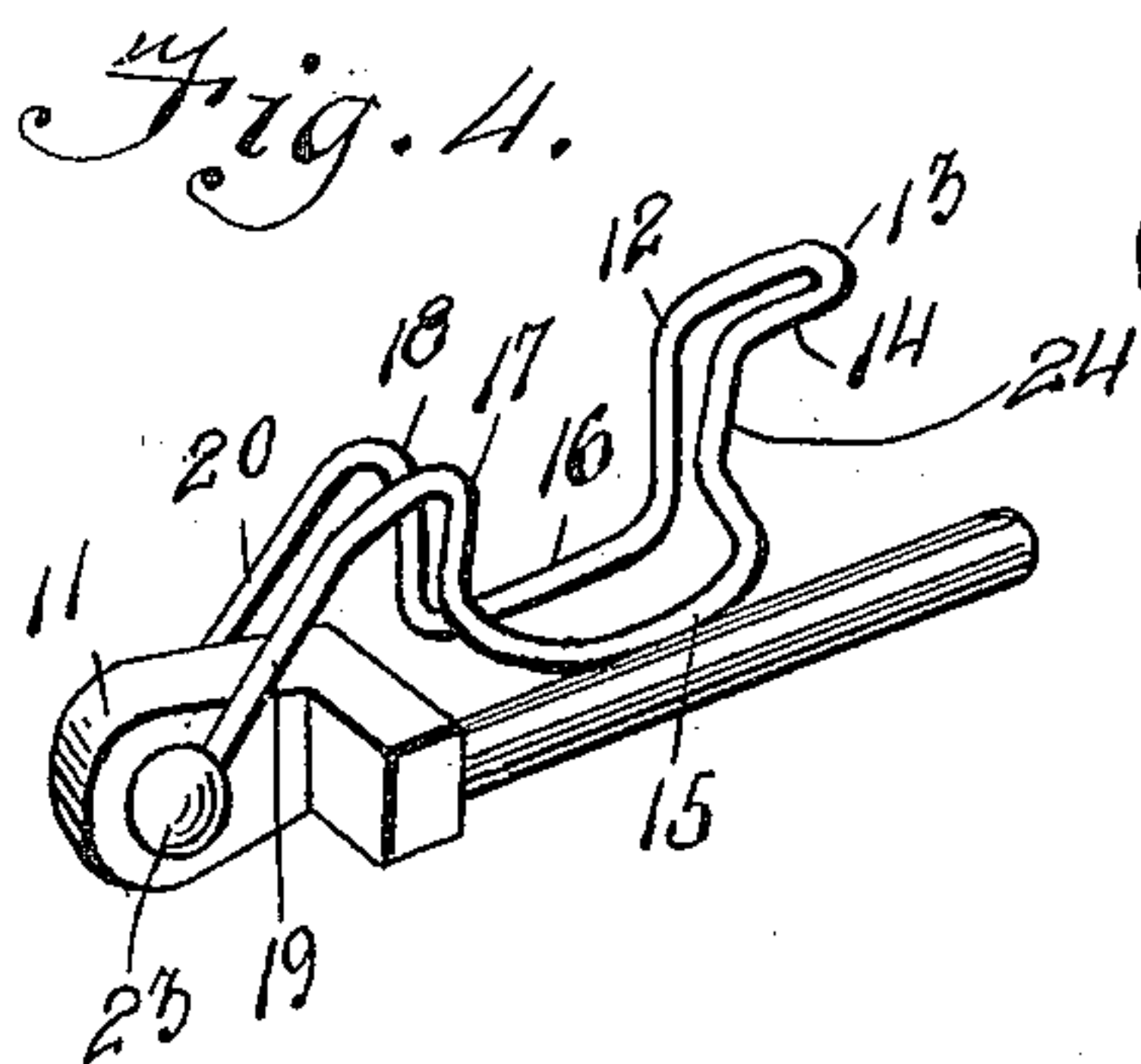
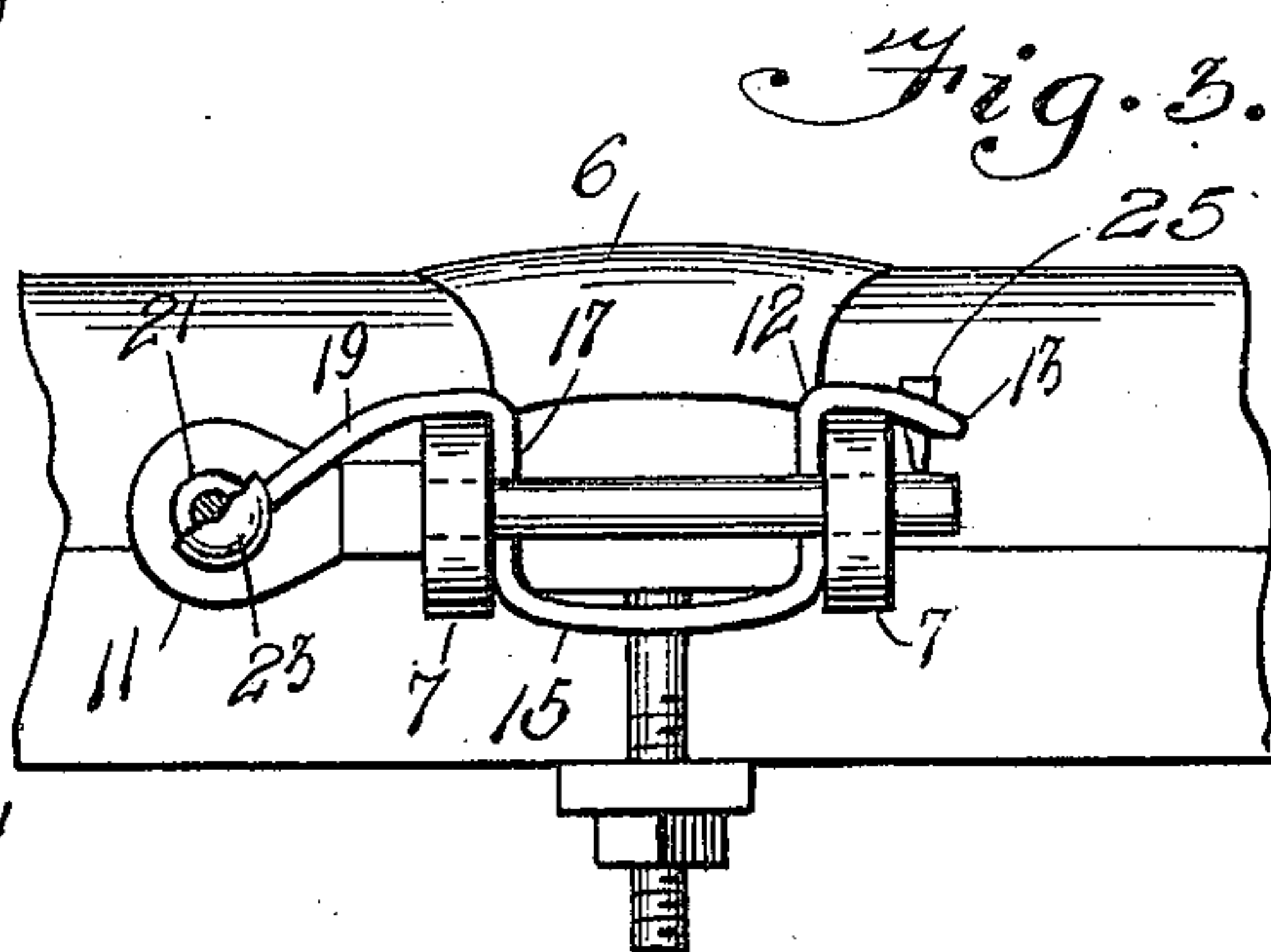
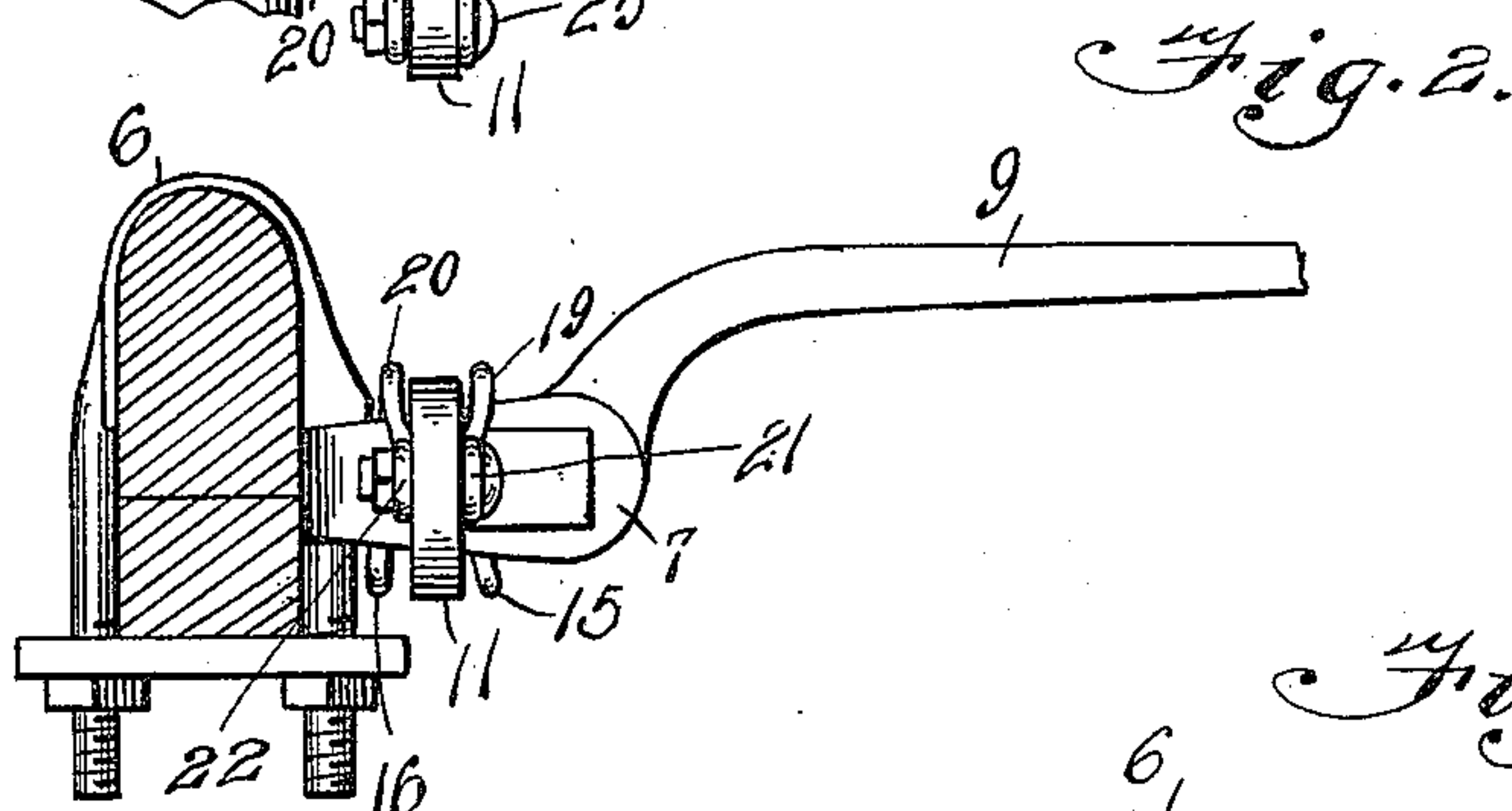
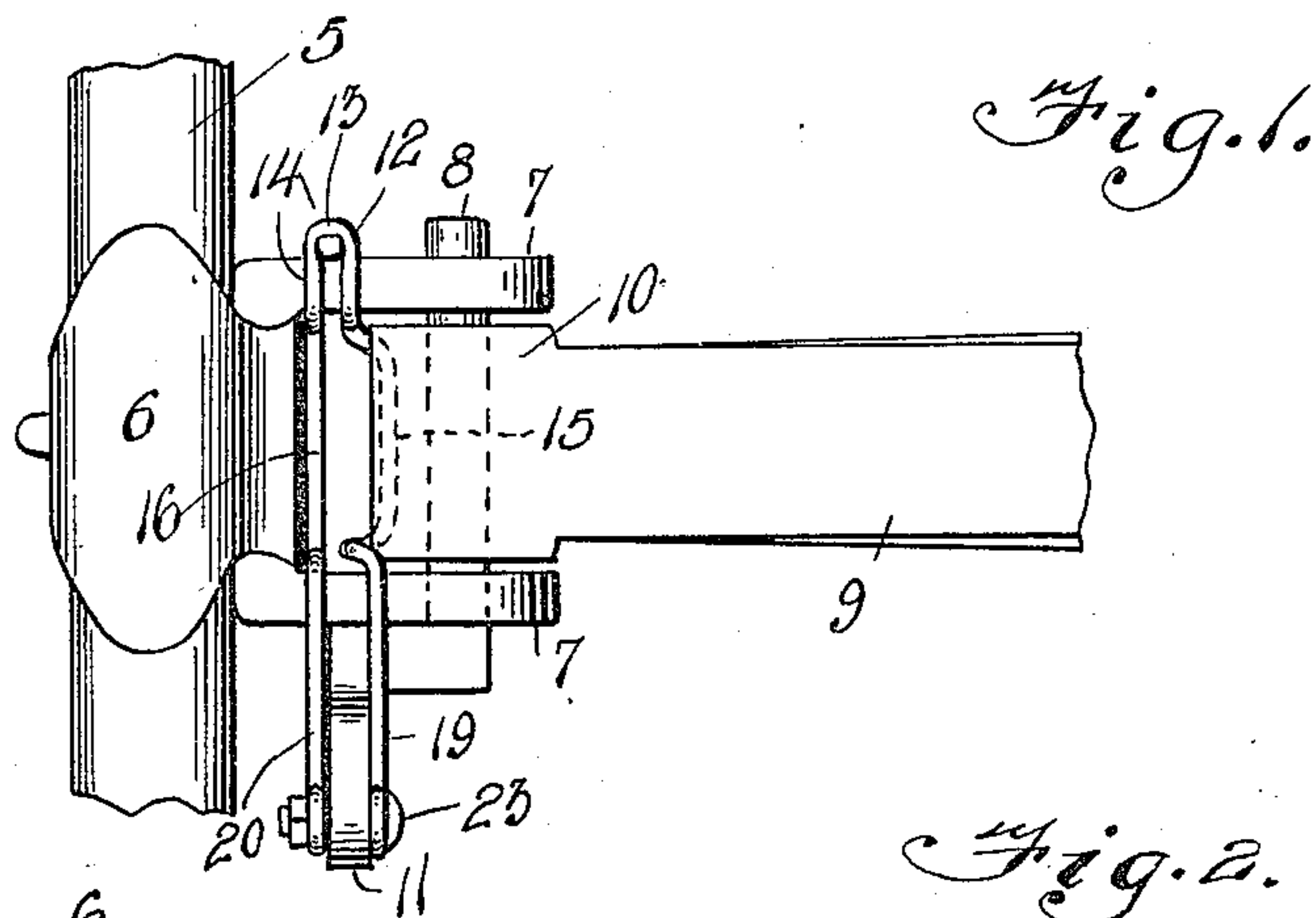


THILL COUPLING.

APPLICATION FILED SEPT. 15, 1910.

993,441.

Patented May 30, 1911.



WITNESSES

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THILL-COUPLING.

993,441.

Specification of Letters Patent. Patented May 30, 1911.

Application filed September 15, 1910. Serial No. 582,230.

To all whom it may concern:

Be it known that I, EDWARD ERICKSON, a citizen of the United States of America, and resident of Wahpeton, in the county of Rich-
land and State of North Dakota, have in-
vented certain new and useful Improvements
in Thill-Couplings, of which the following
is a specification.

This invention relates to thill couplings
and particularly to an anti-rattler attach-
ment coupled with a device for holding the
pin.

An object of this invention is to provide
novel means for holding a thill against rat-
tling coupled with novel means for hold-
ing the pintle bolt in place without the use
of a nut applied to the said pintle bolt,
the said invention having for its further
object the utilization of a novel form of
spring for holding the thill and for retain-
ing the pintle in place, the said spring be-
ing removable from the pin for the purpose
of renewing worn or broken parts.

With the foregoing and other objects in
view, the invention consists in the details
of construction and in the arrangement and
combination of parts to be hereinafter more
fully set forth and claimed.

In describing the invention in detail, ref-
erence will be had to the accompanying
drawings forming part of this specification
wherein like characters denote correspond-
ing parts in the several views, and in
which—

Figure 1 illustrates a top plan view of a
fragment of a vehicle axle with the inven-
tion applied thereto; Fig. 2 illustrates a
view in elevation of a thill coupling with
the axle in section; Fig. 3 illustrates a front
view of the axle and thill coupling with the
thill omitted; and Fig. 4 illustrates a per-
spective view of the anti-rattler device and
pintle bolt.

In the drawings 5 denotes the axle, 6 a
clip and 7 the usual joint leaves connected
to the clip, the said joint leaves being pro-
vided with the usual apertures (not shown)
for the reception of the pintle bolt 8.

The thill iron 9 is provided with the usual
apertured boss 10 which is designed to re-
ceive the pintle bolt 8 and as shown the pin-
tle bolt is provided with a head 11 which is
offset with respect to the pintle bolt proper,
the offset extending rearwardly of the thill

iron when the pintle bolt is applied to the
joint leaves.

An anti-rattler spring 12 is formed of a
length of wire doubled on itself to form a
loop 13, the wire being then extended lon-
gitudinally to form the lip 14 which is de-
signed to rest on one of the joint leaves.
The parallel sections of the wire are then
bent downwardly. The portion 15 of the
wire is then offset with relation to the sec-
tion 16 of the wire, the said section 16 ex-
tending approximately horizontally when
the device is in place, whereas the section
15 is offset forwardly and extends under the
boss 10 so as to partially embrace the said
boss for the purpose of increasing the bear-
ing surface of the spring on the boss. Both
of the sections 15 and 16 converge to form
the parallel sections 17 and 18 which lie ap-
proximately vertically and terminate in the
extensions 19 and 20 respectively which are
looped to form the eyes 21 and 22 respec-
tively which eyes are bolted to the head 11
of the pintle bolt by means of the bolt 23
although instead of the bolt 23 the ends of
the spring may be riveted or otherwise se-
cured to the head 11. The spring has the
vertically disposed section 24 which with
the section 17 and the offset section 15 bears
against the boss of the thill iron and holds
the thill iron and pintle bolt against rat-
tling. It is possible to increase or diminish
the tension of the spring on the thill iron
by adjusting the front strand of wire form-
ing the anti-rattler spring or the said spring
may be further spread by a wedge 25 ap-
plied to the loop 13, as shown in Fig. 1.

I claim—

In a thill coupling, a clip provided with
spaced apart lugs, a bolt for suitably sup-
porting a portion of a thill end between said
lugs, said thill end being spaced from said
clip, a spring formed of a strip of metal
bent to form members substantially oppo-
sately-disposed and spaced apart throughout
their length, said spring comprising end por-
tions adapted to overhang and rest on said
lugs and intermediate depending portions
adapted to be removably positioned between
and to bear against said clip and the end of
said thill, said depending portions compris-
ing vertically arranged members normally
lying substantially parallel to and adapted
to bear against the inner sides of said lugs

to prevent accidental displacement of said
depending portions, and means for pivotally
connecting the end portions of said spring
at one side to said bolt to prevent accidental
5 withdrawal of said bolt and to permit said
spring to be swung on its pivotal connection
to disengage said intermediate depending
portions from said clip, thill end and lugs

thereby permitting the withdrawal of said
bolt.

10

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

EDWARD ERICKSON.

Witnesses:

CHAS. E. WOLFE,

F. B. SCHNELLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
