

No. 614,127.

Patented Nov. 15, 1898.

S. A. OWINGS.
THILL COUPLING.

(Application filed May 14, 1897.)

(No Model.)

Fig. 1.

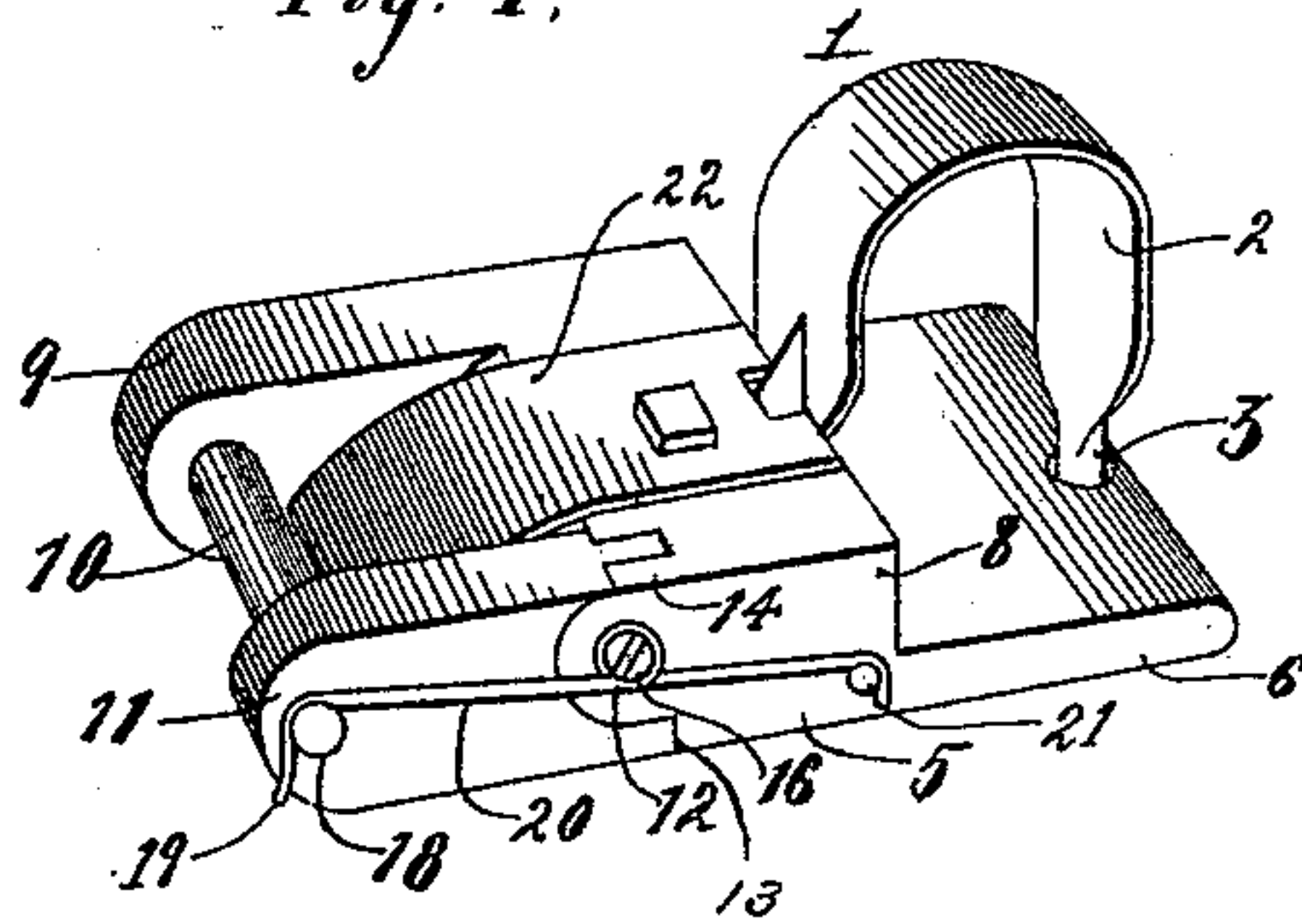


Fig. 2.

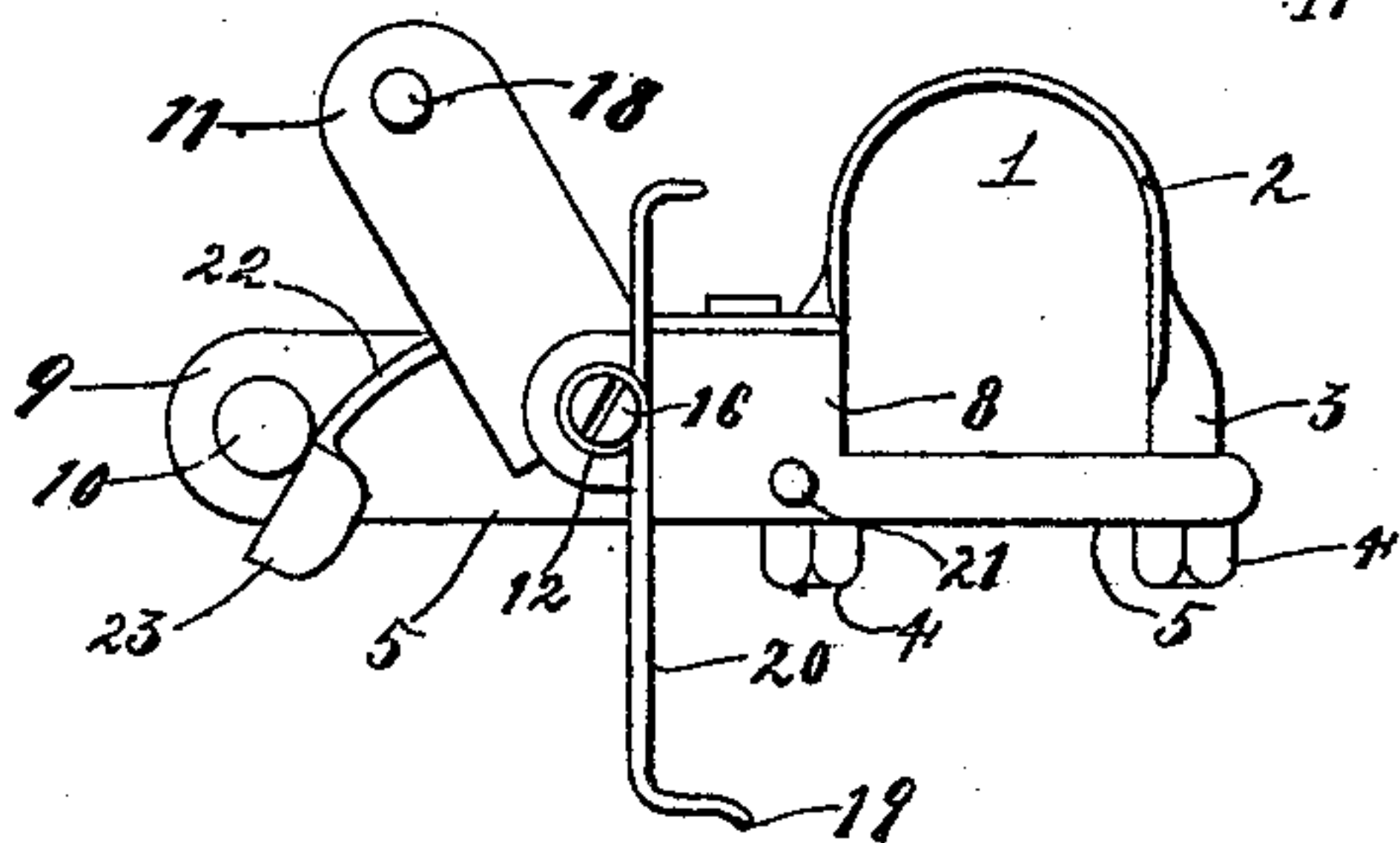


Fig. 3.

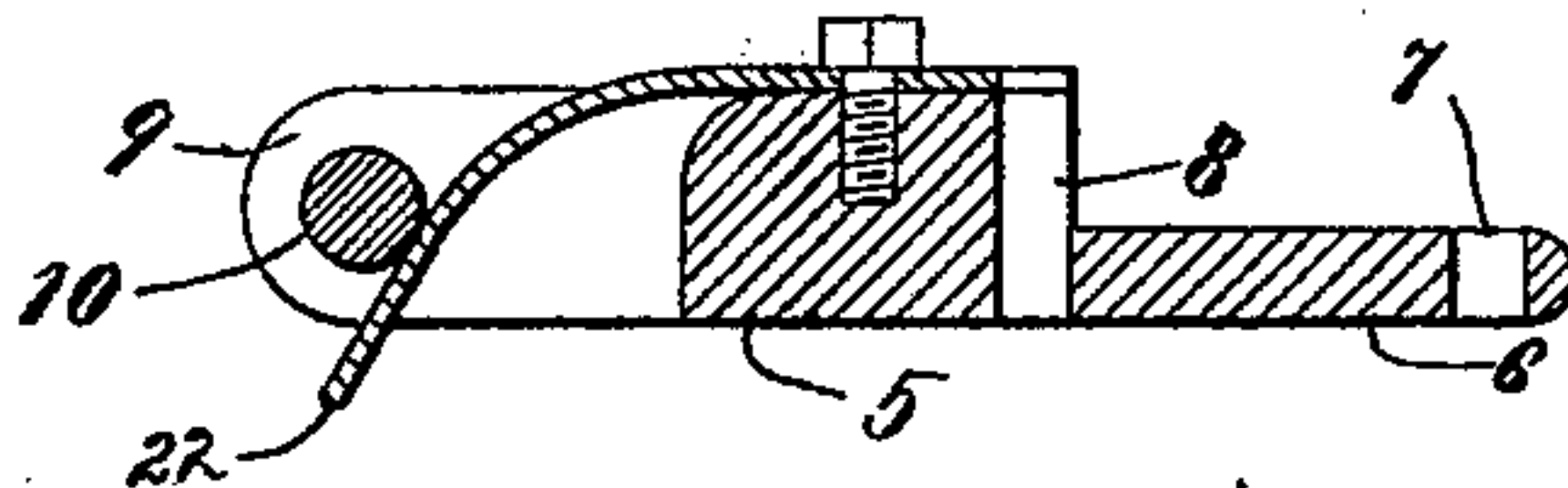


Fig. 4.

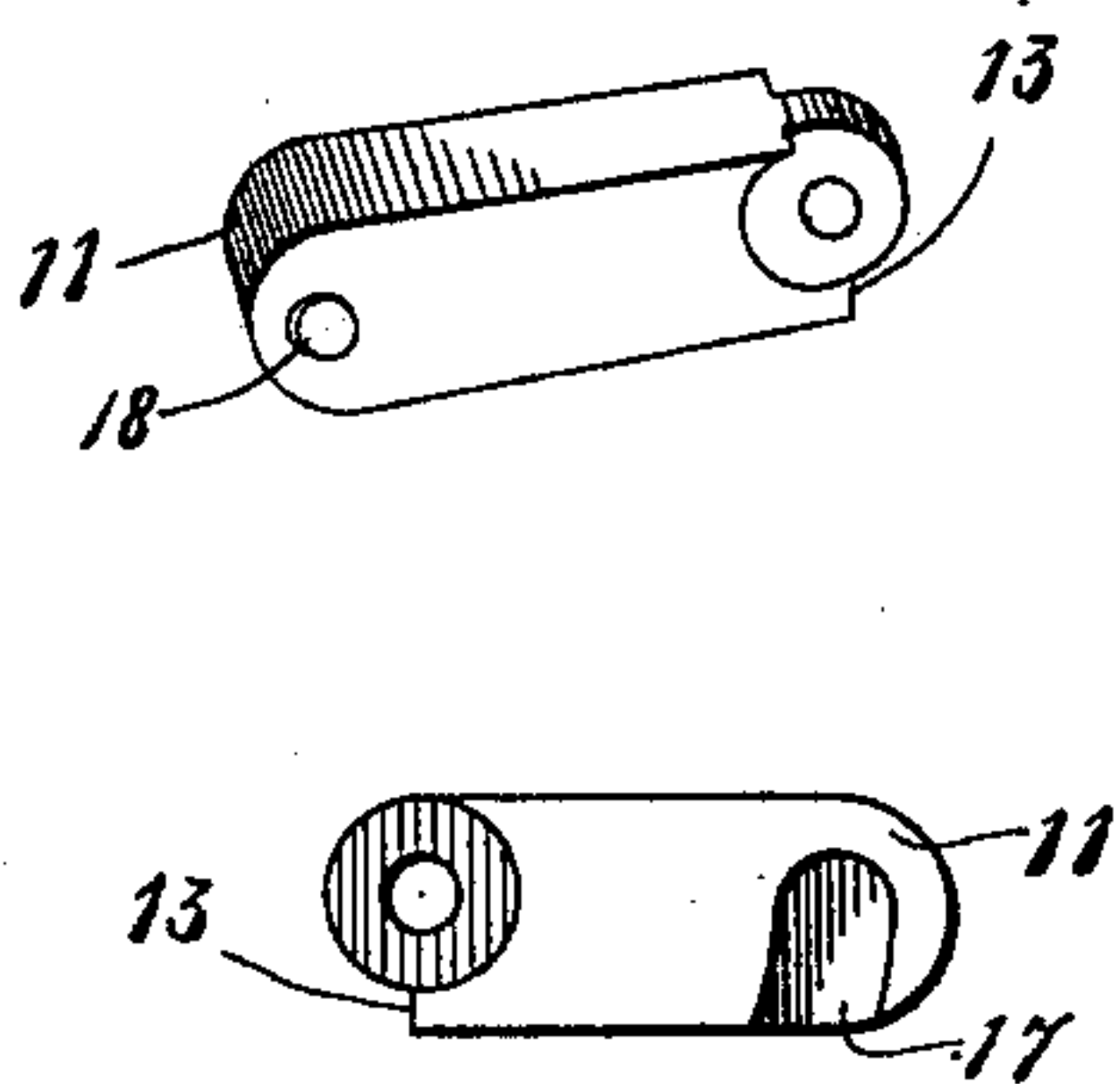
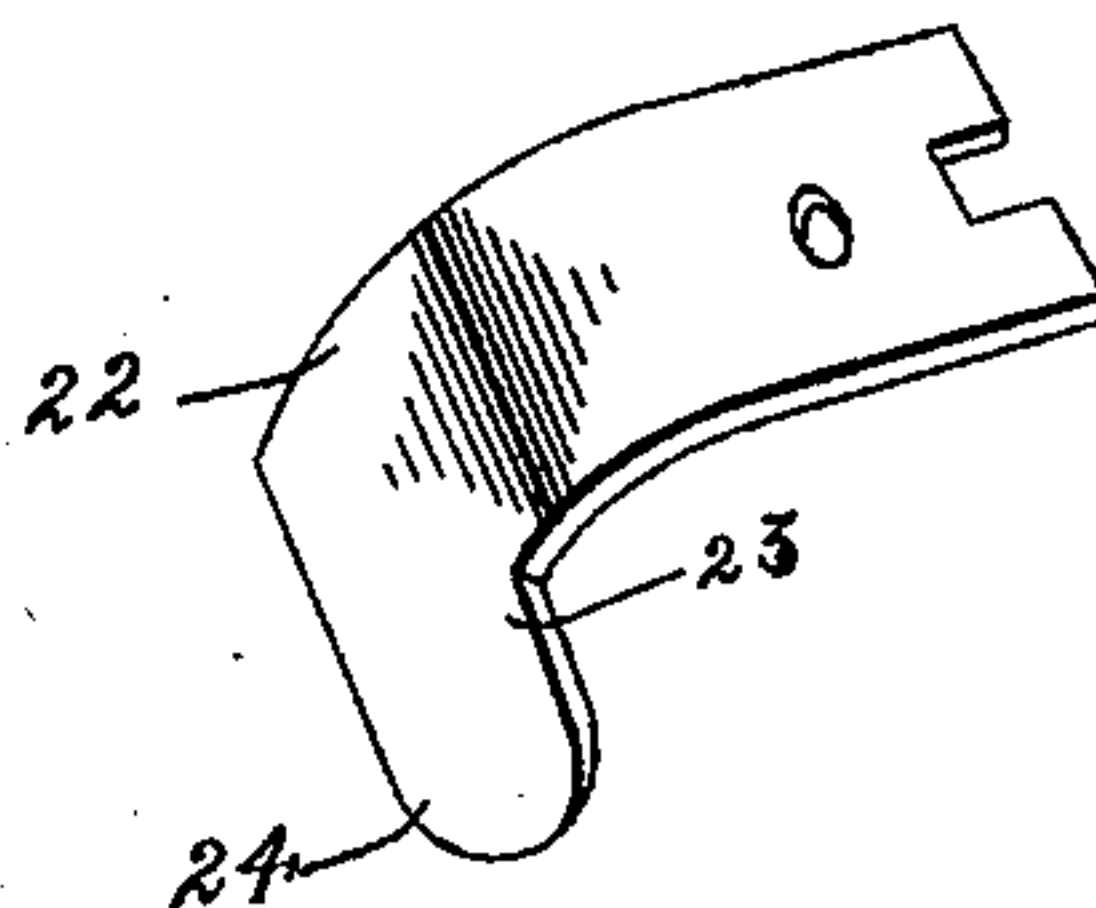


Fig. 5.



Witnesses
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SAMUEL A. OWINGS, OF MERRITT, ILLINOIS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 614,127, dated November 15, 1898.

Application filed May 14, 1897. Serial No. 636,540. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. OWINGS, of Merritt, in the county of Scott and State of Illinois, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby 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.

This invention relates to thill-couplings, and is designed to facilitate the removal of a pole or shafts from a wagon and the application of the same thereto, rendering it an easy matter when a vehicle has been backed into a stable or shed to remove the thills and hang the same up or place the same beneath the vehicle, thus economizing space.

The improved thill-coupling is constructed without bolts and nuts, thus obviating the use of detachable parts which are liable to become displaced and lost. The coupling also provides for preventing all rattling between the coupling and thill-irons.

The detailed objects and advantages of the invention will be pointed out in the course of the subjoined description.

The invention consists in an improved thill-coupling embodying certain novel features and details of construction hereinafter particularly described, illustrated in the drawings, and incorporated in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a thill-coupling constructed in accordance with this invention, showing the same closed. Fig. 2 is a side elevation of the coupling, showing the pivoted ear thrown open and the locking-spring disconnected from said ear. Fig. 3 is a longitudinal section through the coupling. Fig. 4 is a perspective view of the pivoted ear. Fig. 5 is a similar view of the antirattling-spring.

Similar numerals of reference designate corresponding parts in the several views.

Referring to the drawings, 1 designates an ordinary axle-clip provided with the strap portion 2, adapted to fit over the axle and the depending threaded shanks 3, upon which the securing-nuts 4 are placed. Instead of employing a washer-plate beneath the axle the main body of the coupling (indicated at 5) is

formed in such a manner as to constitute this washer-plate, said body being provided with a rearwardly-extending and relatively thin plate portion 6, which underlies the axle and is provided with openings 7 to receive the shanks 3 of the clip. By reducing the body of the coupling 5 to form the plate 6 a shoulder 8 is established which bears against the front side of the axle and serves to steady the thill-coupling with relation to the axle.

Secured rigidly to the body of the coupling 5 is a forwardly-extending ear 9, from the inner side of which projects the coupling-pin 10, terminating in the plane of the opposite ear. The opposite ear (indicated at 11) is pivotally connected to the body of the coupling 5 by a knuckle-joint, as shown at 12, this form of joint embodying shoulders 13, which serve to limit the swinging movement of the ear 11 in one direction while permitting said ear to be rocked upward for attaching or removing a thill-iron. This knuckle-joint is formed by providing the coupling 5 with parallel twin ears 14 and placing a single ear 15 on the pivoted member 11, said ear entering between the parallel ears 14 and being engaged by the pivot or headed pin 16.

The ear 11 is provided in its inner side and near its outer end with an oblique mortise or recess 17, adapted when the ear is rocked downward to receive the end of the pin 10. At or near the outer end of the ear 11 and upon its outer side is a headed stud 18, to receive the outer hooked end 19 of a locking-spring 20, said locking-spring consisting, preferably, of a strip or piece of wire provided intermediate its ends with a coil surrounding the pivot 16 and having its rear end extended and hooked over a projection 21, extending laterally from the body of the coupling 5. The spring 20 not only holds the ear 11 downward in its operative position, but prevents the same from rattling upon the pin 10.

22 indicates a flat leaf-spring which is secured at its rear end to the upper surface of the coupling 5 and which projects at its free end beneath the coupling-pin 10, where it has a lateral extension or lip 23, which is deflected to form an inclined surface 24 for facilitating the placing of the thill-iron upon the pin 10, the thill-iron acting upon the inclined surface 24 to depress the free end of the spring

for allowing the thill-iron to be slid in place upon the pin. When in place, the spring bears against the thill-iron and holds the same tightly against the pin 10, thus preventing any rattling at such point.

The thill-coupling above described is very simple in construction, will prevent all rattling of the parts, and may be easily manipulated for removing the thills or shafts from a vehicle or placing the same thereon. The thill-coupling is also strong and durable, and involves no small or delicate parts which would render the device liable to get out of order.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a thill-coupling, the combination with the body of the coupling, of a rigid ear, a movable ear connected to said body by a knuckle-joint and provided with a laterally-projecting stud, and a spring mounted on the pivot of the movable ear and upon the outside of the coupling and having a hooked free end adapted to engage the stud on the pivoted

ear for holding said ear in its operative position, and also adapted to be disengaged therefrom substantially as and for the purpose described.

2. In a thill-coupling, the combination with the body of the coupling, of a rigid ear carrying a coupling-pin, a pivoted ear recessed to engage said pin, means for holding said ear in its operative position, and an antirattling-spring secured at one end to the body of the coupling and having its free end arranged adjacent to the coupling-pin, said spring being provided at its free end with a laterally-projecting lip which is deflected to form an inclined surface against which the thill-iron will act while placing the latter in position, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL A. OWINGS.

Witnesses:

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OTTO P. DAHMAN.