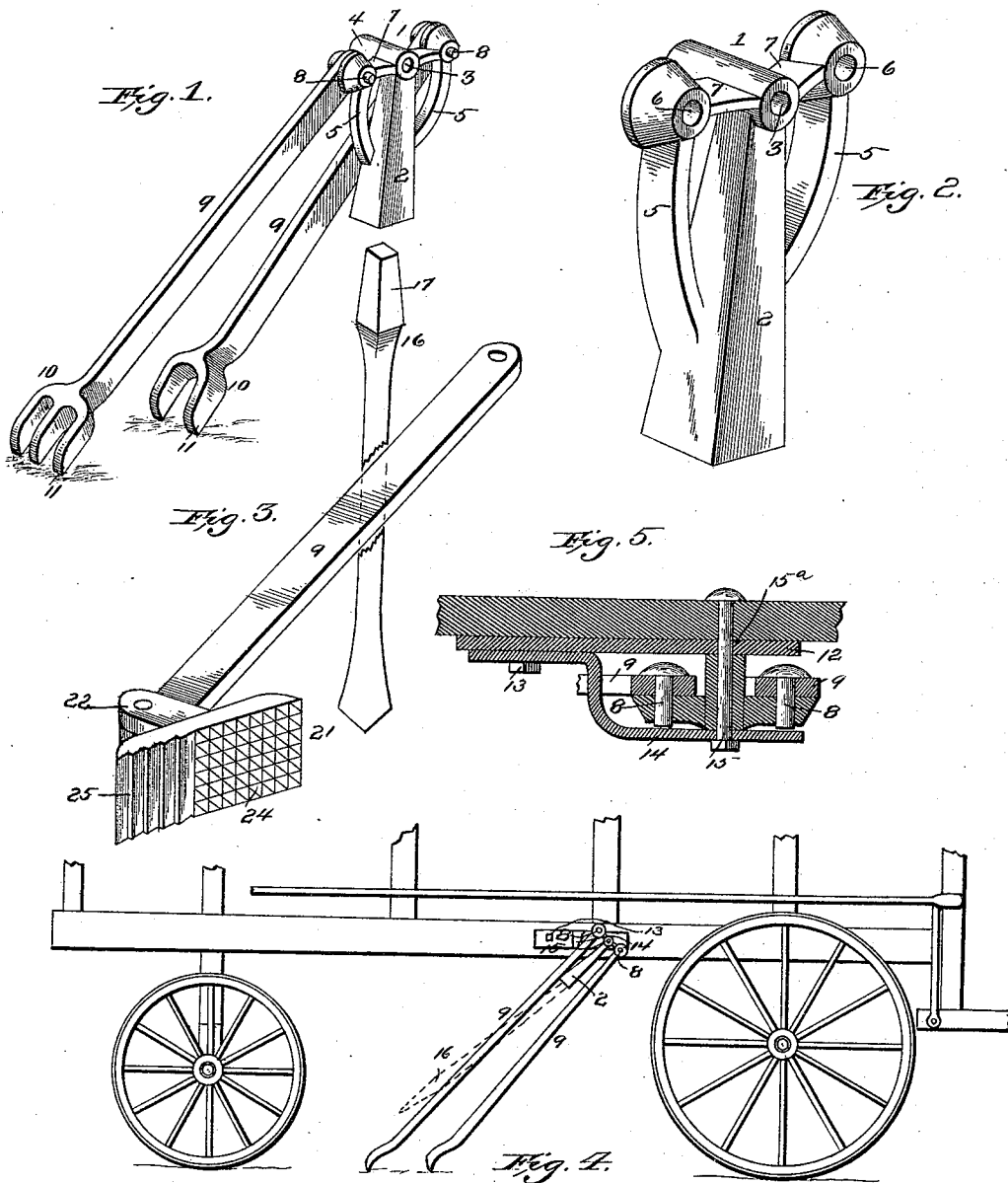


(No Model.)

F. W. SHULS.
BRACING AND SECURING DEVICE.

No. 440,852.

Patented Nov. 18, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERIC W. SHULS, OF GALION, OHIO.

BRACING AND SECURING DEVICE.

SPECIFICATION forming part of Letters Patent No. 440,852, dated November 18, 1890.

Application filed February 12, 1890. Serial No. 340,129. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. SHULS, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a new and useful Bracing and Securing Device, of which the following is a specification.

This invention relates to devices for the purpose of securing machinery—such as thrashing-machines, corn-shellers, sawing-machines, cotton-gins, presses, and the like—in position for being operated by steam or other power in such a manner as to prevent the machinery from being displaced by the strain upon the main drive-belt and the slackening of said belt resulting therefrom.

The invention has for its object to provide means for this purpose which shall be simple, inexpensive, easily applied, and efficient for the purposes indicated, and which shall be capable of being easily and quickly adjusted whenever necessary for the purpose of taking up any slack in the main drive-belt.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully shown and described.

Referring to the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a detail view of the casting, with which the adjusting-legs are pivotally connected. Fig. 3 is a perspective view illustrating a modification. Fig. 4 is a side view of a portion of a machine, showing my invention applied thereto in position for operation. Fig. 5 is horizontal sectional view, showing the device applied to the frame of a thrashing-machine, as in Fig. 4.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a casting comprising a socket 2, at the upper end of which is formed a transverse eye or bearing 3, having a laterally-extending perforated boss or collar 4.

5 5 5 designate arms extending upwardly from opposite sides of the socket. Eyes 6 6 are formed at the upper ends of said arms, and are connected with the central eye or bearing by means of fins or webs 7, the whole forming one complete and integral casting, which should be made of such dimensions

and strength as to enable it to resist a considerable strain.

Connected pivotally with the eyes 6 6 by pins or bolts 8 are the downwardly-extending arms or levers 9 9, the lower ends of which may be forked, as shown in the drawings, at 10, the prongs of said forks being provided with broad treads or edges, as at 11, for the purpose of engaging the ground or the floor, as the case may be, in a manner and for the purpose to be hereinafter described.

12 designates a plate or bracket adapted to be connected or secured by means of a bolt 13 to the frame of the machine in connection with which my invention is to be used. Suitably attached to the outer side of the plate 12 is a flat strap 14, the outer end of which is perforated to receive a bolt 15, the inner end of which passes through a perforation 15^a in the plate 12 and into the frame of the machine, to which the latter is attached.

16 designates a crowbar, the upper end of which is squared, as shown at 17, to adapt it to engage the socket 2 of the casting 1. The lower end of said crowbar is V-shaped, like a drill, as will be seen in the drawings, for the purpose of enabling it to be conveniently utilized for prying the wheels of the machinery in connection with which my invention is used.

In the drawings hereto annexed my invention has been shown as being applied to a thrashing-machine of ordinary construction. The plate 12 is secured to the frame of the machine by means of a bolt passing through the perforation 13, and the bolt 15, which is held in position detachably by the strap 14, is withdrawn to enable the casting 1 to be inserted between said strap and the plate 12, after which the bolt 15 is passed through the eye 3 of the casting, which latter is thus mounted pivotally in position for operation. The square end 17 of the crowbar 16 may now be inserted into the socket 2 of the casting and the latter vibrated or oscillated upon its pivot, thus causing the legs 9 9 to be alternately lifted from and depressed against the floor, thus forcing the machine in the proper direction to tighten the main drive-belt, which has been previously adjusted in position for operation. The crowbar may be removed, when desired, and used for the pur-

pose of prying the wheels of the machine into position, and the machine, after having been adjusted until the main belt has been strained to the requisite degree of tension, is retained
 5 securely by the lower pronged ends of the legs 9 engaging the floor or the ground.

In case the legs 9, having the pronged ends, should be found objectionable as acting injuriously upon the floors of barns and the like,
 10 I may avail myself of the modification which has been illustrated in Fig. 3 of the drawings. By said modification the lower end of each of the legs 9 is connected pivotally with a shoe
 15 21, having upwardly-extending lugs 22, between which the lower end of the leg is pivoted upon a transverse pin or bolt. The lower or bearing face of the shoe 21 is partly serrated, as shown at 24, and partly provided
 20 with transverse inclined ribs 25, which will engage the floor-surface without danger of slipping and without injuring the flooring in any manner.

Having thus described my invention, I claim—

25 1. The casting consisting of the socket provided with an eye at its outer end, outwardly-extended arms having eyes at their outer ends, and the connecting fins or webs, the said central eye being provided with a laterally-

extending perforated boss or flange, substantially as set forth. 30

2. The combination, with the casting having the socket and provided at its outer end with three eyes, the central one of which is provided with a laterally-extending perforated boss or flange, of the legs connected
 35 pivotally to the outer eyes, and pivotal connection between the central eye and the frame of the machine, substantially as set forth.

3. The combination of the supporting-plate
 40 provided with perforations or bolt-holes and having a flat outwardly-extending strap perforated at its outer end, the casting comprising a socket having an eye mounted pivotally
 45 upon a bolt that extends through said strap and base-plate, and eyes on each side of said central eye, the legs connected pivotally to the said outer eyes, and the operating-crowbar, substantially as and for the purpose set
 50 forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FREDERIC W. SHULS.

Witnesses:

T. B. BURGERT,
 E. B. GERTH.