

(No Model.)

D. W. HOUSE.  
ROCKER FOR TANNERY VATS.

No. 533,010.

Patented Jan. 22, 1895.

Fig. 1.

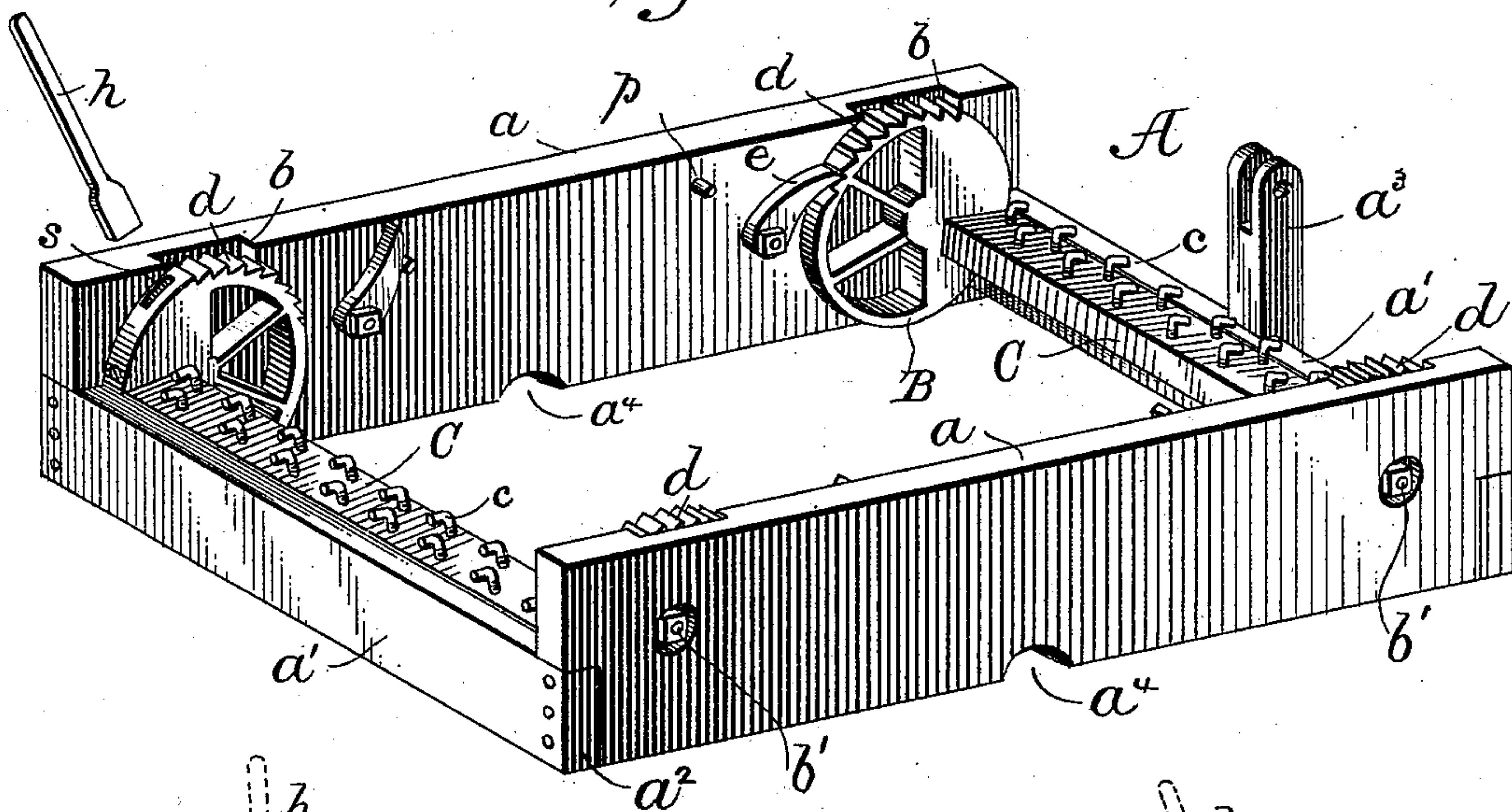
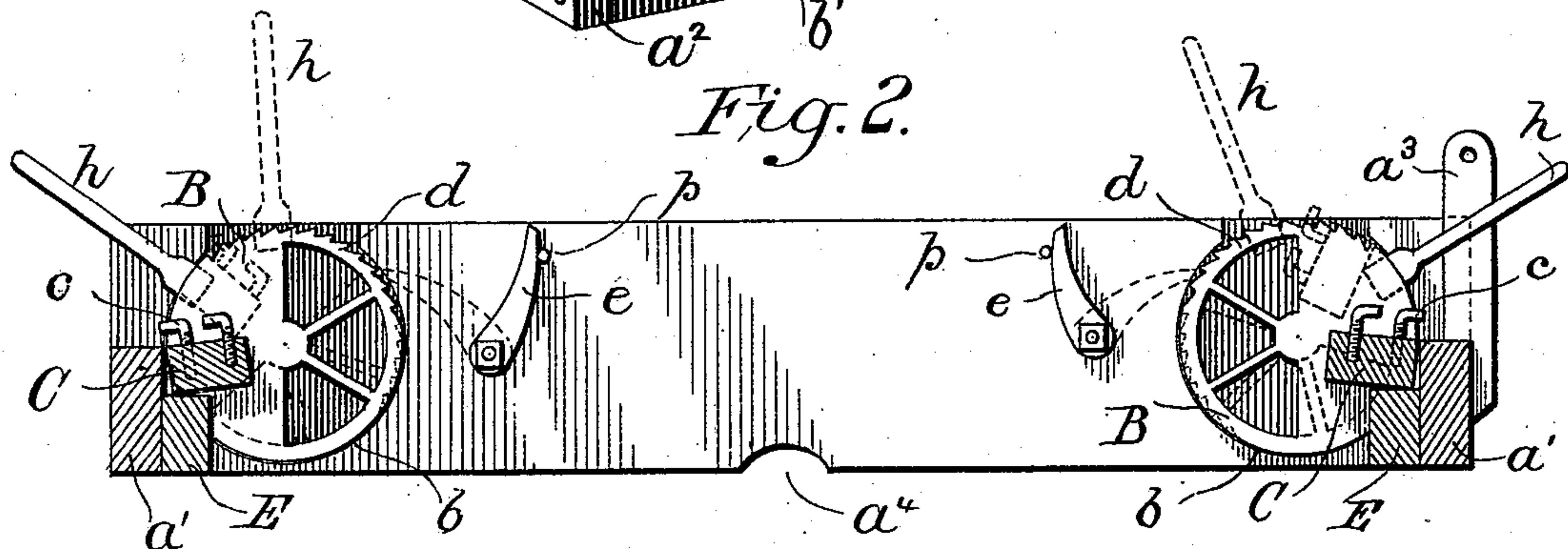


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

DAVID WILSON HOUSE, OF DAVIS, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO ERNEST DAYTON PORTER, OF SAME PLACE.

## ROCKER FOR TANNERY-VATS.

SPECIFICATION forming part of Letters Patent No. 533,010, dated January 22, 1895.

Application filed October 8, 1894. Serial No. 525,271. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID WILSON HOUSE, a citizen of the United States, residing at Davis, in the county of Tucker and State of West Virginia, have invented certain new and useful Improvements in Rockers for Tannery-Vats; 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.

My invention relates generally to apparatus for use in tanneries, and has reference more especially to certain new and useful improvements in the construction of the rockers for the vats.

The object of the invention is to enable the material being treated to be more conveniently and expeditiously handled, to effect a more thorough and even stretching of the same while in the vat, and, incidentally, to improve the general construction and working of the rockers.

With these objects in view, the invention consists in the construction hereinafter described and illustrated and more particularly pointed out in the claims.

The construction is illustrated in the accompanying drawings forming part of this specification, wherein—

Figure 1 is a perspective view of a tannery vat having my improvements applied, and Fig. 2 is a central longitudinal vertical section.

Referring to the views, A indicates the complete rocker, of which  $a$  are the side bars, and  $a'$  the end pieces. These end pieces, instead of being of equal height with the side bars, as is usually the case in these rockers, are only about one-half the height, and are mortised into the ends of the side pieces, as indicated at  $a^2$  in Fig. 1.

The character  $a^3$  indicates a post at one end of the frame of the rocker, to which post is pivotally connected the pitman leading to the usual overhead shaft which gives motion to the frame.

The semi-circles  $a^4$  indicate the bearings for the pins which project inward from the sides of the vats and upon which the rocker works.

The side bars  $a$  of the rocker frame are provided with circular recesses or depressions  $b$  at the ends, as shown most clearly in Fig. 1, said recesses being cut out of the inner face of the side bars. These recesses serve as housings for wheels B, which have stub axles  $b'$  extending through to the outside of the side pieces, where they are secured by nuts seated in countersunk recesses, so as to be flush with the outer face of the side bars.

C, C, indicate cross bars spanning the space between the two wheels at each end of the rocker frame, and having its opposite ends secured to said wheels eccentrically, so that, as the wheels rotate, the cross bars move bodily in the arc of a circle around the axis upon which the wheels turn. These cross bars are provided with series of hooks or catches  $c$ , the arrangement of these hooks or catches being preferably as indicated in the drawings; that is to say, the hooks of one series are spaced opposite the intervals between the hooks of the adjoining series.

The wheels are constructed and adapted for the detachable connection therewith of any suitable operating handle. The most convenient arrangement now known to me for this purpose is that best illustrated in Fig. 1, where the periphery of the wheels is provided with a radial socket  $s$  into which may be stuck the end of the handle  $h$ .

To provide against the rotation of the wheels in a direction to carry the catch bars toward the center of the frame, I employ a releasable locking device, the preferred form of which consists in a ratchet rim  $d$  on the periphery of the wheels, and a pivoted gravitating pawl  $e$  loosely pivoted on the inner side of the frame-pieces in such proximity to the wheels as to co-operate with the ratchet rim. Pins  $p$  are secured in the side bars in such position relatively to the pawls as to form stops to prevent the pawls from falling completely over out of reach of the ratchet rims, and yet to allow the weight of said pawl to hold them out of engagement with the teeth of the ratchets when turned back against the pins.

E, E, indicate cross bars secured to the inner faces of the end pieces of the frame, and serving as rests for the catch bars, and stops



to limit the outward and downward turning movements of said bars. These stop bars are so located that, when the catch bars C, C, rest thereon, the hooks or catches on the upper surface of the latter will occupy a position just above the edge of the end pieces.

As shown in the accompanying drawings, the wheels B, B, are not completely inclosed within the recesses in the side bars, but project sufficiently to allow the pawls, which are pivoted on the inner face of the bars, to engage the ratchet rims, and to provide for the easy insertion and removal of the handle *h*. If preferred, however, the wheels may be completely housed within the recesses, and the pawls may be also set in corresponding housings; but, in this case, it would be necessary to employ some other arrangement for connecting the handle to the wheels.

It is characteristic of the invention that the improvements may be applied to the ordinary construction of rocker frames now used in most tanneries at very slight expense and without altering the shape or size of the frames. It will be noted that the wheels, pawls, and other projecting parts, are so located that the upper edge of the side bars is free from outward projections.

The catch bars may be secured to the wheels in any convenient manner. The simplest and best arrangement now known to me consists of a radial notch or recess cut in the solid part of the wheels, into which the ends of the bars are preferably dove-tailed, and a screw, as *s*, Fig. 1, passing from the periphery of the wheels into the ends of the bars.

Except in the manner of holding and stretching the hides, skins, or other material to be operated upon, the operation of the rocker herein shown does not differ from those now commonly employed. In respect of the handling and stretching the skins, however, the present invention will be found to possess important advantages. In stretching the skins, the ends are hooked over the pins on the upper side of the catch bars, said bars being at this time in the positions indicated in dotted lines in Fig. 2, and the projecting pieces of the skins (the neck, tail, &c.) lie out over the tops of the end-pieces of the frame, instead of being cramped in on the under side. When the skins are hooked over the pins, the handle is inserted in the sockets and the wheels are turned outwardly carrying the catch-bar into the position shown in full lines and

stretching the skins to any desired degree. The ratchet rims extend sufficiently around the peripheries of the wheels to allow for considerable range of adjustment, which, of course, permits the catch-bars to be set at varying distances apart.

I do not intend to be limited in the practice of my invention to the employment of the specific construction and arrangement of details herein illustrated, as the invention is capable of considerable modification in these respects without departing from its spirit or scope.

Having thus described my invention, what I claim is—

1. In a rocker for tannery vats, the combination of the frame, wheels journaled in the sides of said frame at the end, a transverse catch bar connected eccentrically to said wheels, and a pawl and ratchet mechanism for locking the wheels in different positions of adjustment, said wheels being constructed and adapted to receive a removable handle for operating them; substantially as described.

2. In a rocker for tannery vats, the combination of the frame, a transverse, rotary, eccentrically mounted, catch bar journaled in the sides of said frame at the end, means for releasably locking said catch bar in different positions of adjustment and a rest or stop on the frame for limiting the adjustment of the catch bar in the opposite direction; substantially as described.

3. In a rocker for tannery vats, the combination of the frame, the side bars of said frame being provided with circular recesses near the end, wheels housed in said recesses and journaled in the side bars, a bar connected eccentrically to said wheels and extending across the rocker at the end of the frame, hooks or catches on said bar, a pawl and ratchet mechanism for permitting the adjustment of the wheels in different positions and a rest or stop on the frame against which the catch bar strikes and limits the adjustment of the wheels in the opposite direction, said wheels being constructed and adapted to receive a removable operating handle; substantially as described.

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

DAVID WILSON HOUSE.

Witnesses:

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H. J. WAGONER.