

GEORGE M. ROHRBACHER.

Improvement in Apparatus for Dyeing.

No. 126,578.

Patented May 7, 1872.

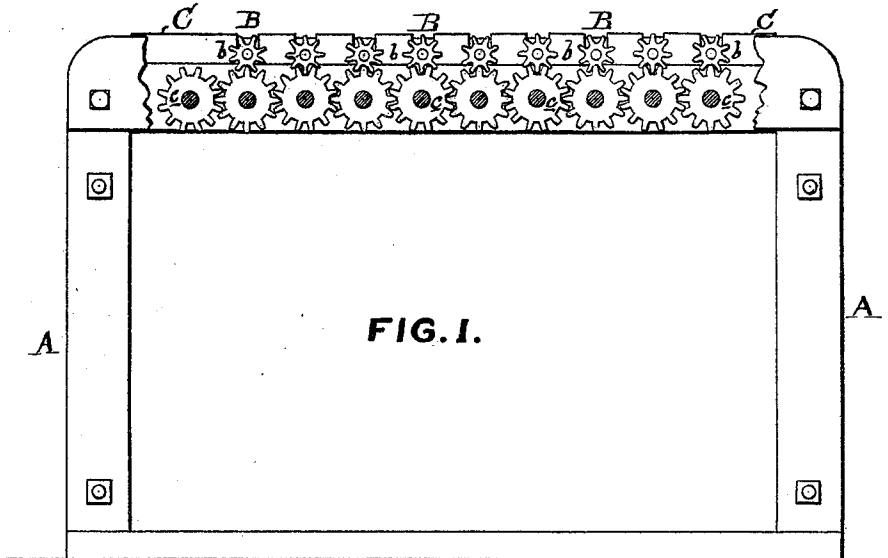


FIG. 2.

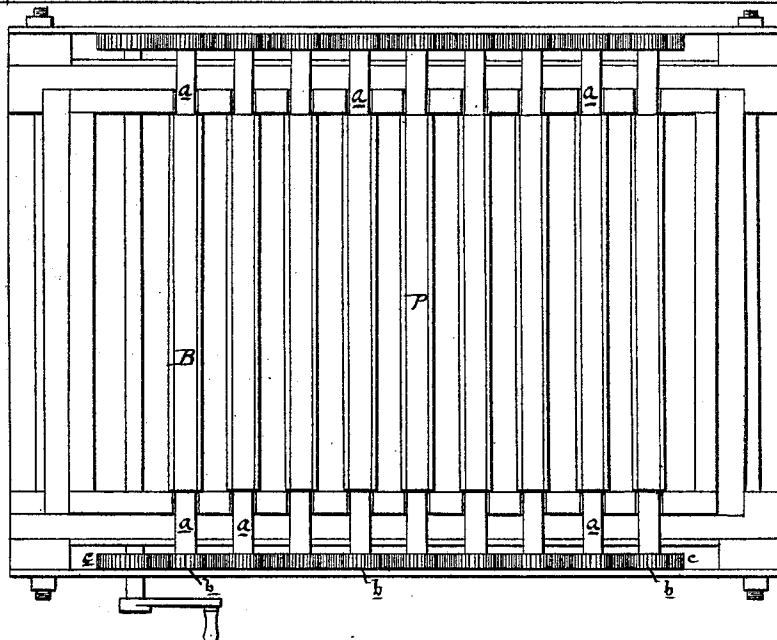
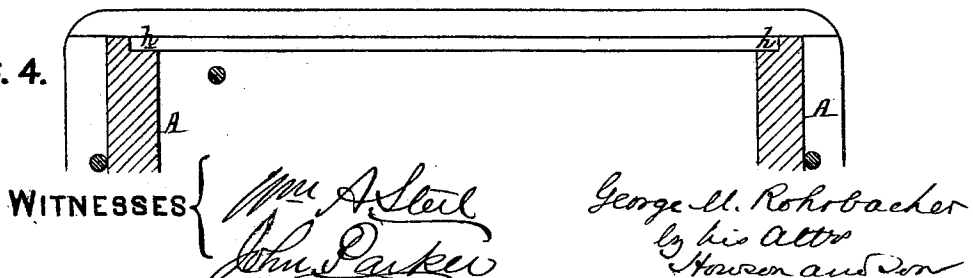


FIG. 3.



FIG. 4.



WITNESSES {

Wm A Steel
John Parker

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UNITED STATES PATENT OFFICE.

GEORGE MICHAEL ROHRBACHER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR DYEING.

Specification forming part of Letters Patent No. 126,578, dated May 7, 1872; antedated May 1, 1872.

SPECIFICATION.

I, GEORGE MICHAEL ROHRBACHER, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented certain Improvements in Dyeing Apparatus, of which the following is a specification:

Nature and Object of the Invention.

My invention consists of certain improvements in dyeing apparatus (too fully explained hereafter to need preliminary description) whereby skeins or hanks of yarn may be dyed much more rapidly and uniformly, and with much less labor on the part of the attendants, than by the usual appliances.

Description of the Accompanying Drawing.

Figure 1 is a side elevation of my improved dyeing apparatus; Fig. 2, a plan view of the same; and Figs. 3 and 4, detached sectional views of the upper portion of the apparatus.

General Description.

A represents a dyer's vat or tank of the kind commonly used for dyeing yarn in skeins or hanks.

To prevent tangling, and for convenience of manipulation, the skeins of yarn are usually strung upon "sticks," which are laid transversely across the top of the vat, so that the suspended skeins may be steeped in the dye, with which the vessel is filled nearly to the top, and which is kept heated nearly or quite to the boiling-point by a coil of steam-pipes or otherwise. As only the lower portions of the skeins are submerged in the dye it becomes necessary, after a sufficient time has elapsed to thoroughly impregnate these submerged portions, to turn or shift the whole number of skeins upon their "sticks," so that the upper portions also may be submitted to

the action of the dye. My invention has been designed to facilitate these and other operations.

The sticks B B B, &c., are each formed with journals *a a* adapted to bearings in the top of the vat, and are provided with pinions *b* at one or both ends, either geared directly together or to an under row of geared pinions, *c*, this arrangement enabling an attendant to turn simultaneously the whole of the sticks or spindles from which the skeins of yarn are suspended, such motion being either intermittent or continuous, as circumstances may suggest.

It will be seen that any one or all of the sticks may be lifted for the purpose of removing the skeins; but I prefer to adapt all of the said spindles to a frame, C, Fig. 3, which fits within and rests upon a shoulder, *h*, formed within the vat, and which, with the spindles and skeins, can be lifted bodily from the vat and be removed to the place where the skeins are to be dried.

Claims.

1. The combination, substantially as herein described, of a dyer's vat and a number of detachable sticks or spindles, B, provided with pinions *b* gearing with each other or with a row of supplementary pinions, *c*, as set forth.

2. The detachable frame C, adapted to the top of the vat A, and carrying the geared and detachable sticks or spindles B, all substantially as specified.

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

G. M. ROHRBACHER.

Witnesses:

WM. A. STEEL,
HARRY SMITH.