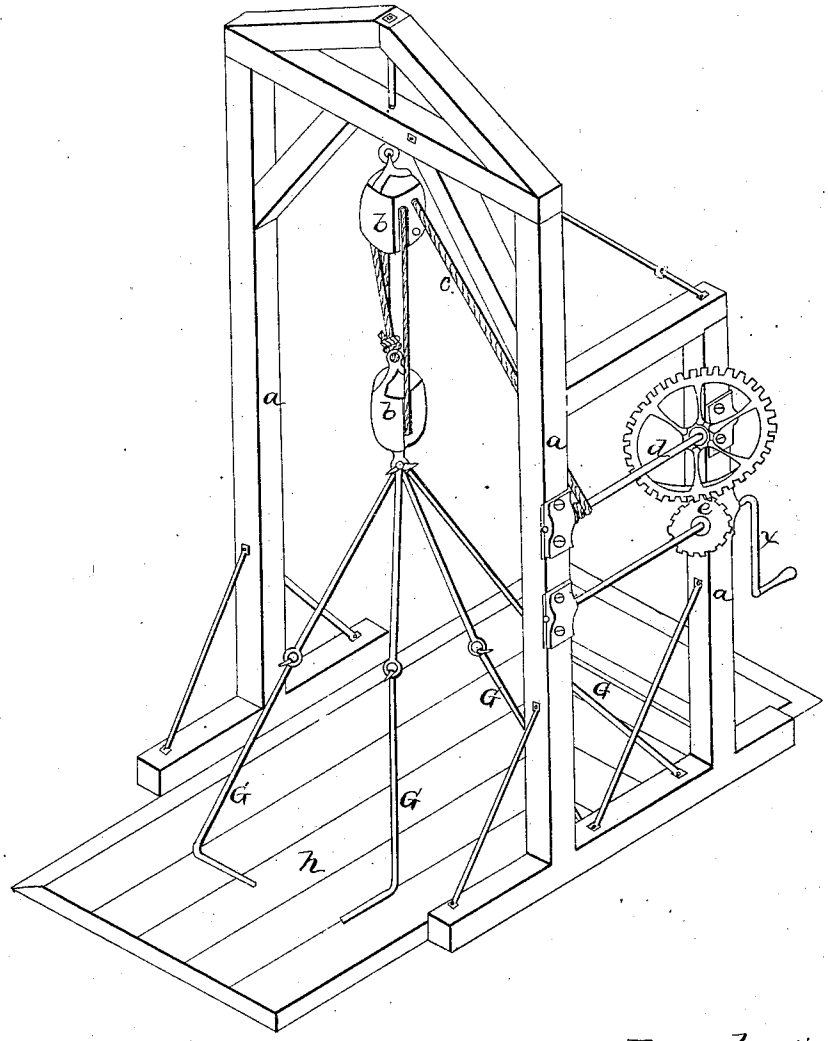
Robinson & Sanborn

Tan Vat,

No. 20,093. Patented Apr. 27, 1858.



Witnesses;
Samuel E. Clifford
Hiram Grindall

Inventors;
Charles E. Robinson
Lewis D. Sanborn

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHAS. E. ROBINSON AND L. D. SANBORN, OF CONCORD, NEW HAMPSHIRE.

APPARATUS FOR RAISING LEATHER FROM VATS.

Specification of Letters Patent No. 20,093, dated April 27, 1858.

To all whom it may concern:

Be it known that we, CHARLES E. ROBINSON and LEWIS D. SANBORN, of Concord, in the county of Merrimack and State of New Hampshire, have invented a new and Improved Mode of Taking Leather from Tan-Vats; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing.

The nature of our invention consists in putting four iron rods with the lower ends turned at a right angle, down at the sides of the vat. When it is full of leather and is ready to be taken out, the lower ends turning under the leather on turning the rods at the top. The leather is then taken out of the vat by a crab machine.

To enable others skilled in the art to make and use our invention we will proceed to describe its construction and operation.

We make four iron rods of sufficient size to sustain the weight, about two feet longer than the depth of the vat. The lower ends are turned at a right angle so that they may reach half across the vat; the upper ends are made with an eye. The crab is made of two three inch, ash joists three feet longer than the depth of the vat, *i*, *e*., if the vat is four feet deep the crab should stand seven feet high. These joists should stand the width of the vat apart with a cross piece fastening them together at the top. Two braces at the top of this cross bar meet together at the center of it in the form of a triangle. A bolt passes through the center of the cross-bar and the center of the braces above, with an eye in the lower end and a nut on the top end holding it firm. This frame is braced into feet at the lower ends so as to stand firm and to be easily moved from one vat to another. On one side of this frame is placed a gear-shaft over which a rope can pass. A crank with a small gear is applied to this large gear by which it can be easily turned. In the center of this crab machine tackle blocks are suspended from the bolt. One end of the rope is fastened to the shaft of the large gear. A hook is made for the lower tackle block which is made to pass through the eyes of the iron rods. When a pack of leather is ready to be taken out two of the iron rods are worked down on each side of the vat about one third of the distance from the ends of the vat. The rods are then turned under the leather by turning them at the top of the vat. The crab machine is then placed over the vat; draw the rods together so that the top of them will meet; hook in the hooks of the tackle block and then turn the crank till the leather and bark is out; then place planks over the vat, let the leather down upon them, and set the machine down to another vat.

We do not claim the crab machine wholly as our invention.

What we claim as our invention and desire to secure by Letters Patent is—

The manner of taking leather out of tan vats by using hooks as aforesaid, or a movable frame with copper rods, to be placed in the bottom of each vat before the leather is placed therein, or any way similar to the same by which all of the leather and bark can be taken out at one time.

CHARLES E. ROBINSON.
LEWIS D. SANBORN.

Witnesses to the signature of C. E. Robinson:

JOHN J. MUGRIDGE,
HENRY W. FULLER.

Witnesses to the signature of Lewis D. Sanborn:

JOHN J. MUGRIDGE,
BENJ. B. CLIFFORD.