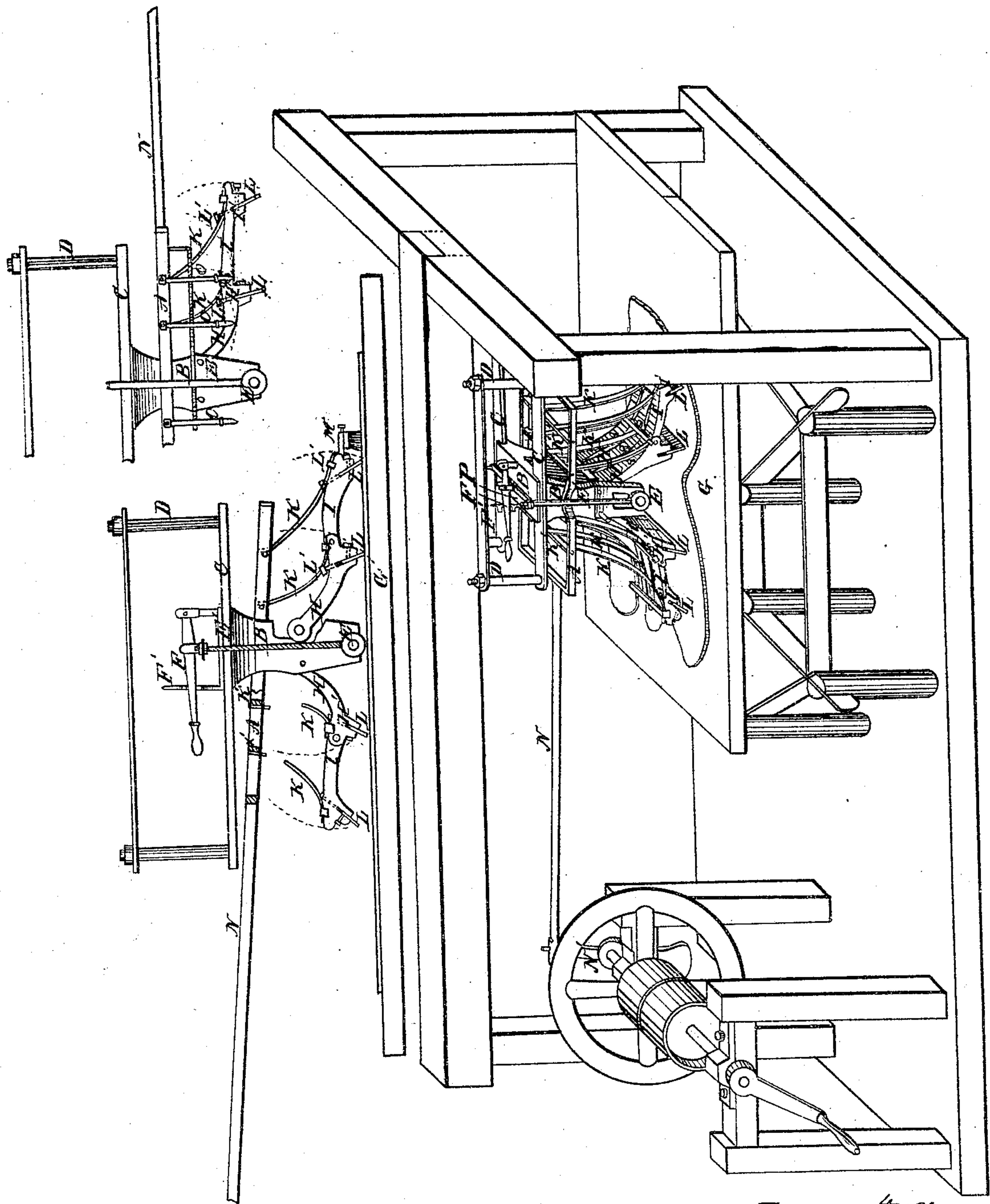


Pray & Fitzhenry,  
 Leather Dressing Machine,  
 No. 61,250, Patented Jan. 15, 1867.



Witnesses.

Witnesses.  
 J. A. Connolly

Inventor.  
 Ira W. Pray  
 Edward Fitzhenry  
 by  
 W. P. W. Murray & Co.  
 Their Attys.



# United States Patent Office.

IRA W. PRAY AND EDWARD FITZHENRY, OF PORTLAND, OREGON.

*Letters Patent No. 61,250, dated January 15, 1867.*

## IMPROVED MACHINE FOR SCOURING LEATHER.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, IRA W. PRAY, and EDWARD FITZHENRY, of Portland, in the county of Multnomah, and State of Oregon, have invented a new and useful improvement in Machines for Finishing Leather; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, made part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is partly a side elevation and partly a vertical section.

Figure 3 is an elevation of the opposite sides.

In the different figures the same letters refer to identical parts.

My improvements relate to the arrangement of a machine for finishing, scouring, and glossing leather by means of the usual steel, stone, or glass scouring tools attached to a frame in such manner that by the reciprocating action of a crank and pitman the two ends shall be brought alternately into action.

A is a frame or plate, pivoted at its centre to the arms of the cross-head B, which is arranged to slide freely upon the ways C, which are suspended by the hangers D. The frame A receives a reciprocating motion from the pitman N, which is attached to it and to the crank N'. The revolution of the crank gives an oscillating motion to each end of the frame A as well as a reciprocating motion to the entire apparatus. A series of curved arms, H, are attached by a hinged joint to the cross-head B in such manner that they may have a vertical oscillation; and to the ends of these arms another series of similar arms, I, are in like manner hinged. These arms are intended to have an independent vertical play so as to adapt themselves to inequalities in the surface of the leather. On the under side of the arms H and I are jaws marked H' and I', respectively, fitted to receive the square plates of steel, stone, and glass, L, ordinarily employed in cleaning and finishing leather; these plates L, adjustably held by the set-screws L' passing through the arms above the jaws. To the outer extremities of the arms I are attached brushes M. The plates L are kept in contact with the leather by the stress of the springs K, which, resting upon the arms, are attached to the cross-pieces K', which are so suspended upon journals fixed in the frame A that they may be turned by the levers O, which enable the workman to raise up any of the series of arms he may desire, or increase the pressure as may be necessary. The side of the leather to be finished is attached to the table G, and is kept in place by the roller E, which is suspended by the rods E' from the bar P over the cross-head B. This bar P is attached to a lever, F, by which the height of the roller E is regulated; and it is retained in the required position by the notched catch F'.

The operation of the machine is sufficiently indicated by the above description of the parts of which it is composed. The power is derived from any source capable of application by the revolution of the crank. A reciprocating motion is given to the entire apparatus, and at the same time an oscillating motion given to the frame A brings alternately the scrapers or "slickers" L into contact with the face of the hide upon the table, their independent arrangement permitting them to accommodate themselves to any ordinary irregularities of surface.

Having fully explained the construction and operation of my improved machine, what I claim as my invention, and seek to secure by Letters Patent, is—

1. A mechanism by which dually arranged sets of rubbers or scrapers L, in a machine for finishing leather, may alternately be brought into action by the reciprocating motion of a crank, substantially in the manner set forth.
2. In combination with the crank N' and pitman N we claim the frame A, pivoted substantially in the manner and for the purpose set forth.
3. The combination of the hinged arms H, with or without the arms I, with the springs K, the parts being constructed and arranged for use substantially as set forth.
4. The springs K, pivoted cross-pieces K', and levers O, in combination with the hinged arms H and I, substantially as and for the purpose set forth.
5. In combination with the table G we claim the roller E, adjustably suspended by the rods E' and cross-bar P, substantially as and for the purpose set forth.

Witnesses:

J. N. DOLPH,  
JOHN R. PRINDLE.

IRA W. PRAY,  
ED. FITZHENRY.