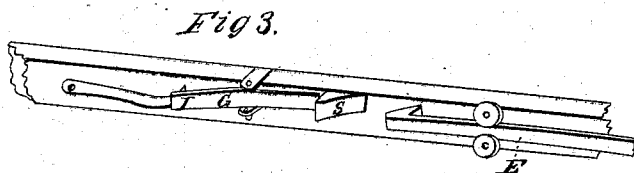
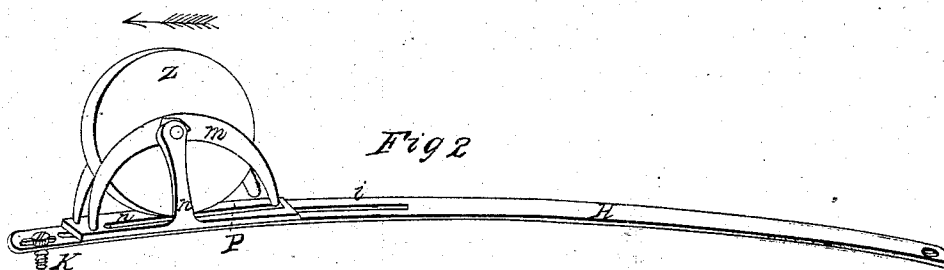
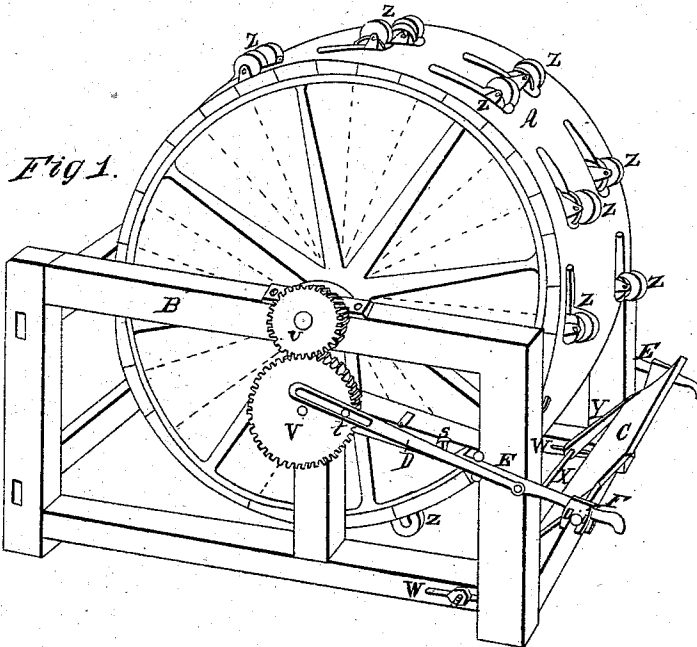


R. Lee,
Dressing Leather,
No 48, 186, *Patented June 13, 1865.*



Witnesses.
Chas. McKim
E. D. Marshall

Inventor.
Richard Lee.

UNITED STATES PATENT OFFICE.

RICHARD LEE, OF NEWARK, NEW JERSEY.

IMPROVED LEATHER-DRESSING MACHINE.

Specification forming part of Letters Patent No. 48,186, dated June 13, 1865.

To all whom it may concern:

Be it known that I, RICHARD LEE, of the city of Newark, in the county of Essex and State of New Jersey, have invented a Machine for Dressing and Finishing Leather; and I do hereby declare the following to be a full and exact description thereof, reference being had herein to the drawings accompanying this specification, making part of the same.

The nature of my invention consists in constructing a machine which overcomes the difficulty that has confined the process to hand labor up to the present time.

In the drawings, Figure 1 shows the machine. Fig. 2 shows the part of the machine which does the work upon the leather, technically termed a "roller," although it does not revolve in working. Fig. 3 shows the spring-catch that holds the table to its place.

A cylinder or drum, about eight feet in diameter and three or four feet in width, A, on a suitable frame, is driven by a belt or gearing, as most convenient. Upon the face of the drum is placed any requisite number of rubbers or rollers, *z*, in such positions as that by a slight overlapping each other on the line described by the revolving of the drum it is insured that every part of the hide or skin shall be operated upon by them in one revolution of the drum. Usually one rubber or roller is placed on the middle line of the face of the drum, and others in pairs at equal distances round the drum, their distance apart laterally being determined by the width of the faces of the rolls.

The hide or skin is placed on the table C, the face of said table being a concave that corresponds with the convex line described by the faces of the rolls as they pass on the revolving of the drum. This table is adjustable, being held by the arms *y* to the bar *x*, which bar is movable in the slot *w*, and is fastened by a nut and screw at each end.

The table C, by means of the gearing *u* and *v*, the connecting-rod D, the spring-catch bar E, and a connection, F, is made to come up and is held fast to the position required for the operating of the rolls *z* upon the surface of the hide or skin during one revolution of the drum. The pin *t* on the wheel *v* carrying the slotted end of the connecting-rod D, the other end being attached to the spring-catch bar E, draws, as the wheel revolves, the catch-bar onto the catch on the frame *s*, Fig. 3, there being on the inside of the wheel *v*, directly opposite the pin *t*, a cam. (Not shown in the drawings.) That cam in passing presses the end *r* of the lever

G, so lifting the catch on the spring-bar E off the catch *s*, when the table falls back by its own gravity, and as the wheel *u* on the shaft of the drum makes two revolutions for one of the wheel *v* the table is held to the work at every alternate second revolution of the drum, remaining released from the work sufficient time for the operator to make the needed changes in the position of the skin upon the table.

The operating-roll *z* is supported in a pedestal, *n*, said pedestal being attached to the spring H. One end of this spring is secured to the face of the drum, its tension being regulated by the screw *k*. To each side of the roll is attached to a semicircle, *m*, held immovable by a screw-nut. One end of the semicircle rests upon the base of the pedestal *n*, the other bears on a tilt-spring, *p*, allowing the roll to turn on its bearings just the distance of the height of the tilt-spring from the base of the pedestal, when the pressure of the roll on the skin commences. Then, as the roll moves forward in the direction of the arrow in the drawings, the tilt-spring is pressed hard down on the pedestal. The instant it is released the tilt-spring changes the bearing to the other end of the semicircle upon the base of the pedestal. The object of this is to guard against tearing a skin when the roll is passing a hole therein, the roll, being thrown forward by the tilt-spring when it enters a hole, has sufficient rolling motion when it meets the edge of the hole to pass it over that edge without catching or tearing the skin.

A variety of rubbers or rolls adapted to the work required on a hide or skin are used on the machine. In the spring H is a long slot, *i*, for the convenience of shifting the position of the pedestal *n* thereon, for the purpose of increasing or decreasing the tension, as the kinds of work may require.

What I claim and desire to secure is—

1. The rolls or rubbers, with their semicircles, tilt-springs and spring-bearings constructed in the manner and for the purpose specified.
2. The manner of alternating the action of the table, substantially as shown.
3. The whole machine, with its various parts combined, arranged, and operated in the manner and for the purpose hereinabove set forth.

RICHARD LEE.

Witnesses:

CHAS. H. SKINNER,
E. F. MARSHALL.