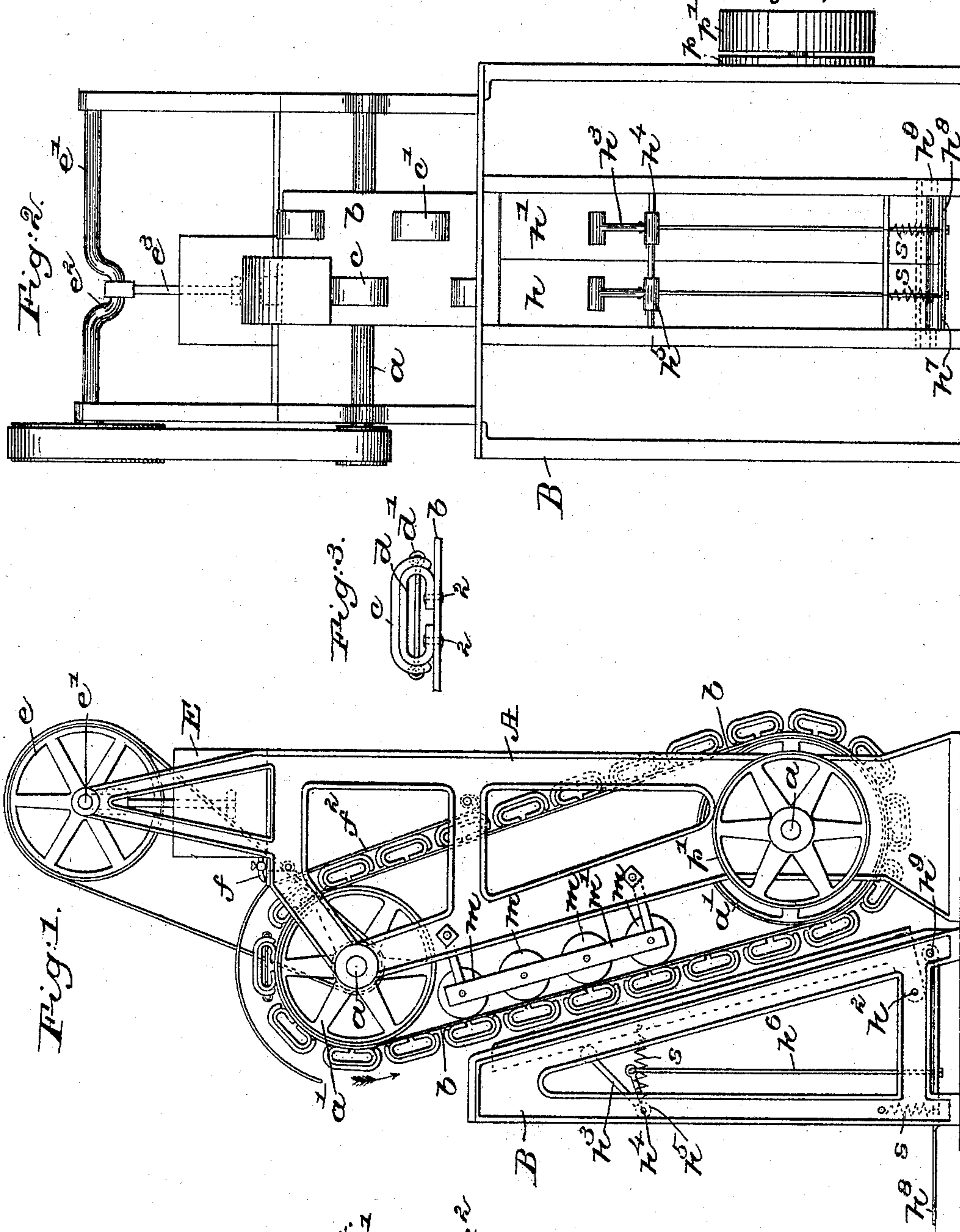


(No Model.)

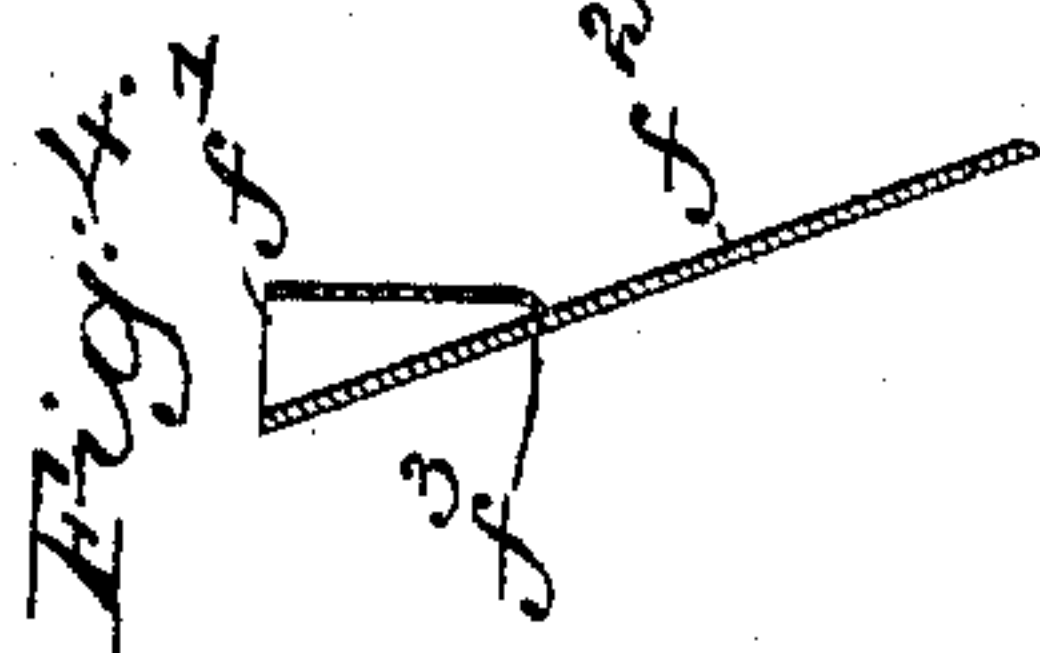
T. DAWSON & C. R. & G. F. SCHUMACHER.
MACHINE FOR DRESSING LEATHER.

No. 497,003.

Patented May 9, 1893.



Witnesses.
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UNITED STATES PATENT OFFICE.

THOMAS DAWSON, OF LYNN, AND CARL R. SCHUMACHER AND GEORGE F. SCHUMACHER, OF BOSTON, MASSACHUSETTS.

MACHINE FOR DRESSING LEATHER.

SPECIFICATION forming part of Letters Patent No. 497,003, dated May 9, 1893.

Application filed May 27, 1892. Serial No. 434,569. (No model.)

To all whom it may concern:

Be it known that we, THOMAS DAWSON, a subject of the Queen of Great Britain, residing at Lynn, county of Essex, and CARL R. SCHUMACHER and GEORGE F. SCHUMACHER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Machines for Dressing Leather, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention relates to leather dressing machines, more particularly to that class of machines for mechanically applying blacking or seasoning to various kinds of skins by means of a moving carrier provided with two series of pads, one of which applies the seasoning or blacking, while the other series rubs or works the same into the skin, suitable devices being provided by which to press the skin operated upon against either or both sets of pads at will.

The principal features of the invention consist in a moving flexible carrier, preferably in the form of a belt, to which the pads for applying and rubbing in the dressing are applied; and also in a flat table or presser upon which skins are placed while being operated upon whereby the dressing is applied to the skins while the latter are flat instead of curved or otherwise distorted.

The invention also consists in various details of construction to be hereinafter described and set forth in the claims.

Figure 1 of the drawings represents in side elevation a leather dressing machine embodying this invention; Fig. 2, a left-hand front elevation of the same; Fig. 3, a sectional detail of the flexible carrier and one of the pads to be hereinafter referred to; and Fig. 4, a sectional detail of the distributing apron to be referred to.

Referring to the drawings the frame A is of suitable shape and construction to sustain the working parts, said frame as herein shown having suitable journal bearings for the horizontal shaft *a*, arranged one above and preferably offset from the other, and upon which are made fast the wheels or drums *a'* about which is passed the flexible carrier or belt *b*

having secured to it two series of pads *c*, *c'*, the pads in each series being preferably arranged at intervals and arranged so that the pads of one series are located opposite the intervals between the pads of the other series. The pads of each series being of like shape and construction, therefore a detailed description of a single pad will suffice.

Referring to Fig. 3, a looped leather strip *d* is secured at its ends by rivets 2 to the carrier *b*. The pad proper *c*, consisting in the present instance of a thick piece of felt, is secured to the leather or other strip *d* by means of a pin *d'* passed through the ends of the pad and through the loops of the leather strip *d*. The pad may thus be readily removed for the substitution of a new one when the old is worn out, or for the substitution of a pad of different material or shape to accommodate various classes of work.

The lowermost shaft *a*, is provided with fast and loose pulleys *p*, *p'*, by means of which the shafts *a* are rotated and the carrier *b* moved, as will be described. The uppermost shaft *a* is belted to a pulley *e* fast on a shaft *e'* provided with a crank *e²* which operates a stirrer *e³* within the tank or receptacle E containing the dressing, blacking, or other substance which is to be applied to the leather, the said dressing being drawn from the tank through a suitable faucet *f* which discharges into a V-shaped receptacle *f'* formed at the upper end and upon the outside of the apron or distributing plate *f²* carried by the frame and in contact with the inner face of which one series of pads move, the dressing thus discharged into the said V-shaped receptacle flowing therefrom through perforations *f³* to the inner surface of the distributing plate or apron *f²* to be taken up by the pads moving in contact with the apron, the stirrer *e³* acting to keep the dressing agitated and in proper condition. A suitable bed B having a flat face is formed by the frame in front of the moving pads or formed by an independent frame standing before the pads, the said bed having two pressers *h*, *h'*, see Fig. 2, each of which is pivoted at *h²*, and to which are jointed arms of the like bell crank levers *h³* pivoted at *h⁴* in the frame, and having their other, preferably shorter arms, *h⁵* connected by links

h^6 with treadles h^7, h^8 , pivoted at h^9 in the frame, the springs s represented as applied to the treadles acting to draw the presser normally back or away from the moving pads. A series of two or more supporting rolls m journaled in a proper frame m' are arranged back of the carrier b or upon the side thereof opposite the pressers h' to properly support the carrier during the operation of the machine.

10 The operation of the machine is as follows:— The lowermost or driving shaft a is rotated to cause the carrier b with its pads or wipers to move in the direction of the arrow Fig. 1. The pads c upon the carrier as they move upwardly beneath and in contact with the distributing apron f^2 take therefrom a proper supply of the seasoning or dressing. The leather skin previously prepared to receive the seasoning or dressing is placed on the table B with its face toward the moving pads, when the operator by depressing the treadle h^7 will cause the presser h to move forward to press the skin against the moving series of pads c , which latter will apply to the face of the skin the seasoning or dressing taken from the apron f^2 . When the seasoning or dressing has been thus applied the skin is moved to the right Fig. 2, in front of the moving series of pads c' and the treadle h^8 depressed to move the presser h' forward to press that portion of the skin to which the seasoning or dressing has been applied against the moving pads c' , which latter act to thoroughly distribute and rub in the dressing. While one series of pads is being utilized to distribute or rub in the seasoning or dressing the other series of pads may be applying the same to a different portion of the skin, the two operations of applying and distributing to be carried on simultaneously, or they may be carried on alternately as desired, the seasoning or dressing being first applied by the pads c and afterward rubbed in by the pads c' , then more applied by the pads c to be subsequently rubbed in by the pads c' .

45 In this machine the skins are never cured but are seasoned while lying flat which is very desirable, and the pads being mounted upon a flexible carrier b act upon the skin with less

harshness than would be the case were the pads mounted upon an inflexible carrier which would not yield to inequalities in the leather.

The carrier b readily adapts itself to irregularities in the leather, and prevents pulling, scraping, or otherwise injuring the same.

We claim—

1. In a machine for dressing leather, an endless carrier provided throughout its length with two rows of pads, and means to cause continuous movement of the carrier, combined with two independently movable long flat pressers, arranged respectively opposite the two rows of pads and upon which the leather may be placed and which may be moved independently to press the leather against one or the other row of moving pads, as desired, substantially as described.

2. In a machine for dressing leather, a movable carrier provided with pads, combined with an apron adjacent to and adapted to be wiped by said pads, having a receptacle at its upper end upon that side of the apron which is opposite the pads to receive the dressing to be applied to the pads, and perforations in the apron to conduct the dressing from said receptacle to that side of the apron which is wiped by the pads, substantially as described.

3. In a machine for dressing leather, the combination with a movable carrier of a looped strip d , secured by its ends thereto, and a pad attached to the looped strip, substantially as described.

4. In a machine for dressing leather, the combination with a movable carrier, of a looped strip d secured at its ends thereto, and a pad c' attached to said strip by a pin d' , substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS DAWSON.
 CARL R. SCHUMACHER.
 GEORGE F. SCHUMACHER.

Witnesses:

FREDERICK L. EMERY,
 EMMA J. BENNETT.