(No Model.)

O. C. SMITH.

MACHINE FOR BUFFING AND WHITENING LEATHER.

No. 248,518. Patented Oct. 18, 1881.

Fig. 1.

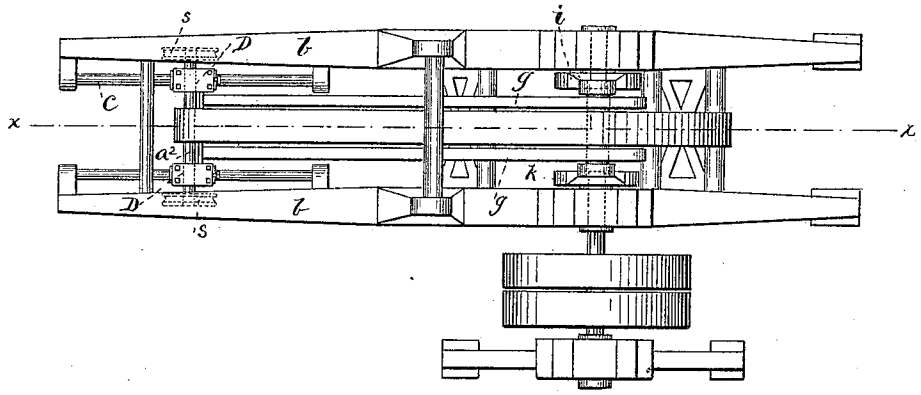


Fig. 2.

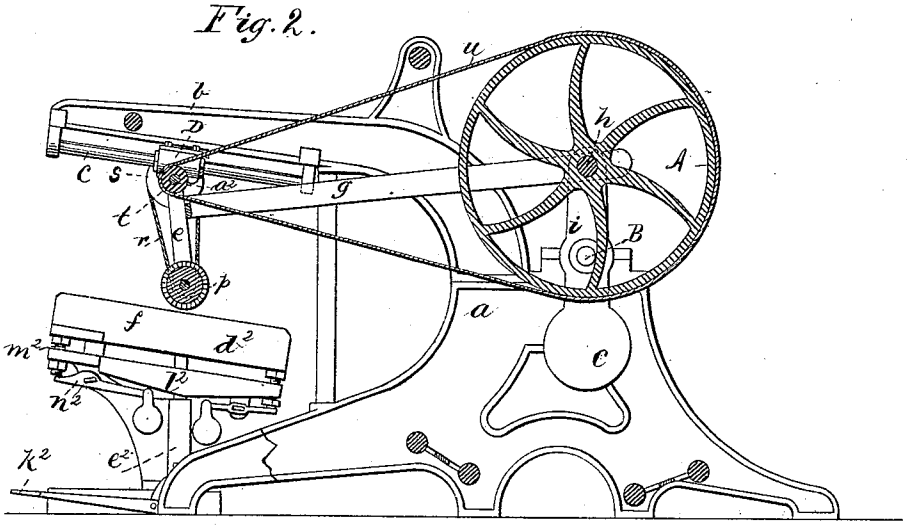


Fig. 3.

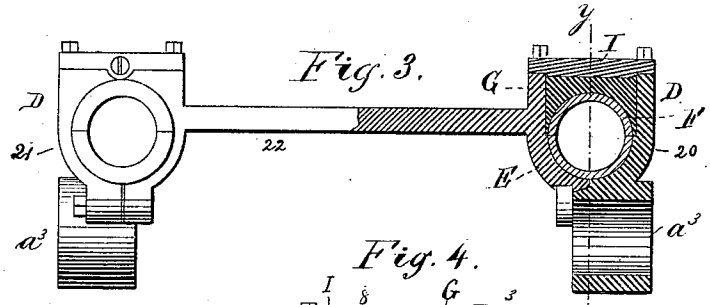
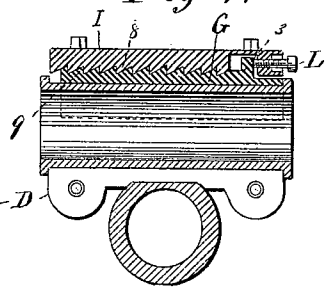


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

OLIVER C. SMITH, OF IPSWICH, MASSACHUSETTS.

MACHINE FOR BUFFING AND WHITENING LEATHER.

SPECIFICATION forming part of Letters Patent No. 248,518, dated October 18, 1881.

Application filed April 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, OLIVER C. SMITH, of Ipswich, county of Essex, State of Massachusetts, have invented an Improvement in Machines for Buffing and Whitening Leather, of which the following description, in connection with the accompanying drawings, is a specification.

This invention in machines for whitening and buffing leather is an improvement on the United States Letters Patent heretofore granted to me, No. 157,939, to which reference may be had, and on the class of machines specifically referred to in the said patent, and has for its object a simplification of the mechanism shown in the said patent and the reduction of the number of the working parts, thereby reducing the power required to drive the machine and increasing its capacity for work.

In this my present invention I have succeeded in doing away with the two stationary drums and the two belts (shown in the said Patent No. 157,939) for revolving the pulley which moves the belt for driving the shaft at the upper end of the swinging frame. Instead of the devices shown in the said patent, I have fixed one large wheel directly on the crank-pin, and extended the belt from it over the pulley on the shaft at the upper end of the swinging frame. I have also provided a carriage to fit and move on the guide-rods, instead of the two independent boxes shown in the said patent, and have provided the boxes of the carriage with means to take up wear, as will be hereinafter described.

Figure 1 represents, in top, view a machine embodying my invention; Fig. 2, a longitudinal vertical section thereof on the dotted line *x x*, the table or bed being shown in elevation. Fig. 3 is an enlarged detail, partially in section, showing the boxes of the sliding frame; and Fig. 4, a section of Fig. 3 on the dotted line *y y*.

In this my present machine I have aimed, as far as possible, to mark the parts common to the Patent No. 157,939 with the same letters.

The frame parts *a b*, the guide-rods *c*, link *g*, crank-pin *h*, cranks *i k*, belt *u*, swinging frame *e*, pulley *t*, shaft a^2 at the upper end of the swinging frame, pulley *s*, rotating cylinder or tool *p*, the table *f* and its parts, are all as in the said patent.

In this my present invention the pulley A is fixed directly upon the crank-pin *h*, joining the two cranks *i k*, projected from shaft B. The weight of the pulley A is counterbalanced by the weights C, one on each crank. The belt *u* on this large fixed pulley A is extended over the pulley *t* on the shaft a^2 at the upper end of the usual swinging frame, and rotates the said shaft, together with its pulleys *s*, which by small belts *r* revolve the rotary cylinder or tool *p* in the usual manner as the link *g*, herein made double, reciprocates the carriage D on the guide-rods *c*. This carriage is composed of yokes 20 21, connected by a bar, 22, the yokes having depending from them bearings a^3 to receive the shaft a^2, which turns in the said bearings. The boxes which run on the guide-rods *c* have Babbitt or other linings, E F. Upon the lining F, I have placed an adjusting-wedge, G, provided with one or more inclined teeth or wedging-surfaces, 9, and above the said adjusting-wedge I have placed a cap, I, having at its under side one or more opposed teeth or inclines, 8.

A screw, L, screwed into a lug of the cap I, and acting against a projection, 3, of the wedge G, may be made to force the wedge toward the left (see Fig. 1) and force the lining F down upon the rod *c*, thus keeping the linings of the boxes at all times properly fitted to the said rods.

I claim—

1. In a machine for buffing or treating leather, the swinging frame, its tool, and the shaft a^2 and pulley *t* thereon, combined with the link *g*, belt *u*, cranks *i k*, crank-pin *h*, and pulley A, fixed to the said crank-pin, to operate substantially as described.

2. The carriage and slide-rods on which it slides, and its boxes and lining, combined with the adjusting-wedge and cap, having teeth or inclines to enable said linings to be kept in close contact with the said rods, substantially as described.

3. The cranks *i k*, crank-pin *h*, and pullley A, fixed thereon, combined with the shaft a^2 and the pulley *t* thereon, to operate substantially as described.

4. The carriage D, fitted to slide on the guide-rods and provided with independent bearings a^5, combined with the two links, the shaft a^2, pulley t, belt u, cranks, crank-pin h, and pulley A, fixed to the said crank-pin, substantially as and for the purpose described.

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

OLIVER C. SMITH.

Witnesses:
G. W. GREGORY,
BERNICE J. NOYES.