(Model.)

F. A. DUPUY.

Leather Blacking Frame.

No. 237,836. **Patented Feb. 15, 1881.**

Fig. 1.

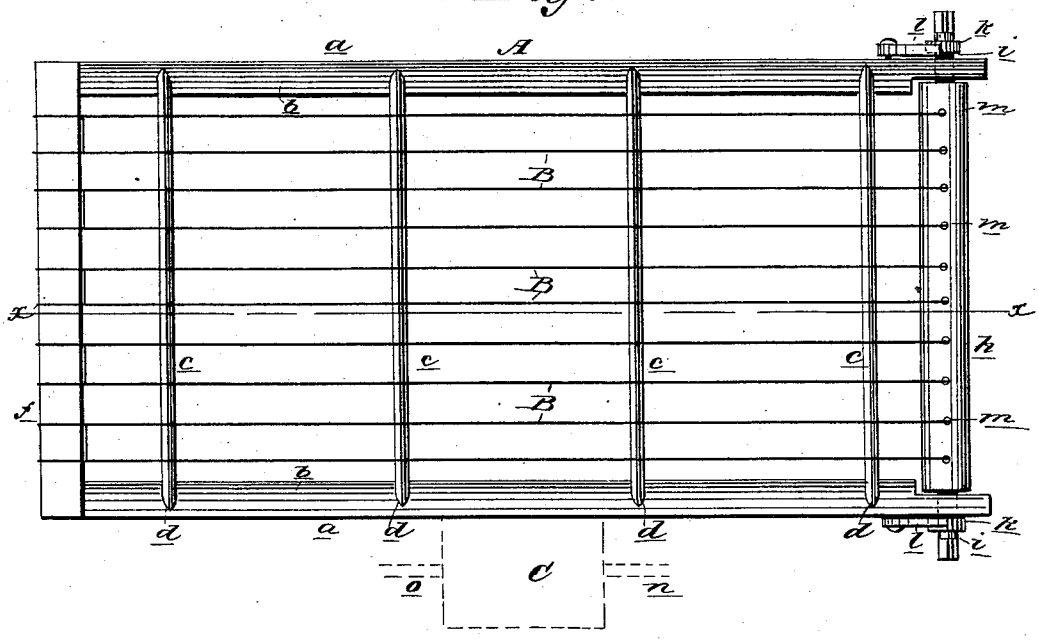
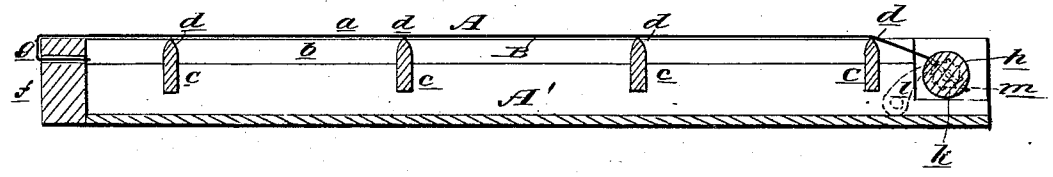


Fig. 2.



WITNESSES:

Francis McArdle.

C. Sedgwick

INVENTOR:

F. A. Dupuy

BY Munn & Co

ATTORNEYS.

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

UNITED STATES PATENT OFFICE.

FRANCIS A. DUPUY, OF IRONTON, OHIO.

LEATHER-BLACKING FRAME.

SPECIFICATION forming part of Letters Patent No. 237,836, dated February 15, 1881.

Application filed December 28, 1880. (Model.)

To all whom it may concern:

Be it known that I, FRANCIS A. DUPUY, of Ironton, in the county of Lawrence and State of Ohio, have invented a new and Improved Leather-Blacking Frame, of which the following is a full, clear, and exact description.

To blacken leather it is necessary to wash off all the grease and thoroughly wet the grain. This is done with brushes, using a boiling solution of logwood and sal-soda. When this is accomplished the liquid blacking is applied with brushes. The old way is to place the hides, one by one, on a solid table to be blacked, and another way is to pile ten or twelve sides of leather on a table at one time and, beginning at the top, black them in succession. In either method the blacking runs under the edges and through any holes that there may be in the leather, thus blacking the flesh side and rendering it unsightly, and consequently less salable. In the first method it is necessary, after blacking each side, to wipe all the blacking off the table with rags before placing another side thereon, and this consumes as much time, nearly, as the blacking.

The object of this invention is to overcome all these objections and to provide a device by means of which the blacking can be more rapidly performed.

The invention consists of a rectangular frame having wires stretched across it for receiving and supporting the sides of leather, in using which the water and blacking which run through and over the leather pass through the wires, and consequently do not soil the flesh side thereof.

If desirable, one end of the frame to which the wires are made fast may be in the form of a winch, by which the wires may be drawn taut at any time.

Figure 1 is a plan of the frame. Fig. 2 is a sectional side elevation of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the blacking-frame, preferably about twelve feet long and four feet and a half wide, consisting of parallel side bars, *a a*, with their upper edges beveled on the inside, as shown at *b*, of cross-bars *c c*, extending from one to the other of the side bars, *a a*, and secured therein, with their upper edges beveled, as shown at *d*, and on a level with the upper edges of the side bars, *a a*. One end bar, *f*, is provided with a row of holes, *g*, through which one end of the wires B are passed and secured; and the opposite end of the frame A consists of a drum or winch, *h*, whose journals *i i* extend through the side bars, *a a*, and are provided with ratchets *k k*, in which engage pawls *l l*, that are pivoted on the sides of the side bars, *a a*. This end bar or winch, *h*, is also provided with a row of holes, *m*, through which the other ends of the wires B are passed and made fast, as shown, so that by turning said end bar or winch, *h*, the wires B are drawn taut over and rest upon the cross-bars *c c*. This winch *h* may be dispensed with and a plain end bar, like the bar *f*, be substituted for it, and the wires B be tightened by other means, if necessary, though, if once drawn tight, they will remain so under long-continued use, the cross-bars *c c* preventing them from sagging, said cross-bars *c c* being set preferably about a foot apart.

The bottom A′ of the frame A is made of tongued-and-grooved lumber, made tight to prevent the blacking and "sig" that is used for dressing the leather from running on the floor, and the lower edges of the cross-bars *c c* are raised an inch, or thereabout, above this bottom A′, to permit the liquid to drain from said bottom A′ at one end into a suitable receptacle placed to receive it.

I propose to attach to a side of the frame A, about centrally, a vessel of copper or other metal, (indicated in dotted lines at C, Fig. 1,) in which to boil the solution of logwood and sal-soda used in dressing the leather, as above referred to. A steam-pipe, *n*, will be entered into the said vessel C to supply steam for boiling the contents, and a water-pipe, *o*, will supply the water.

An old method of heating the "sig," as the solution or extract of logwood and sal-soda is called, is to heat it by bucketfuls by placing heated irons therein, and another method is to heat it in barrels by steam-pipes, and to take it thence by the bucketful, as required, to the blacking-table. Another way is to heat the sig in copper boilers and draw it off in buckets. In all these methods it is necessary

to get a hot bucketful for every one or two sides of leather, and much time and labor are thereby involved. By the plan herein described I have close at hand an abundant supply of hot sig at all times.

By the use of this frame A from eighty to one hundred sides of leather can be blacked in one day, whereas with the old solid table but from forty to sixty sides can be blacked in the same time. Thus it will be seen that by the use of this device great economies in time and labor are made and the cost of production thereby much reduced, while at the same time the leather is made more readily salable because of its freedom from blacking on the flesh side.

Particular reference has been had herein to harness-leather, which is always blacked on the grain side, but the frame is equally adapted to leather to be blacked on the flesh side.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An improved leather-blacking frame constructed substantially as herein shown and described, consisting of side bars, *a a*, cross-bars *c c*, end bars, *f h*, and wires B, arranged as set forth.

2. The combination, with frame A and wires B, of the bottom A′, substantially as herein shown and described, whereby the water and blacking are prevented from running on the floor, as set forth.

FRANCIS A. DUPUY.

Witnesses:
ED. BRAMMER,
L. D. MARKIN.