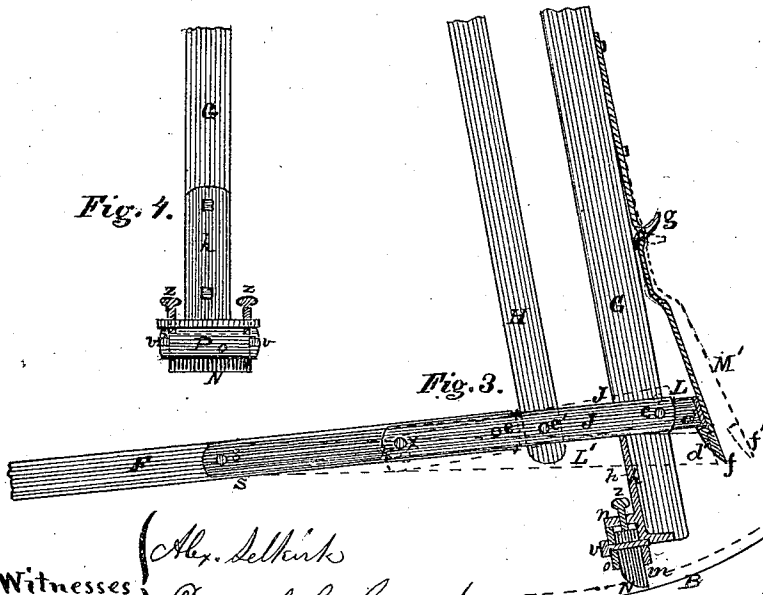
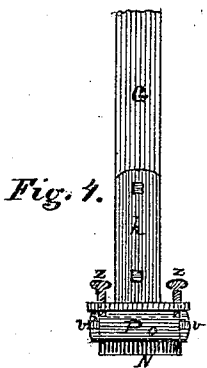
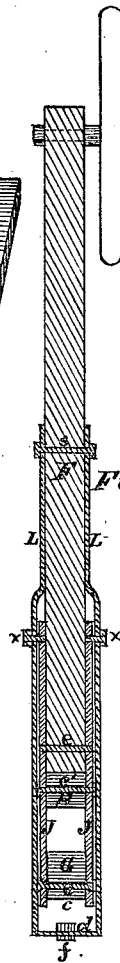
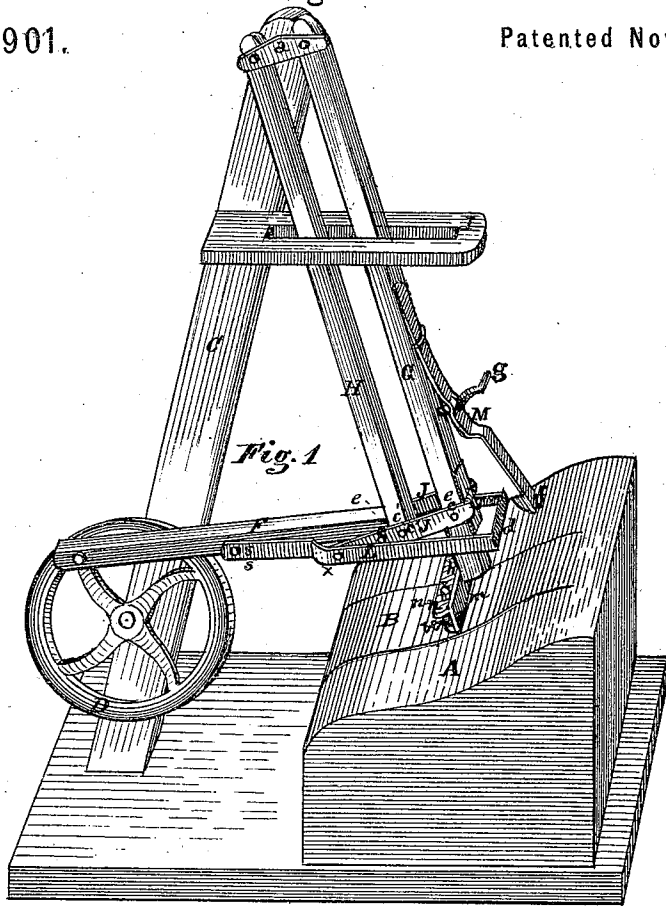


H. CUNNINGHAM.
Improvement in Apparatus for Stoning, Glassing, and
Pebbling Leather.

No. 132,901.

Patented Nov. 12, 1872.



Witnesses

Alex. Selkirk

Daniel C. Corbett

Henry Cunningham
Inventor

UNITED STATES PATENT OFFICE.

HENRY CUNNINGHAM, OF ALBANY, NEW YORK.

IMPROVEMENT IN APPARATUS FOR STONING, GLASSING, AND PEBBLING LEATHER.

Specification forming part of Letters Patent No. **132,901**, dated November 12, 1872.

To all whom it may concern:

Be it known that I, HENRY CUNNINGHAM, of the city and county of Albany, State of New York, have invented certain new and useful Improvements in Machines for Stoning, Glassing, and Pebbling Leather; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of a machine embodying the improvements in this invention. Fig. 2 is a vertical view of a section through the pitman and the improvements connected therewith. Fig. 3 is a side elevation of the pitman and the vibrating bars with the improvements. Fig. 4 is a view from back of the tool-holder.

This invention relates to that class of machines used for stoning, glassing, and other operations on leather, which has a vibrating tool-bar coupled with a second bar in such a manner that when operated by the usual pitman the tool will be lifted up from the table when the tool-bar is thrown back and be cast down when thrown forward. It is well known by those who have operated this class of machines that, by reason of the unequal thickness of the leather operated upon before being shaved, the tool will catch on the material and become so set that it cannot be removed without great labor and loss of time. By my invention the tool can be thrown up immediately, at any time, so that all contact of the tool with the bed or table will be broken, and the tool, when thrown in contact with the machine, will not pleat the leather, and will also remove the usual wrinkles more readily than in machines now used.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawing and letters of reference marked thereon, the same letters indicating like parts.

In the drawing, A represents the table. B is the bed, over which the tool works. C is any suitable frame or standard to which the several parts of the machine are attached. D is the fly-wheel. F is the pitman. G is the vibrating tool-bar. H is the tripping-bar. I is the guide, all of which are old and have long been used. The vibrating tool G and the tripping-bar I are connected at the top of

the standard C by means of the usual cross-head *a*, which swings on a pivot starting from the standard C. The lower ends of the said tool-bar H and tripping-bar I are connected, by pivots *c* and *c'* at the bottom, by the plates J J, Figs. 1, 2, and 3. In other machines the said plate J J are bolted to the pitman F in such a manner as to render them rigid. In my invention I dispense with the said rigid bolting or securing of the said plates J, and attach the said plates, a little past the center, to the said pitman at near its end, by a pivot, *e*, which may consist of a round bolt, as shown in Figs. 2 and 3. The said plates J are also continued back of the pivot *e* on each side of the pitman F, and have their ends pivoted to the pitman-levers L L. The said pitman-levers L L are made connected in front, as shown in Figs. 1 and 2, and are so placed that each will face the plates J J, and a portion of each side of the pitman F, as shown in Fig. 2. The extreme back end of the said levers L L are pivoted to the pitman F at near the center of its length (as usually made) by the pivot *s*. The said levers are at a distance of about ten inches forward of the said pivot *s*, pivoted to the plates J J by the pivots *x*, Figs. 1 and 2. Being thus arranged, when the front connecting ends *d* of the said levers are thrown up, as in Fig. 3, the pitman, with the plates J, will be made to result the same as if they were made rigid; and when the ends are thrown down, as in Fig. 2, and *d* in Fig. 3 in dotted lines, the said rigidity will be broken and the pitman will become flexible. I also attach to the front of the tool-bar G, and about two feet above the line of the pitman F, a spring, M, which spring is provided on its lower end, about on a line with the pitman, with a catch, *f*, as in Figs. 1 and 3. The said spring M has pivoted in it, near the center of its length, a trigger-lever, *g*, which trigger-lever, when pulled in one direction, will throw the catch *f* off from the face of the tool-bar G, and, when thrown in the reverse, will permit its return. To hold the stone or glass, or equivalent tool N, I use a tool-holder, P, which I construct as follows: I make the attaching-plate *h* and front plate *m* and top plate *n* solid with each other, as in Fig. 3. I then place back of the front plate *m* the binding-plate *o*, between which plates *m*

and *o* the tool is to be placed, and connect the said plate by means of the draw-bolts *V V*, Figs. 3 and 4, which bolts *V* are to draw the said plates *m* and *o* (with the tool between) together; I also pierce the top plate *n* and furnish it with two set-screws *z z*, Figs. 3 and 4, which set-screws pass down below the lower surface of the said top-plate *a*, and are to be used to set the said tool *N* down to the bed *B*, and hold it down firmly; and instead of giving the point of the said tool a cant back toward the front of the machine, as is usually done, I give the said tool a position parallel with the line of the tool-bar *G*, as shown in Fig. 3; so that when the said tool passes over the leather operated upon, it will not slip over the wrinkles therein and cause a pleating of the leather, but will act so as to carry or wipe out the said wrinkles, as is desired.

The manner in which the several parts of this invention operate is as follows: When the levers *L L*, pivoted to the pitman *F* and to the plates *J J*, are thrown up in a line with the said pitman, and the catch *f* is thrown back so as to hold on the cross-connecting ends *d*, as in Fig. 3, the pitman *F* and the plates *J J* will be made rigid, and the same as if the said plates *J J* were firmly bolted to the said pitman at *s* and *x*; and when the said levers *L* are thus thrown up and the whole is made

rigid, as described, the tool *N* will be in contact with the bed *B* in each forward stroke; but when the trigger-lever *g* is pulled down, as shown in Fig. 1 and by dotted lines in Fig. 3, the spring-catch *f* attached to the spring *M* will be thrown out to a position shown by dotted lines *L' L'* in Fig. 3, and the levers *L* will assume the position shown in Fig. 1 and by dotted lines *L'*, Fig. 3, the contact of the tool *N* with the bed *B* will be broken, and the tool will move clear of the same.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The plates *J J*, pivoted at *e* to the pitman *F*, and in combination with the tool-bar *G* and tripping-bar *H*, substantially as and for the purpose set forth.

2. The combination of the pitman-levers *L* with the plates *J J*, when the said levers *L* are pivoted to the said plates *J*, substantially as and for the purpose set forth.

3. The combination of the spring *M*, catch *f*, and trigger-lever *g*, substantially as and for the purpose set forth.

HENRY CUNNINGHAM.

Witnesses:

ALEX. SELKIRK,
DANIEL C. COVERT.