(Model.)

W. H. BACHELLER.

EDGE SETTING MACHINE.

No. 262,919. Patented Aug. 22, 1882.

Fig. 1.

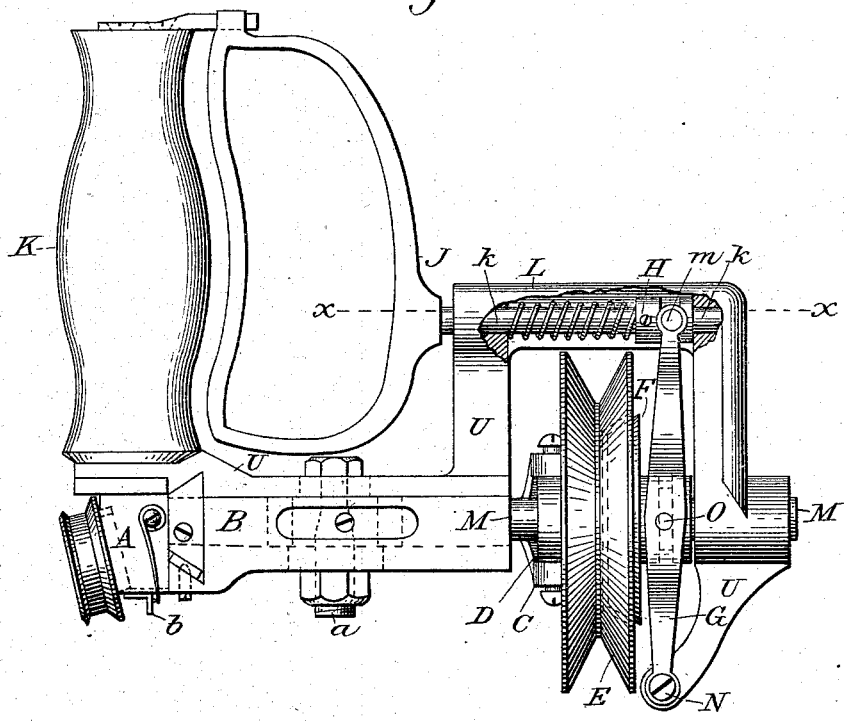
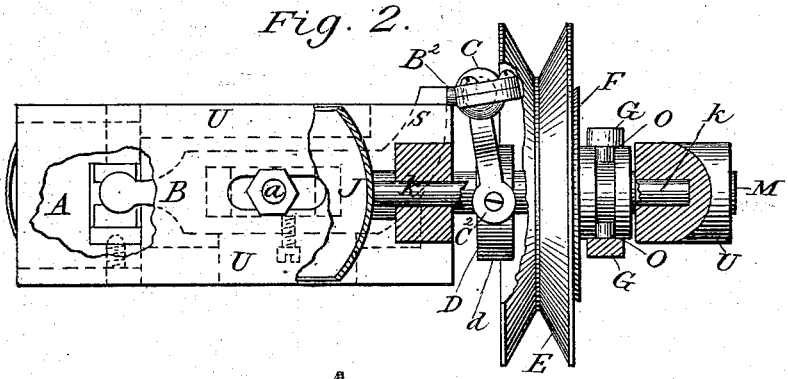


Fig. 2.



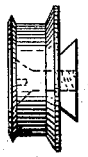


Fig. 3

Witnesses:
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WILLIAM H. BACHELLER, OF LYNN, MASSACHUSETTS.

EDGE-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 262,919, dated August 22, 1882.

Application filed April 14, 1882. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BACHELLER, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Edge-Setting Machine, of which the following is a specification.

My invention consists of a new and useful edge setting or burnishing machine for burnishing the edges of boot and shoe soles, in which, by means of the mechanism more particularly hereinafter described, a vibratory motion is imparted to the burnishing-tool for polishing the edges of boot and shoe soles, and by means of the mechanism hereinafter described motion is imparted to the burnishing-tool when the operator grasps the handle and guard, and motion is withdrawn from it when he releases his grip on said handle and guard, thereby saving wear. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my burnishing-machine. Fig. 2 represents a plan with the section at X X of Fig. 1, a break being made in the shipper-rod at *k k* to give a clearer view of the eccentric D and forked end of pitman C C^2. Fig. 3 represents the burnishing-iron before it is inserted in the sliding head or burnishing-tool A.

Similar letters refer to similar parts throughout the several views.

U U is the frame of the machine.

A is the sliding head or burnishing-tool.

B B^2 is the lever, pivoted at *a*, having a ball-and-socket or universal joint at its end B^2, and having a flat circular head at its end B, the same being inserted into the sliding head A, with suitable provision for taking up wear and its several motions.

C C^2 is a pitman having a ball-and-socket joint at its end C, and forked to receive eccentric strap *d* at its end C^2, and receiving its motion from eccentric D, said eccentric being made fast to shaft M.

F represents a friction-clutch splined, and by means of a feather or key caused to revolve with shaft M, but having a free lateral motion on same.

G is a lever pivoted at N to machine-frame U U, having pins O O, which engage in friction-clutch F, lever G also having a pin, *m*, engaging collar H, which is made fast on rod *k k*, the rod *k k* being made fast to guard J. Mounted on rod *k k* is a guard, J.

E is a pulley revolving loosely on shaft M. A belt extending over the pulley communicates power to the machine.

The guard J is so constructed that upon taking hold of the handle K the fingers are passed through the guard J and the grip compressing it against the handle K, communicating motion through rod *k k*, collar H, lever G, to friction-clutch F, thereby communicating motion from pulley E to shaft M. The spring L on rod *k k*, compressed against collar H through lever G, withdraws clutch F, when the grip is released from guard J and handle K, guard J answering to guard the knuckles of the operator from the belt, and also as a shipper-handle for setting the burnishing-tool in motion, thereby saving wear of the machine when it is not in operation.

The machine is suspended by suitable means, so as to impart to it a swinging motion. The burnishing-iron, as shown in Fig. 3, is inserted in a slot in the sliding head A. Then the sliding catch *b* is pushed back under same, and is held in this position by means of a spring. When it is desirable to take out the burnishing-iron, by forcing back the slide *b* against the spring the burnishing-iron will drop of its own weight. To properly burnish the edges of shoes and boots it is necessary that the burnishing-iron should be heated. This is accomplished by means of a gas-pipe arranged and adjusted in such a manner as to direct the gas-jet directly upon the burnishing-iron. The boot or shoe is secured to a suitable jack well known to those skilled in the art. The operator then grasps the handle K, the fingers being placed through the guard J. The grip then compresses the guard J against the handle K, thereby communicating motion through the rod *k k*, collar H, lever G to friction-clutch F, thereby communicating motion from pulley E to shaft M. The shaft M then communicates motion through the eccentric D, pitman C C^2, pivoted lever B B^2, to the sliding head or burnishing-tool A, causing it to vibrate in its slide. The machine being suspended in the manner hereinbefore described, the operator places the rapidly-vibrating burnishing-tool A in contact with the edge to be operated upon and passes it along

one side of the shoe from heel to toe or toe to heel, until a sufficient polish is imparted to the surface of the edge. When the operator desires to suspend work, by releasing his grip on the handle K and guard J the spring L on the rod *k k*, compressed against the collar H through the lever G, withdraws the friction-clutch F from the pulley E, allowing the pulley E to revolve loosely on the shaft M. Motion being thus withdrawn, the burnishing-tool or sliding head, with the burnishing-iron inserted in same, as above described, ceases to vibrate.

I claim as my invention and desire to secure by Letters Patent—

1. In a suspended edge-setting machine, the pivoted lever B B^2, pitman C C^2, and eccentric D, in combination with the slide S, for imparting a vibratory motion to the sliding head A, all arranged to operate substantially as set forth.

2. The combination of the pivoted lever B B^2, pitman C C^2, eccentric D, with eccentric strap *d*, shaft M, pulley E, and friction-clutch F, for imparting a vibratory motion to the burnishing-tool or sliding head A, all arranged and adapted to operate substantially as described.

3. In combination, the handle K and guard J, rod *k k*, spring L, collar H, pivoted lever G, friction-clutch F, and pulley E, in the manner and for the purposes substantially as set forth.

4. In a burnishing-machine, the handle K, in combination with the guard J, rod *k k*, spring L, and lever G, which act automatically to start and stop the burnishing-tool, all as set forth.

WILLIAM H. BACHELLER.

Witnesses:
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