W. Cooper,

Dressing Stone.

No. 21,742. Patented Oct. 12, 1858.

Fig. 1.

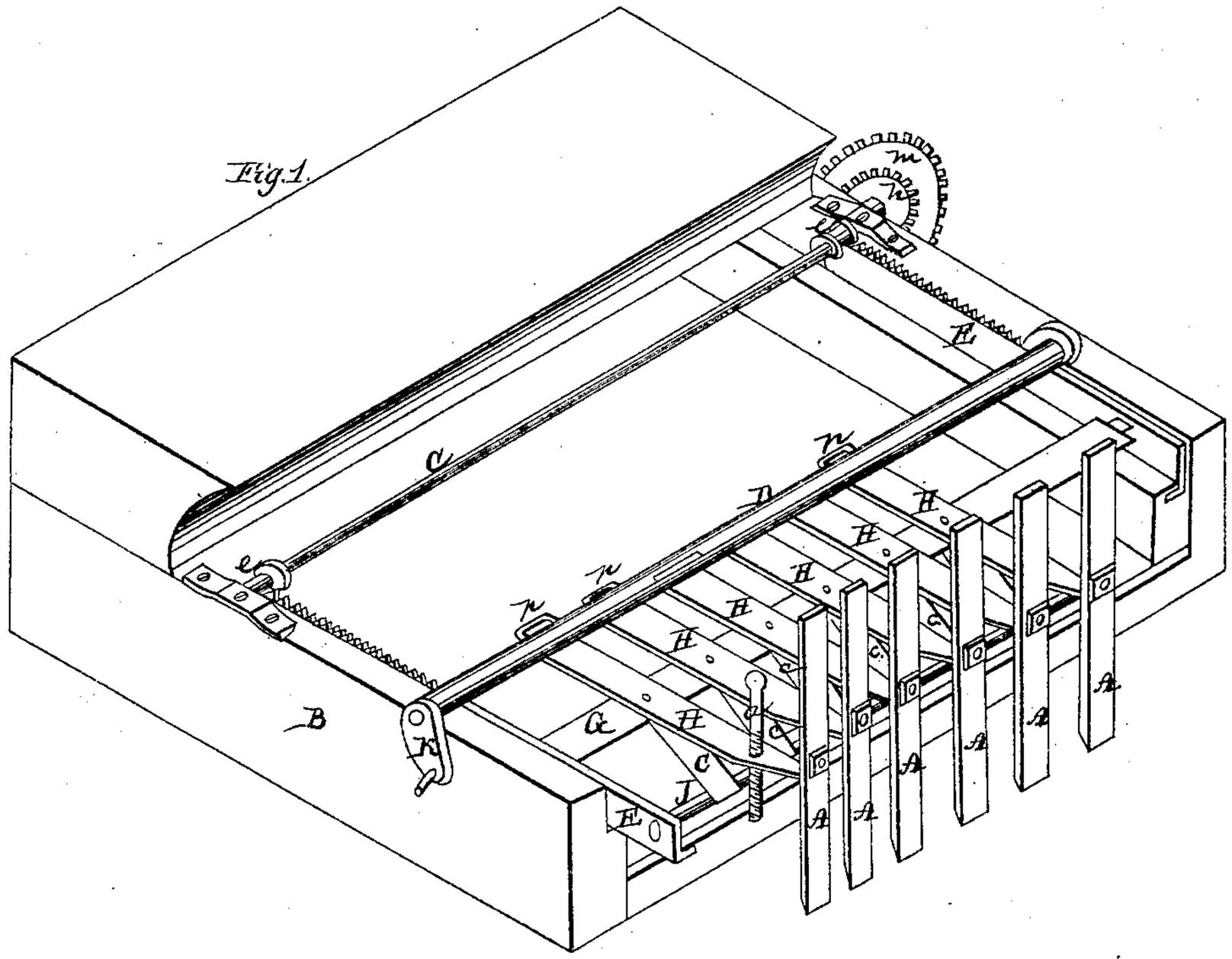
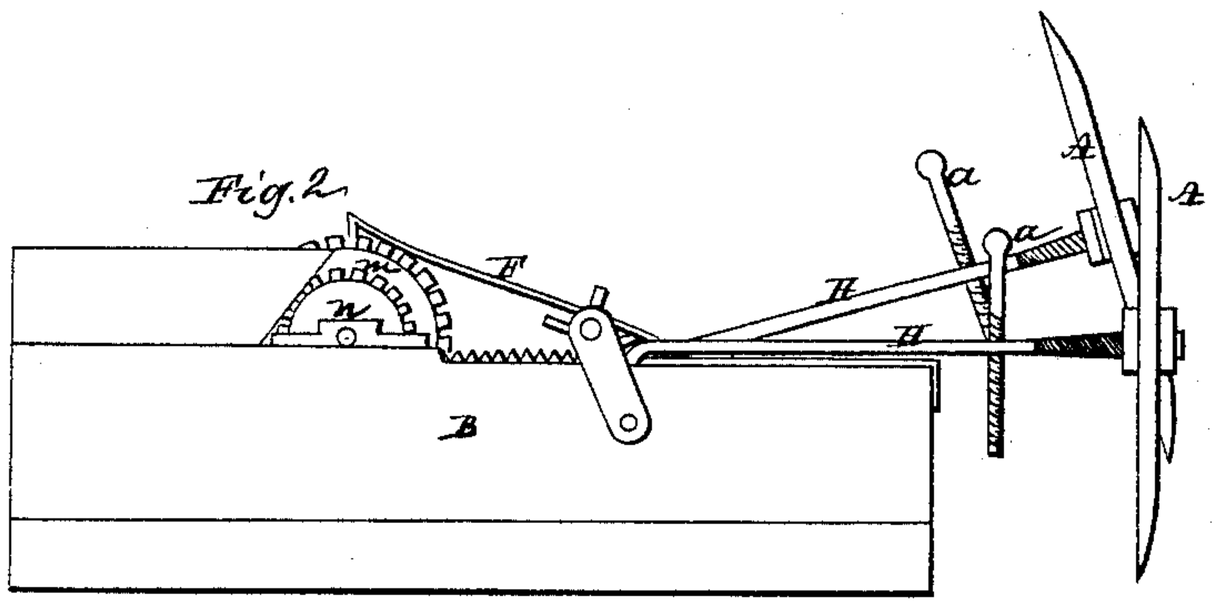


Fig. 2.



UNITED STATES PATENT OFFICE.

WILLIAM COOPER, OF MOUNT GILEAD, OHIO.

MACHINE FOR DRESSING STONE.

Specification of Letters Patent No. 21,742, dated October 12, 1858.

To all whom it may concern:

Be it known that I, WILLIAM COOPER, of Mount Gilead, in the county of Morrow and State of Ohio, have invented certain new and useful Improvements in Stone-Dressing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the arrangement of the several parts which will be hereinafter fully described.

In the annexed drawings Figure 1 is a perspective view. Fig. 2 is a side view.

In the several figures B, represents the frame of the machine.

(A, A, A,) represent the picks which are secured to one end of the levers (H, H, H,). These levers are provided on their under side with springs (*c*, *c*,) and have a rod G as their fulcrum and are secured to said rod.

D, is a shaft which is provided with projections (*p*, *p*, *p*,) so situated that when it revolves its projections catch upon the ends of the levers (H, H,) bearing them down. These projections as they pass around leave the levers suddenly at a certain point, and the picks being on the other end of the levers and those ends being consequently the heaviest, the picks descend with some force.

(*a*, *a*,) are screws which pass through the forward ends of the levers and which are intended to regulate the fall of the picks. The lower ends of these screws rest upon the frame of the machine if necessary not allowing the pick to descend so far, thus striking a lighter blow. The springs (*c*, *c*,) secured to the under side of the lever also rest when the picks are down, upon the rod J, and assist in regulating the fall of the picks.

E, E, are two side rack slide bars—the picks, levers, rods J and G, and shaft D are secured to these slide bars and move backward and forward with them. Pinions *e*, *e*, on shaft C, work in the racks in these bars and give them motion.

m, *n*, and *o*, are ratchet wheels on shaft C, and F is intended to represent a ratchet bar which is secured to the frame and which works in these wheels *m*, *n*, and *o*, and stations them at any desired point. These three wheels are made of different sizes, for the nicer adjustment of the picks to the material to be dressed.

In the operation of this machine, it is placed upon the stone to be dressed and by turning the crank K the picks are set in motion by the projections pressing upon the ends of levers (H,) and leaving them suddenly allowing the picks to fall upon the stone, the springs (*c*, *c*,) strike the rod J, before the picks strike the stone this partly breaks the force of the fall, and gives the picks a vibrating motion afterward, thus they strike the stone very lightly several times after their first fall, before they are raised again. The operator sits upon the machine and while he operates the picks with one hand, he can with the other move the slide bars E, E, forward when necessary thus making the picks to progress to unpicked portions of the stone. Furrows may be made with this machine, or the stone may be dressed level, and any number of picks may be used, that the capacity of the machine will allow of, or all may be removed but one.

It will readily be perceived that this machine is very easily operated and can be very nicely adjusted to suit the work at the will of the operator.

Having thus fully described in invention what I claim as new and desire to secure by Letters Patent is—

The arrangement of the picks (A, A,) screws (*a*, *a*,) springs (*c*, *c*,) and shaft D, with the adjustable carriage E, ratchet wheels (*m*, *n*, *o*,) and ratchet F, the same being constructed combined and operated in the manner and for the purpose herein specified.

WM. COOPER.

Witnesses:
JOHN RYAN,
T. H. DEPUYSEE.