

C. H. SCHEERMESSE.
Stone-Crushing Machine.

No. 166,897.

Patented Aug. 17, 1875.

Fig. 1.

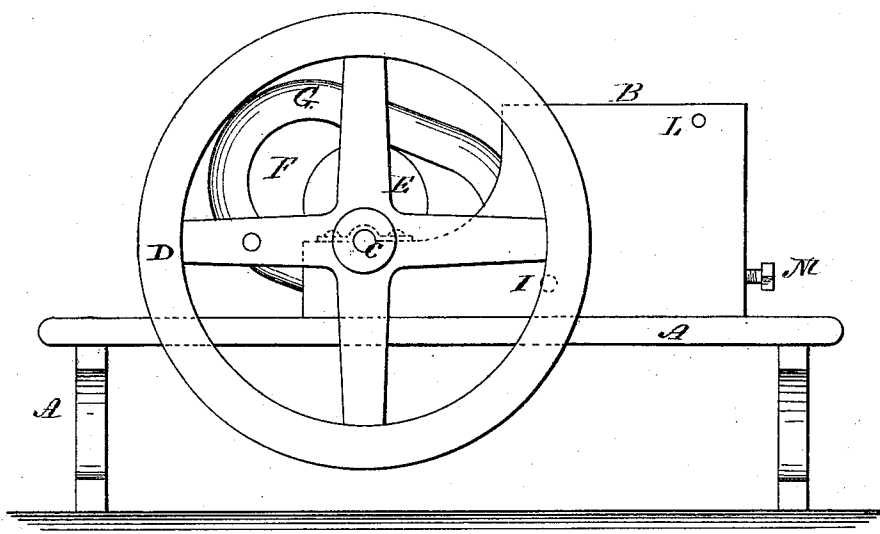
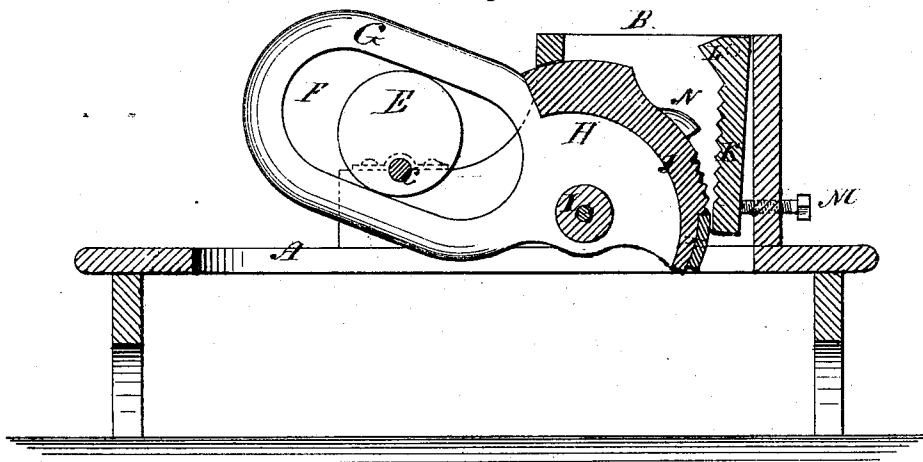


Fig. 2.



Witnesses:

Arthur Q. McIntire

Colborne Brooks

Inventor.

Christian Henry Scheermesser.

by his Attorney.

Wm. C. McIntire.

UNITED STATES PATENT OFFICE.

CHRISTIAN H. SCHEERMESSE, OF CUMBERLAND, MARYLAND, ASSIGNOR
OF ONE-HALF HIS RIGHT TO JAMES H. PERCY, OF SAME PLACE.

IMPROVEMENT IN STONE-CRUSHING MACHINES.

Specification forming part of Letters Patent No. **166,897**, dated August 17, 1875; application filed
July 19, 1875.

To all whom it may concern:

Be it known that I, CHRISTIAN HENRY SCHEERMESSE, of Cumberland, in the county of Alleghany and State of Maryland, have invented certain new and useful Improvements in Stone-Crushing Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to a novel construction of stone-crushing machines. It has for its object to give to the fragments of stone a twisting movement during the direct pressure of the crushing-jaws, and consists in mounting the movable jaw upon a horizontal pivot, and, by means of a slotted lever and an actuating cam on the power-shaft, causing the curved face of the jaw, while approaching the stationary jaw, to move in the arc of a circle, as will be hereinafter more fully set forth.

To enable those skilled to make and use the same I will proceed to describe the construction and operation of my improved stone-crushing machine, referring by letters to the accompanying drawing, in which—

Figure 1 is a side elevation of a machine embodying my invention, and Fig. 2 a longitudinal vertical section of the same.

Similar letters indicate like parts in both figures of the drawing.

A represents the frame, upon which is mounted at one end a hopper, B, which has the rear ends of its sides extended backward sufficiently far to form bearings for the power-shaft C, to which is secured, by a feather or otherwise, a driving-wheel, D. On the shaft C, and between its bearings, is secured a cam, E, which, when the shaft C is rotated, moves in the slot F in the lever G of the movable jaw H, which is pivoted near its lower end at I. This movement causes the serrated or roughened face to approach a similarly roughened

plate, K, secured adjustably in the end of the hopper, and while the jaw H approaches the plate K, and lessens the space between the roughened faces, the face J is moving in the arc of a circle, and while crushing any fragments between the jaws is likewise twisting them, which renders the crushing more effective. The plate K may be hung at its top by pivot-bearings and by means of set-screws M. Its lower free end may be adjusted toward or from the face of the moving-jaw face J, which may be made separate from the jaw H, and secured thereto by bolts or otherwise, so that it may be renewed when worn. N are projections on the upper part of the face J, which serve to force down and hold the fragments of stone between the bite of the jaws.

The operation of the machine is very simple. The stone to be crushed is fed into the hopper B and the driving-wheel started, which, rotating the shaft C and its fixed cam E, causes the slotted lever G to move up and down, and thus move the jaw H on its pivot I in about a quarter circle. The lugs or projections N take hold of and force the stones in between the bite of the rough faces J K, and the face J, moving in the arc of a circle, while it at the same time approaches the face K, gives a twisted gripe to the stone, and thus very effectually crushes the stone.

What I claim as new, and desire to secure by Letters Patent, is—

In combination with the adjustable jaw K and the movable jaw H, provided with a slotted arm, G, and pivoted at or near its bottom, the cam E and shaft C, arranged above the plane of the axis of the jaw, and operating to move the jaw H through a quarter circle, substantially as and for the purpose set forth.

CHRISTIAN HENRY SCHEERMESSE.

In presence of—

ROBT. SHRIVER,
WM. E. GRIFFITH.