

D. W. LOW.  
ICE-CRUSHING MACHINE.

No. 181,273.

Patented Aug. 22, 1876.

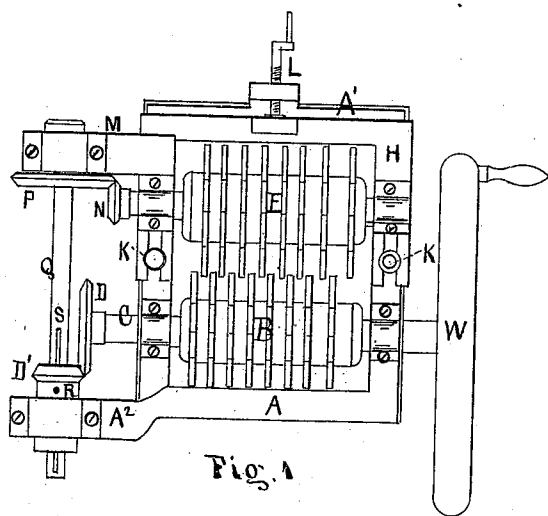


Fig. 1

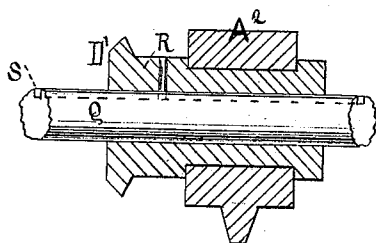


Fig. 2.

Witnesses

Augustus Andrews,  
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# UNITED STATES PATENT OFFICE.

DAVID W. LOW, OF GLOUCESTER, MASSACHUSETTS.

## IMPROVEMENT IN ICE-CRUSHING MACHINES.

Specification forming part of Letters Patent No. 181,273, dated August 22, 1876; application filed April 1, 1876.

*To all whom it may concern:*

Be it known that I, DAVID W. LOW, of Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Ice-Crushing Machines, of which the following is a specification:

The nature of my invention consists in an improvement in that class of ice-crushing machines that crush the ice between two toothed cylinders, and embodies a device by which the distance between the cylinders may be regulated while the machine is in operation.

Figure 1 is a plan of the machine. Fig. 2 shows one of the bearings in detail.

Let A A<sup>1</sup> represent a fixed frame, to which the crushing-cylinder B is attached. This cylinder, together with the shaft C and gear-wheel D, is driven by the wheel W. Upon the fixed frame A A<sup>1</sup> A<sup>2</sup> I fix a sliding frame, H M, which is held in position by the screws K K, which work in slots, as shown, so as to allow the frame H to slide. L is a hand-screw, connected to both frames, and arranged to give a sliding motion to the frame H M, and through it to the second or movable crushing-cylinder E. The cylinder E is made to revolve

by the gears D D', shaft Q, and gears P N, as shown. The gear D' is attached to a quill, R, which is hung in the housing A<sup>2</sup>. (Shown more clearly in Fig. 2.) The shaft Q has a keyway at S, which fits a corresponding spline on the interior of the quill R, so that, though the shaft Q is free to slide in the quill, it must revolve with the gear D, and through it give motion to the gears P and N and the cylinder E.

From the above it may be seen that, by sliding the frame H by means of the adjusting-screw L, the distance between the two cylinders B and E may be adjusted at will while the machine is in motion.

I claim as my invention—

An ice-crushing machine having two rollers, B and E, the sliding frame H M, having a screw-threaded recess, adjusting-screw L, gears D D' P N, and sliding shaft Q, the whole combined substantially as and for the purpose set forth.

DAVID W. LOW.

Witnesses:

WILLIAM EDSON,  
AUGUSTUS ANDREWS.