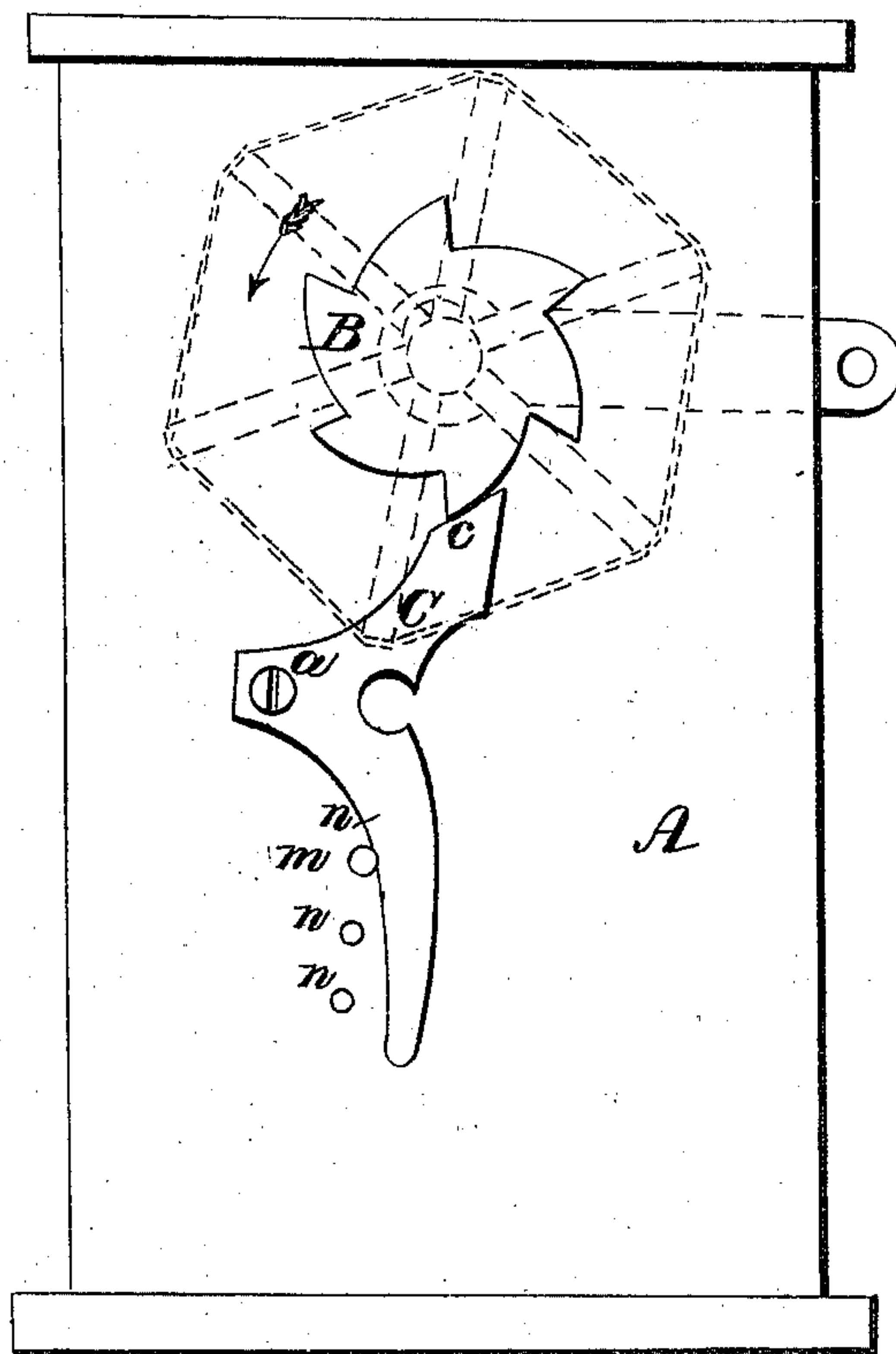


H. N. SHULTZ.

Flour Bolt.

No. 81,831.

Patented Sept. 1, 1868.



Witnesses:
Chas. A. Pettit
Soln C. Lemon

Inventor:
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United States Patent Office.

H. N. SHULTZ, OF SABILLASVILLE, MARYLAND.

Letters Patent No. 81,831, dated September 1, 1868.

IMPROVED FLOUR-BOLT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, H. N. SHULTZ, of Sabillasville, in the county of Frederick, and State of Maryland, have invented a new and improved Flour-Bolt; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

My invention is represented by an end elevation of the bolt-screen or case, with my improvement attached thereto.

The object of this invention is to provide a simple and inexpensive device which can be used in connection with any form of flour-bolt, and applied to the old ones now in use, and by which the bolt can be jarred or subjected to a series of sudden shocks during each revolution, so as thereby to be cleansed and kept free from the accumulation of flour. The device is so arranged that it can be readily adjusted to impart any required degree of violence to the shocks, or to allow the bolt to run smoothly, if desired.

In the drawings, A represents the screen or case within which the bolt runs, and B represents a cam-wheel on the end of the bolt-shaft, outside of the case. The shaft itself passes through a slot in the case, bearing on the bottom of the slot, in such a manner that it is capable of moving vertically in its bearings, or of bouncing up from its bearing, if interfered with during its revolution by any object beneath it. Under the cam-wheel, pivoted to the end of the case by a pin, *a*, is a bent lever, C, the upper end of which is slightly bevelled, as seen at *c*, in order that the cams of the wheel B may ride easily over it, and the lower end of which extends down towards the bottom of the case, and is held in position by a pin, *m*, fixed in one of a series of holes, *n n n*, in the end of the case.

The motion of the bolt is in the direction of the arrow shown in the drawing. The lever C being fastened in the desired position by a pin, *m*, the cams of the wheel B come in contact with the bevelled end, *c*, and, as they ride over it, lift the end of the shaft, and drop it again upon its bearing with a sudden shock, the violence of which will be proportionate to the height to which the cams lift the shaft. This height is perfectly controlled and adjusted by setting the pin *m* further up or down in the series of holes *n n*.

The whole arrangement is exceedingly simple and effective. It can be attached to any bolt at the cost of a few cents at the most, and when attached will enable the miller to keep his bolt perfectly clean. It can be readily thrown back out of the way by placing the pin *m* on the right side of the lever.

It does not in the slightest degree interfere with the reverse action of the bolt, nor can it be put out of order by any change in the action of the machinery, however sudden and violent.

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

The combination of the cam-wheel B upon the end of the flour-bolt, with the lever C and adjustable stop *m*, operating as described, whereby, as the bolt rotates forward, the stop holds the lever firmly in place, and as it rotates backward it allows the lever to swing out of the way, substantially as described, for the purpose specified.

H. N. SHULTZ.

Witnesses:

JNO. M. SLEASMAN,
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