

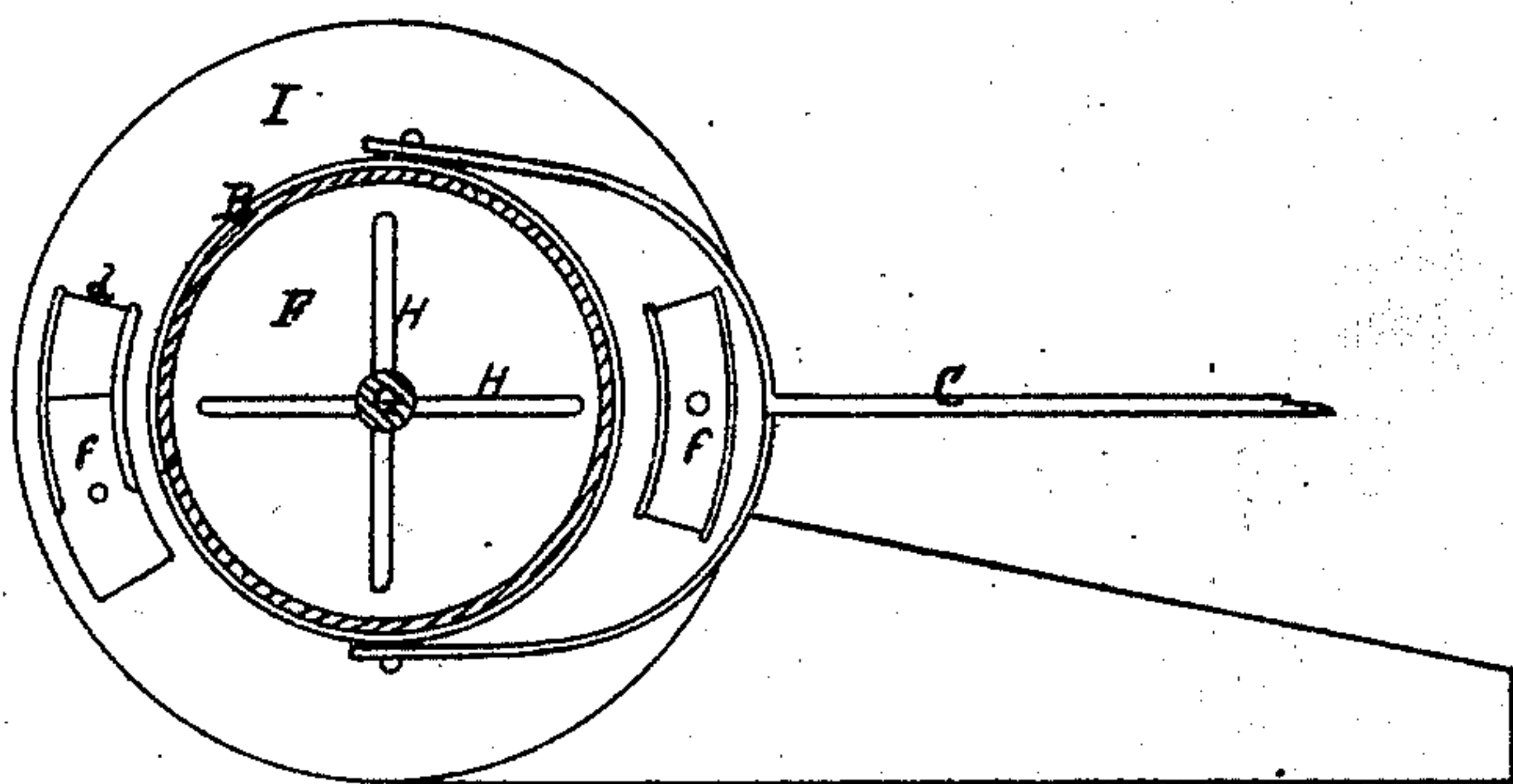
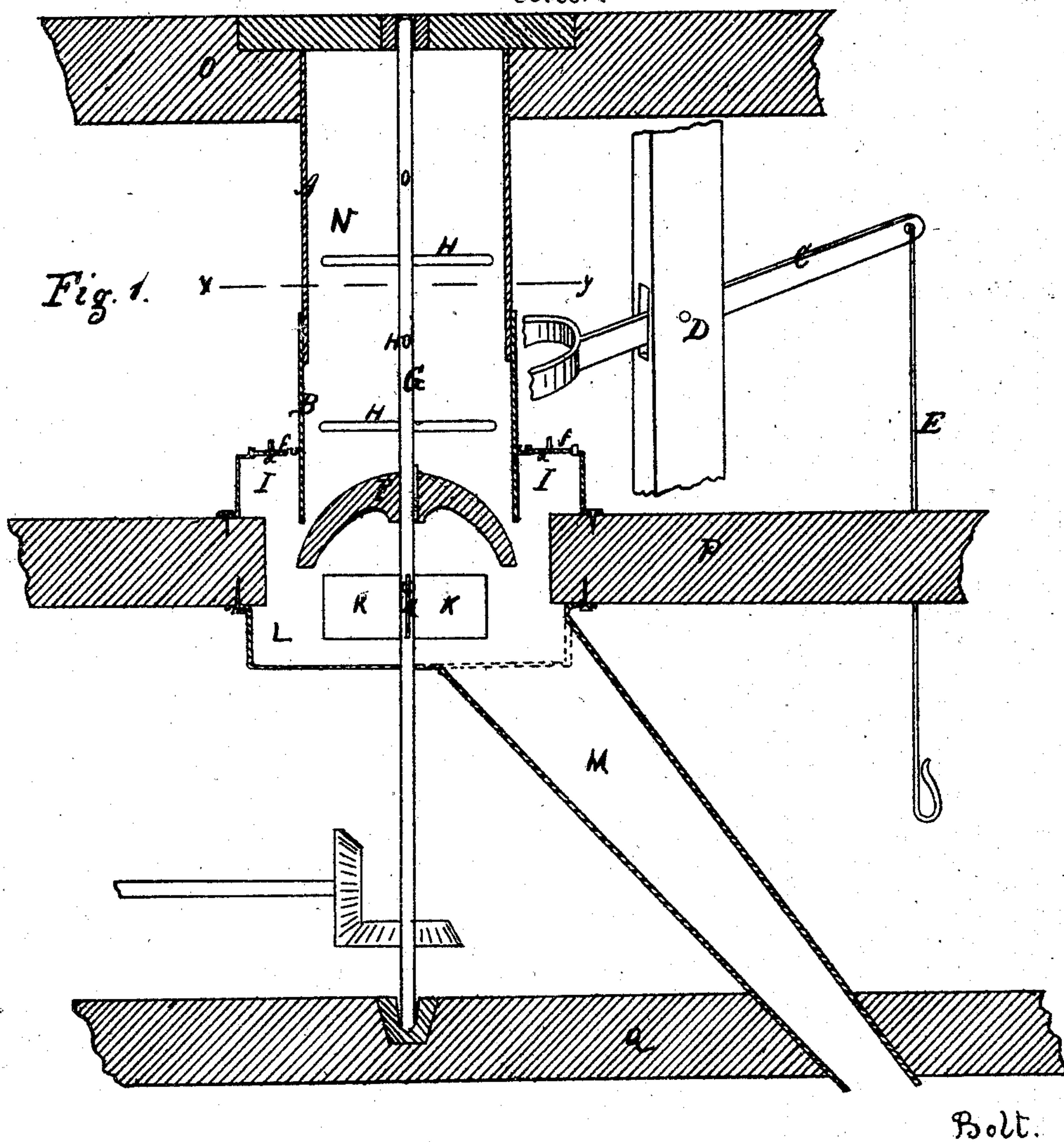
W. Pickens.

Bolt-Feeder & Cooler.

Nº 74125

Patented Feb. 4, 1868.

Cooler.



Witnesses.

Mr Zimmerman
Jas R Hayden

Inventor

Mr. Pickens

by J. B. Turchin, Attorney

United States Patent Office.

WILLIAM PICKENS, OF CHICAGO, ILLINOIS.

Letters Patent No. 74,125, dated February 4, 1868.

IMPROVED BOLT-FEEDER AND COOLER.

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, WILLIAM PICKENS, of Chicago, in the county of Cook, and State of Illinois, have invented an "Improved Bolt-Feeder and Cooler;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section of the whole apparatus, and

Figure 2 is a plan of the same on the line *x y*.

The nature of my invention consists in conveying feed from the cooler of the mill through a cylindrical case of telescopic construction, inside of which revolves a spindle, provided with breakers and fans, the first to work up and loosen the feed, and the second to produce a draught of air by means of the ventilating-case surrounding the base of the conveying-case, and thereby cool the feed and force it from the receiving-case into the spout through which the feed goes into the bolt, as will be hereinafter fully described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A and B are the sections of the cylindrical case N, made of sheet iron, B overlapping A in a telescopic manner, and slid up and down by means of lever C, pivoted at D, and worked by rod E, or by some other equivalent means. F is a saucer, made of cast iron, and of a semi-spheroidal shape, firmly set on the spindle G, by means of which, and by raising or lowering case B, the admittance of feed into the bolt is regulated. H H are the breakers, set firmly on the spindle G, to work up and loosen the feed as it is passing down from the cooler. I is ventilating-case, made of tin, and provided with openings *d d* and slides *f f*, to admit air and regulate the draught. K K are the fans secured to the spindle G, to produce a draught through the openings *d d* into the receiving-case L, and force the same into the spout M, thus conveying the feed through the same into the bolt. The case A is secured to the floor O of the cooler, the ventilating and the receiving-cases are secured to the centre-board P, and the spout goes through the lower board Q, thus conveying feed right into the bolt. Spindle G is provided with a bevel-pinion at the lower end, and is worked by the gear working the bolt.

The advantage of this arrangement is, that the feeding of the bolt is not intermittent, as in other devices of this kind, but is steady, flowing, and uniform all the time; besides, sticks or iron, or any other object that happens to get into the cooler, cannot be conveyed to the bolt and injure cloth, but will be retained in the case N during the operation.

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

Spindle G, with saucer F, breakers H H, and fans K K, secured to it, and constructed as described, in combination with conveying-case N and ventilating-case I, both constructed as described, the whole arranged and operating substantially as and in the manner herein set forth, and for the purpose specified.

WILLIAM PICKENS.

Witnesses:

JAS. R. HAYDEN,

J. B. TURCHIN.