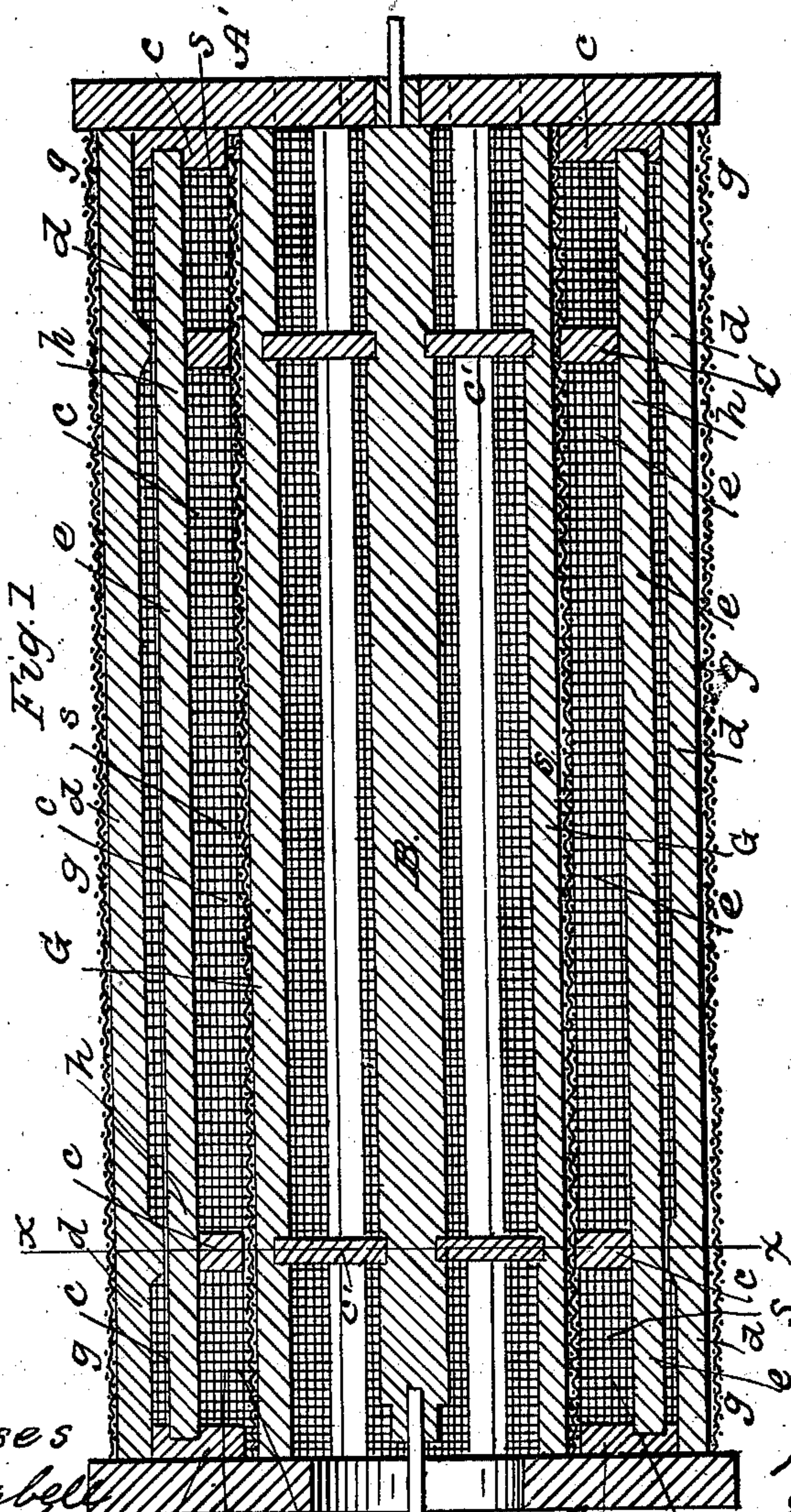
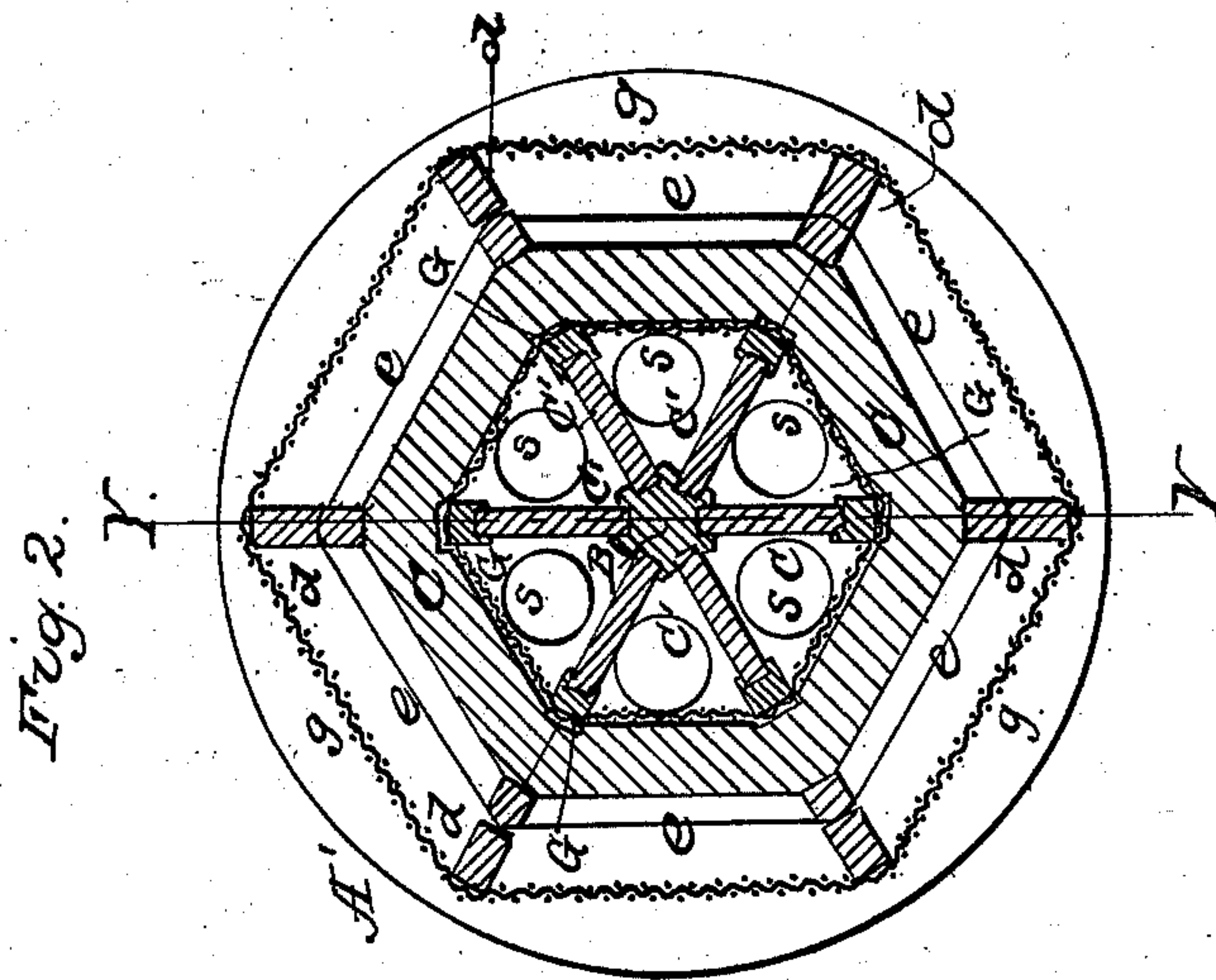


Flour-Bolting Reel.

Patented May 11, 1869.



Witnesses

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Letters Patent No. 89,963, dated May 11, 1869.

IMPROVED BOLTING-REEL.

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, JOHN T. AGNER, of Lexington, in the county of Rockbridge, and State of Virginia, have invented a new and useful Improvement on Bolting-Reels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a diametrical section through the improved bolting-reel.

Figure 2 is a cross-section through the reel, taken in the plane indicated by red line *x x*.

Similar letters of reference indicate corresponding parts in both figures.

The object of my invention is to improve flour-bolts, by enclosing the bolting-cloth between internal and external reticulated fenders or guards, in such manner as will effectually exclude those insects which destroy the bolting-cloth, as will be hereinafter explained.

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

In the accompanying drawings—

A A' represent two circular heads, one of which, A, has a central opening, *a*, through it, through which the material to be bolted is fed into the bolt, in the usual well-known manner.

Upon the inner sides of these heads hexagonal pieces *c c* are concentrically secured, the outer edges of which are rabbeted, and have secured to them the longitudinal bars *h h*. The bars *G* are secured to the inner edges of said pieces *c c*, at the angles thereof.

Between the bars *G* and *h*, hexagonal pieces *O* are secured, for stiffening the bars, and strengthening them at those points where the radial arms *O'* unite with the innermost bars *G*.

Arms *O'* radiate from a longitudinal shaft, *B*, passing centrally through the reel.

The bolting-cloth *e*, indicated in red, figs. 1 and 2, is applied, in a suitable manner, around, and secured

to the bars *h*, and extends from the head *A* nearly to the head *A'*, as shown in fig. 1.

Surrounding this cloth *e* is a wire cloth, *g*, which is secured to the outer edges of the bars *d*, and which extends from one head, *A*, to the other, *A'*.

Within the space enclosed by the bolting-cloth *e*, and secured to the outer edges of the bars *G*, is a wire cloth, *s*, which extends from one head, *A*, to the other, *A'*. The wire cloth used inside and outside of the bolting-cloth, should not be of such a degree of fineness as to interfere with the free passage through it of the material which is being bolted, nor should its meshes be so large as would allow the passage through it of insects which destroy the bolting-cloth.

It will be seen that I completely enclose the bolting-cloth *e* between wire fenders, which will prevent bugs from obtaining access to it. At the same time I do not impair the bolting-capacity of the cloth, but, on the contrary, the interior reticulated fender, or wire cloth *s* will retard the passage through it of the coarsest portions of the substances which are fed into the bolt, and thus prevent these substances from clogging the fine interstices through the bolting-cloth.

The advantage of my improvement will be apparent, when I state that a bolting-cloth which costs from fifty to one hundred dollars, is frequently rendered useless by the ravages of insects which feed on the flour, and which will destroy a cloth in a very short time, whether the bolt is in operation or at rest, if it is not protected as I have above described.

Having described my invention,

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

The arrangement of the bolting-cloth *e*, between the wire cloths *g s*, for the purpose of protecting the cloth *e* from the ravages of insects, substantially as specified.

Witnesses:

W. W. REX,
J. W. MILLER.

JOHN T. AGNER.