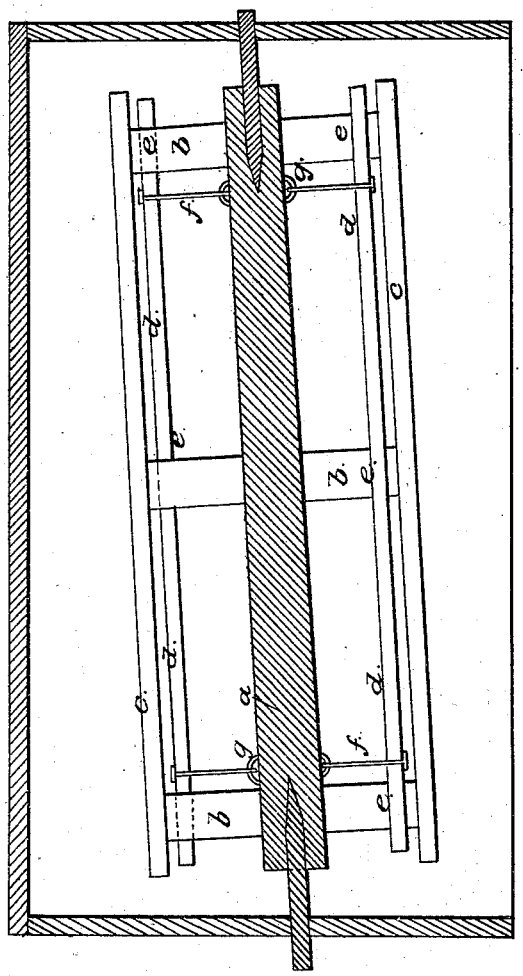
R. BUCHANAN.

Flour Bolt.

No. 3,680.

Patented July 24, 1844.



UNITED STATES PATENT OFFICE.

RYBURN BUCHANAN, OF SULLIVAN COUNTY, TENNESSEE.

BOLTER FOR BOLTING FLOUR.

Specification of Letters Patent No. 3,680, dated July 24, 1844.

To all whom it may concern:

Be it known that I, RYBURN BUCHANAN, of the county of Sullivan and State of Tennessee, have invented a new and useful improvement on the knocker used in flour mills to prevent bolting-cloths from becoming clogged or choked with dust and fine flour and its reacting quality preventing the cloth from slipping; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in providing one, two, or more knockers to act on the arms or frame work of the bolter, on the inside of the bolter so that both ends and the middle of the bolting-cloth be effectually divested of dust and fine flour by the strokes of the knockers without injury to the cloth or any part of the machinery.

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

I construct my bolting-reel in any of the known forms, and apply thereto the bolting cloth and other appendages of the bolter, but in order to obviate the difficulty arising from the adhesion of dust and fine flour and thus preventing the flour from passing through the cloth, I make and infix two or a set of knockers similar to each other.

By reference to the accompanying drawing the construction of this knocker its operation and its combination with the bolter will be clearly understood. The outside lines represent a top view of a common bolting-chest, those inclosed represent the frame of a common bolter to wit, the shaft by the lines referred to by the letters *a*, *a*, the arms crossing the shaft, by the letters *b*, *b*, *b*, and the ribs of the bolter or bolting-reel by the letters *c*, *c*, *c*, *c*, the knocker is represented in this drawing by the line marked by the letters *d*, *d*, lying on and crossing the arms of the reel, inside the ribs as at *e*, *e*, *e*, and suspended by metal rods *f*, *f*, on staples driven into the shaft at *g g*. This knocker is made of a piece of wood *d*, *d*, in the drawing of $\frac{3}{4}$ or 1 inch square and long enough to cross all the arms of the bolter from one end to the other as represented in the drawing at the letters *e*, *e*, *e*, this piece of wood is suspended by two metal rods *f*, *f*, fastened into the piece of wood by screws or otherwise and attached to the main shaft of the bolter as at *g g*, by means of an eye in the end of each of the rods through each of which a small metal staple is loosely inserted so as to act as a hinge and, driven into the shaft as aforesaid; the piece of wood aforesaid constituting the knocker and being suspended by the rods on the staples to the shaft as above described, acts and reacts on the arms and in the inside of the bolter, by falling, when the same is turned round as is common in bolting, and acts on the middle and end arms at the same time, they being placed in a line and the knocker being made perfectly straight.

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

The combination with the bolting-reel of the long vibrating reacting knocker or knockers, suspended within the reel and acting when in operation upon the arms of the same from one to the other at the same time and reacting when revolved to the opposite side so as to keep the bolting-cloth clean of dust as herein described without injury to the cloth and preventing its slipping on the ribs of the bolter.

July 3rd 1844.

RYBURN BUCHANAN.

Witnesses:

SAML RHEA,

JOS. R. ANDERSON.