S. C. SCHOFIELD.
Grinding-Mills.

No. 199,999. Patented Feb. 5, 1878.

Fig. 1.

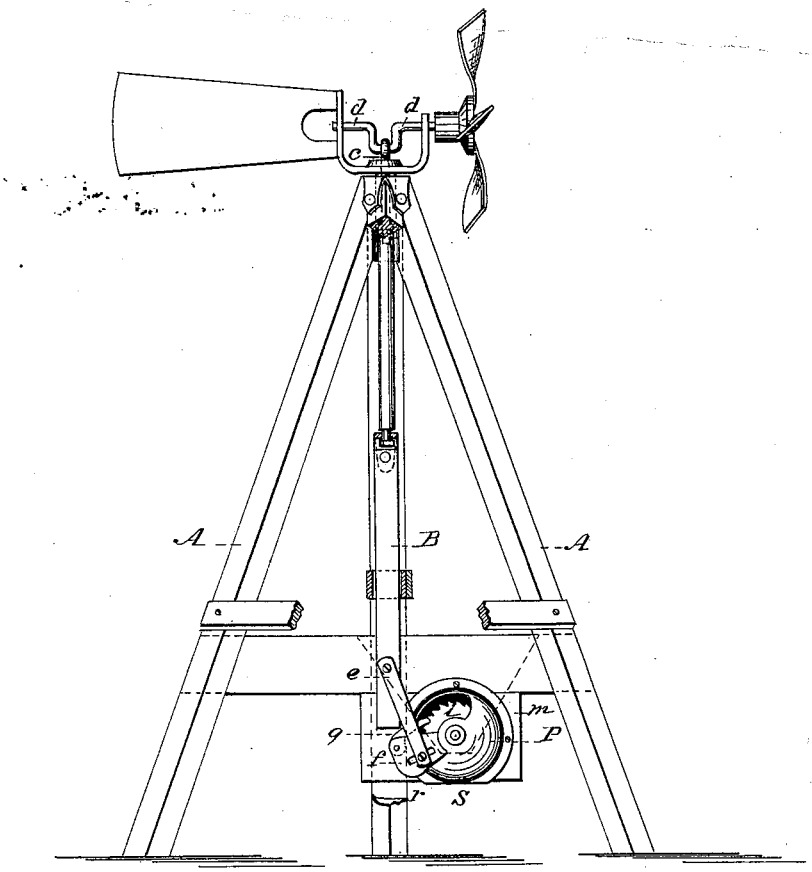


Fig. 2.

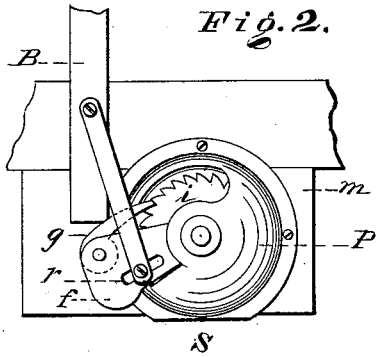
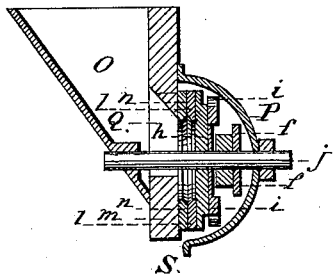


Fig. 3.



WITNESSES:

Marnie B. Stallings

Theodore S. Week

INVENTOR:

SILAS C. SCHOFIELD

BY H. W. Bradley & Co.

ATTYS.

UNITED STATES PATENT OFFICE.

SILAS C. SCHOFIELD, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. **199,999**, dated February 5, 1878; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, SILAS C. SCHOFIELD, of Freeport, in the county of Stephenson and State of Illinois, have invented a new method of operating feed-mills by the ordinary pumping-windmill; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a front elevation of my invention; Fig. 2, an enlarged front view of the feed-mill detached from the windmill, and Fig. 3 a sectional side view of the same.

Like letters of reference made use of in each of the figures indicate like parts.

To enable those skilled in the art to understand and construct my invention, I will proceed to describe it.

A is the tower upon which the windmill is mounted. B is the reciprocating rod, which is operated by the crank *c* in the windmill-shaft *d*. *e* is a link connecting the reciprocating rod B with the vibrating arm *f*, which is hung loosely upon the hub of the disk *h*. *g* is a pawl attached to the arm *f*, and takes hold in the ratchet *i*, which is fastened rigidly to the disk *h*, so that at every movement of the rod B the disk *h* is moved forward.

The arm *f* is provided with a slot, *r*, by which the link *e* may be moved nearer to or farther from the center of motion, to increase or diminish the speed of the feed-mill, according to the power of the windmill to which it is attached. *j* is the shaft upon which the disk *h* is rigidly fastened. *l* is the live or moving grinding-ring, which is rigidly attached to the disk *h*. *n* is the dead or stationary ring attached to the plank *m*. These grinding-rings are of hard metal, and similar to those used on other feed-mills.

Q is an aperture, through which the grain passes, and falls between the grinding-rings, and, being ground, passes out at the opening S. O is the hopper, the base of which forms a bearing for one end of the shaft *j*. P is the shell or case which incloses the mill, and forms a bearing for the other end of the shaft *j*.

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

In a grinding-mill having a fixed plate or bed-stone, the runner having ratchet-teeth, as described, in combination with the reciprocating pitman, having a pawl, as described, substantially as and for the purpose set forth.

SILAS C. SCHOFIELD.

Witnesses:
E. H. MORGAN,
CHAS. MORGAN.