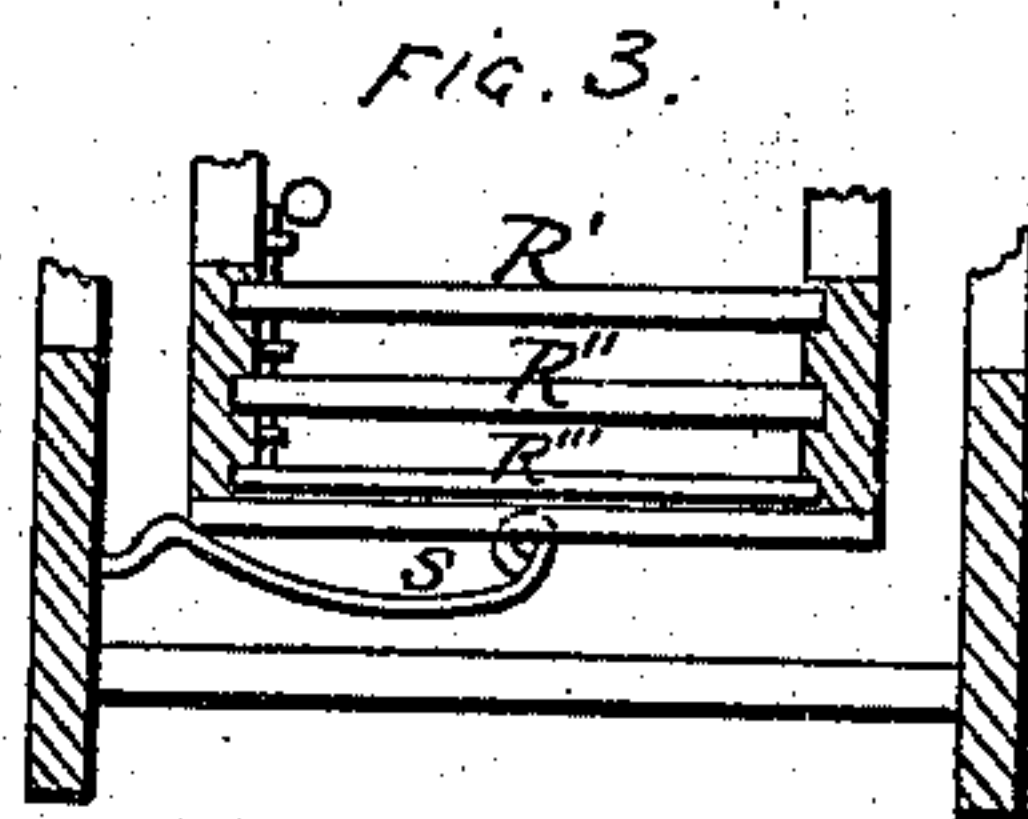
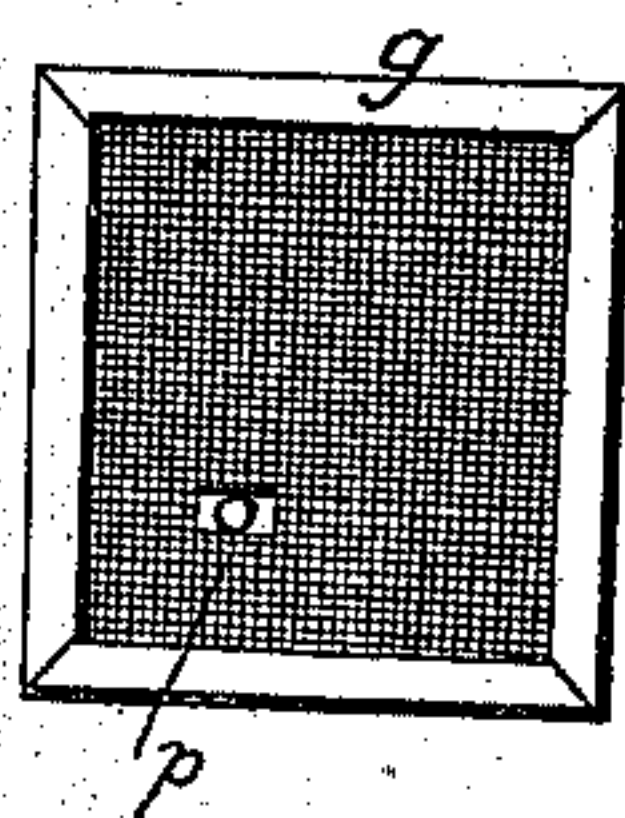
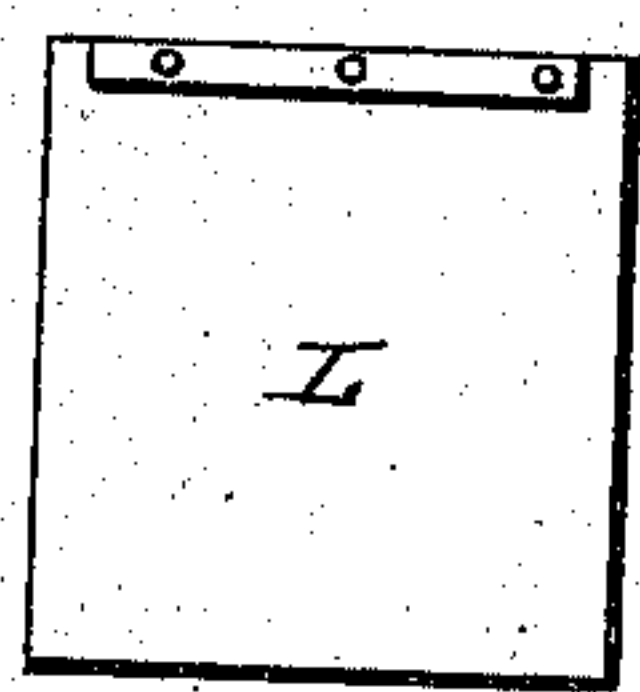
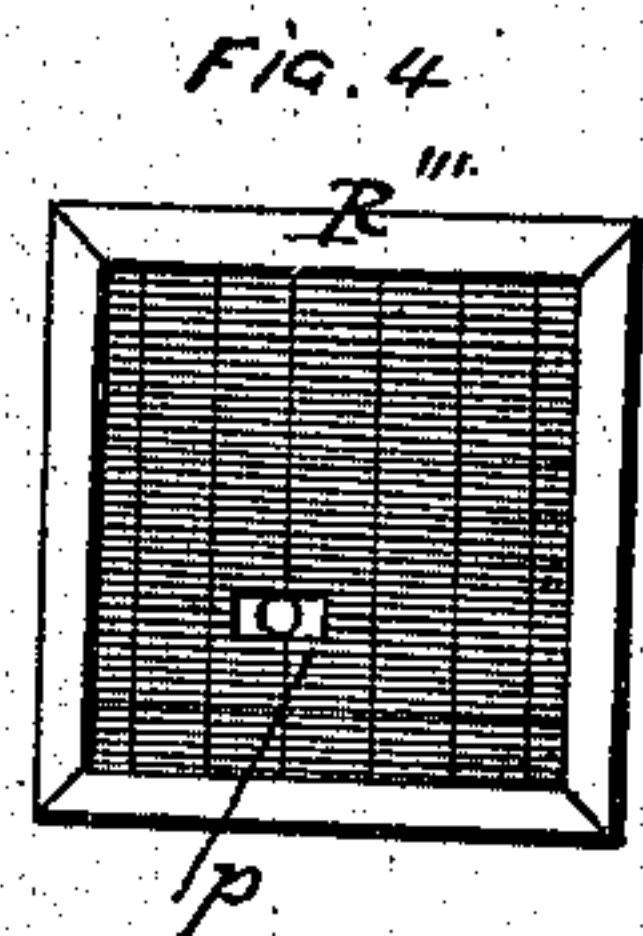
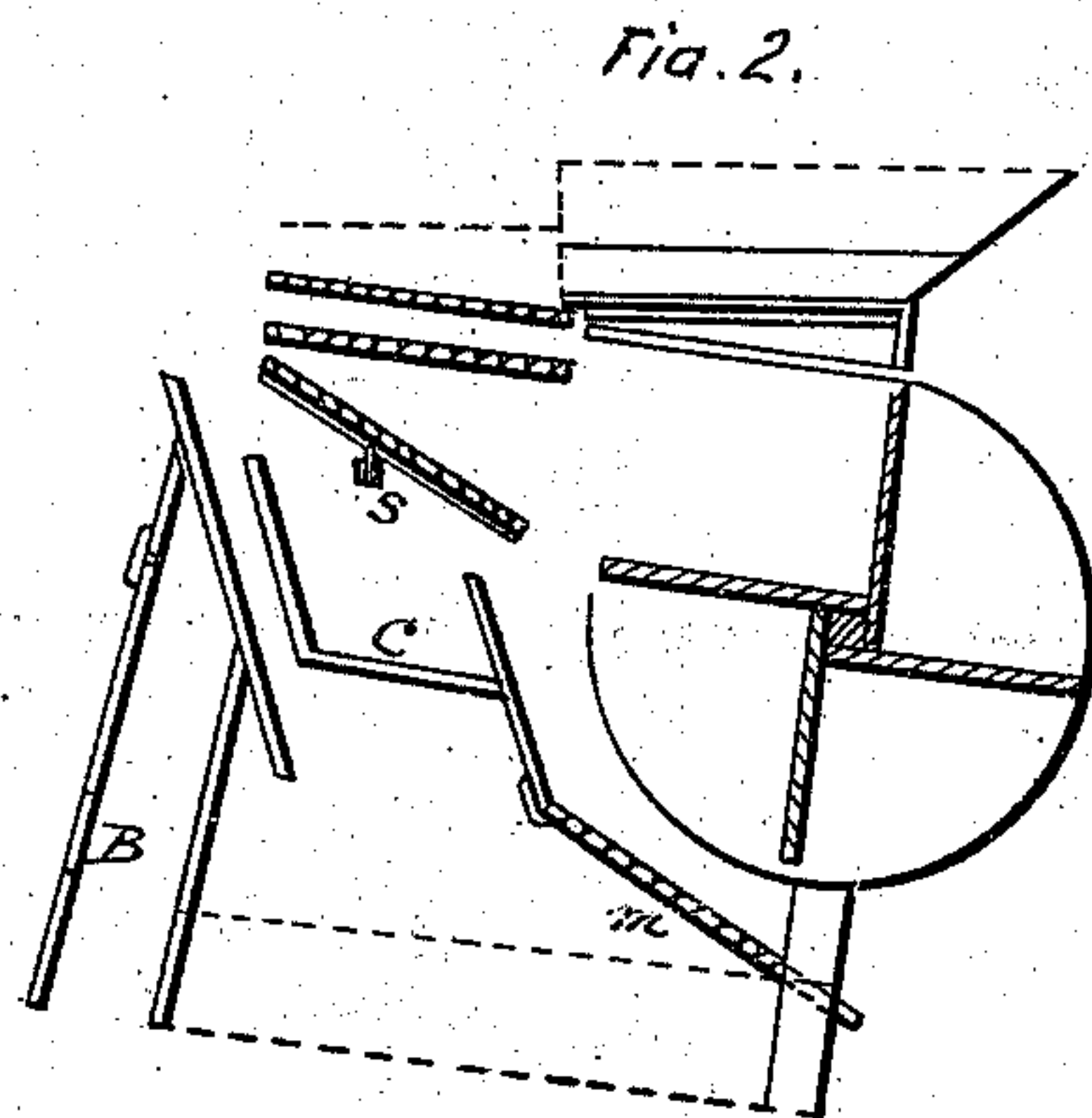
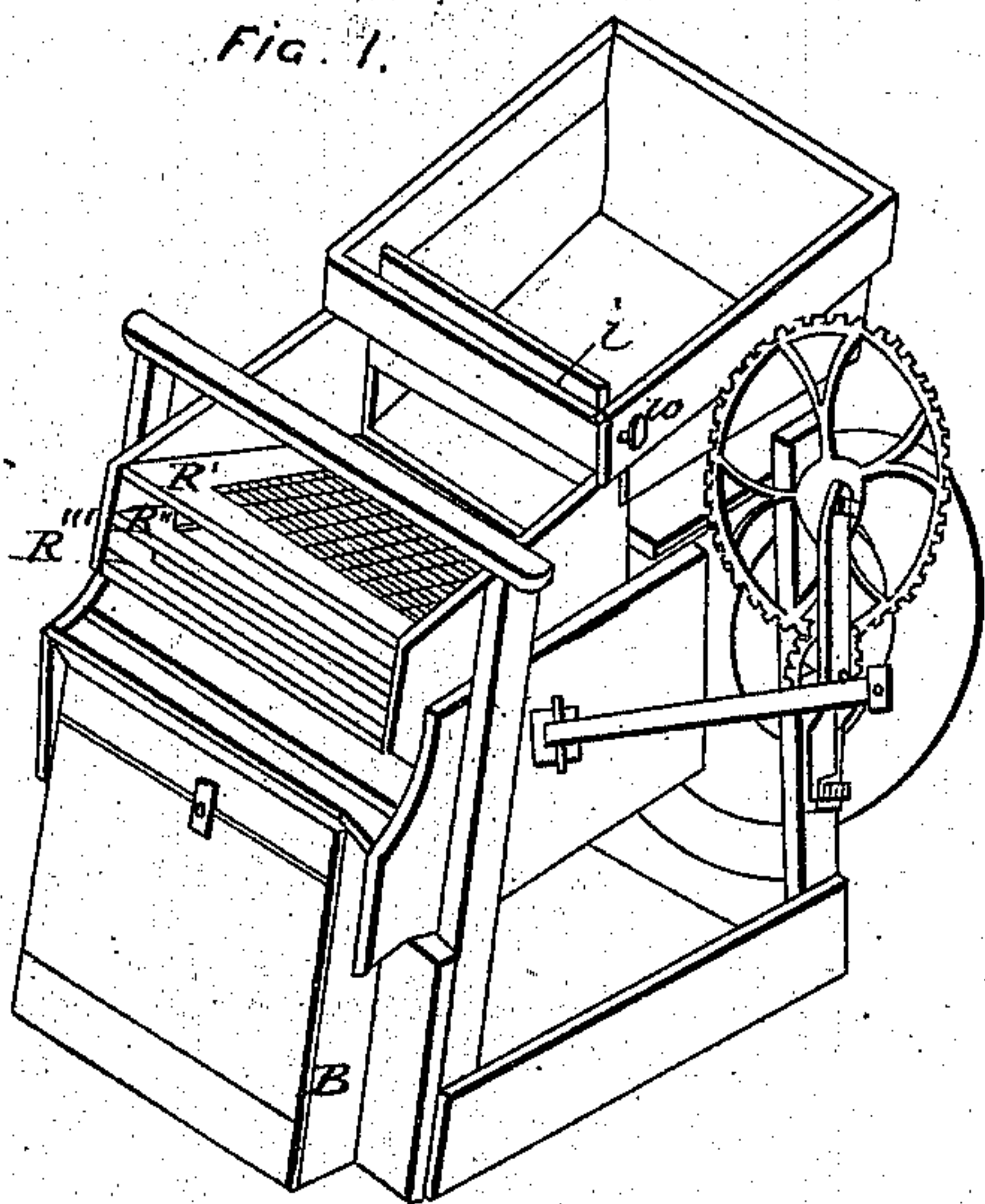


L. ENSIGN.
Grain Winnow.

No. 35,594.

Patented June 17, 1862.



ATTEST.

A. Du Bois
W. H. Koob

INVENTOR.

Lemuel Ensign
By W. H. Koob - atty.

UNITED STATES PATENT OFFICE.

LEMUEL ENSIGN, OF MILLBURN, NEW YORK.

IMPROVEMENT IN FANNING-MILLS.

Specification forming part of Letters Patent No. **35,594**, dated June 17, 1862.

To all whom it may concern:

Be it known that I, LEMUEL ENSIGN, of Millburn, in the county of Broome and State of New York, have invented certain new and useful Improvements in Fanning-Mills; 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 annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a transverse section; Fig. 3, an end view of a part of the mill, showing the vibrating spring-hammer. Fig. 4 represents the cockle and chess riddle with elongated meshes and plate on the under side.

The nature of my invention consists in the arrangement and combination of the different parts, as hereinafter set forth.

In this mill the drum is contracted and the front part is enlarged, so as to increase the size of the riddles, the whole being reduced to at least one-half the size of ordinary mills, yet it is capable of doing as much work and better work than the old mills.

R', R'', and R''' are the riddles arranged for taking chess or cockle out of grain, which can be thoroughly done by running the grain once through. R''', the cockle-riddle, is made with elongated meshes, and is provided with a plate, *p*, attached to the under side, upon which the spring-hammer S strikes. As the hopper H vibrates horizontally the lower edge passes over the curved part of the spring-hammer S,

causing it to strike on the plate *p*, and thus keeping the riddle clear, allowing a free passage of the chess into the hopper C. By taking out the chess-riddle R''' in the lower part of the hopper and putting in its place a blank riddle, L, then putting the grass seed riddle *g* in the place of the middle riddle, R'', placing the latter in the place of the upper riddle, R', then taking out the long riddle *m* under the drum and putting in its place a blank riddle, the mill is in order for cleaning grass-seed or other small seeds.

A slide, *i*, held by the screw *w*, regulates the feed of the hopper.

B is a box for holding extra riddles when not in use.

The advantages of this mill are that it may be made so small as to take up but little room, and can, by shifting the riddles as described above, be changed quickly from a grain-mill to a grass-seed mill. By the device of the spring-hammer acting on the chess or cockle screen it cleans grain better than any other mill in use.

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

The arrangement and combination of the riddle R''', plate *p*, and spring-hammer S, substantially as and for the purposes set forth.

LEMUEL ENSIGN.

Witnesses:

E. B. STODDARD,
DAVID ENSIGN.