(No Model.)

H. J. & G. A. GILBERT.

SIEVE FOR ROLLER MILLS.

No. 275,190. Patented Apr. 3, 1883.

Fig. 1.

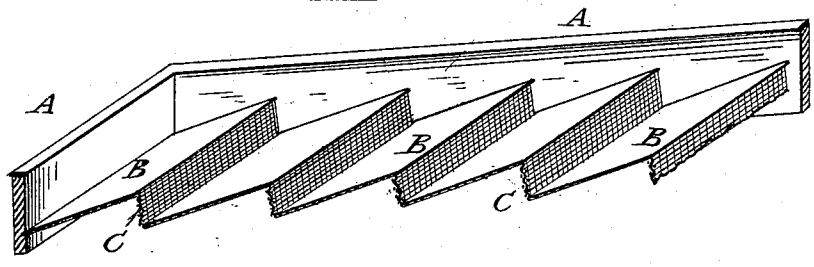
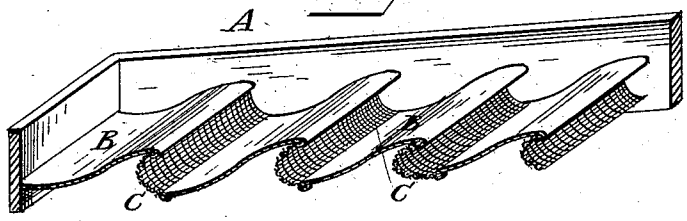


Fig. 2.



Witnesses,
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UNITED STATES PATENT OFFICE.

HENRY J. GILBERT AND GEORGE A. GILBERT, OF RACINE, WISCONSIN.

SIEVE FOR ROLLER-MILLS.

SPECIFICATION forming part of Letters Patent No. 275,190, dated April 3, 1883.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that we, HENRY J. GILBERT and GEORGE A. GILBERT, of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain new and useful Improvements in Sieves for Roller-Mills, &c.; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to sieves for roller-mills, and will be fully described hereinafter.

In the drawings, Figure 1 is a view in perspective of one form of our sieve, and Fig. 2 is a like view of another form.

A is the frame, to which are secured inclined plates B, of zinc or other smooth substance, and extending from the highest edge of each one of these plates to the lowest edge of the plate next to it is a strip of gauze, C, and which, when the sieve is in position in the mill, extends up at an angle of about seventy degrees with the horizon. The plates B may be either straight or curved, and the gauze C may be slightly concaved, as shown in the drawings.

We generally hang our sieves on an incline, their lowest ends being those upon which the cereal falls from the hopper or rolls above, and we connect their frames with agitating mechanism, by which the sieves are reciprocated on a slight angle. This motion in one direction causes the grain to ride over the smooth plates B and travel from one to another upward, and then in the opposite direction causes the grain to pound upon the gauzes B, when the smaller particles sift through, leaving the larger particles to travel upward, to be pounded against each of the gauzes successively until it has traveled the entire length of the sieve, completely freed from flour.

Our sieves are mainly for use in roller-mills, where the grain, after passing between one pair of rollers, is carried by a sieve to another pair, and then over another sieve and through another pair of rolls until it has been entirely reduced.

Our smooth plates B permit the grain to ride up easily from the bottom of one of the gauzes to the top of another, and there is no opportunity for the bran to gain a lodgment in its passage.

While we have described our sieves as particularly applicable to roller-mills, it is obvious that they may be used in any position in which sieves may be employed.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A sieve for roller-mills, consisting of the frame A, inclined metallic plates B, and connecting-gauzes C, extending from the highest edge of one inclined plate to the lowest edge of the succeeding plate, substantially as set forth.

2. The combination, in a sieve, of inclined metallic plates B and connecting-gauzes C, as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, on the 13th day of May and the 18th day of May, 1882, respectively, in the presence of two witnesses.

HENRY J. GILBERT.
GEO. A. GILBERT.

Witnesses to signature of H. J. Gilbert:
S. S. STREET,
LEWIS J. BOWMAN.

Witnesses to signature of G. A. Gilbert:
CHARLES GLENNEN,
M. C. COOKE.