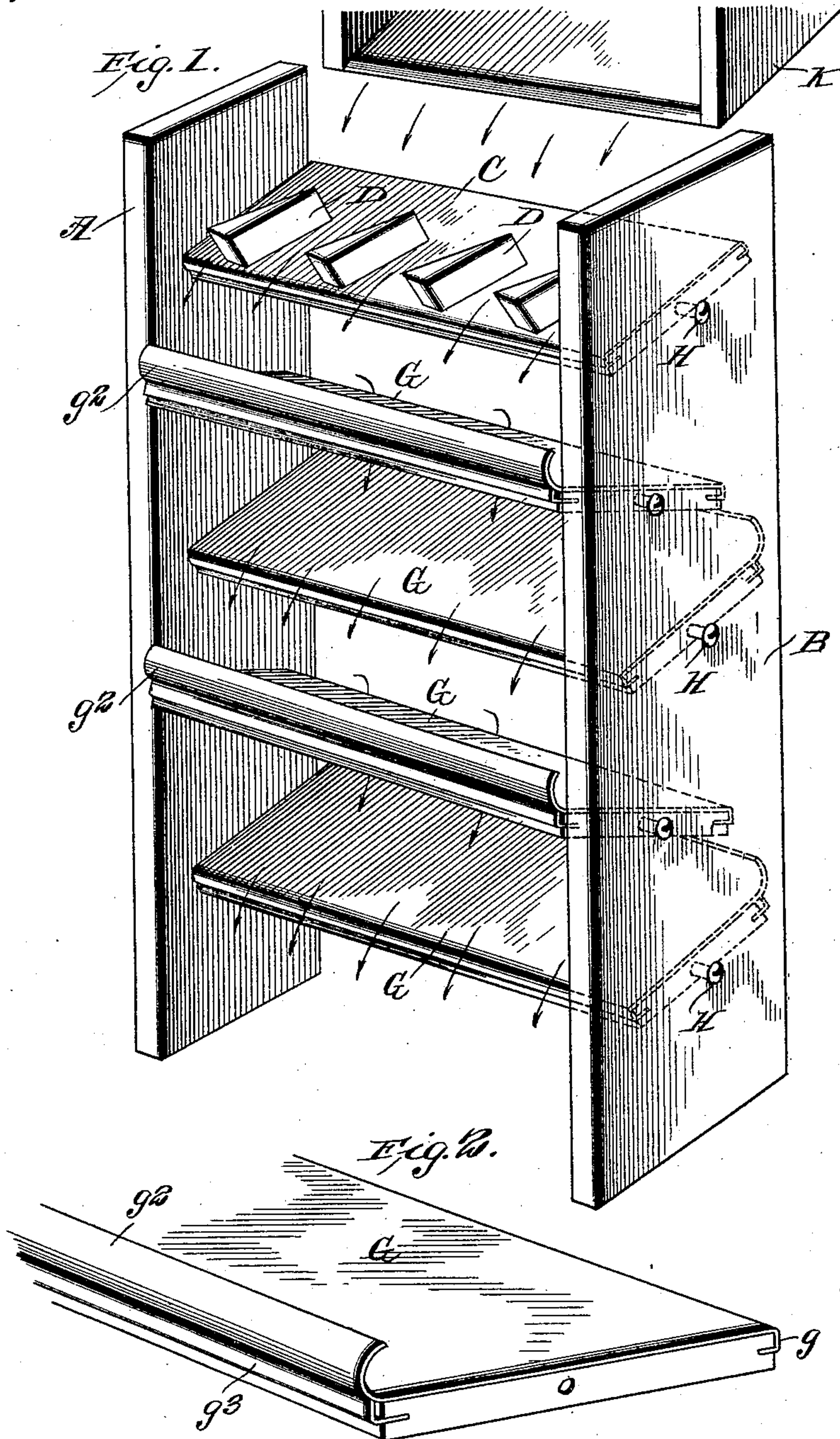


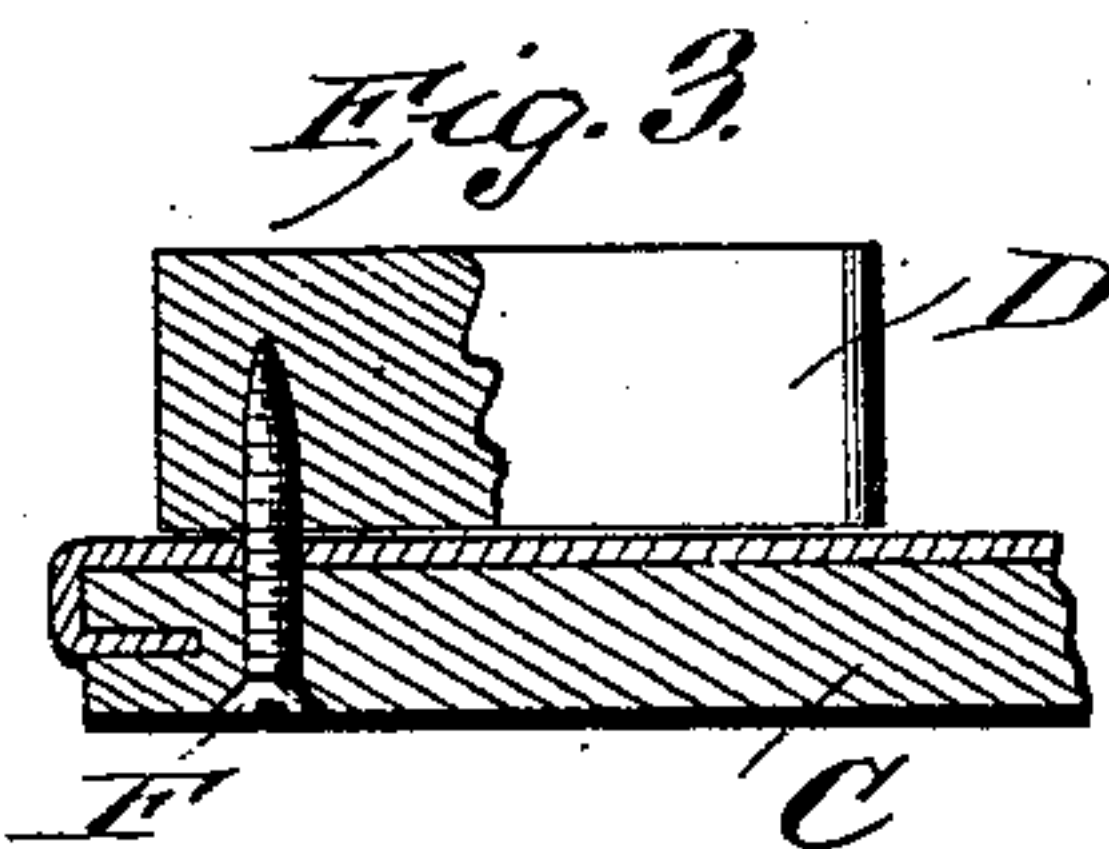
G. H. HOTTEL.
FEED REGULATOR FOR FLOUR MILLS.
APPLICATION FILED JAN. 25, 1910.

969,372.

Patented Sept. 6, 1910.



WITNESSES:
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UNITED STATES PATENT OFFICE.

GEORGE HENRY HOTTEL, OF STRASBURG, VIRGINIA.

FEED-REGULATOR FOR FLOUR-MILLS.

969,372.

Specification of Letters Patent.

Patented Sept. 6, 1910.

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To all whom it may concern:

Be it known that I, GEORGE H. HOTTEL, a citizen of the United States, and a resident of Strasburg, in the county of Shenandoah and State of Virginia, have made certain new and useful Improvements in Feed-Regulators for Flour-Mills, of which the following is a specification.

My invention relates to improvements in devices for feeding grain to the rolls of flour mills, and it consists in the constructions, combinations and arrangements hereinafter described and claimed.

An object of my invention is to provide a device in which the feeding of the grain is accomplished by gravity, without the necessity of employing eccentrics, springs, vibrating attachments, with their necessary accompaniment of shafting, pulleys, or belts.

A further object of my invention is to provide a device in which the grain may be fed in a thin stream to the rolls at a varying speed with a novel means for directing the grain to one portion or another of the roll, and novel means for adjusting the directing means.

Other objects and advantages will appear in the following specification and the novel features of the device will be particularly pointed out in the appended claim.

My invention is illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view showing one embodiment of my invention; Fig. 2 is a perspective detailed view showing the construction of the inclined shelves; and Fig. 3 is a section showing the means for attaching the guide or distributing members.

In carrying out my invention I provide the two side members A and B. Pivottally secured between these side members is a series of inclined shelves like those shown in Fig. 1. The upper shelf C is provided with a series of wedge shaped distributing members D. These distributing members are secured to the shelf C by means of screws F which are inserted through the under side of the shelf C and are pivoted to the shelf near the base portion of the wedge as plainly shown in Fig. 3. The shelves L below the upper shelf C are each preferably provided with a strip of metal G which has a portion *g* bent back upon itself and inserted in the wooden portion of the shelf on one edge, while at the other edge of the

shelf is an upturned curved portion *g*². Underneath the curved portion is an L-shaped flange *g*³ which abuts against the lower side of the curved flange to strengthen the latter. The shelves are pivottally supported between the members A and B by means of screws H, which are inserted through the sides and which extend into the ends of the shelves as clearly shown in the drawing.

From the foregoing description of the various parts of the device the operation thereof may be readily understood. The grain coming from the chute K falls on the topmost shelf C and may be directed by the distributing members D toward any desired portion of the shelf L immediately below. Each alternate shelf is inclined with respect to the one above it so that the grain is delivered from one shelf to the other. In practice it is found that the curved flanges *g*² distribute the grain more evenly over the surface of the shelves than a straight flange. Moreover, there is less tendency for the grain to jump off from the shelf even when there is considerable inclination to the shelves, since the grain meets the curved flange approximately at a tangent and the direction of motion is changed gradually. There is therefore not the tendency to rebound as there would be with a straight flange.

By first loosening and then tightening the screws H the shelves may be set at any desired angle. The upper shelf C being pivottally mounted on its longitudinal axis, may be turned completely over so as to bring the screws F in convenient position for adjusting the positions of the distributing members D.

This device provides a simple yet effective means of distributing grain to the roll. The grain is distributed evenly in a thin stream thereby eliminating the bunching or waving of stock.

I claim:

In a feed regulator for roller mills, the combination of a pair of vertical side members, with a plurality of distributing shelves pivottally mounted between said side members, the upper of said distributing shelves being provided with a series of wedge shaped distributing members pivottally mounted near their base portions on the lower edge of the inclined shelf, screws for

each shelf serving as pivots for its shelf and
as a means for retaining the shelf in an in-
clined position, and a curved flange on the
upper edge of each inclined shelf adapted
5 to receive the grain from the shelf above it
and to act as a turning member for dis-
tributing the grain evenly and as a guard

for preventing the spilling of the grain
from off the shelf.

GEORGE HENRY HOTTEL.

Witnesses:

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C. L. KNEISLEY.