

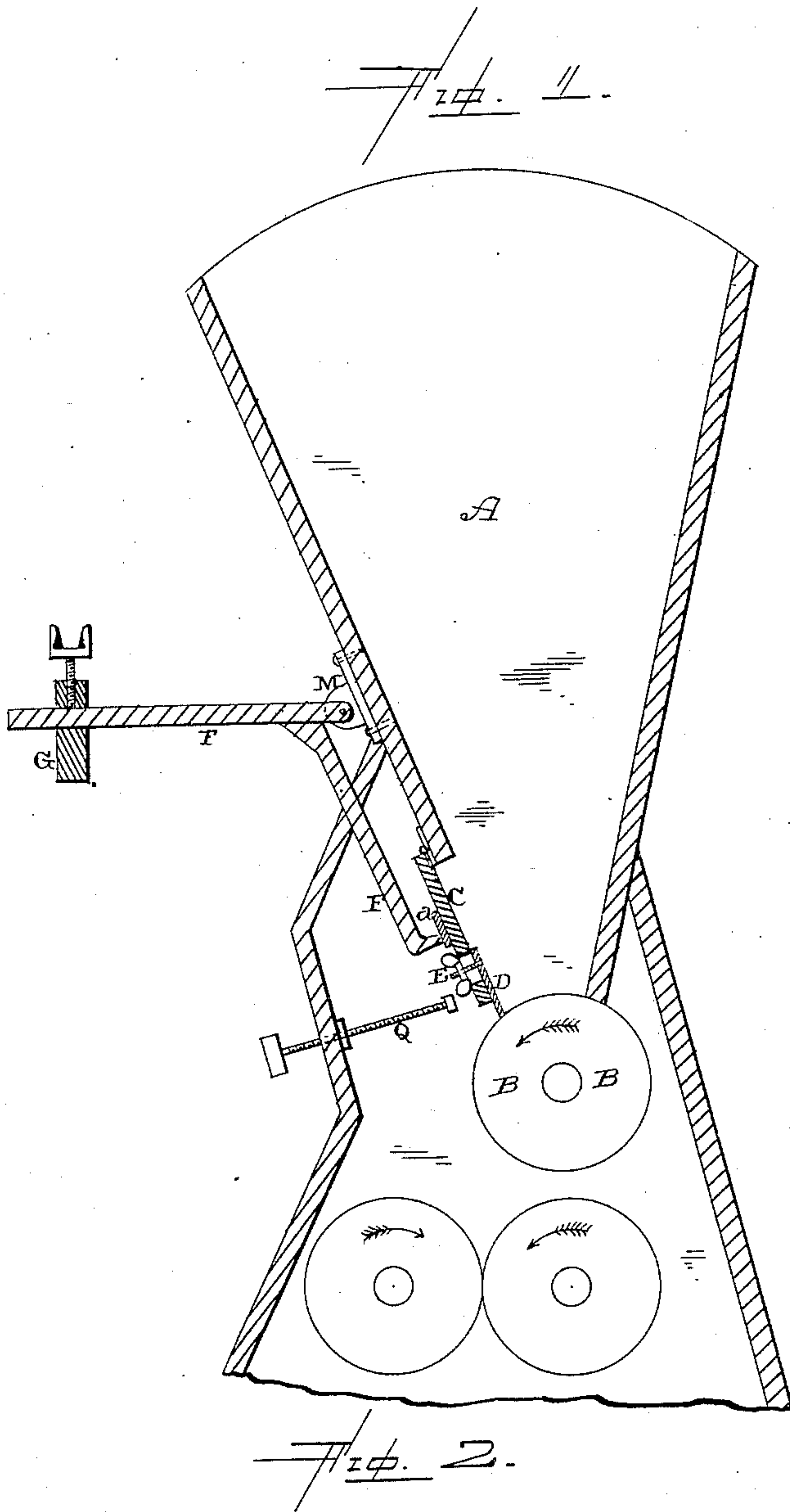
(No Model.)

D. S. MACKEY.

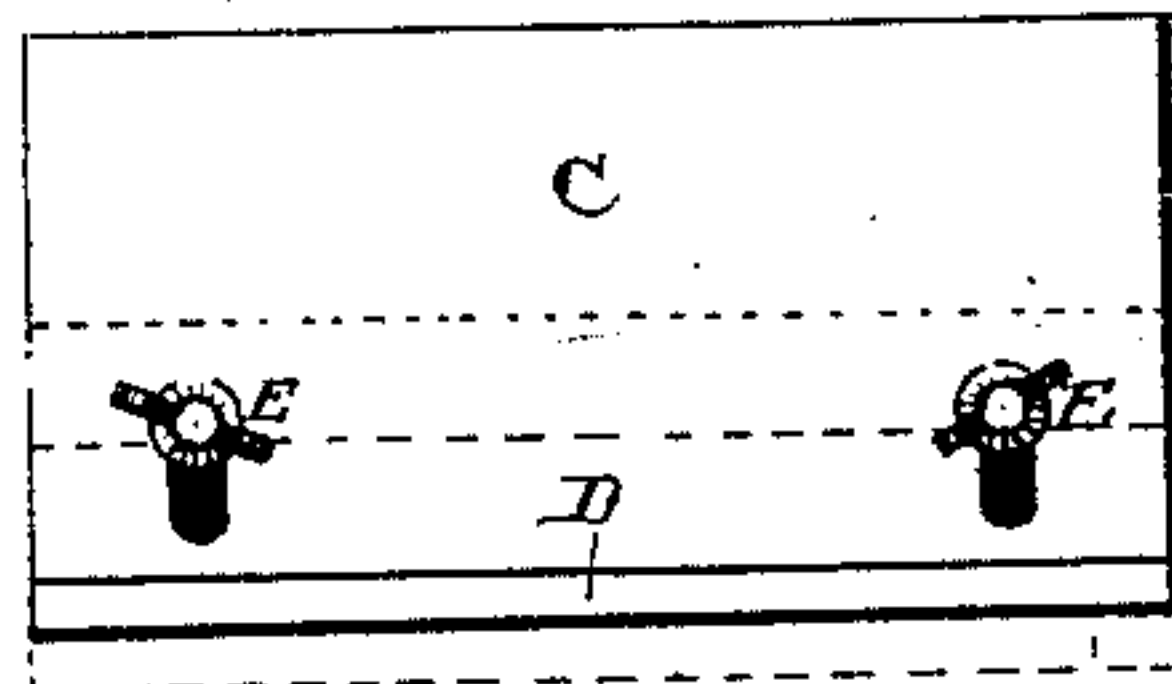
FEED REGULATOR FOR ROLLER MILLS.

No. 348,755.

Patented Sept. 7, 1886.



WITNESSES  
R. J. Gardner  
A. H. Brecht,



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per J. A. Lehmann, atty.

# UNITED STATES PATENT OFFICE.

DAVID S. MACKEY, OF BATAVIA, NEW YORK.

## FEED-REGULATOR FOR ROLLER-MILLS.

SPECIFICATION forming part of Letters Patent No. 348,755, dated September 7, 1886.

Application filed May 11, 1886. Serial No. 201,842. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID S. MACKEY, of Batavia, in the county of Genesee and State of New York, have invented certain new and  
5 useful Improvements in Feed-Regulators for Roller-Mills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make  
10 and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in feed-regulators for roller-mills; and it consists  
15 in the construction and combination of devices which will be more fully described hereinafter, and claimed.

The object of my invention is to provide an improved feed-regulator, whereby the material is caused to be fed evenly, and which can  
20 be adjusted to feed either fine or coarse material.

Figure 1 is a vertical section of a feed-regulator embodying my invention. Fig. 2 is a  
25 detail view showing the slotted plate.

A represents the hopper, and B the roller, which is placed in the bottom thereof in the usual manner.

Hinged to the front side of the hopper, as  
30 shown, is a swinging slotted board, C, which projects downward very near to the roller B, and which is held pressed forward into the inclined position shown by means of the weighted lever. The lower edge of this swinging  
35 board C is separated from the roller by a suitable space, and in order to regulate the feed from the hopper a thin metallic plate, D, is fastened to this board by means of the headed bolts and the thumb-nuts E. This plate D  
40 can be adjusted in relation to the roller so as to regulate the feed from the hopper as may be desired. Very frequently the roller B will get out of true, and then the plate D can be adjusted so as to extend parallel therewith,

and thus insure a uniform feed the whole  
length of the hopper and roller. The adjust-  
ability of this plate D also enables coarse or  
fine material to be fed from the hopper with  
perfect uniformity.

Secured to the front side of the hopper is  
50 the bracket M, in which is pivoted the angular lever F. The lower end of this lever F bears against the metallic plate a, which is secured to the swinging board C, while its up-  
per end projects outward and carries the ad-  
55 justable weight G, which is placed thereon. This weight can be adjusted back and forth at will according to the pressure it is desired to exert upon the hinged board and its plate.

The material is fed into the hopper until a  
60 certain amount has accumulated therein, when the pressure of the material in the hopper upon the swinging board will force the lower end of the board and plate backward from the roller, and then the revolution of  
65 the roller will cause the material to be fed evenly the whole length of the hopper and roller. By means of an adjustable stop or set-screw, Q, the distance the lower edge of the plate D may be forced backward from the  
70 roller by the weight of material in the hopper is regulated at will, and thus the feed will always be regular.

Having thus described my invention, I  
claim— 75

The combination of the hopper A, roller B, and hinged slotted board C with the adjustable plate D, lever F, weight G, and the set-screw Q, which is passed through the side of the hopper to regulate the distance the board  
80 C shall move backward, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID S. MACKEY.

Witnesses:

MYRON H. PECK, Jr.,  
CARLOS A. HALL.