

(No Model.)

J. SOMBART.
FEED REGULATOR.

No. 336,496.

Patented Feb. 16, 1886.

Fig. 1.

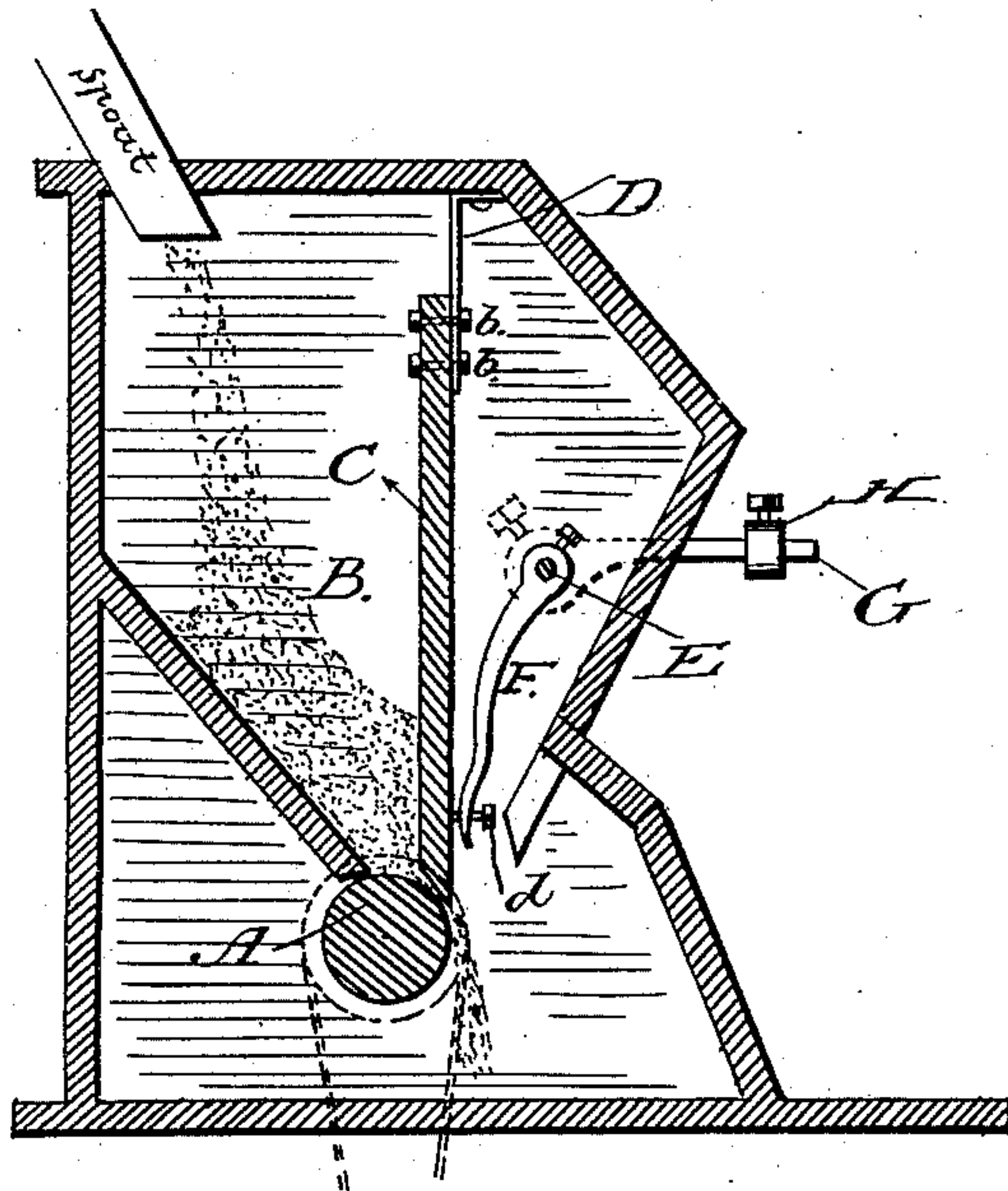
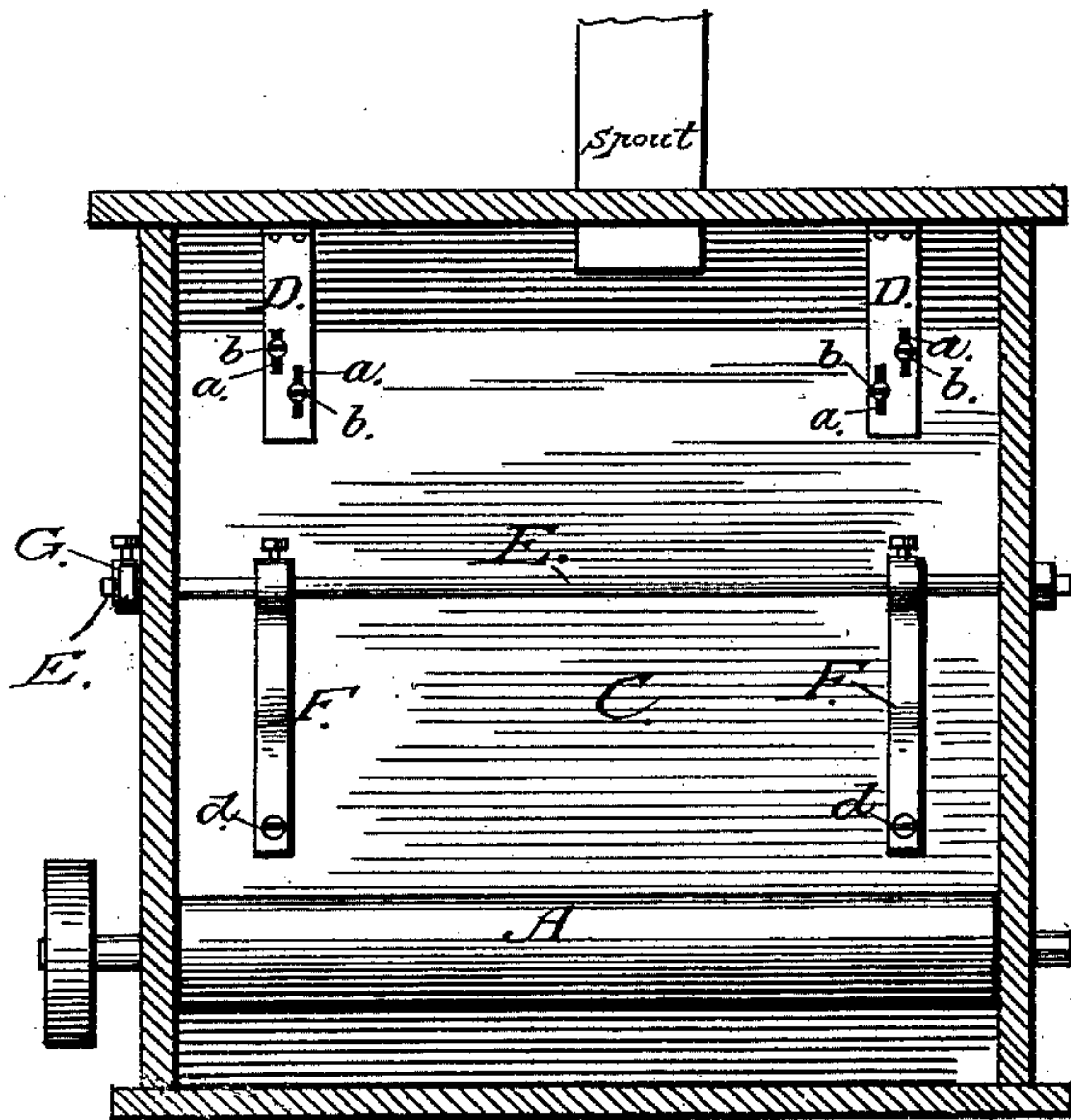


Fig. 2.



Witnesses
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JULIUS SOMBART, OF BOONVILLE, MISSOURI.

FEED-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 336,496, dated February 16, 1886.

Application filed November 20, 1885. Serial No. 183,419. (No model.)

To all whom it may concern:

Be it known that I, JULIUS SOMBART, a citizen of the United States, residing at Boonville, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Feed-Regulators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional view of a feed-hopper with my improvements attached. Fig. 2 is a front elevation of the same.

My invention relates to a feeding device or hopper designed especially for feeding grain or granular substances to grain-crushing mills, grinding-rollers, purifiers, or other grinding and dressing machinery where continuous and regular feeding is required; and my invention consists in the construction and combination of devices, which I shall hereinafter fully describe, and specifically point out in the claims.

In the drawings, A represents the ordinary feed-roll, which operates in the discharge-mouth of the hopper B, arranged above said roll, and may be of any desired form and size. Within the hopper, and forming the front wall of its throat, is a vibrating feed-board, C, which is suspended from the top of said hopper by suitable straps, D, provided with elongated slots *a* and set-screws *b*, whereby said feed-board is rendered capable of vertical adjustment to accommodate itself to the different kinds of grain. Passing longitudinally through the hopper and in front of the feed-board is a shaft, E, upon which are mounted two downwardly-projecting arms, F, the lower ends of which are adapted to bear against the feed-board near its extreme lower edge. Upon one end of this shaft E is rigidly secured an arm, G, having a weight, H, adjustably mounted thereon, and serving as a counter-balance to regulate the discharge from the hopper. Set-screws *d* pass through the lower end of the arms F and bear upon the front of the feed-

board, and afford a minute adjustment of the latter with relation to the discharge.

The operation of the device is as follows: The stock is fed into the feeding-hopper B. The opening of the throat at the base of the hopper is regulated and adjusted as desired by means of the weighted arm to feed the stock, as required. Should the stock be fed into the hopper faster than it is being fed over the feed-roll A as the device is adjusted, the accumulation of stock in the hopper will speedily overcome the resistance of the weight of the arm and cause the feed-board to yield, thus opening the throat wider, feeding out the stock over the feed-roll more rapidly, and preventing the clogging of the hopper; but as soon as this is done and the accumulation of stock in the hopper is relieved the weighted arm and arms F cause the board to resume the position to which it was adjusted, closing throat again to the position to which it was regulated.

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

1. The combination, with a feed-roll, a stationary hopper, and adjustable feed-board, the straps and set-screws, of a longitudinal shaft, E, suitable arms mounted upon the shaft with their lower ends bearing against the feed-board, and a counter-balance for regulating the discharge from the hopper, substantially as herein described.

2. An improved feeding device comprising a stationary hopper, a feed-roll, a feed-board suspended within the hopper and forming the front wall of its throat, a longitudinal shaft, E, suitable arms, F, mounted upon the shaft and bearing against the lower part of the feed-board, adjusting-screws *d*, an arm, G, secured to the shaft, and a weight movable upon said arm, substantially as herein described.

JULIUS SOMBART.

Witnesses:

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