

W. H. JANNEY.

GRAIN SEPARATOR

No. 249,055.

Patented Nov. 1, 1881.

Fig. 1.

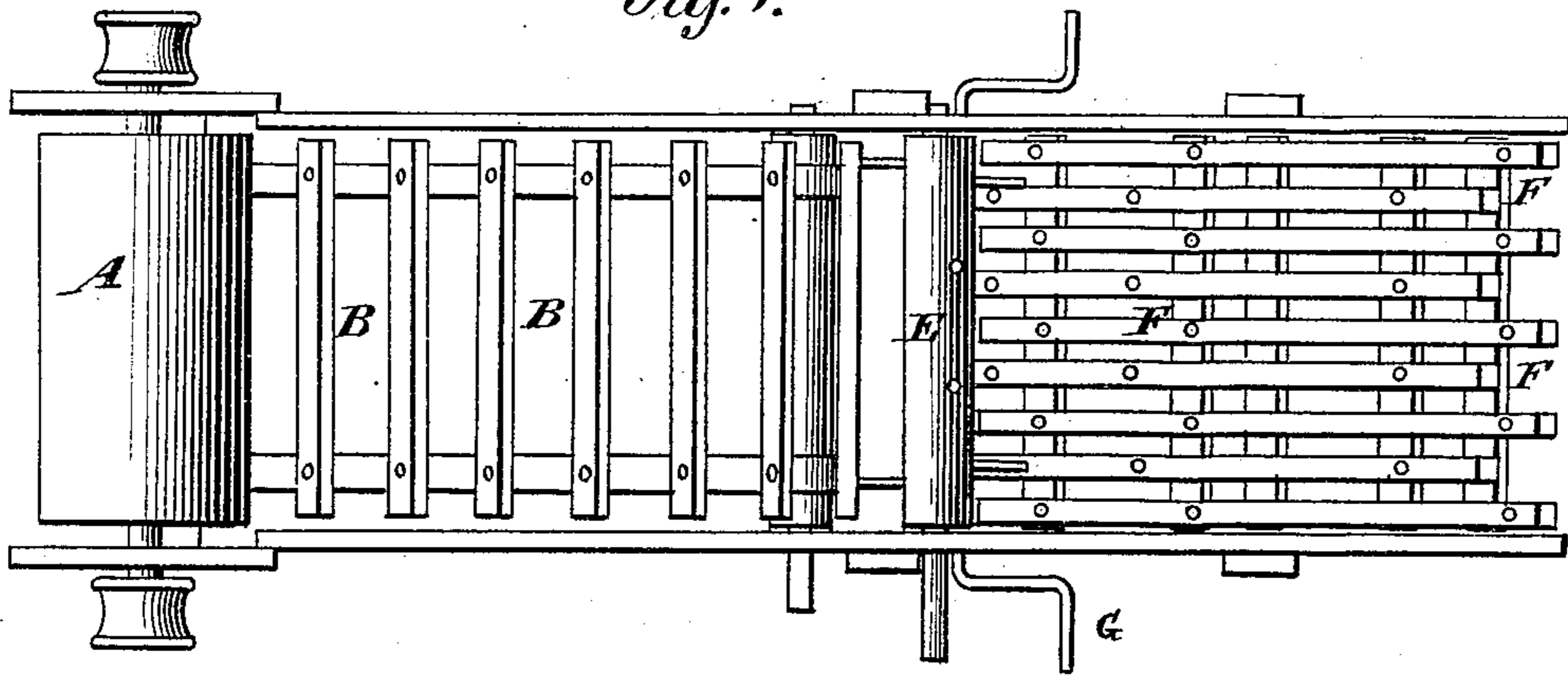


Fig. 2.

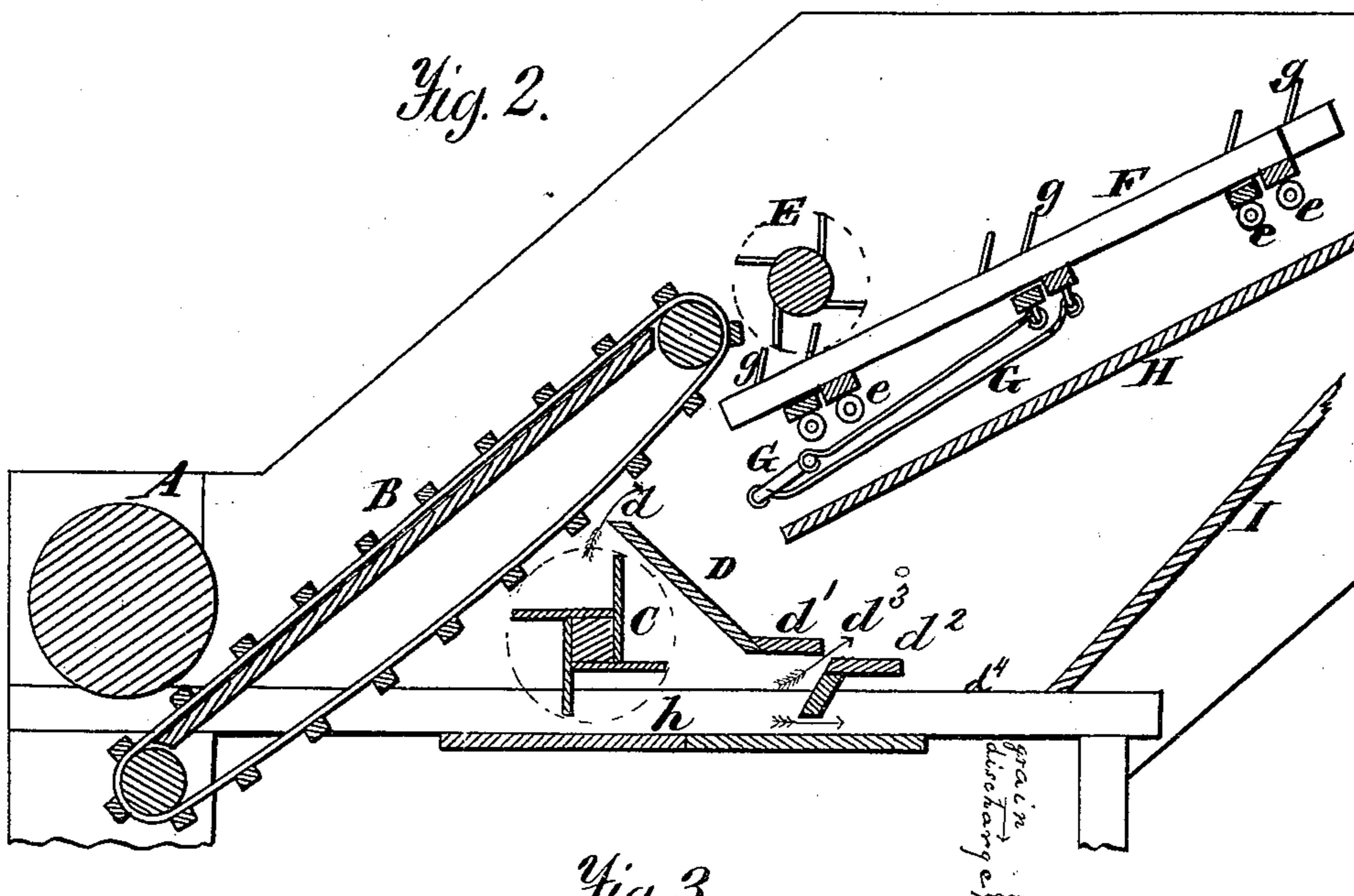
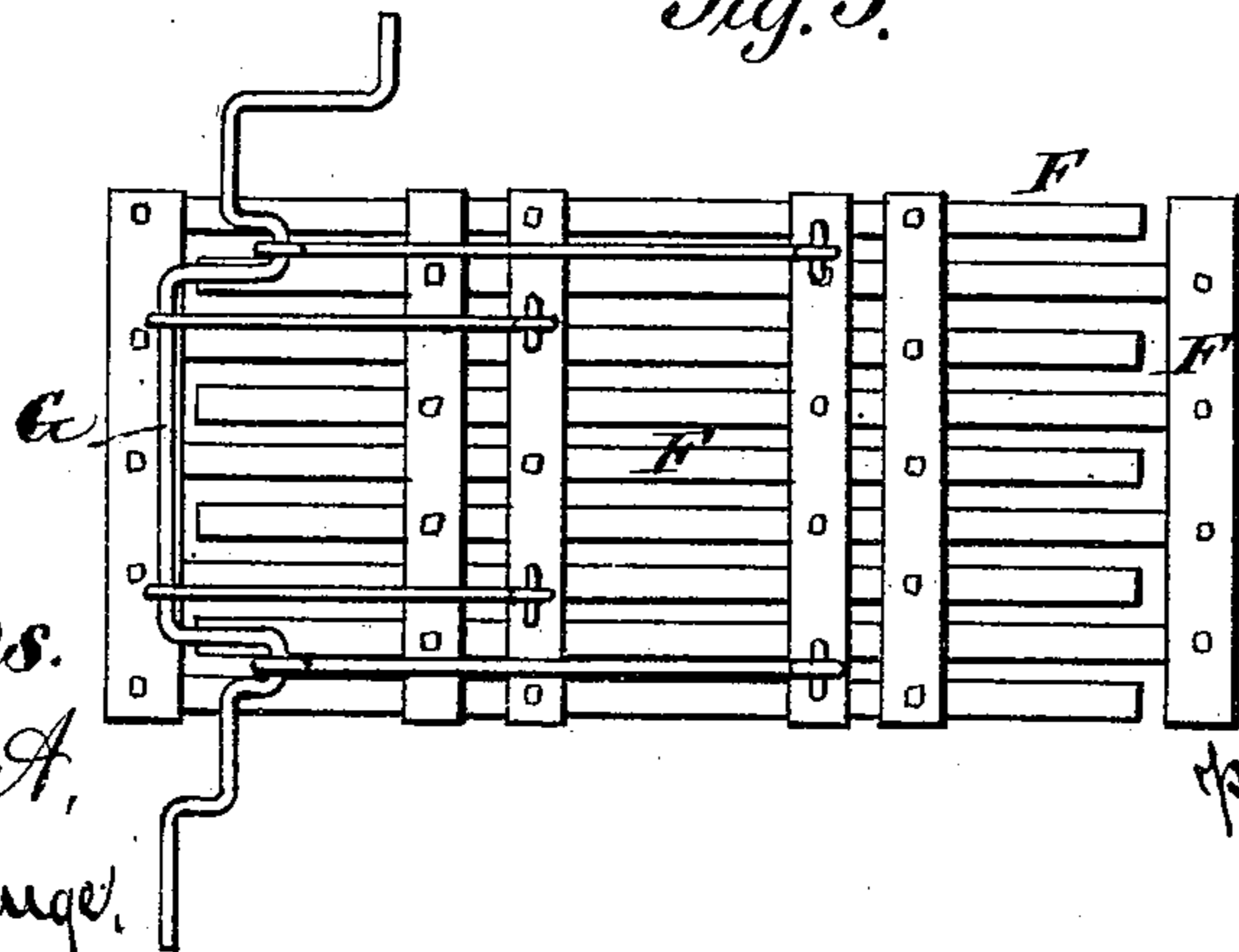


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

WILLIAM H. JANNEY, OF MARTINSBURG, WEST VIRGINIA.

## GRAIN-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 249,055, dated November 1, 1881.

Application filed December 1, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM H. JANNEY, of Martinsburg, in the county of Berkeley and State of West Virginia, have invented certain  
5 new and useful Improvements in Grain-Separators; 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 appertains to make and use  
10 the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a plan view of my improved  
15 thrashing-machine. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a detail view of the shakers.

My invention relates to an improvement in the class of grain-separators which include a  
20 traveling endless-band elevator and a "shaker" or means for separating the oats from the straw and conveying the latter away from the machine, while the grain passes downward and is winnowed by a fan-blast.

25 My improvement relates to the construction and arrangement of the parts by which the course of the falling grain and blast is directed, the result attained being that the grain is more thoroughly cleaned, and without the aid of vibrating or other screens.

30 A in the accompanying drawings marks the feed-cylinder, and B the straw or grain elevator, with a series of transverse slats attached thereto.

35 C is the fan, located in rear of an inclined board, D, with its upper end separated by a blast-passage,  $d$ , from the under side of the grain-elevator, and its lower end provided with a rearward extension,  $d'$ , separated from a  
40 rearwardly-extending board,  $d^2$ , by a blast-passage,  $d^3$ . The blast from the passage  $d$  acts upon the grain passing from the elevator B upon the shakers, while the blast from the passage  $d^3$  acts upon the grain returned from the  
45 shakers by the inclined board H, and escapes downward through the opening  $d^4$ .

50 E is the picker, disposed so as to take the grain from the elevator B and pass it upon the shakers. The teeth of the picker are tangential to its periphery to permit the ready removal of the grain, &c., therefrom, which fall upon the shakers.

F F are the shakers, two in number, and arranged each upon rolls  $e e$ , and so as to have a limited back-and-forward motion. These  
55 shakers are connected to a double-crank shaft, G, which acts upon the said shakers so as to cause them to move simultaneously in opposite directions, and thus enable them to effect the separation of the grain falling thereon. 60 These shakers are armed with teeth  $g g$ . The grain, after leaving the shakers, is returned upon an inclined board, H, and, falling upon the incline D and within the mill, is subjected to a second blast, as aforesaid, and is then  
65 passed down through opening  $d^4$  into a suitable receptacle, (not shown,) being first blown against the inclined board I, down which it slides, while the chaff, short straw, and other light particles are carried on by the blast over  
70 the top of the board.

The elevator B consists of a slatted apron, with the under side of the upper portion resting upon or passing over an imperforate surface or board, as seen in Fig. 2, while to the  
75 under side of the machine are fastened boards  $h$ , to catch and conveniently hold any fine particles or refuse matter passing off at that point.

Having thus fully described my invention, I claim and desire to secure by Letters Patent— 80

The combination of the inclined board D, having the horizontal portion  $d'$ , the horizontal part  $d^2$ , having a downwardly-inclined front portion, and said part  $d^2$  being separated from part  $d'$  and from the base of the fan-box by  
85 narrow blast-spaces, the inclined guard-board I, separated from part  $d^2$  by opening  $d^4$ , the fan, shaker F, and return-board H, all arranged as shown and described, whereby a portion of the blast acts on the grain as it falls from the  
90 shaker and return-board, another portion as it passes over boards D  $d'$   $d^2$ , and a third portion as it escapes downward into opening  $d^4$ , as set forth.

In testimony that I claim the foregoing I  
95 have hereunto set my hand this 17th day of November, 1879.

WILLIAM H. JANNEY.

Witnesses:

E. S. TROXELL,  
JNO. A. BOYER.