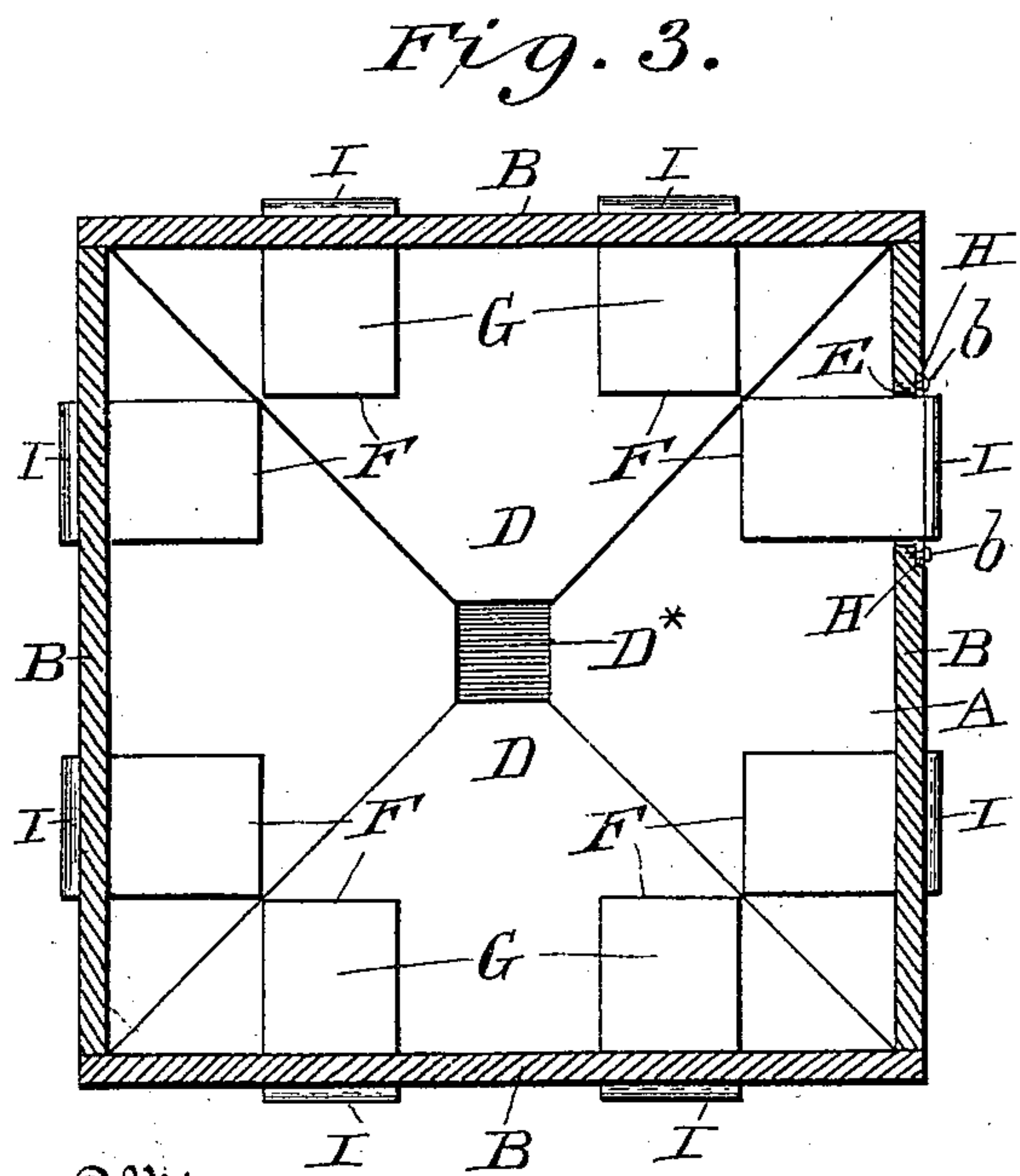
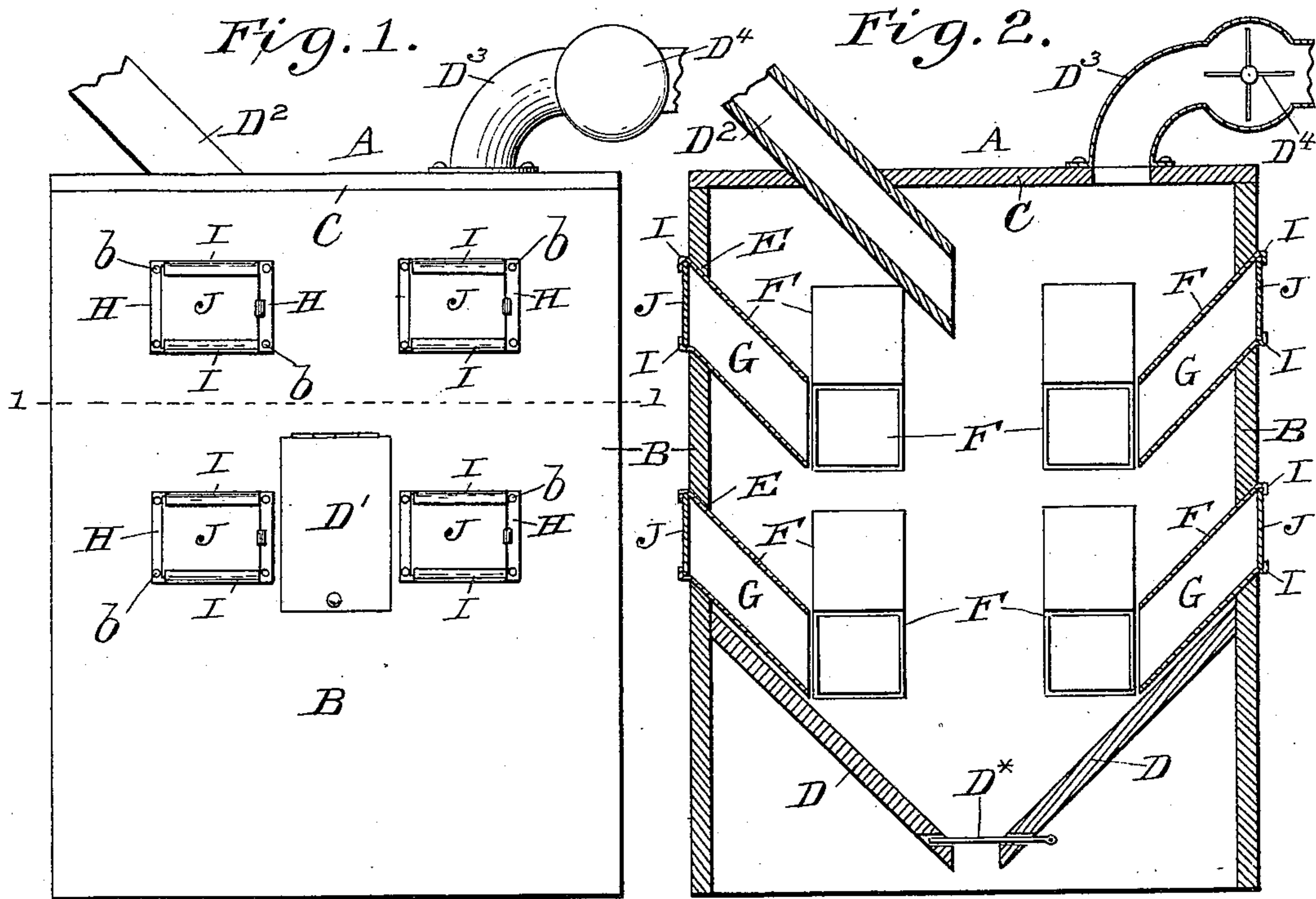


(No Model.)

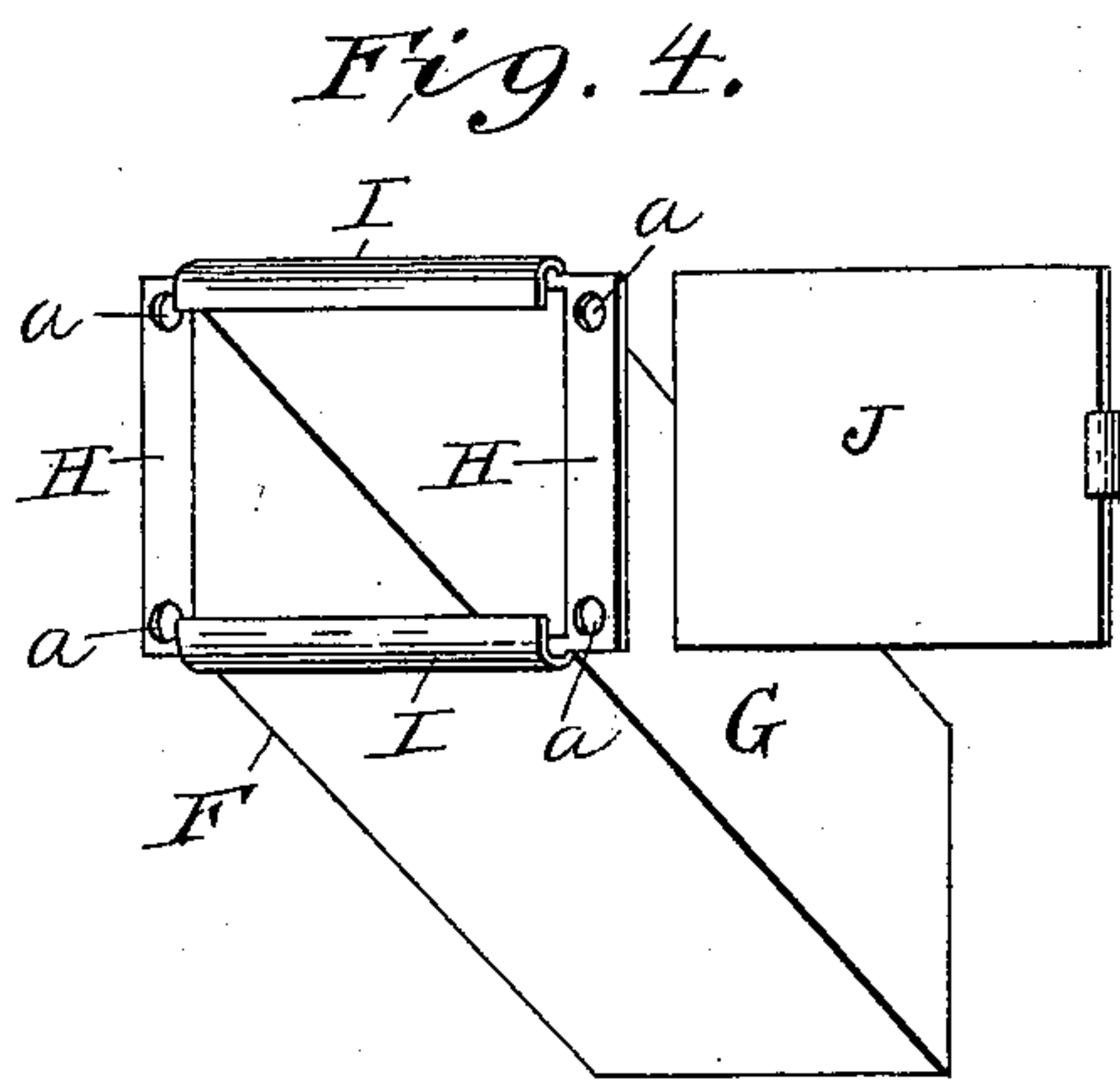
J. M. DAVIS.
STOCK HOPPER.

No. 567,020.

Patented Sept. 1, 1896.



Witnesses
Harry W. Wallis,
O. B. Lester.



Inventor
James M. Davis
by Blackwood & Co.
his Attorneys

UNITED STATES PATENT OFFICE.

JAMES M. DAVIS, OF SPRINGDALE, ARKANSAS.

STOCK-HOPPER.

SPECIFICATION forming part of Letters Patent No. 567,020, dated September 1, 1896.

Application filed May 22, 1896. Serial No. 592,613. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. DAVIS, a citizen of the United States, residing at Springdale, in the county of Washington and State of Arkansas, have invented certain new and useful Improvements in Stock-Hoppers; 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 the same.

My invention relates to an improvement in stock-hoppers for wheat and other grains, and has for its object to provide a stock-hopper which is simple and inexpensive in construction and which will thoroughly clean and purify the wheat and hold the same when cleaned until it is desired to deliver it to the break-rolls.

My invention consists in the construction, combination, and arrangement of the several parts, as more fully hereinafter described and specifically claimed.

Referring to the drawings, Figure 1 is a side elevation; Fig. 2, a vertical section; Fig. 3, a horizontal section on line 1 1 of Fig. 1; Fig. 4, a detail perspective view of one of the ventilators.

In the drawings, in which like letters of reference denote like parts throughout the several views, A represents the stock-hopper, (located over the first set of break-rolls,) in which a stock of, say, from five to five hundred bushels of wheat or other grain is to be kept; B, the walls; C, the top; D, the slanting bottom of the stock-hopper; D*, a sliding gate at the bottom thereof to regulate the discharge of grain therefrom, and D' a door in one of the sides by which access may be had to the interior of the hopper when desired; D², the grain-inlet spout, located in the top of the hopper; D³, an exit-pipe for fuzz or dust, also in the top of the hopper, and D⁴ a suction-fan connected with said pipe D³ for the purpose of cleaning the grain by carrying off the fuzz and dust from the same as it enters the stock-hopper and at the same time keeping the hopper clean.

E are one or more series of openings formed in each of the walls of the stock-hopper.

F are detachable downwardly-slanting tubular ventilators for the purpose of feeding

air to and ventilating the grain in the hopper, made preferably of sheet metal or cast-iron, but may be made of any other suitable material. These ventilators correspond in number to the openings E and are adapted to be inserted and held therein. Each of said ventilators F is provided with a tubular portion G, having two of its outer edges turned over to form flanges H, said oblique flanges being provided with holes *a*, adapted to receive screws or nails *b*, or any other means for securely holding the ventilators in place, and its remaining two edges bent over to form guides or ways I.

J are sliding doors, made of sheet metal or other material, adapted to be held and slide in said guides or ways to close or open the ventilators and thereby regulate the admission of air to the hopper.

The ventilators are made to slant downward at an angle of about forty-five degrees for the purpose of preventing the grain from running out through them as it comes into the hopper, and are made detachable, so as to adapt them to be applied to any and all kinds of stock-hoppers.

Although I have shown but two series of ventilators in each of the sides of the stock-hopper and two ventilators in each series the number of series of ventilators and the number of ventilators in each series may be increased or diminished as desired.

The operation is as follows: The wheat or other grain is fed into the hopper by means of the inlet-spout D², and as it falls by gravity into the hopper the suction-fan cleans it by removing all the fuzz and dust therefrom, and the ventilators feed currents of air into the stock of grain and thoroughly ventilate and purify the same. When it is desired to feed the grain to the break-rolls, it is only necessary to open and adjust the gate D* at the bottom of the hopper and let the grain flow therefrom in the desired quantity.

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

1. A stock-hopper having one or more series of ventilators, inserted through openings in the walls thereof, provided at their upper ends with flanges for securing them to said hopper, and flanges forming guides or ways,

and a door adapted to slide therein, substantially as described.

2. As an article of manufacture, a detachable tubular ventilator, provided with oblique
5 securing-flanges at its upper end, and flanges forming guides or ways, and with a door adapted to slide therein, substantially as described.

3. In a stock-hopper, the combination of
10 the inlet and outlet openings for the grain, and the suction-fan for cleaning the same as it falls into said hopper, with the slanting tubular ventilators inserted through open-

ings in the walls thereof, having flanges for removably attaching the same to the hopper, 15 and guides or ways, and the door supported in said guides or ways for regulating the admission of air to said ventilators, substantially as described.

In testimony whereof I affix my signature 20 in presence of two witnesses.

JAMES M. DAVIS.

Witnesses:

C. C. PHILIPS,
W. R. RITTER.