

No. 662,574.

Patented Nov. 27, 1900.

E. L. MCGARY.
AIR CONVEYER.

(Application filed July 14, 1900.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

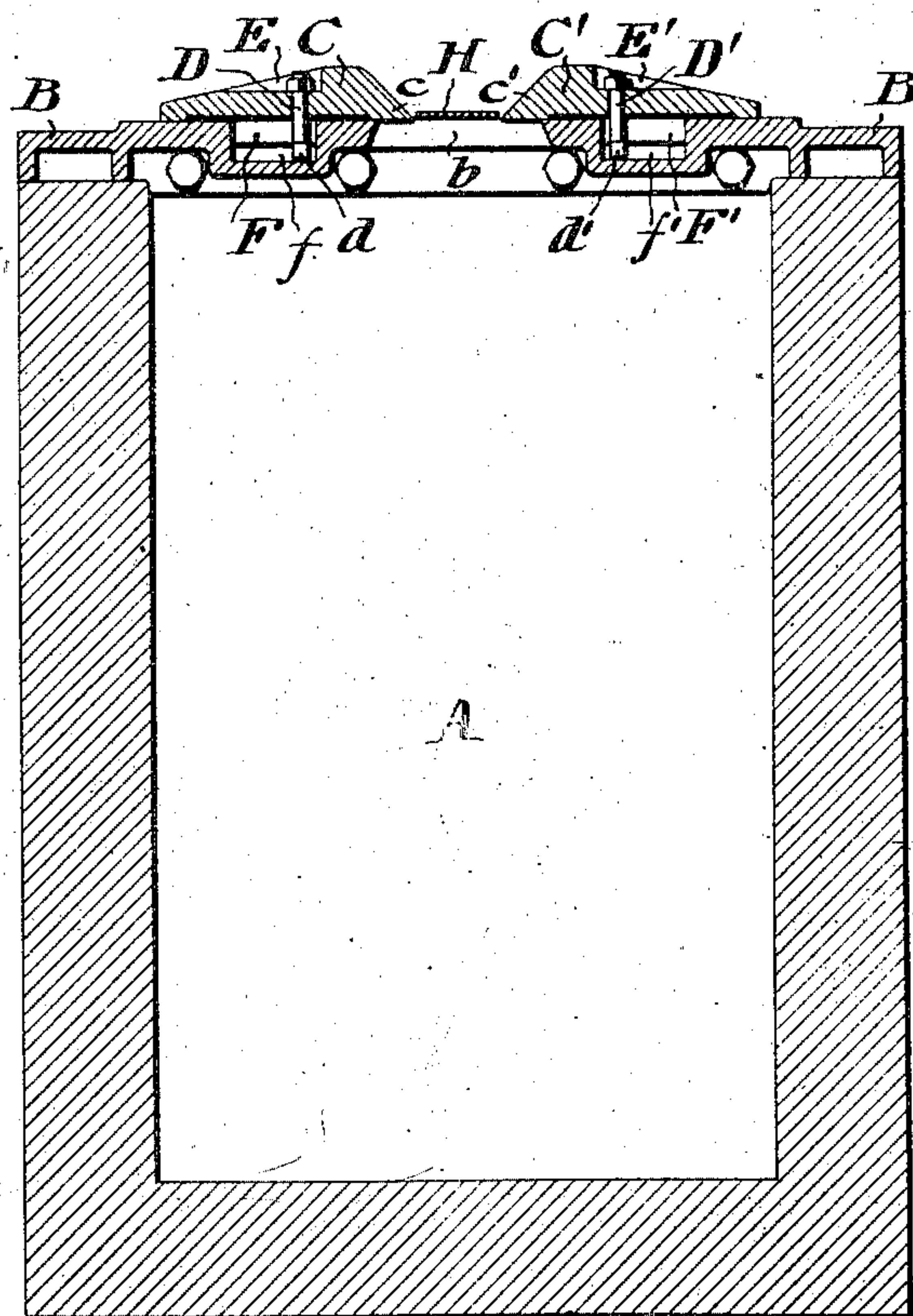
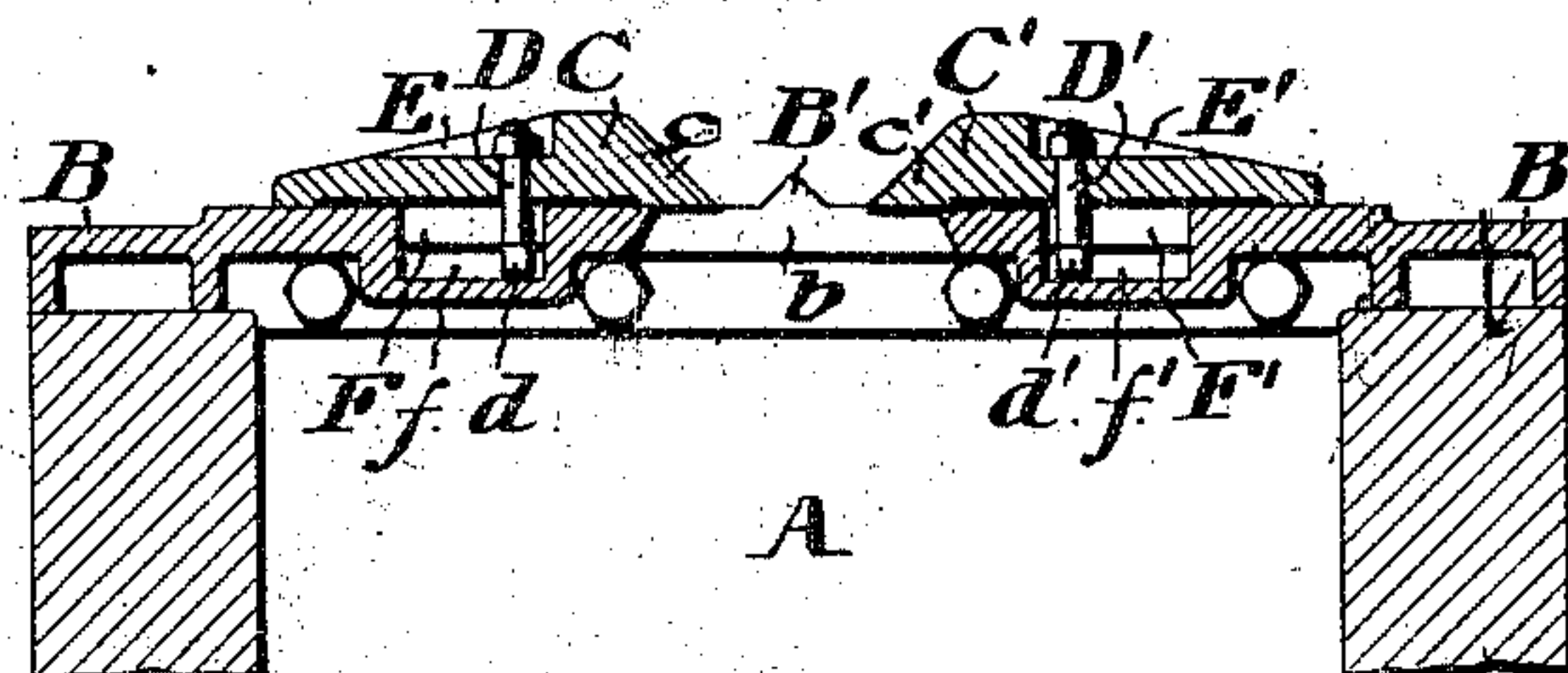


FIG. 4.



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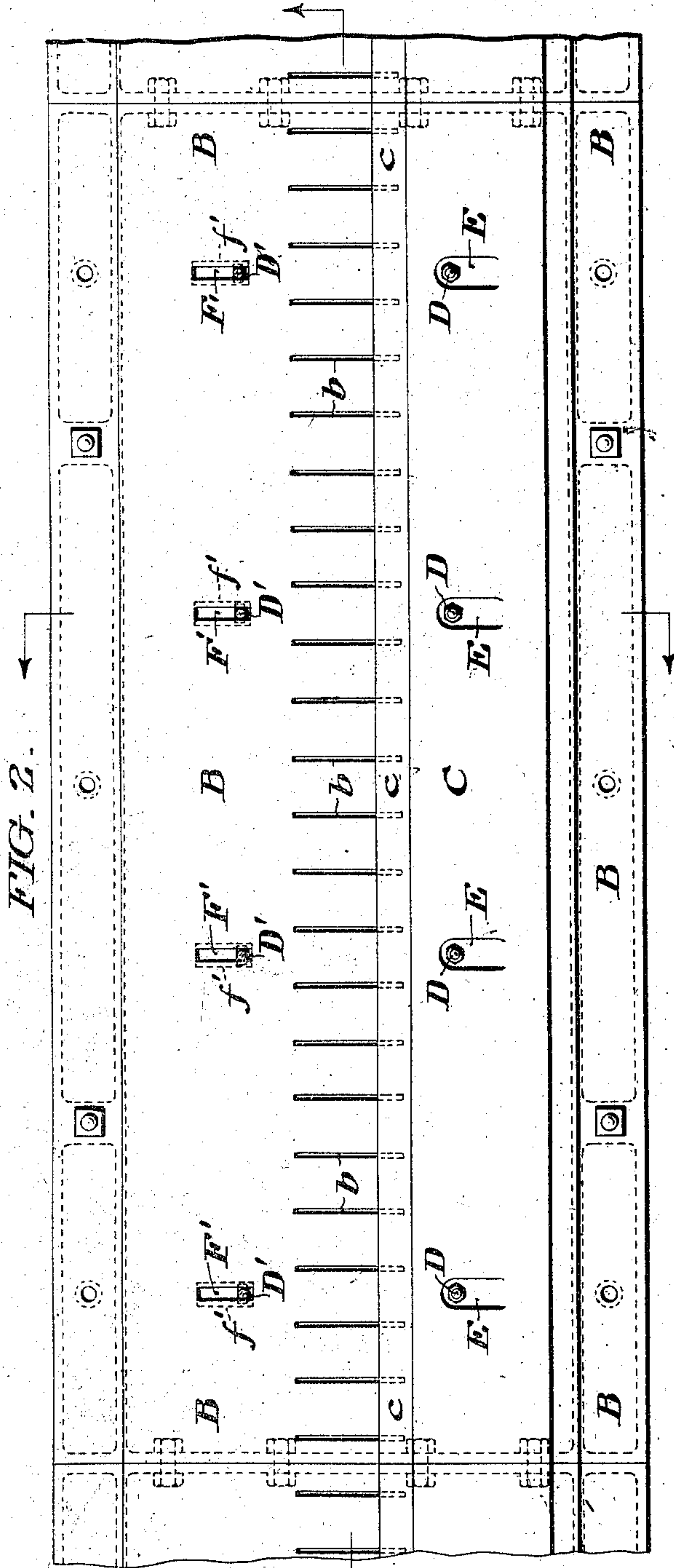
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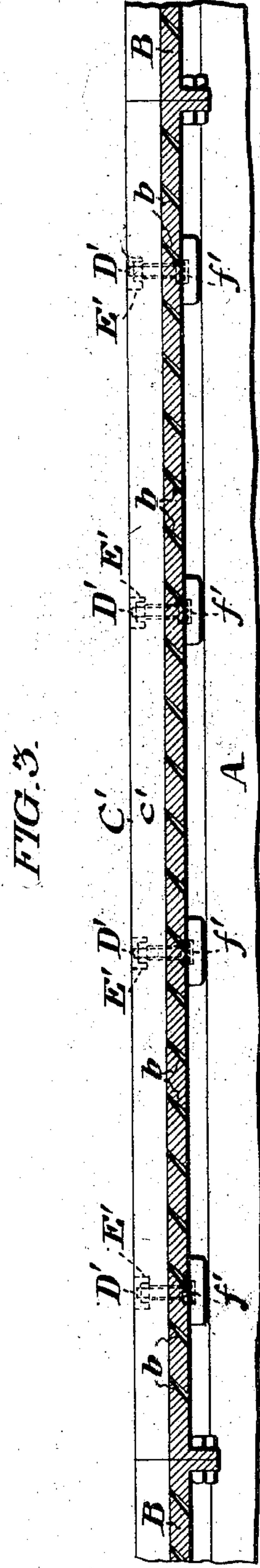
(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

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AIR CONVEYER.

SPECIFICATION forming part of Letters Patent No. 662,574, dated November 27, 1900.

Application filed July 14, 1900. Serial No. 23,578. (No model.)

To all whom it may concern:

Be it known that I, EUGENE L. MCGARY, a citizen of the United States, residing in the city of Pittsburg, county of Allegheny, and State of Pennsylvania, have invented certain new and useful Improvements in Conveyers for Material by Atmospheric Action, (usually termed "Air Conveyers,") whereof the following is a specification, reference being had to the accompanying drawings.

The underlying principle and mode of operation of my invention is similar to that of the process set forth in Letters Patent of the United States No. 545,013, dated August 20, 1895, and the features of improvement are intended to afford means for localizing the air-blast, so as to limit the discharge as far as possible to a given region of efficiency, and, furthermore, to provide a guide for the material which is being conveyed.

In the accompanying drawings, Figure 1 is a transverse view through a conveyer embodying my invention. Fig. 2 is a top or plan view thereof with one of the top plates removed to show the construction. Fig. 3 is a vertical longitudinal section through the table or top portion of the conveyer, and Fig. 4 is a transverse section through the table of a conveyer embodying the invention in a modified form.

Referring to the type of invention which is shown in Figs. 1, 2, and 3, A represents the conduit of the conveyer, whose area of cross-section is of course proportioned to the total area of discharge in the manner which is well understood. Said conduit is supplied with an air-blast under pressure from any convenient source, which, however, it is not deemed necessary to indicate in the drawings. The table or top of the conveyer comprises a bed-plate B, conveniently formed of contiguous sections bolted together and having air-slits *b*, preferably inclined, as shown, in the direction of the transit of material. The length of said slits corresponds with the maximum width of efficient surface desired in the conveyer; but as in many instances it may not be desired to utilize a conveying-path of such extreme width the extension of said slits beyond the required path would, of course, be

unproductive of any useful result and would needlessly waste a large percentage of the blast. To avoid this objection, I provide, upon the top of the conveyer-table and adjacent to one or both sides of the conveying-path, adjustable covering-strips C C'. The front edges of said strips are preferably inclined, as shown at *c c'*, so as to form a trough with shallow flaring sides, which are adapted to guide material passing between the same. Means for adjustment of said strips are also provided, consisting, preferably, of bolts D D', whose screw-nuts are mounted in counter-sunk sockets E E', formed in the upper surface of the plates. Said bolts extend down into slots F F', formed in the table-top B, the lower portions of said slots being undercut or enlarged laterally, as indicated at *f f'*, so that the bolt-heads *d d'* may engage beneath the edges of the slots. The covering-strips may thus be shifted inward or outward with relation to the slits *b*. Thus the region of air-discharge may be limited to any desired width by setting one or both of the adjustable covering-strips in the appropriate position, and, moreover, raised guide edges are afforded for the material conveyed, which in this instance is in the form of metal strips or bands H.

In the arrangement shown in Fig. 4 the general arrangement and construction of the parts are similar to that hereinbefore described; but I form a longitudinal rib B' centrally along the slotted portion of the table. Said rib may be integral with the table itself or may be made separate and attached thereto. If the rib is integral with the table, the slit *b* may cut through the rib, as is the case in Fig. 4, where the section is taken through one of the slits. If the rib is formed by a separate piece, it may be continuous. The latter construction has the advantage of effecting a further economy of the blast. The effect thereof is to subdivide the path of the travel of material into two channels, the central rib B' forming an intermediate guide which directs the material as indicated in the figure.

Having thus described my invention, I desire to have it understood that I do not limit myself to the use of a pair of covering-strips,

since some of the results of the invention may be attained by means of one only.

I claim—

1. In an air conveyer, comprising a conduit
5 and a table having an air-passage formed
therethrough, the combination, with said table, of a covering-strip running longitudi-
nally with said table, but adjustable laterally
with relation to the air-passages thereof; and
10 means for securing said strip, substantially
as described.

2. In an air conveyer, comprising a conduit
and a table having air-passages formed there-
through, the combination, with said table, of
15 a pair of covering-strips running longitudi-
nally with said table, and adjustable laterally
with relation to the air-passages thereof; and

means for securing said strips, substantially
as described.

3. In an air conveyer, comprising a conduit 20
and a table having air-passages formed there-
through, the combination, with said table, of
a pair of covering-strips running longitudi-
nally with said table, and adjustable laterally
with relation to the air-passages thereof; 25
means for securing said strips; and a guide-
rib running longitudinally with said table
and between the proximate edges of said
strips, substantially as described.

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Witnesses:

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