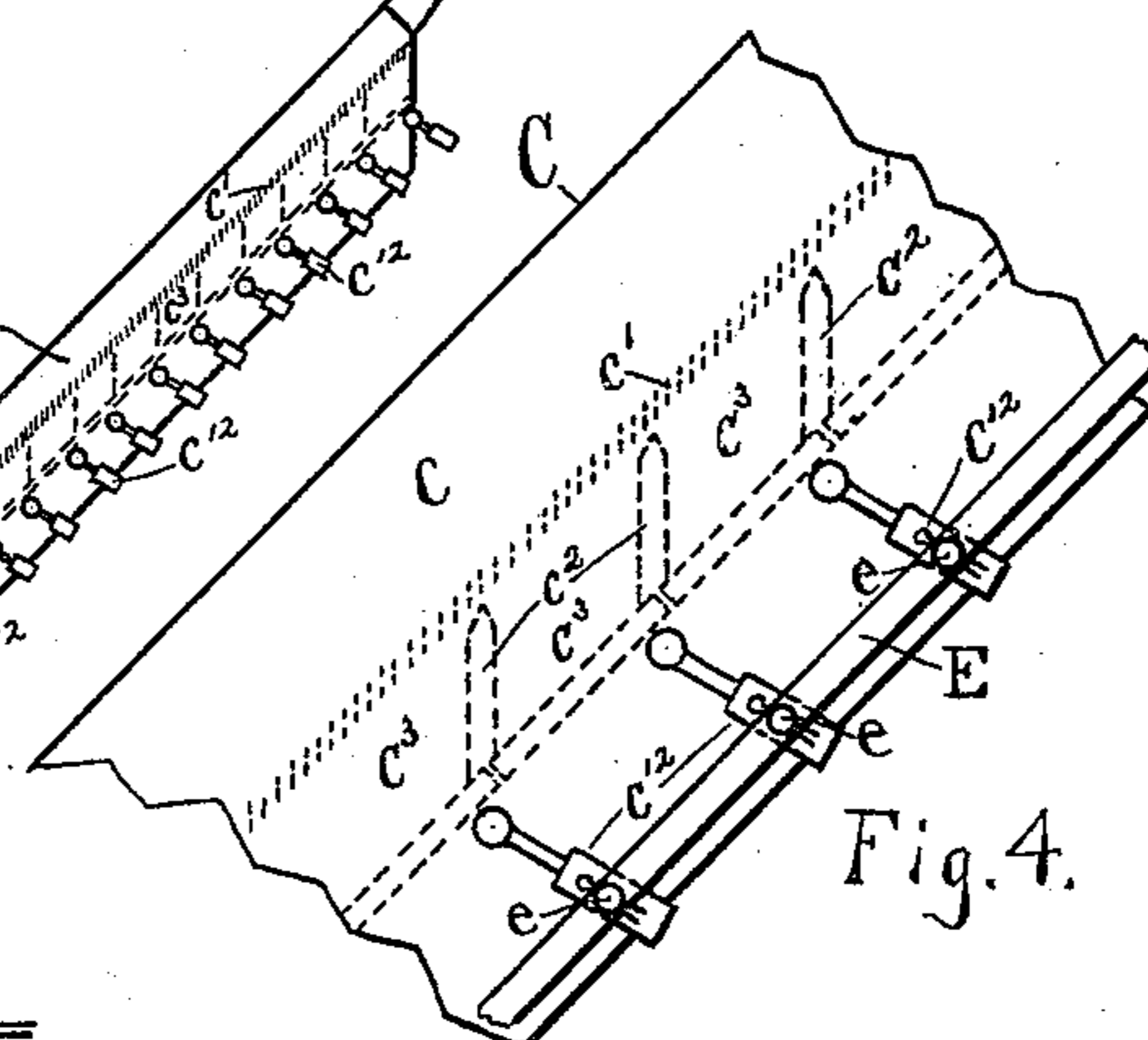
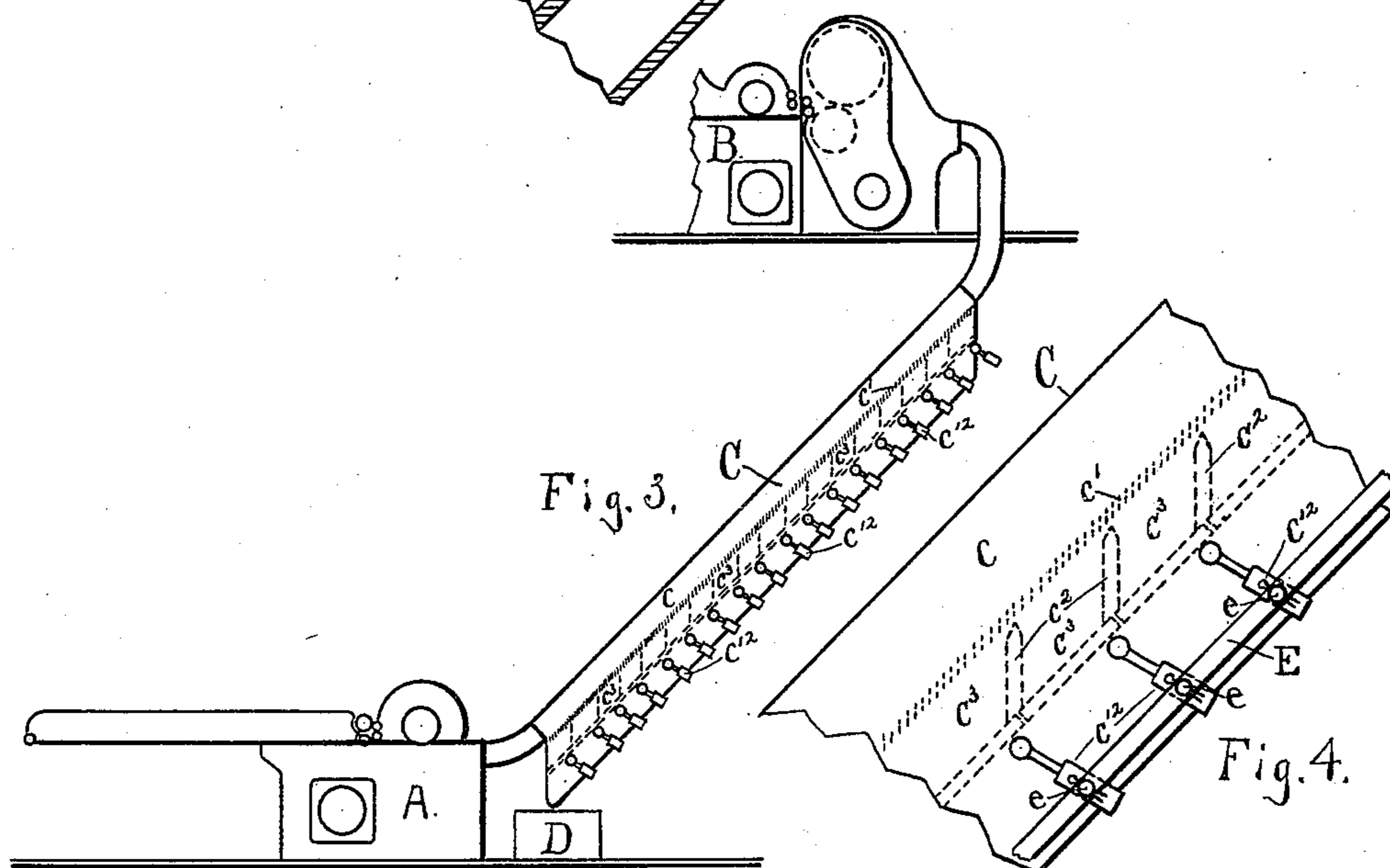
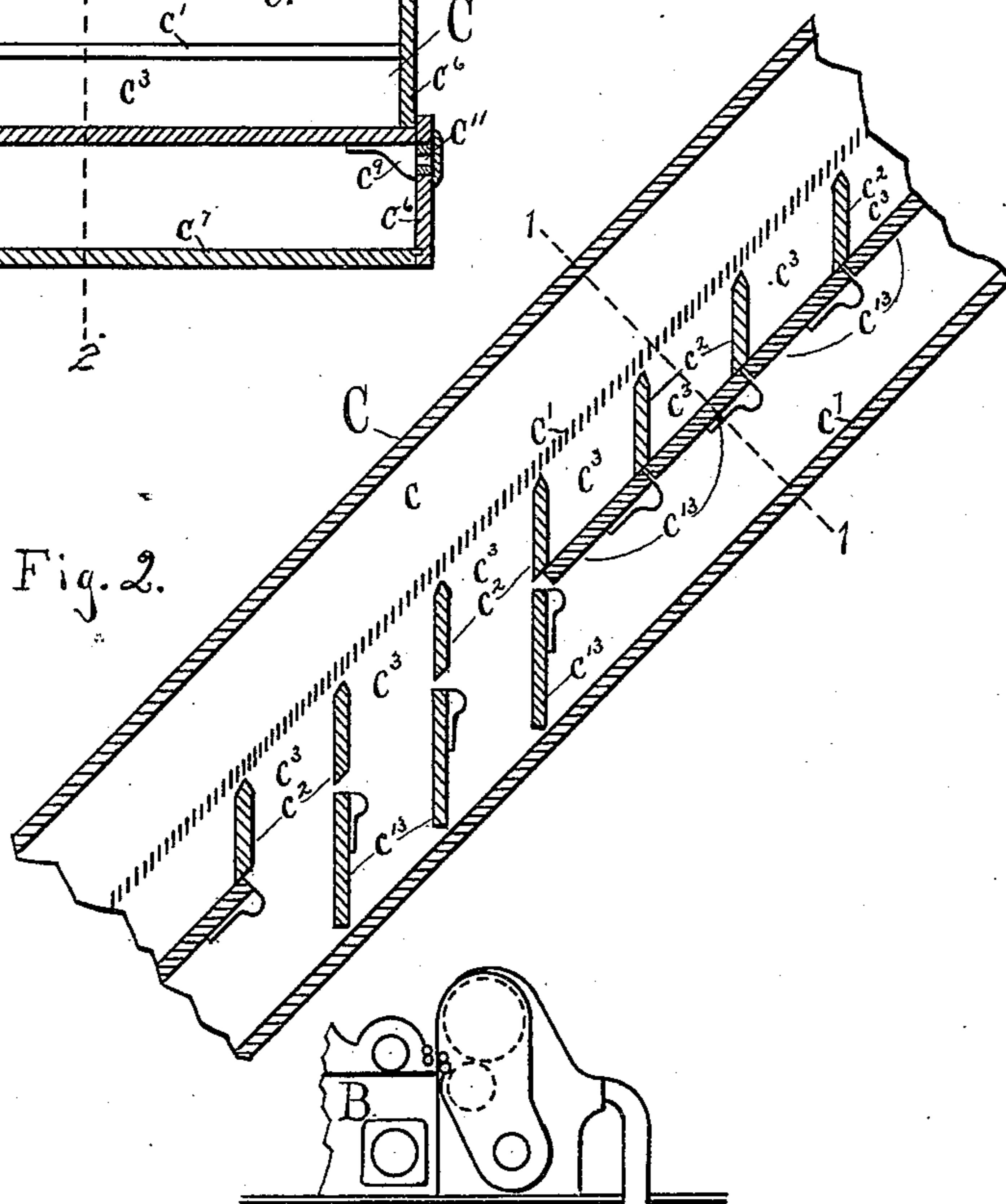
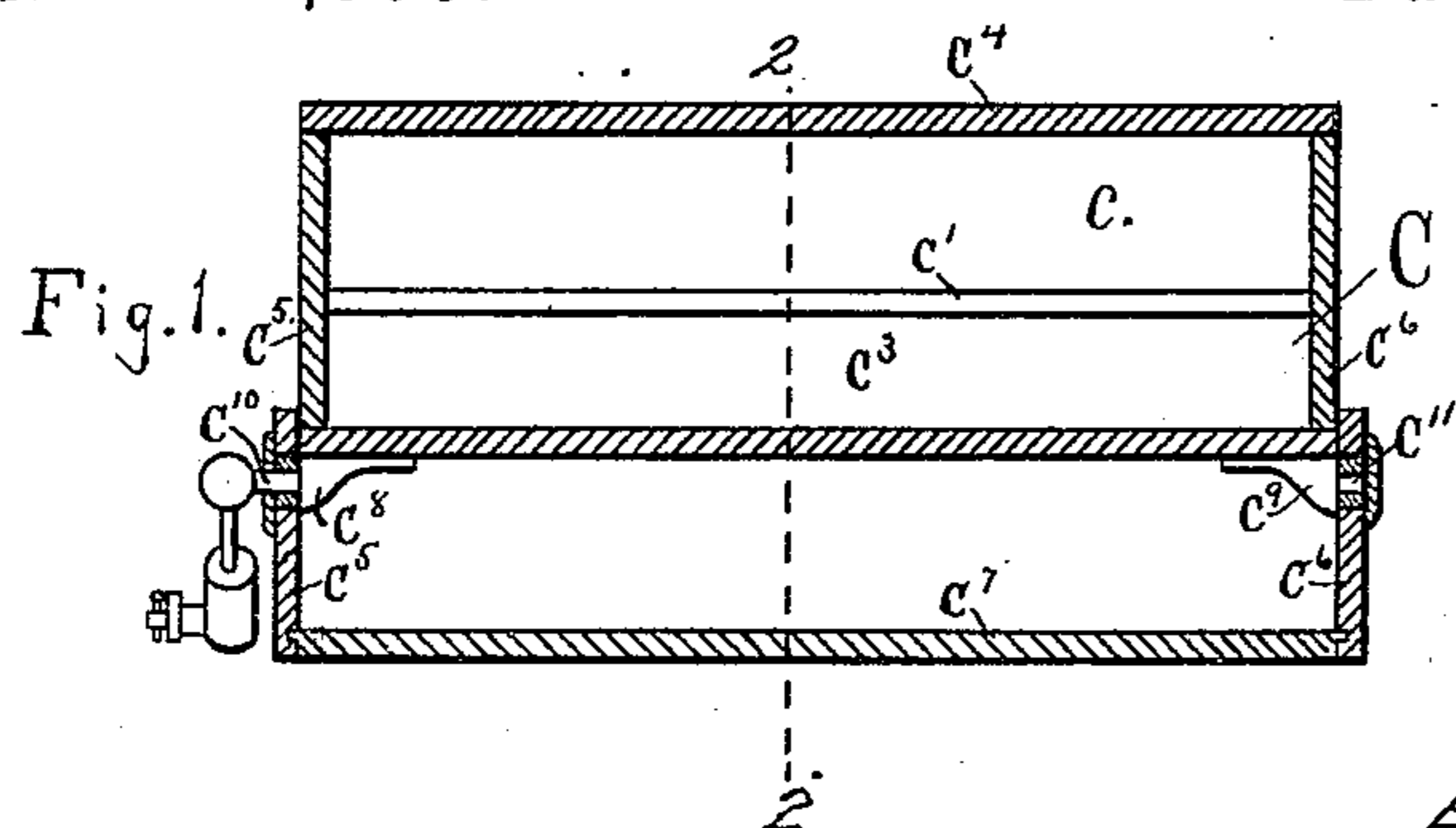


(No Model.)

H. C. PERHAM.
DUST TRUNK FOR COTTON OPENERS.

No. 427,008.

Patented Apr. 29, 1890.



WITNESSES:

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HAVEN C. PERHAM, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE
KITSON MACHINE COMPANY, OF SAME PLACE.

DUST-TRUNK FOR COTTON-OPENERS.

SPECIFICATION forming part of Letters Patent No. 427,008, dated April 29, 1890.

Application filed December 26, 1889. Serial No. 334,934. (No model.)

To all whom it may concern:

Be it known that I, HAVEN C. PERHAM, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Dust-Trunks for Cotton-Openers, of which the following is a specification.

My invention relates to dust-trunks for cleaning fibers, as cotton; and the trunk shown in the drawings is like trunks in common use, having a fiber-passage through which cotton or other fibers are drawn by a current of air from a machine which opens the fibers to another machine which forms said fibers into a lap or sheet, the bottom of the fiber-passage consisting of a grating, usually, of parallel transverse bars arranged at intervals. Immediately below the grating are arranged at suitable intervals a series of transverse vertical division-boards to receive foreign matters, which, being heavier than the cotton, sift through said grating into said pockets, these parts being substantially as shown in Patent No. 388,070, granted to me August 21, 1888, and the fiber-passage and the grating being inclined, as therein shown; but instead of the bottom of the trunk being common to all the dust-pockets, as shown and described in said patent, I use a separate tightly-fitting hinged bottom for each dust-pocket and below said dust-pockets an inclined chute to receive the contents of said pockets when the bottoms of the same are dropped or opened to allow said contents to run down said chute and to be discharged from the end thereof by their own gravity.

In the accompanying drawings, Figure 1 is a transverse section on the line 1 1 in Fig. 2, and Fig. 2, a longitudinal section on the line 2 2 in Fig. 1, these figures showing my improvement applied to a dust-trunk; Fig. 3, a side elevation of an opener arranged on one floor of a building and a portion of a lapper arranged on the next floor above, and an inclined dust-trunk containing my improvement connecting said opener and lapper, the grating, division-boards, and dust-pocket bottoms being shown by dotted lines; Fig. 4, a side elevation of a portion of said dust-trunk, showing the weighted arms connected to each

other by a rod and the dotted lines indicating the parts shown by dotted lines in Fig. 3.

A is an opener of any usual construction; B, a lapper of ordinary construction placed in a room above that which contains the opener A, and C is a dust-trunk connecting the opener and lapper for the usual purpose, said dust-trunk being inclined substantially throughout its length, as shown and described in said patent. The fiber-passage *c* of the trunk C is arranged above the grating *c'*, which forms the bottom of said passage and opens into the dust-pockets *c³* or spaces between the vertical transverse division-boards *c²* and the sides *c⁵ c⁶* of said trunk C. The top *c⁴* of the dust-trunk is parallel with the grating *c'* and with the bottom *c⁷* of said dust-trunk, the latter being immovably connected to the sides *c⁵ c⁶* of said trunk at a sufficient distance below the lower ends of the division-boards to form a dust-passage for the contents of all of said pockets below the division-boards. Each of the dust-pockets is closed by a separate bottom *c¹³*, hinged at its upper edge to the sides of the trunk by means of trunnions *c⁸ c⁹*, secured to said bottoms and extending into or through holes *c¹⁰ c¹¹* in the sides of said trunk, one of the trunnions of each of said bottoms being provided outside of the trunk with a weighted or heavy arm *c¹²*, secured to said trunnion at such an angle as by its weight and leverage to keep said bottom against two adjacent division-boards and to close the bottom of a dust-pocket in an air-tight manner. By raising the weighted arm *c¹²* of any bottom said bottom *c¹³* is swung downward from its dust-pocket and allows the contents of said pocket to fall into the chute formed by the inclined bottom *c⁷* and vertical sides *c⁵ c⁶* of the dust-trunk and to be carried by their own weight to the lower end of said chute and to be discharged therefrom into a suitable dust-bin or receptacle D, or in a well-known manner into any passage connected with a dust-room or with the outer air. All the arms *c¹²* may be jointed to the same rod E by pivots *e*, so that giving such rod a longitudinal motion in one direction will open all the bottoms *c¹³* and in the other direction will close said bottoms.

I claim as my invention—

1. A dust-trunk provided with a grating, with a fiber-passage arranged above said grating, with dust-pockets arranged below said grating and having separate bottoms which
5 may be opened to discharge the contents of said pockets, and with an inclined chute arranged below said pockets to conduct matters discharged from said pockets to a proper receptacle, as and for the purpose specified.

10 2. A dust-trunk provided with a grating, with a fiber-passage arranged above said grating, with dust-pockets arranged below said grating and having separate bottoms pivoted at their edges and adapted thereby
15 to be opened to discharge the contents of said pockets, and with an inclined chute arranged below said pockets to conduct matters discharged from said pockets to a suitable receptacle, in combination with arms
20 connected to the pivots of said bottoms outside of said trunk at an angle to said bottoms and adapted by their weight to close said bottoms against said pockets and to be raised to open said pockets, as and for the purpose
25 specified.

3. A dust-trunk provided with a grating, with a fiber-passage arranged above said grating, with dust-pockets arranged below said grating and having separate bottoms pivoted at their edges and adapted thereby
30 to be opened to discharge the contents of said pockets, and with an inclined chute arranged below said pockets to conduct matters discharged from said pockets to a suitable receptacle, in combination with arms
35 connected to the pivots of said bottoms outside of said trunk at an angle to said bottoms and adapted by their weight to close said bottoms against said pockets and to be raised to open said pockets, and a rod connecting
40 said arms to enable said pockets to be opened or closed simultaneously, as and for the purpose specified.

In witness whereof I have signed this specification, in the presence of two attesting witnesses, this 10th day of December, A. D. 1889.

HAVEN C. PERHAM.

Witnesses:

ALBERT M. MOORE,
HENRY A. DAVIS.