

No. 789,711.

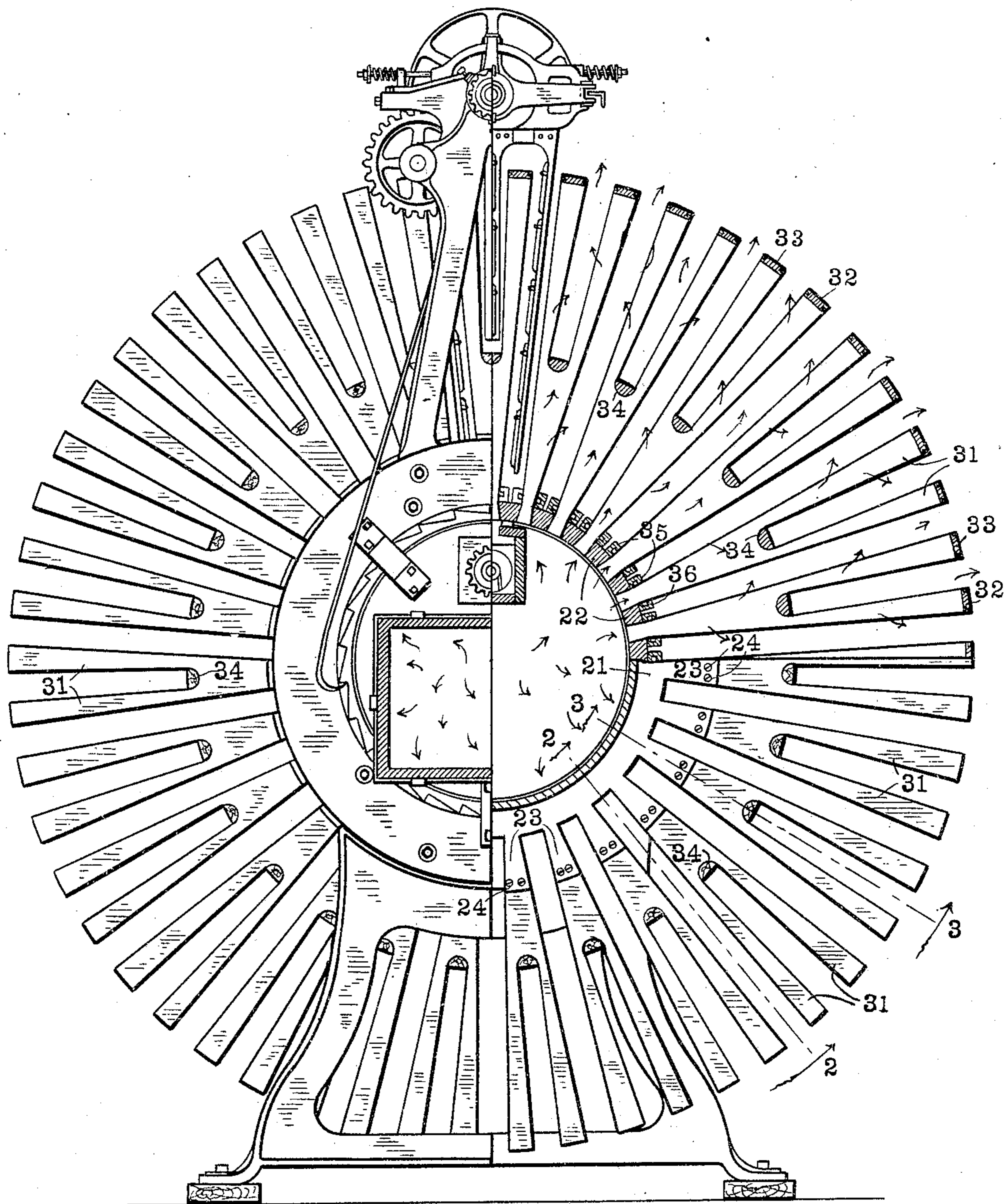
PATENTED MAY 16, 1905.

A. C. BRANTINGHAM.  
POCKET FOR DUST COLLECTORS.

APPLICATION FILED NOV. 9, 1903.

2 SHEETS—SHEET 1.

*Fig. 1.*



Witnesses  
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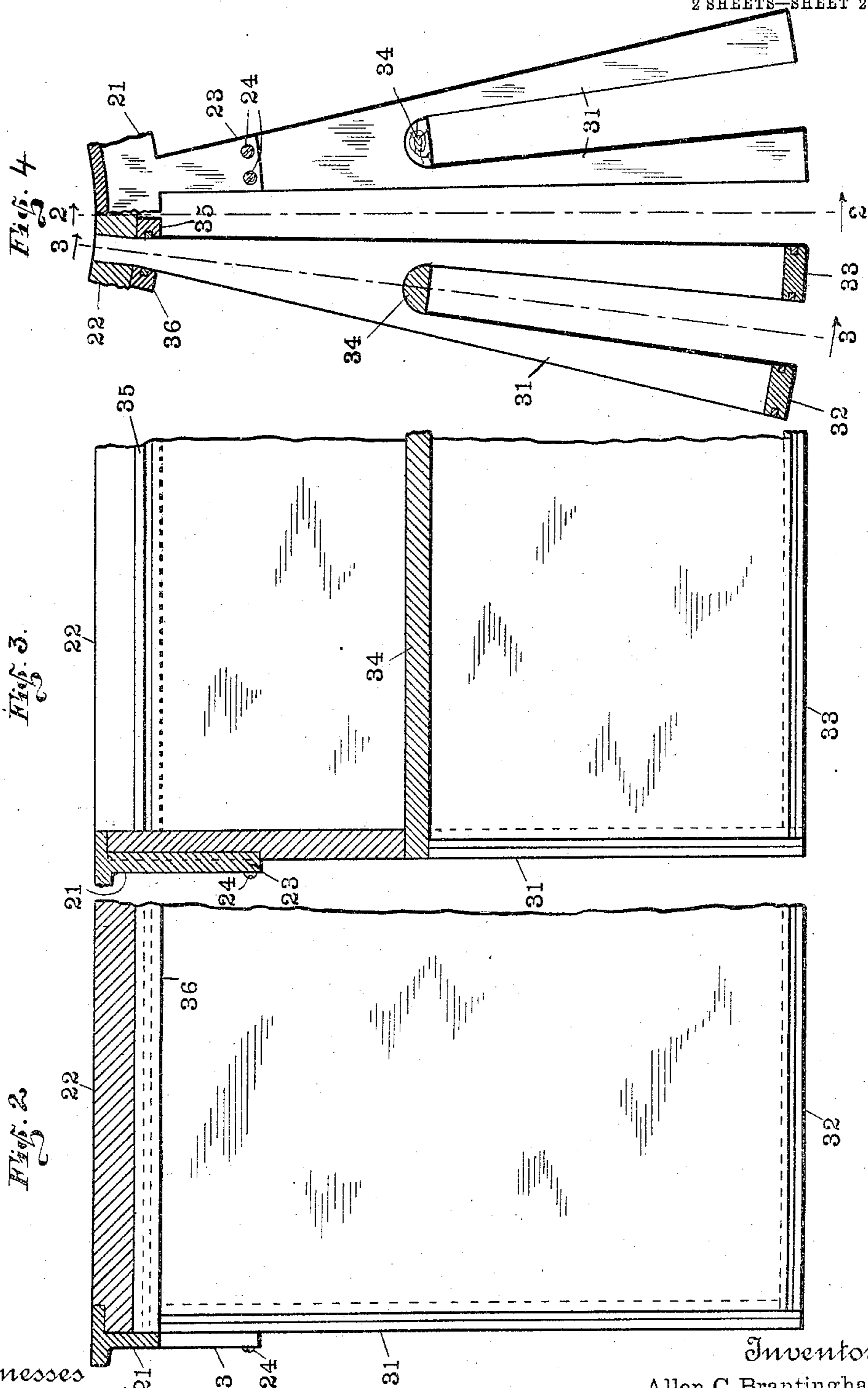
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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

ALLEN C. BRANTINGHAM, OF TOLEDO, OHIO.

## POCKET FOR DUST-COLLECTORS.

SPECIFICATION forming part of Letters Patent No. 789,711, dated May 16, 1905.

Application filed November 9, 1903. Serial No. 180,405.

*To all whom it may concern:*

Be it known that I, ALLEN C. BRANTINGHAM, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Pockets for Dust-Collectors, of which the following is a specification.

The object of my said invention is to produce for use in dust-collectors separate "pockets" or divisions, which may be constructed in quantities and easily and quickly inserted into and removed from the frame of the dust-collecting structure and which shall embody a maximum amount of filtering or separating surfaces.

Said invention will be first fully described and the novel features thereof then pointed out in the claim.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a view, partly in end elevation and partly in transverse vertical section, of a dust-collecting machine provided with separating-pockets embodying my present invention; Fig. 2, a detail view as seen when looking in the direction indicated by the arrows from the point indicated by the dotted line 2 2 in Figs. 1 and 4, showing a fragment of one of the said pockets in side elevation; Fig. 3, a similar view as seen when looking from the point indicated by the dotted lines 3 3 in said figures; and Fig. 4, a view showing two of said pockets arranged side by side, one being shown in end elevation and the other in transverse section.

This dust-collector, generally speaking, is not, so far as its general construction and arrangement are concerned, involved in my present invention and will not, therefore, be further described herein, except incidentally in describing said invention. The rotary frame of said dust-collector, however, is provided at each end with an annular flange 21, to which the ends of the pocket-frames are suitably secured, and also with longitudinal frame members 22, extending between said flanges substantially from end to end of the structure, against which the inner bars of the pocket-

frames will rest when in place. The flanges 21 are shown as embodying radial arms 23, and the means for connecting the pocket-frames thereto is shown as screws 24.

The pockets each embody forked-shaped end pieces 31, two outer longitudinal ribs 32 and 33, a middle longitudinal rib 34, and two inner longitudinal ribs 35 and 36. The filtering-cloth (of which the separating-surface of each pocket is composed) extends, for example, from a rib 35 to rib 33, from rib 33 to rib 34, from rib 34 to rib 32, and from rib 32 to rib 36, where it terminates. As will be readily understood, this arrangement gives in the same sized structure a much larger separating-surface than a structure in which the central rib 34 and the parts of cloth extending thereto were absent. In a rotary dust-collector where the pockets are disposed radially providing for the required space between the inner portions of said pockets has necessarily made the space between or within the outer sides of the pockets much larger than necessary. By means of my present invention I have utilized this heretofore waste space, and thus secured a maximum of separating-surface in a structure of minimum size. These pockets thus constructed may be made in large quantities and are capable of being inserted into the structure provided to receive them conveniently and there secured merely by the use of the screw 24 and may correspondingly be removed at any time (by taking out said screws) quickly and without difficulty, and so thus very conveniently cleaned or repaired in case of necessity. As above stated also, they embody a maximum of separating-surface, and consequently of efficiency, within a minimum of space, which is highly desirable, especially in large mills, where economy of space is greatly to be desired.

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

The combination with the rotary frame structure of a dust-collector having longitudinal members 22, and annular flanges 21, of separating-pockets embodying the several

frame-bars 35, 33, 34, 32 and 36, two end  
pieces 31, between which said several bars  
extend, and a suitable cloth extending over  
said bars as shown and thus forming two  
5 longer and two shorter separating-surfaces,  
the frame-bars 35 and 36 of said separating-  
pockets arranged to abut against the structure  
members 22, and the end pieces of said sepa-  
rating-pockets being arranged to be secured

to the annular flanges 21, all substantially as  
shown and described.

In witness whereof I have hereunto set my  
hand and seal, at Toledo, Ohio, this 4th day of  
November, A. D. 1903.

ALLEN C. BRANTINGHAM. [L. S.]

Witnesses:

G. N. SMITH,  
WADE HOLLAND.