

(No Model.)

J. B. HART & E. H. WALKER.

RAG CLEANING MACHINE.

No. 311,187.

Patented Jan. 27, 1885.

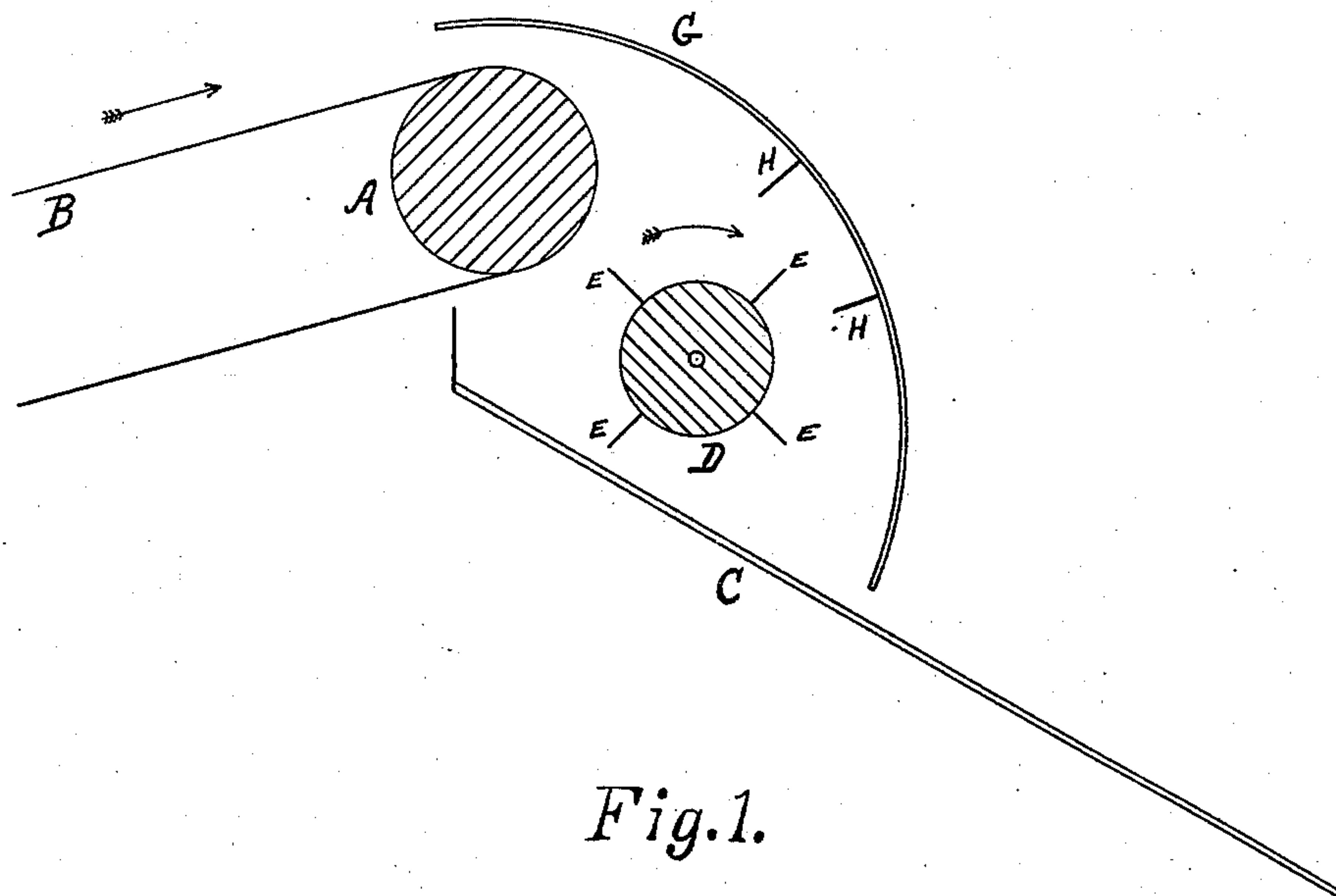


Fig. 1.

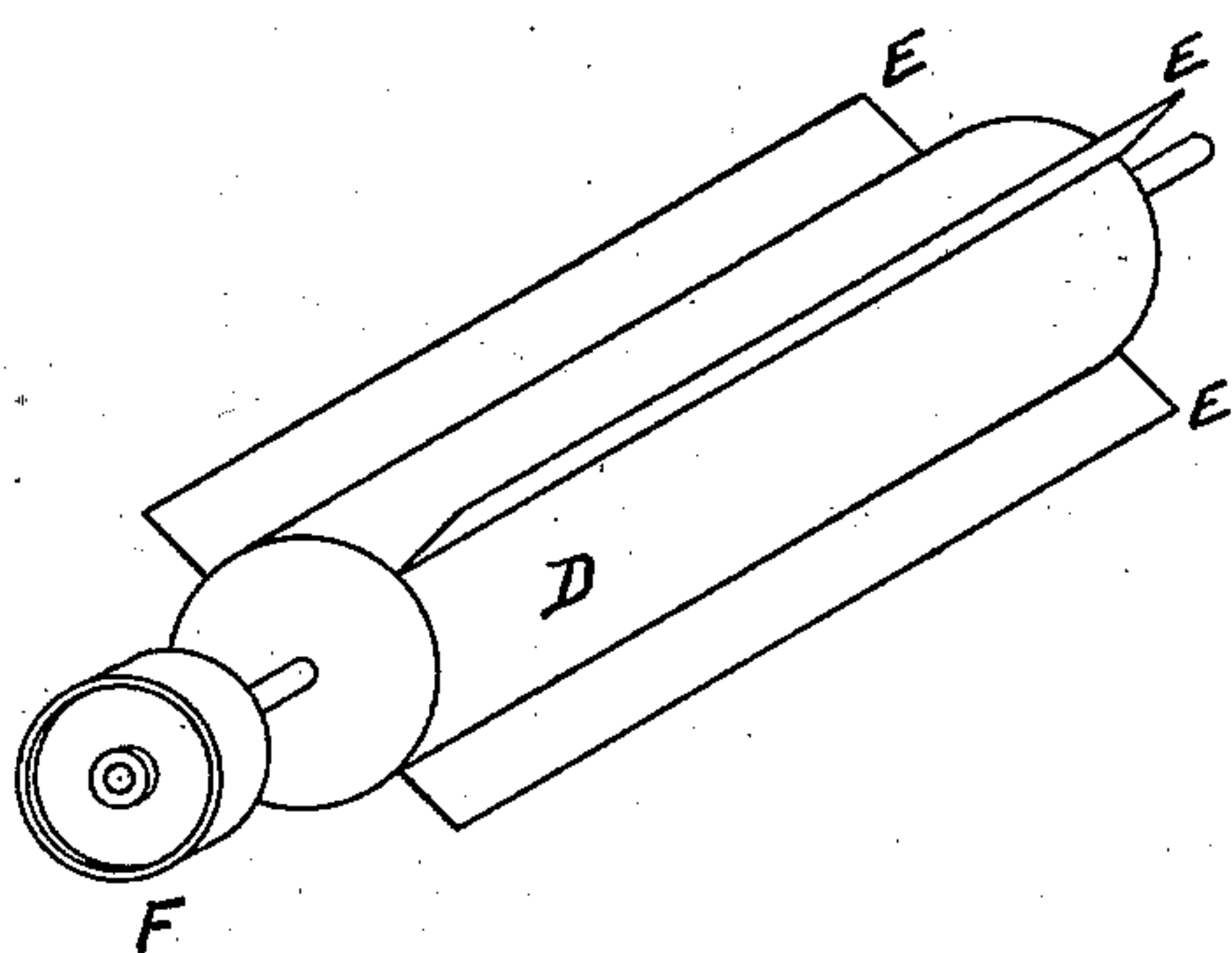


Fig. 2.

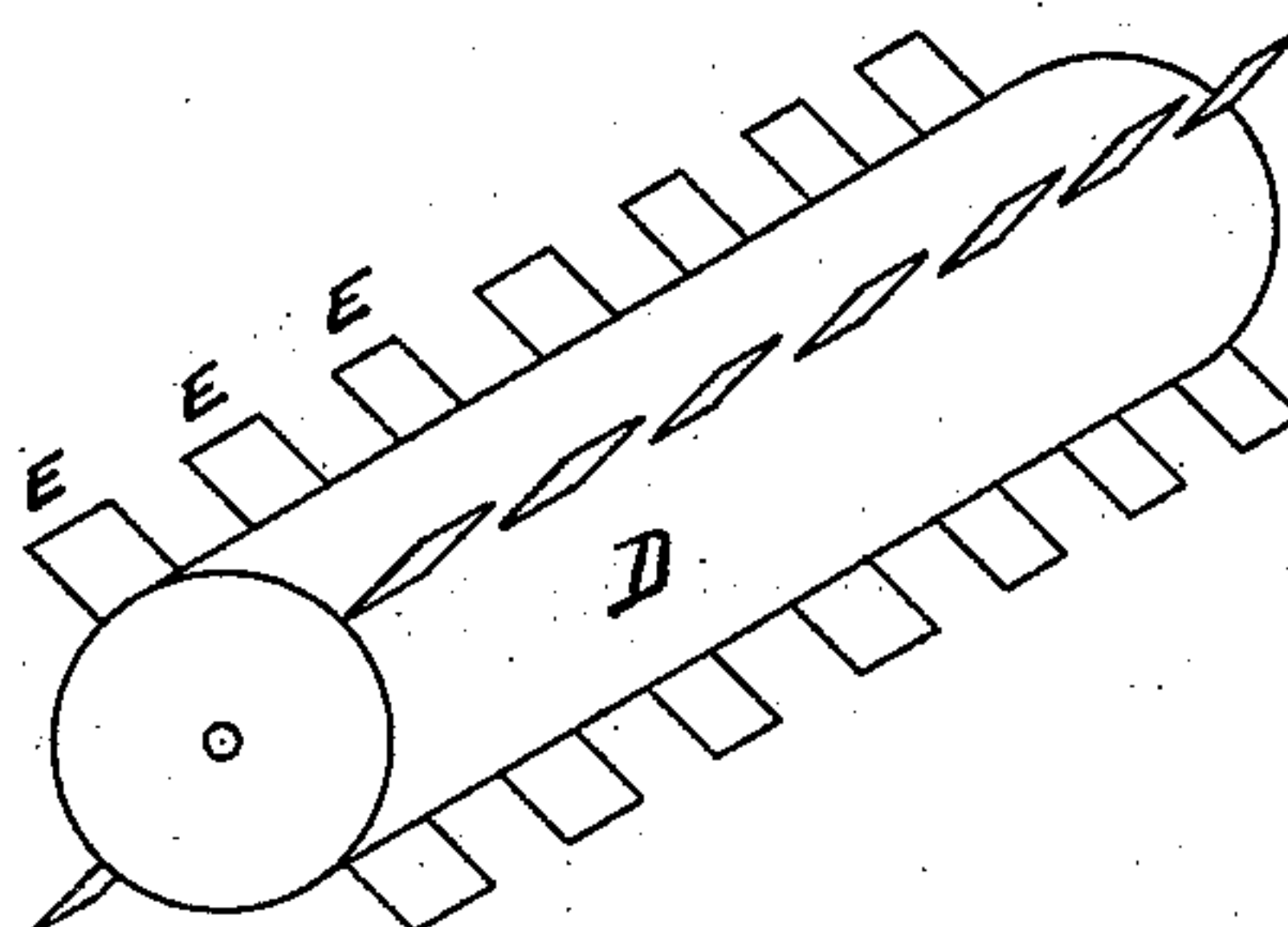


Fig. 3.

Witnesses,

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UNITED STATES PATENT OFFICE.

JOHN B. HART AND EMERY H. WALKER, OF HOLYOKE, MASSACHUSETTS.

RAG-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 311,187, dated January 27, 1885.

Application filed May 5, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOHN B. HART and EMERY H. WALKER, citizens of the United States, residing at Holyoke, in the county of Hampden and Commonwealth of Massachusetts, have invented a new and useful Improvement in Rag-Cleaning Machines, of which the following is a specification.

Our invention relates to improvements in appliances for the treatment of cut rags used in the manufacture of paper; and the objects of our improvements are to secure a thorough mixing, stirring, and shaking of the rags for the purpose of separating foreign substances from the rags and disengaging small particles of cloth from the larger ones. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section showing our invention and parts connected therewith. Fig. 2 is a perspective view of a portion of the invention in detail, and Fig. 3 is a perspective view of a modified form of parts represented in Fig. 2.

Similar letters refer to like parts throughout the several views.

In Fig. 1, A is a roll or drum, which is driven by suitable mechanism, and by its revolution imparts motion to the endless belt or carrier B. The rags to be acted upon are placed upon the top side of said carrier B, and, traveling in the direction indicated by the arrow, pass over the roll A and fall therefrom.

C is a screen, made of lattice-work, interlaced wire, or other suitable material, properly arranged to form a perforated receptacle, and located, as shown, to receive the rags delivered by the carrier B.

D is a shaft or cylinder having projecting arms E E, &c. The shaft D is supported by suitable bearings, and has a pulley, F, through which rotary motion can be transmitted to the said cylinder D. The cylinder D is placed beyond the carrier-roll A, and above and nearly in contact with the screen c, for the purpose of stirring and shaking the rags passing through the apparatus.

G is a bonnet or shield, which covers and closes in the space about the cylinder D, for the purpose of preventing the throwing off of the rags by the action of said cylinder D and arms E E of same.

H H are wings attached to the bonnet G, for the purpose of catching a part of the rags thrown upward by the revolving shaft, and allowing them to fall again upon said cylinder to be further acted upon. The arms E E, &c., may be made in single continuous pieces, as shown in Fig. 2, or they may be made up of sections of any desirable form, one arrangement being shown in Fig. 3.

In operation the rags fall upon the carrier B, pass over the roll A, fall upon the upper part of the screen C and upon the rapidly-revolving cylinder D. The arms E E, &c., toss the rags about in the confined space between the bonnet G and the screen C, and thoroughly stir and shake said rags, so that the dust is separated from the rags and caused to fall through the screen, while, in due time, the rags descend to the lower part of the inclosed space. From the lower part of the bonnet G the rags slide down the incline of the screen and are carried away by suitable devices.

The construction of the screen and carrying devices referred to are not described or illustrated in detail in this connection. Said screen and carriers form, in combination, a device for the cleaning of rags and the saving of small rags, fully described by us in our application No. 127,238, filed April 9, 1884.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a rag-cleaning machine, the combination of an endless feeding-belt or carrier, a revolving shaft or cylinder having beating-arms, a bonnet or shield inclosing said shaft or cylinder, and a screen placed below the latter and the forward end of the feeding-belt, substantially as set forth.

2. In a rag-cleaning machine, the combination of an endless feeding-belt or carrier, a revolving shaft or cylinder having beating-arms, a bonnet or shield inclosing said shaft or cylinder, and provided on its inner side with wings, and an inclined screen placed below the latter and the forward end of the feeding-belt, substantially as set forth.

JOHN B. HART.
EMERY H. WALKER.

Witnesses:

H. K. HAWES,
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