

(No Model.)

F. STILES.  
TOBACCO DRIER.

No. 351,409.

Patented Oct. 26, 1886.

*Fig. 1.*

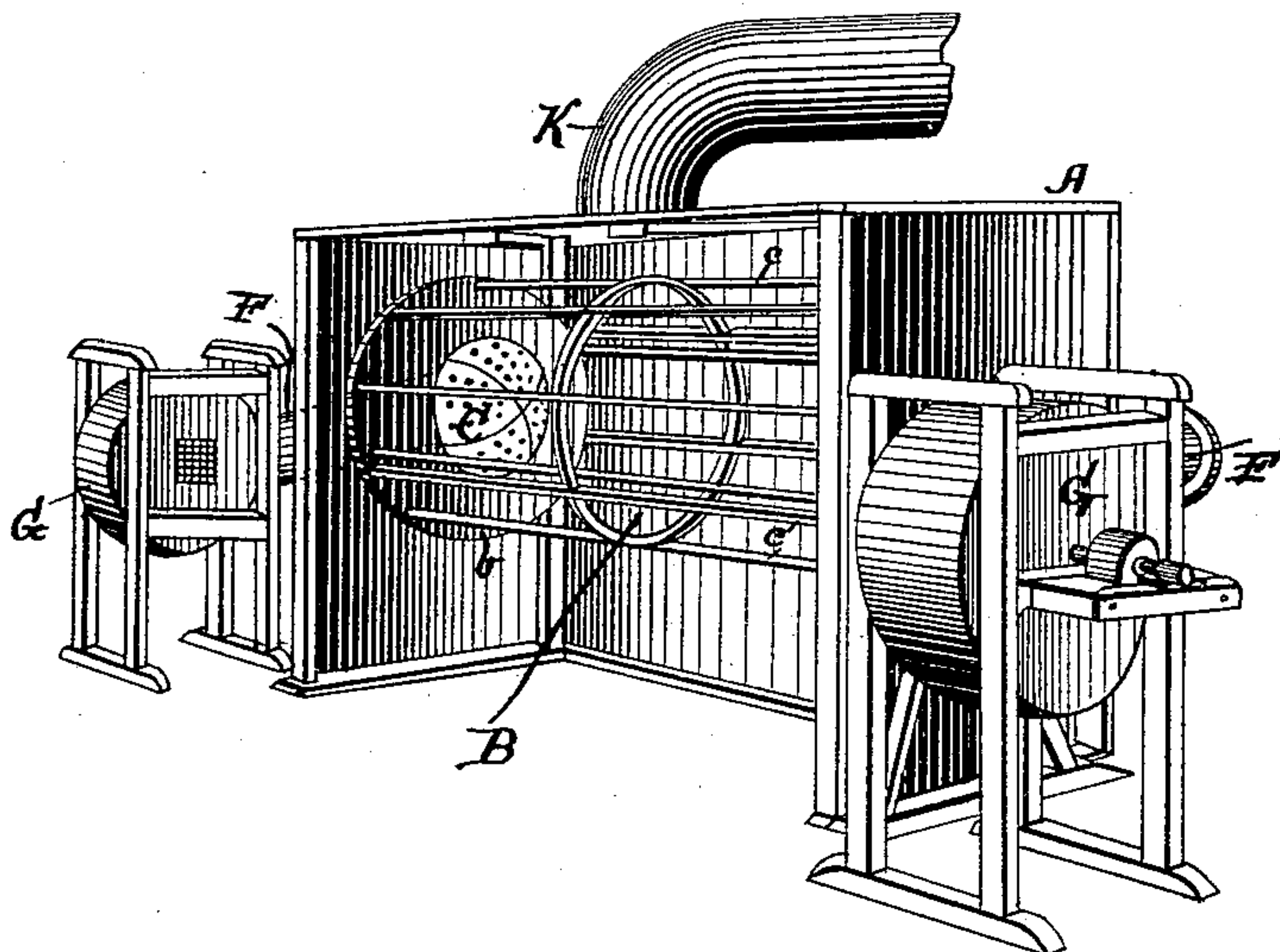
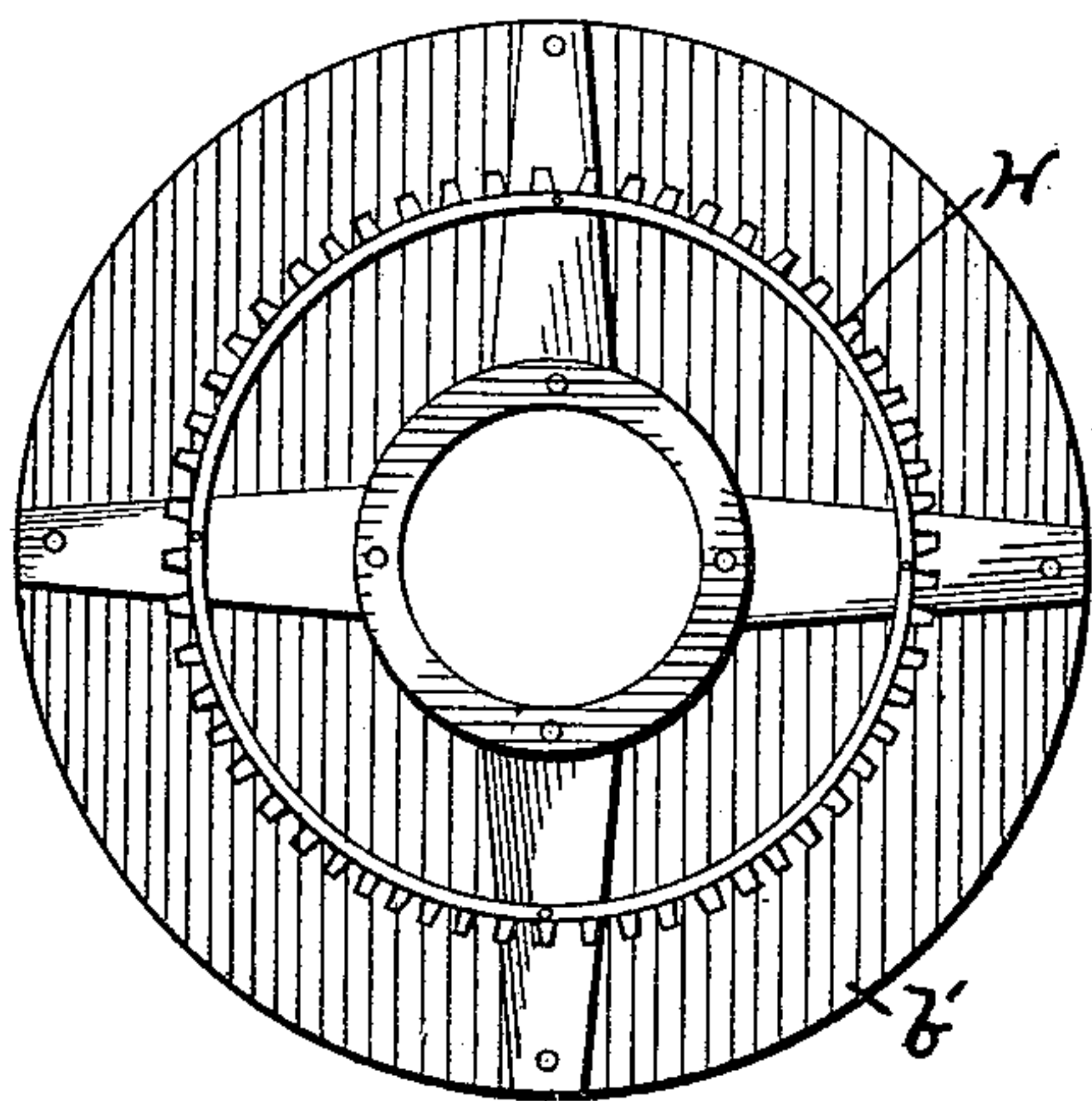
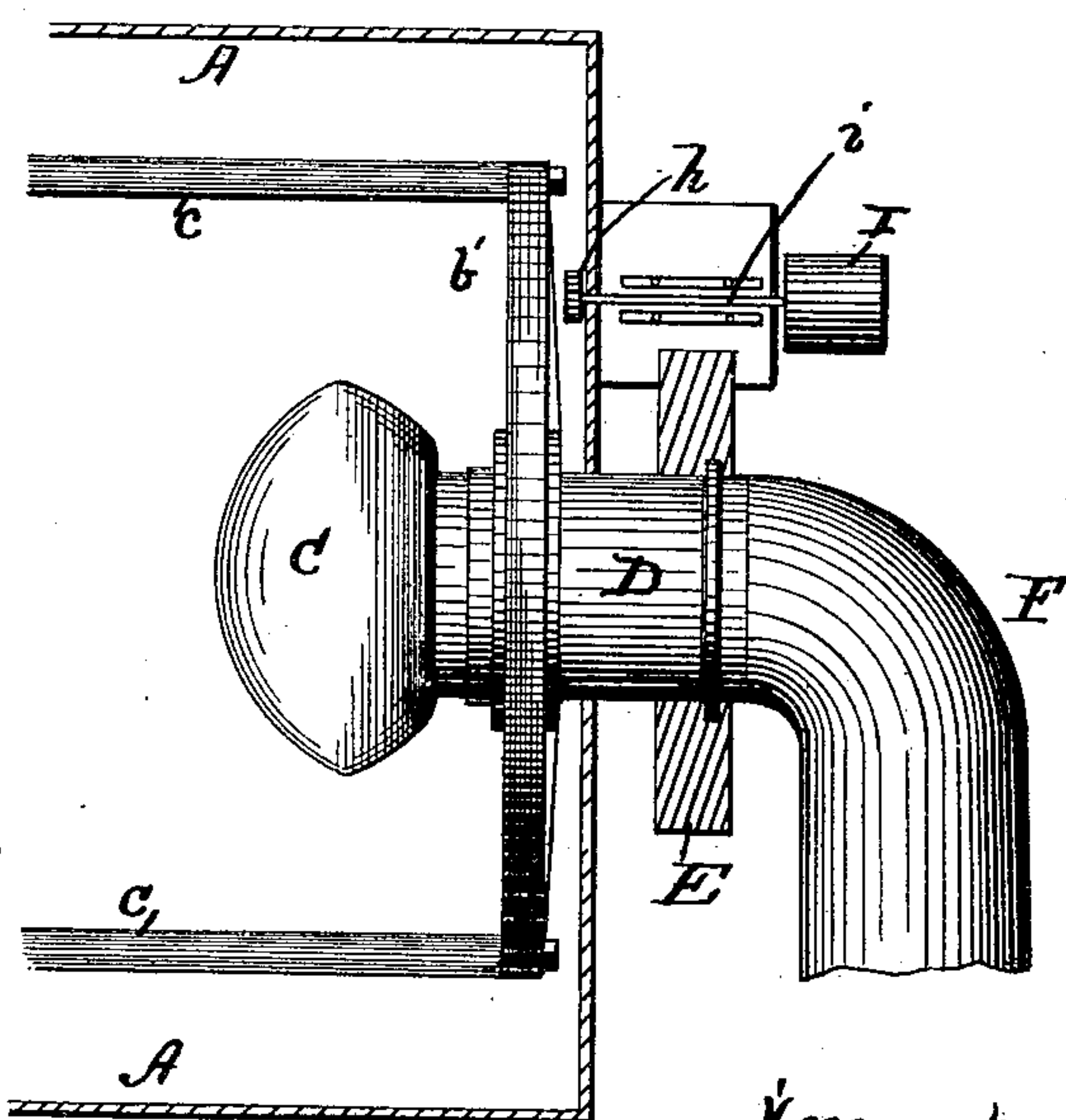


Fig. 3.



*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

FREDERICK STILES, OF BINGHAMTON, NEW YORK, ASSIGNOR TO MARY E. STILES AND DAVID B. COOKE, BOTH OF SAME PLACE.

## TOBACCO-DRIER.

SPECIFICATION forming part of Letters Patent No. 351,409, dated October 26, 1886.

Application filed October 2, 1885. Serial No. 178,847. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK STILES, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Rotary Tobacco-Driers; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to machinery for drying tobacco in cigar-factories; and the object is to provide a machine of this class whereby the tobacco scraps or leaves will be rapidly and effectually dried; and to this end the novelty consists in the means hereinafter set forth, by which the tobacco will be kept agitated so as to continually present new surfaces to the action of a current of cold or hot air until the whole mass of tobacco is thoroughly dry, all of which will be hereinafter more fully set forth, and particularly pointed out in the claim.

In the accompanying drawings the same letters of reference indicate like parts of the invention.

Figure 1 is a perspective view of my improved tobacco-drying machine with the side door of the air-chamber removed. Fig. 2 is a view of a portion of one end of the machine partially in section, and Fig. 3 is an end view of the hollow drum.

A is the drying-chamber, in which revolves the drum B, which is composed of two heads, *b b'*, and a series of rods, *c*. Each head is provided with a hollow perforated metallic cap, C, secured to the inner side thereof, so as to distribute the air which passes through it into the drum.

D is a hollow trunnion secured to the head *b'*, journaled in the pillow-block E, and upon which the drum revolves.

F is a stationary pipe leading from the fan or blower G, so as to convey the air from said

blower through the hollow trunnion D and the perforated cap C to the interior of the drum B.

H is a gear-wheel secured to the outside of the head *b'*, and it meshes with the pinion *h* on the shaft *i*, driven by the pulley I, by means of which the drum B is rotated.

K is the exhaust-pipe for conveying the current of air from the chamber A. The drum B is covered with wire-gauze of suitable mesh, and it is provided with a door for inserting and removing the tobacco from the drum. The perforated cap C and trunnion D are the same at each end of the drum, as shown in Fig. 1. It will thus be seen that as the fans G G are operated a current of hot or cold air will be forced through perforated cap C. While the drum B is being rotated the tobacco will continually be presented in new surfaces until it is thoroughly dry. By this means a quantity of tobacco may be rapidly and effectually dried in a simple and convenient manner. The exhaust-pipe K, besides exhausting the spent air, carries off all dust, dirt, thistle-down, strings, or other foreign matter, leaving the scraps absolutely clean and pure. It will thus be seen that the machine dries, cleans, and screens the tobacco ready for use by the cigar-roller at one and the same time.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

The combination, with the casing A and the rotating drum B, of the blast-generators G, located at each end and communicating with the casing through perforated caps C, and the exhaust-pipe K, extending from the casing, the whole adapted to operate to force a current of air through the tobacco while being rotated, substantially as specified.

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

FREDERICK STILES.

Witnesses:

F. B. RICHARDS,  
H. C. ROGERS.