

No. 644,484.

Patented Feb. 27, 1900.

J. W. WILSON.

CLOTH CLEANER FOR GYRATORY FLOUR BOLTERS.

(Application filed Oct. 5, 1899.)

(No Model.)

Fig. I.

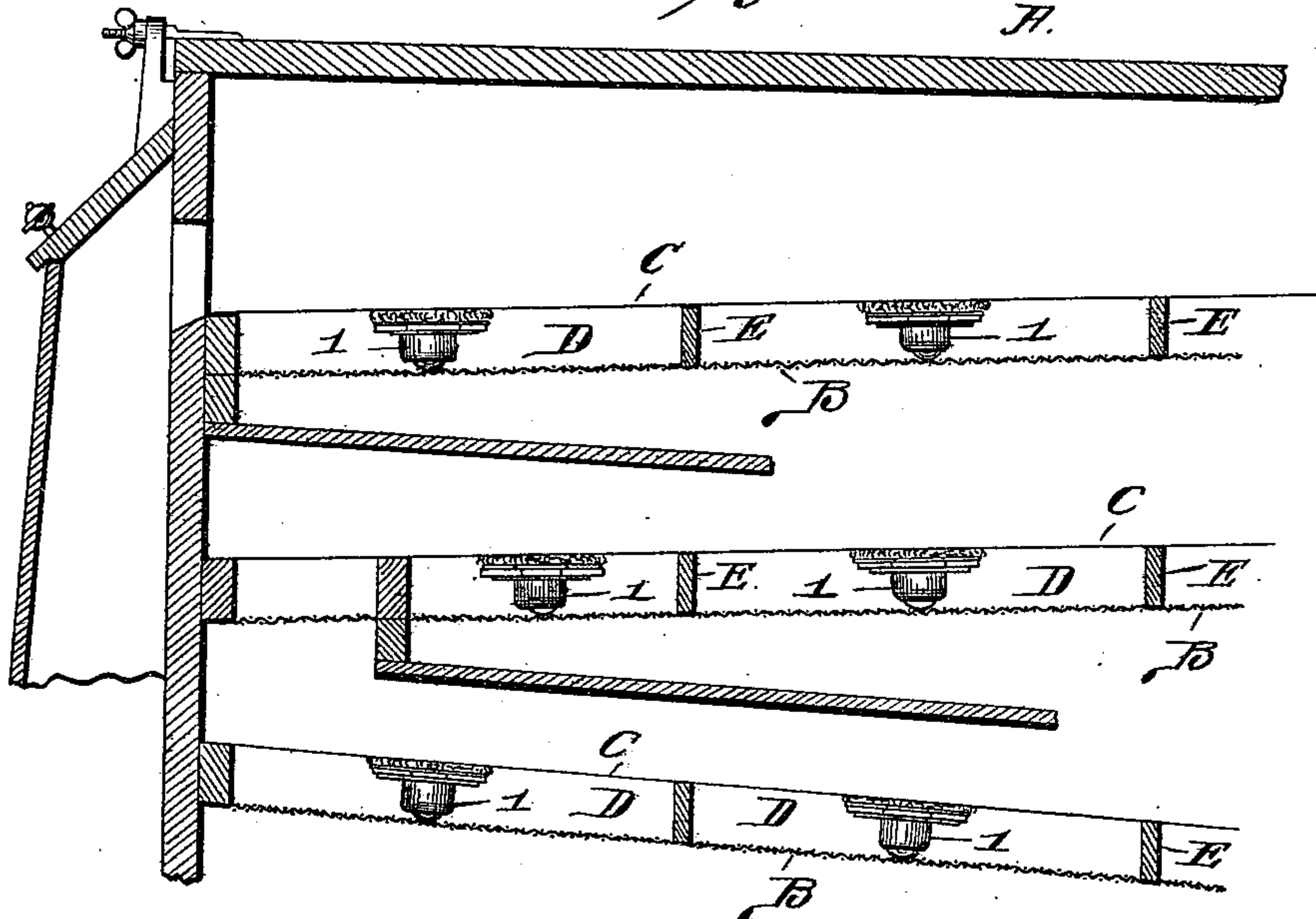


Fig. II.

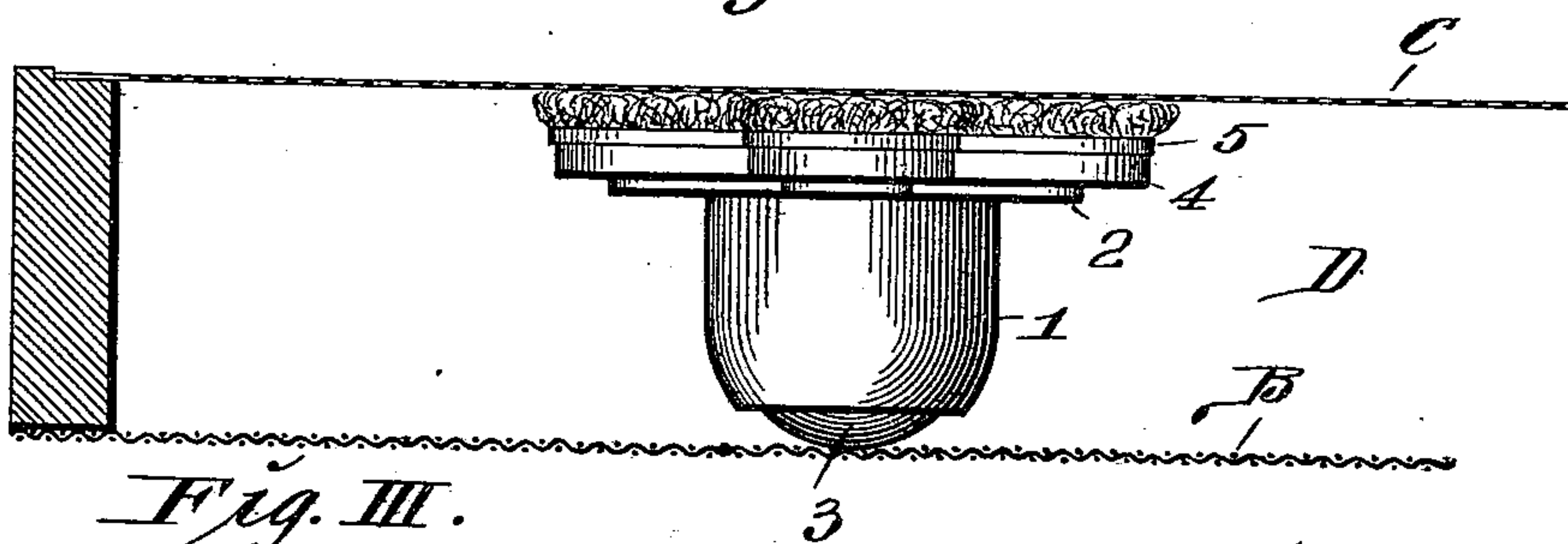


Fig. III.

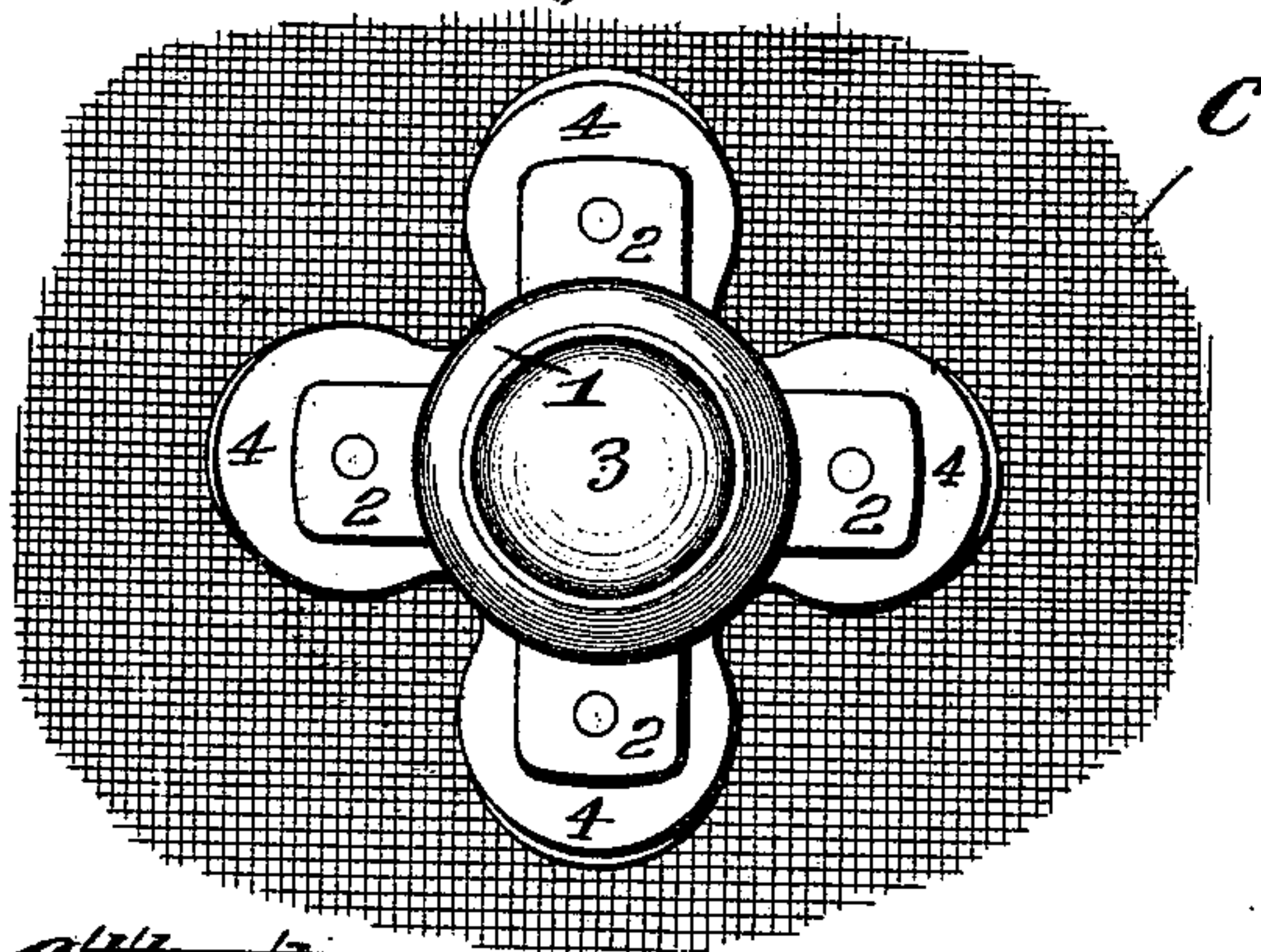
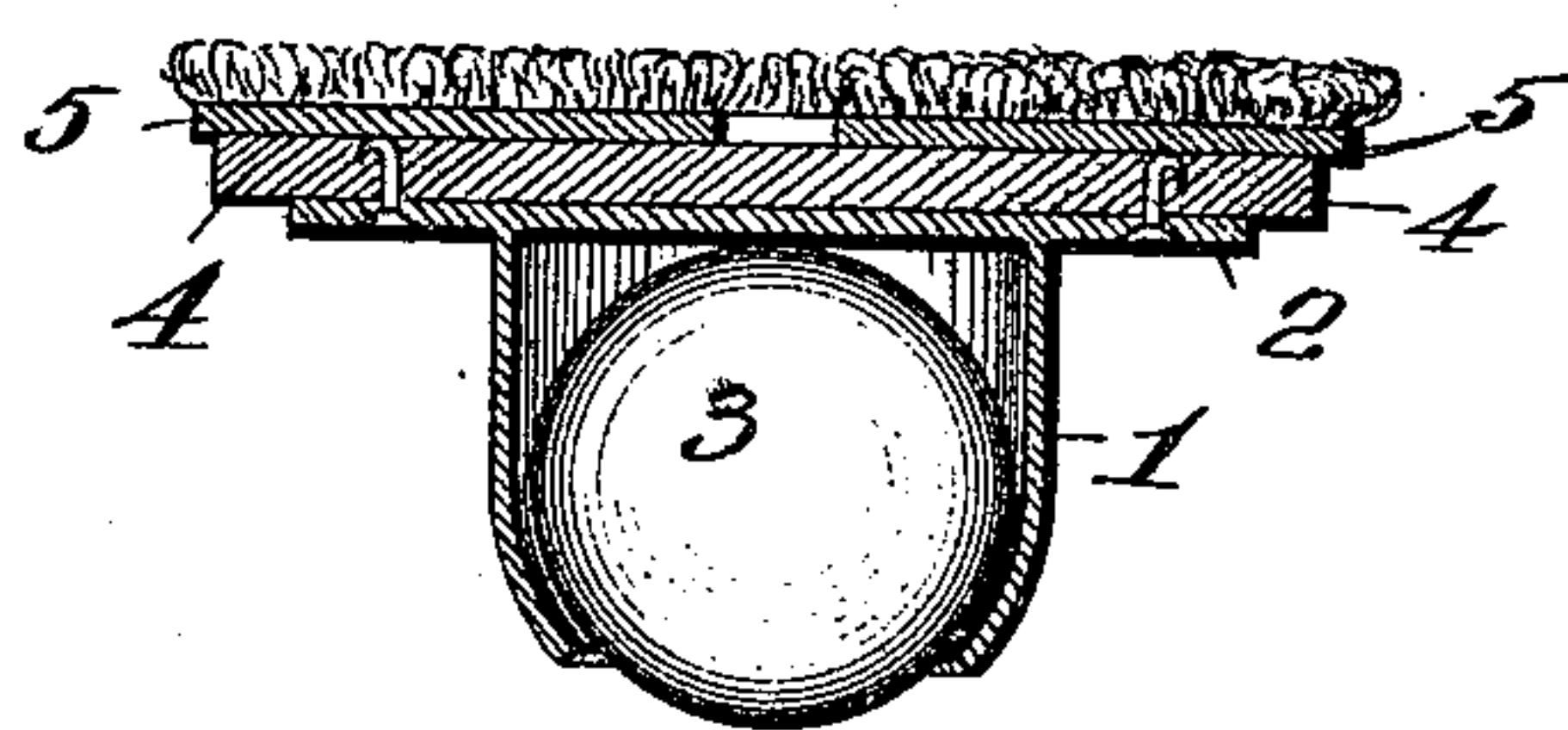


Fig. IV.



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JOSEPH W. WILSON, OF SALT LAKE CITY, UTAH.

CLOTH-CLEANER FOR GYRATORY FLOUR-BOLTERS.

SPECIFICATION forming part of Letters Patent No. 644,484, dated February 27, 1900.

Application filed October 5, 1899. Serial No. 732,629. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. WILSON, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Cloth-Cleaners for Gyratory Flour-Bolters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to devices for use in gyratory flour-bolting machines to constantly displace accumulations of starchy material from the under side of the sieve-cloth to obviate the clogging of the cloth meshes thereby.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical sectional view of a portion of a gyratory bolter containing my improved cleaners. Fig. II is an enlarged sectional view of one of the bolter-sieves with one of the cleaners shown in side elevation. Fig. III is a bottom view of one of the cleaners and a fragment of the sieve-cloth. Fig. IV is a vertical cross-sectional view of one of the cleaners.

A designates the housing of the bolter, within which are the screens composed of frames carrying coarse wire-cloth bottoms B and sieve-cloth C. The screens are divided into compartments D by partitions E.

Referring to the cleaners, 1 designates an inverted cup provided with diverging arms 2. The lower open end of the cup contains a ball 3 and is curved inwardly to retain the ball.

Secured to the cup-carried arms 2 is a spider or frame 4, and attached to the arms of this spider are facings 5, of soft material, such as sheepskin or felt, that are designed to brush against the under surfaces of the sieve-cloth in the practical use of the cleaners.

In the practical use of the cleaners they are confined in the compartments D of the bolting-screens, where they are free to partake of movements corresponding to the motion of the bolter in its operation. The balls 3 ride on the coarse-wire bottom B of the screens, and the facings 5, of soft material, ride in contact with the under surface of the sieve-cloth, where they constantly brush all accumula-

tions of starchy material off of the cloth and keep the cloth meshes unobstructed, so that the stock traveling on the upper surface of the sieve-cloth may be readily bolted there-through.

The arms of the spider 4 may be of any desirable length proportionate to the dimensions of the compartments D in which they are located, it being necessary that the entire cleaners be of small enough dimensions to permit of their revolving in the compartments.

In the movements of the cleaners the balls 3 roll freely on the wire-cloth bottoms B of the screens, and therefore the soft facings 5 are carried in uniformly-light contact with the sieve-cloth without any damage to the cloth or any liability of jarring the coarser particles of stock through in the bolting operation.

I am aware that it is not broadly new to utilize a movable object having a facing of soft material for cleaning sieve-cloths; but I believe it is new to provide such an object with a carrying-ball, on which it rides.

The advantages of my cloth-cleaner over all others used for a like purpose are, first, the motion of a gyratory bolter imparts to my cloth-cleaner a gyratory motion within itself, as well as the gyratory or longitudinal and lateral motion of the bolter, constituting a double or compound motion, to my cleaner, thus greatly increasing its capacity, and consequently greatly increasing the capacity of the gyratory bolter in which it works, and, second, it stands up in position yet in light contact with the sieve-cloth without injuring the fiber of the cloth in the least, overcoming entirely the tendency of other cloth-cleaners to fly up and strike the cloth and jar through impurities with the flour.

While I have shown and described a single ball 3 in the inverted cup of my device, it is evident that more than one ball might be utilized. The device might be made of tripod form and three or any other number of balls used.

I claim as my invention—

1. In a cloth-cleaner for flour-bolters, the combination of a frame, a facing carried thereby, and a ball on which said frame is carried; substantially as described.

2. A cloth-cleaner for flour-bolters comprising a cup, a ball loosely seated therein, and a facing of soft material carried by said cup, substantially as described.
- 5 3. A cloth-cleaner for flour-bolters comprising a cup, a ball loosely seated therein, a frame or spider carried by said cup, and a facing of soft material on said frame or spider, substantially as described.

JOS. W. WILSON.

In presence of—

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