

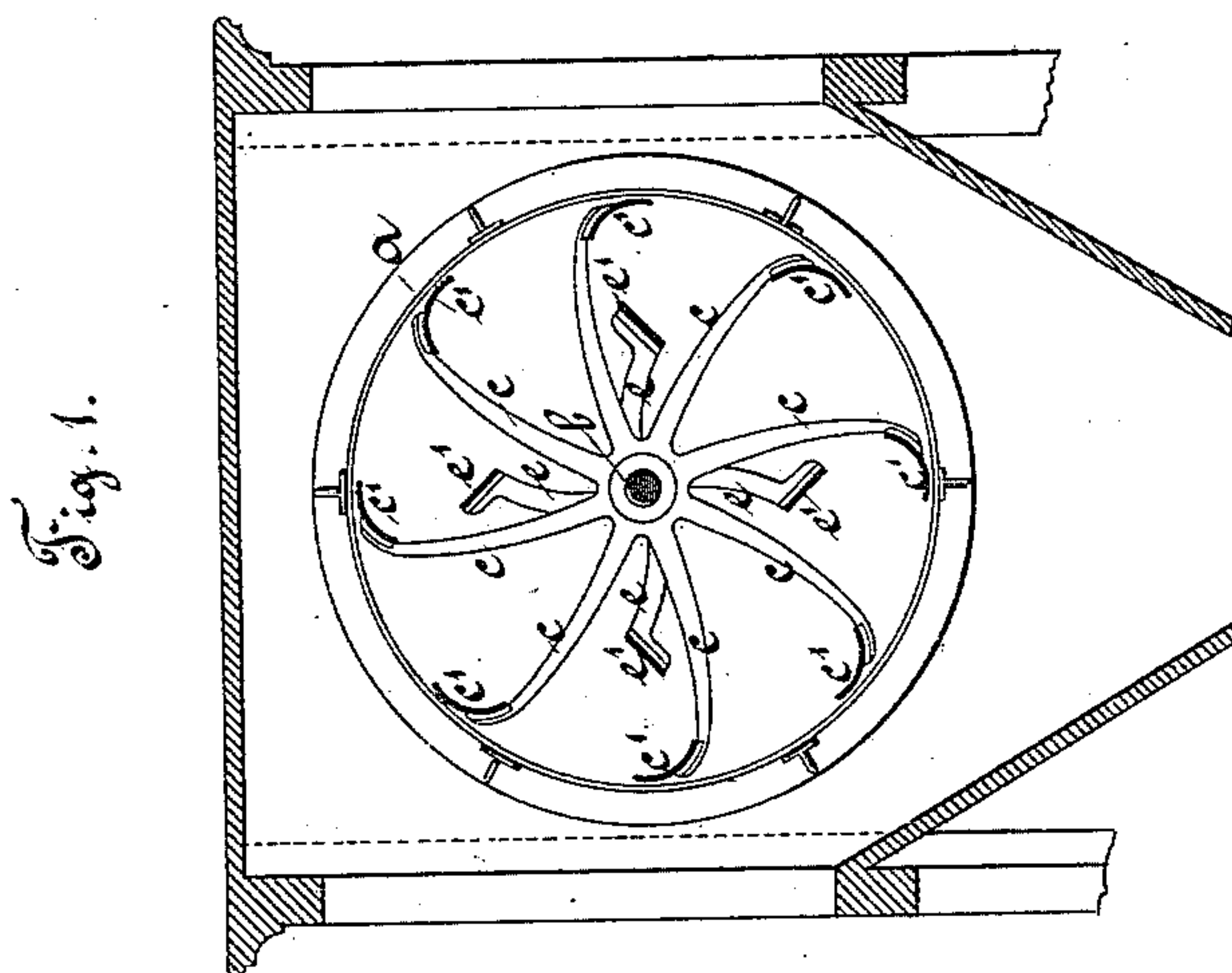
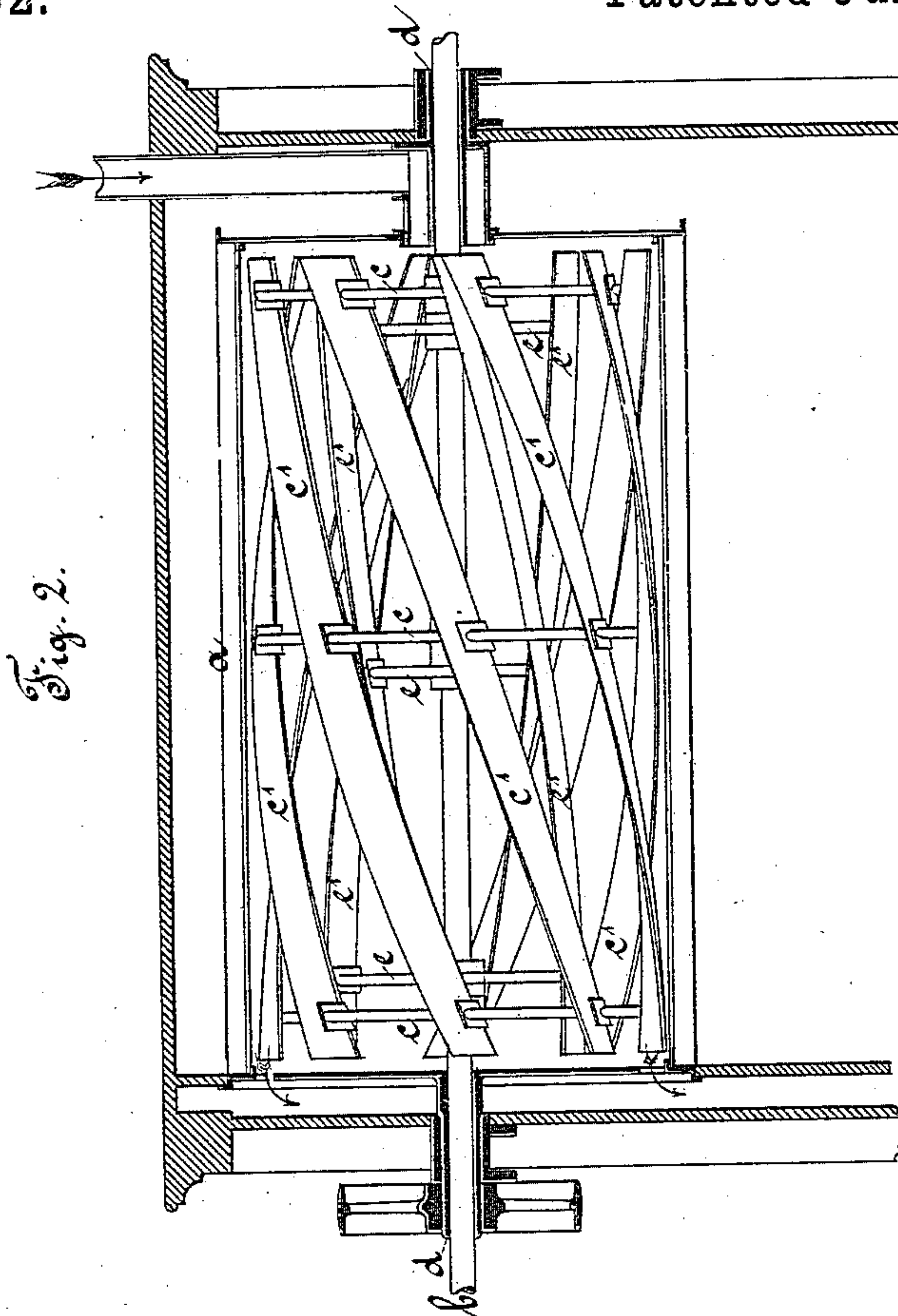
(No Model.)

2 Sheets—Sheet 1.

H. E. L. BAUERMEISTER.
FLOUR SIFTING MACHINE.

No. 278,852.

Patented June 5, 1883.



Witnesses:

Diedrich Petersen.

Hugo Mentze

Inventor:

Hermann Emil Ludwig Bauermeister

By William Meyer, Atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

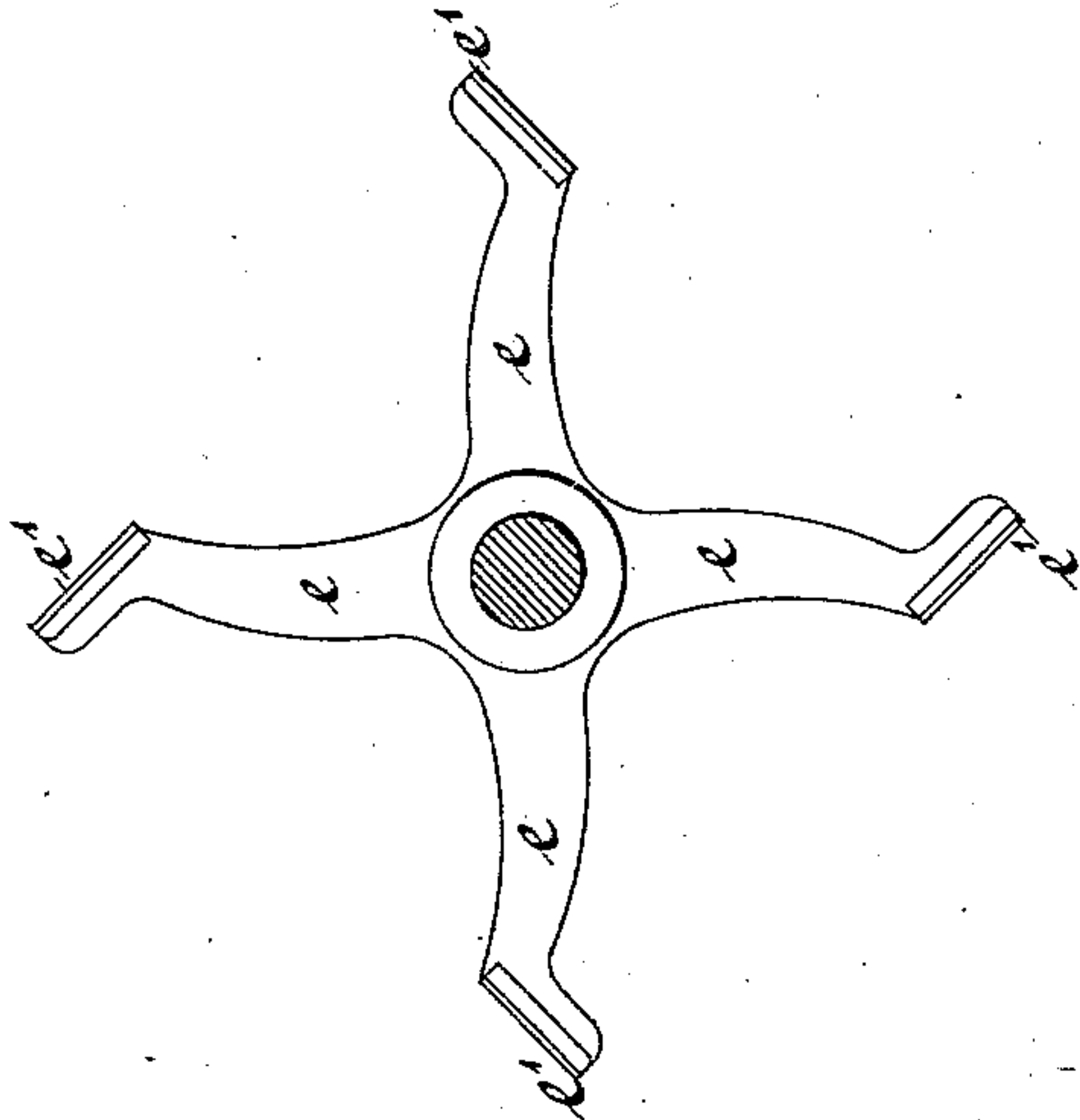
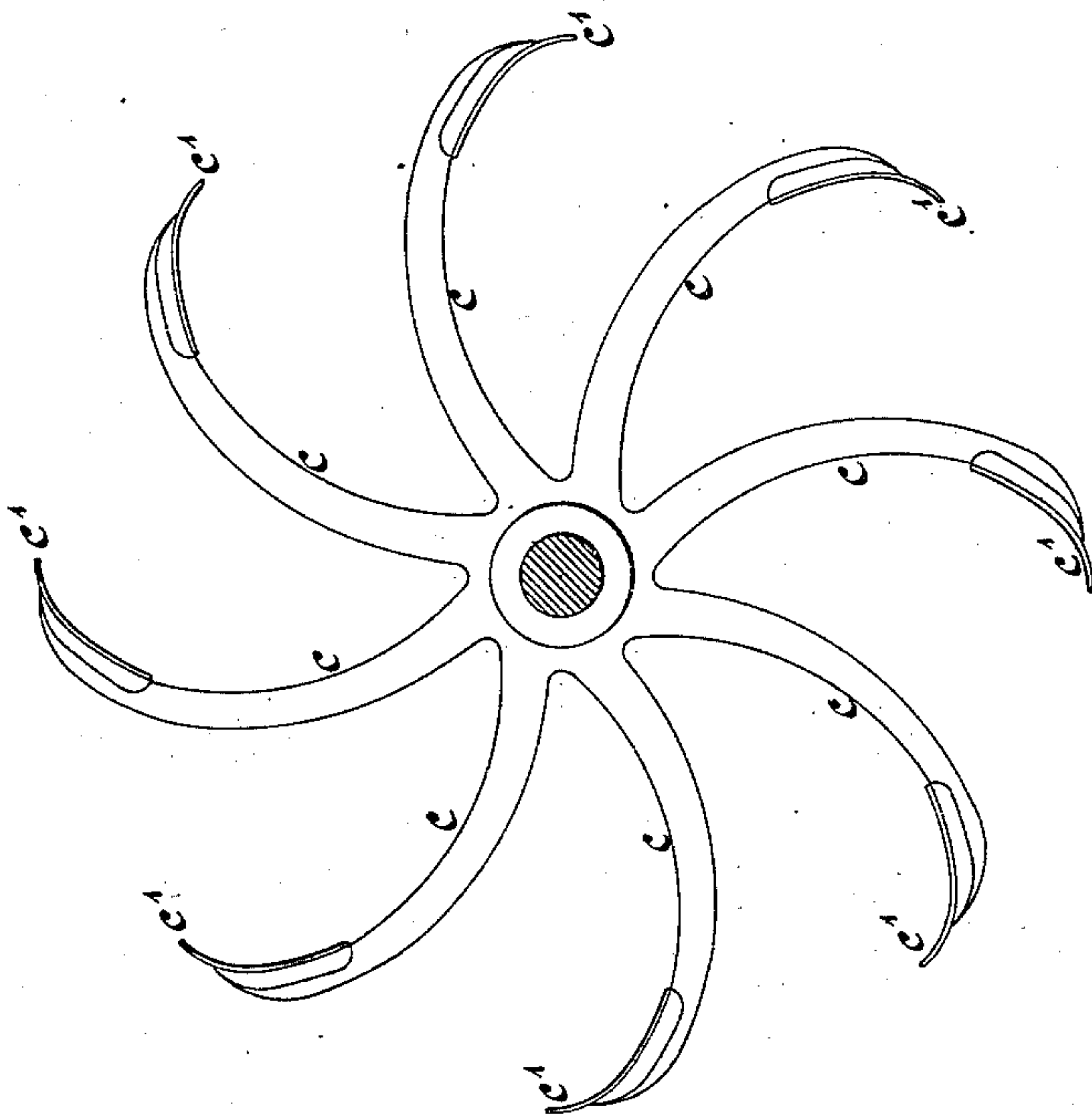


Fig. 3.



Witnesses:

Diedrich Petersen.

Angomente

Inventor:

Hermann Emil Ludwig Bauermeister

By William Meyer.

UNITED STATES PATENT OFFICE.

HERMANN E. L. BAUERMEISTER, OF HAMBURG, GERMANY.

FLOUR-SIFTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 278,852, dated June 5, 1883.

Application filed January 19, 1883. (No model.) Patented in Germany September 22, 1882, No. 19,386.

To all whom it may concern:

Be it known that I, HERMANN EMIL LUDWIG BAUERMEISTER, a subject of the Emperor of Germany, and a resident of Hamburg, in the German Empire, have invented certain new and useful Improvements in Flour-Sifting Machines, of which the following is a specification.

My invention relates to improvements in flour-sifting machines in which centrifugal fliers operate or revolve inside a gauze-covered reel or drum; and the objects of my improvements are to rub off the gluten from the hulls and to separate the flour entirely in the most effective manner from the offal, also sparing as completely as possible the gauze envelope or cover of the reel or drum. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical cross-section of a sifting-machine provided with my improvements. Fig. 2 is a side elevation thereof, partly in section. Figs. 3 and 4 are detail views of the centrifugal fliers.

The same letters refer to the same or corresponding parts throughout the several views.

Inside the gauze-covered reel *a*, which is fastened to the hollow shaft *d*, rotate two fliers, *c* and *c'*, fixed to the shaft *b*, in a direction which is opposite to the rotation of the reel. The arms of these fliers are of different lengths. Those of *c*, which bear the scrapers *c'*, of parabolic cross-section, are nearly twice as long as those of *e*, provided with the rejectors *e'*. Both rejectors, as well as scrapers, are shaped lengthwise in such a manner as to form screw-lines of quick pitch around the ideal cylinders described by their flier-arms. The meal taken or scraped off from the gauze by the scrapers *c'* is thrown, in consequence of the parabolic

form of such scrapers, nearly diametrically through the reel, and partly will touch that part of the gauze which is opposite to the throwing or outer scraper, and partly is caught by the inner rejectors, *e'*, and rejected or thrown toward the gauze at an angle corresponding with the inclination of such rejectors or throwers to a radius of a circle around the center shaft of the fliers *b*. An inclination of about forty-five degrees will produce nearly always the best effect. Anyhow the angle may vary according to the fineness of the gauze and to the number of revolutions which the reel *a* makes within a given time. The effect of such arrangement is a frequent mutual crossing of the very long throwing-lines, thus causing the gluten to be rubbed off completely from the hulls, and simultaneously to diminish the force of the throw, and thereby to save or protect the gauze from destruction.

I am aware that prior to my invention flour-sifting machines have been made with double fliers. I therefore do not claim such combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination, in flour-sifting machines, of the reel *a*, shaft *b*, fliers *c*, constructed with concave blades or scrapers *c'*, and fliers *e*, constructed with backwardly-inclined rejector-blades *e'*, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 19th day of December, 1882.

HERMANN EMIL LUDWIG BAUERMEISTER.

Witnesses:

ALEXANDER SPECHT,
EMIL HAASE.