No. 832,470. PATENTED OCT. 2, 1906.

W. FRANK.

DOUGH ROLLING MACHINE.

APPLICATION FILED JUNE 23, 1906.

2 SHEETS—SHEET 1.

Fig. 1,

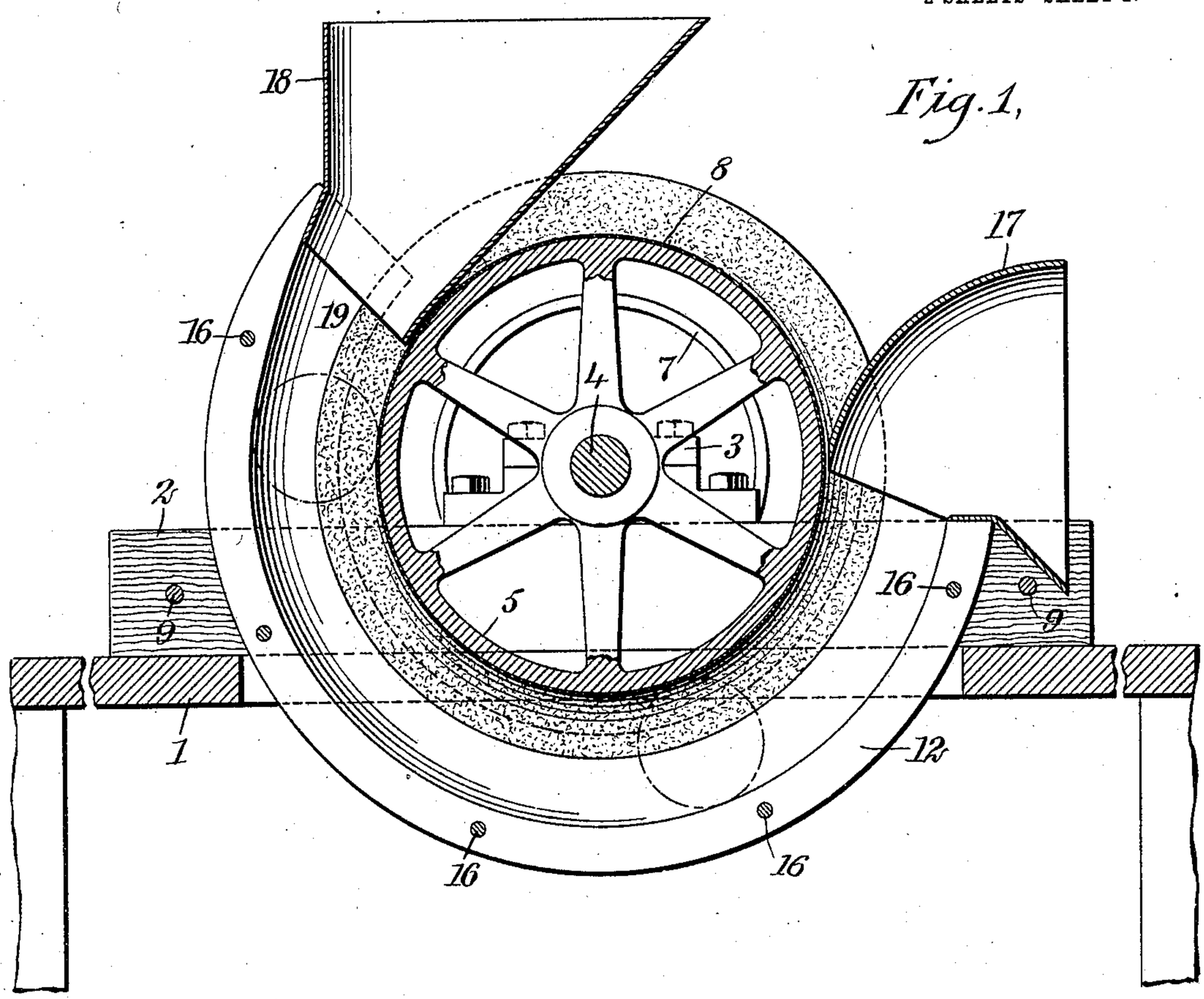
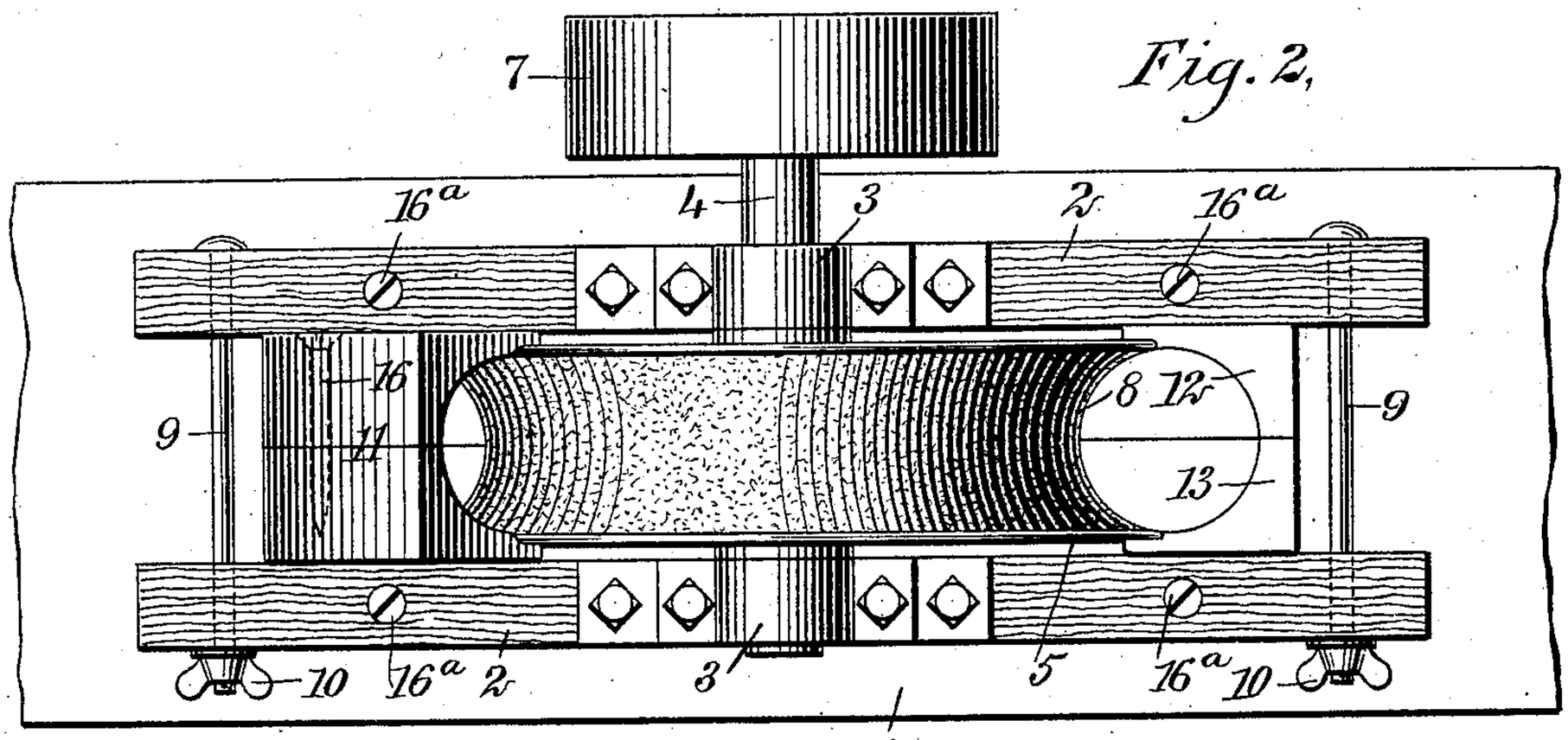


Fig. 2,



WITNESSES

Edward Thorpe.

INVENTOR

William Frank

BY Munn & Co

ATTORNEYS

No. 832,470. PATENTED OCT. 2, 1906.

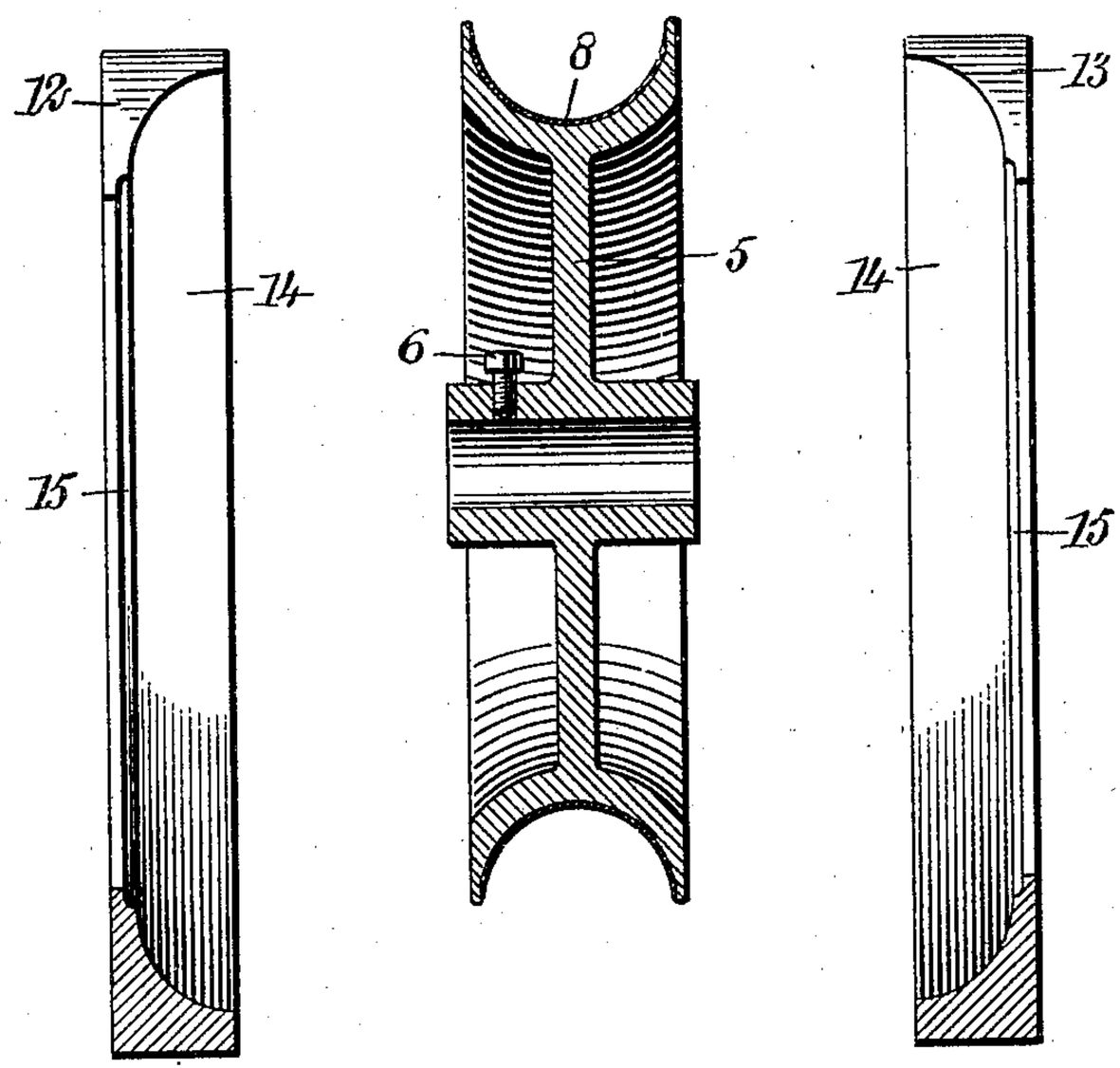
W. FRANK.

DOUGH ROLLING MACHINE.

APPLICATION FILED JUNE 23. 1906.

2 SHEETS—SHEET 2.

Fig. 3.



WITNESSES

Edward Thorpe.

INVENTOR

William Frank

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM FRANK, OF GUTTENBERG, NEW JERSEY.

DOUGH-ROLLING MACHINE.

No. 832,470. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed June 23, 1906. Serial No. 323,019.

To all whom it may concern:

Be it known that I, WILLIAM FRANK, a citizen of the United States, and a resident of Guttenberg, in the county of Hudson and State of New Jersey, have invented a new and Improved Dough-Rolling Machine, of which the following is a full, clear, and exact description.

This invention is an improved machine for rolling or molding dough or other plastic materials into spherical or other convenient shapes, the object of the invention being to simplify the construction of machines of this character and render the machine more effective in operation than those of this class hitherto devised; also, to so construct the machine that it can be readily taken apart for cleaning or other purposes.

To this end the invention consists of a grooved wheel suitably journaled on a machine-bed and meshing with a grooved segment partially surrounding its circumference and concentrically arranged thereto, one end of the segment acting to receive the dough for shaping it and the opposite end discharging it in a spherical or other desired shape. This segment is made in halves in order that it may be readily stripped from the wheel to clean it and is adjustably fixed to the frame of the machine by parallel beams, upon which the grooved wheel is journaled, acting to clamp the segment at each side.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal vertical central section of the machine. Fig. 2 is a plan view of the same, and Fig. 3 is a transverse sectional view of the wheel and its coöperative segment members.

The invention comprises a bed 1, suitably supported, upon which are arranged two parallel beams 2. Substantially at the center of the top face of these beams are secured journal-boxes 3, in which is journaled a shaft 4, having fixed to it between the beams 2 a grooved wheel 5 by means of a set-screw 6, and at its outer end a pulley 7 for driving the grooved wheel from any source of power, or, if preferred, the shaft 4 may be provided with a hand-crank. The wheel 5 is constructed, as best shown in Fig. 2, with a semicircular groove in its periphery, lined with a canvas covering 8, fastened to the periphery with glue or other adhesive material.

At each end of the beams 2 a bolt 9 passes through alining apertures in them, and said bolts have threaded on their outer ends thumb-nuts 10, designed to draw the beams together and clamp a segment 11, partially surrounding the wheel, in adjusted relation. The segment 11 is made in two longitudinal halves 12 and 13, each of which is provided with a groove 14 on its inner face constituting a quarter of a circle, so that when the halves of the segment are placed together and in contact with the sides of the wheel the groove will form, with the groove in the wheel, a complete circle tapering from the feeding end to the discharge end, being made larger at the feeding-opening.

The halves of the segment 11, as best shown in Fig. 3, are constructed with rabbeted portions 15, into which exactly fits without undue friction the edges of the wheel adjacent to its groove, thereby avoiding a shoulder where the segment and wheel join. The halves of the segment are fixed together by screws 16 passing through them near the outer periphery and are clamped in adjusted relation to the wheel after they have been applied to it by the action of the thumb-nuts 10 drawing the beams 2 in contact with its faces. The beams 2 are then fastened to the bed by screws 16^a.

As shown in Fig. 1, after the machine is assembled the entrance-opening between the wheel and segment is provided with a funnel 17, enabling the dough to pass freely to the machine, and a discharge-funnel 18, through which the dough is ejected. The groove in the segment adjacent to the discharge-opening is slightly enlarged, as shown at 19, for the purpose of permitting the dough to freely pass upward at this point.

In the operation of the machine after it has been properly put together the wheel 5 is set in motion through the action of the pulley 7, and the operator, standing at the front of the machine, feeds dough of a suitable size into the funnel 17, which the wheel acts to roll in a spherical shape as it draws it through the segment. The canvas on the wheel acts to increase the friction between it and the dough, rendering the machine positive in ac-

tion. After the spheres of dough pass into the funnel 18 they are removed by the hand of the operator.

Although I have described the invention in detail, it is to be understood that the scope thereof is limited by the annexed claims only.

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

1. In a dough-rolling machine, two longitudinal beams arranged parallel to each other, a grooved wheel journaled on said beams, a grooved segment partially surrounding the circumference of the wheel, and means for clamping said segment in adjusted relation to the wheel, comprising means for drawing the beams together.

2. In a dough-rolling machine, a revoluble grooved wheel, a segment partially surrounding the circumference of the wheel having a tapering groove therein, said segment being constructed in halves removably secured together, and means for holding the segment in adjusted relation to the wheel.

3. In a dough-rolling machine, a grooved wheel, a grooved segment partially surrounding the circumference of the wheel, said segment being constructed of longitudinally-divided parts, and means for holding said segment in adjusted relation.

4. In a dough-rolling machine, a bed, two longitudinal beams secured to the bed, a grooved wheel journaled on the beams, a grooved segment partially surrounding the circumference of the wheel, means for drawing the beams together to clamp the segment in adjusted relation between them, and means for securing the beams to the bed.

5. In a dough-rolling machine, two longitudinal beams, a grooved wheel journaled on said beams, a grooved segment partially surrounding the circumference of the wheel and adapted to be clamped in adjusted relation between the beams, said segment being longitudinally divided in parts which are removably secured together, and means for operating the wheel.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM FRANK.

Witnesses:
JOHN ZELLER,
CHAS. A. EYPPER.