(No Model.)

W. W. BRAZELL.

CHURN DASHER.

No. 600,400. Patented Mar. 8, 1898.

FIG. 5.

FIG. 1.

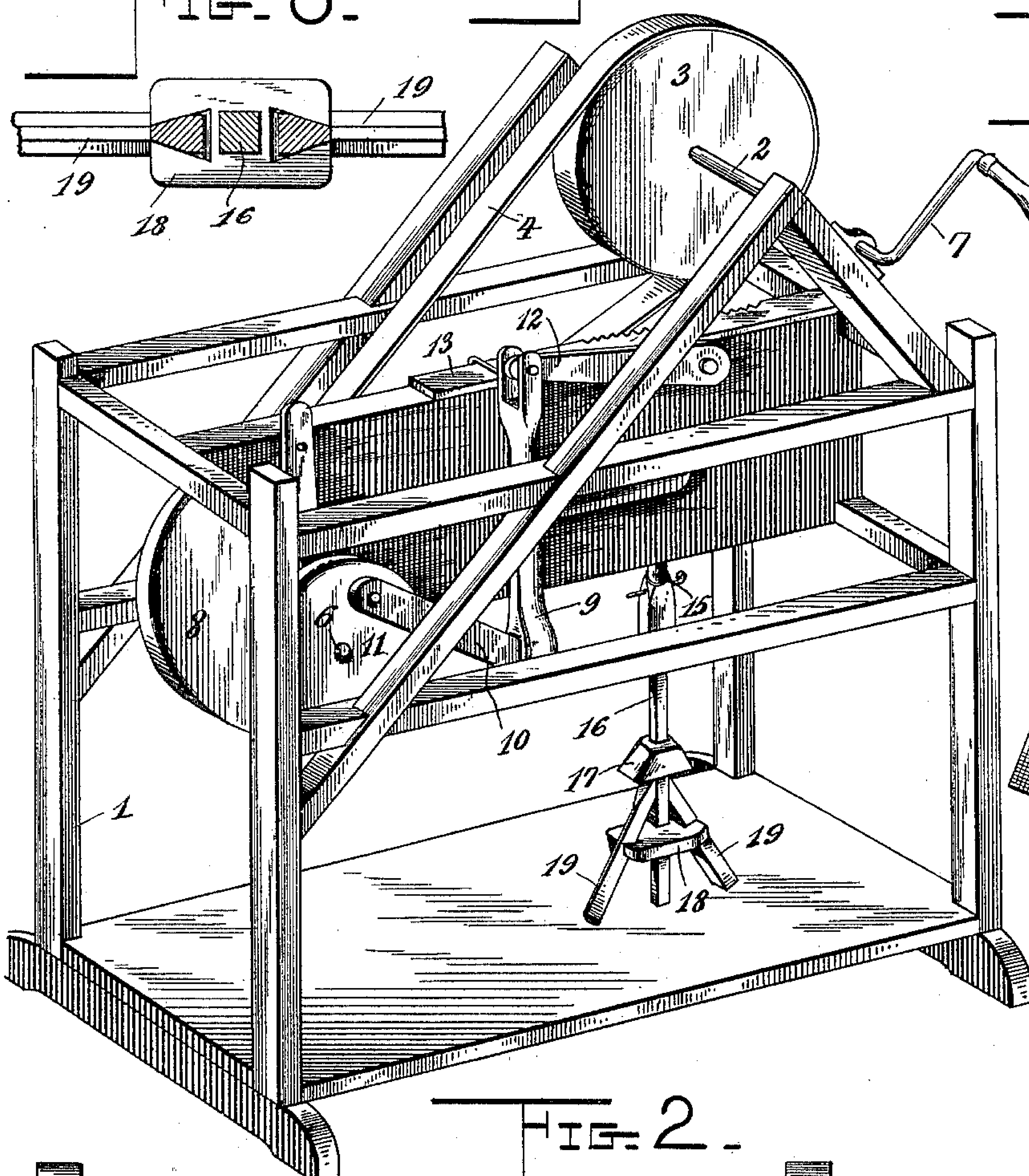


FIG. 3.

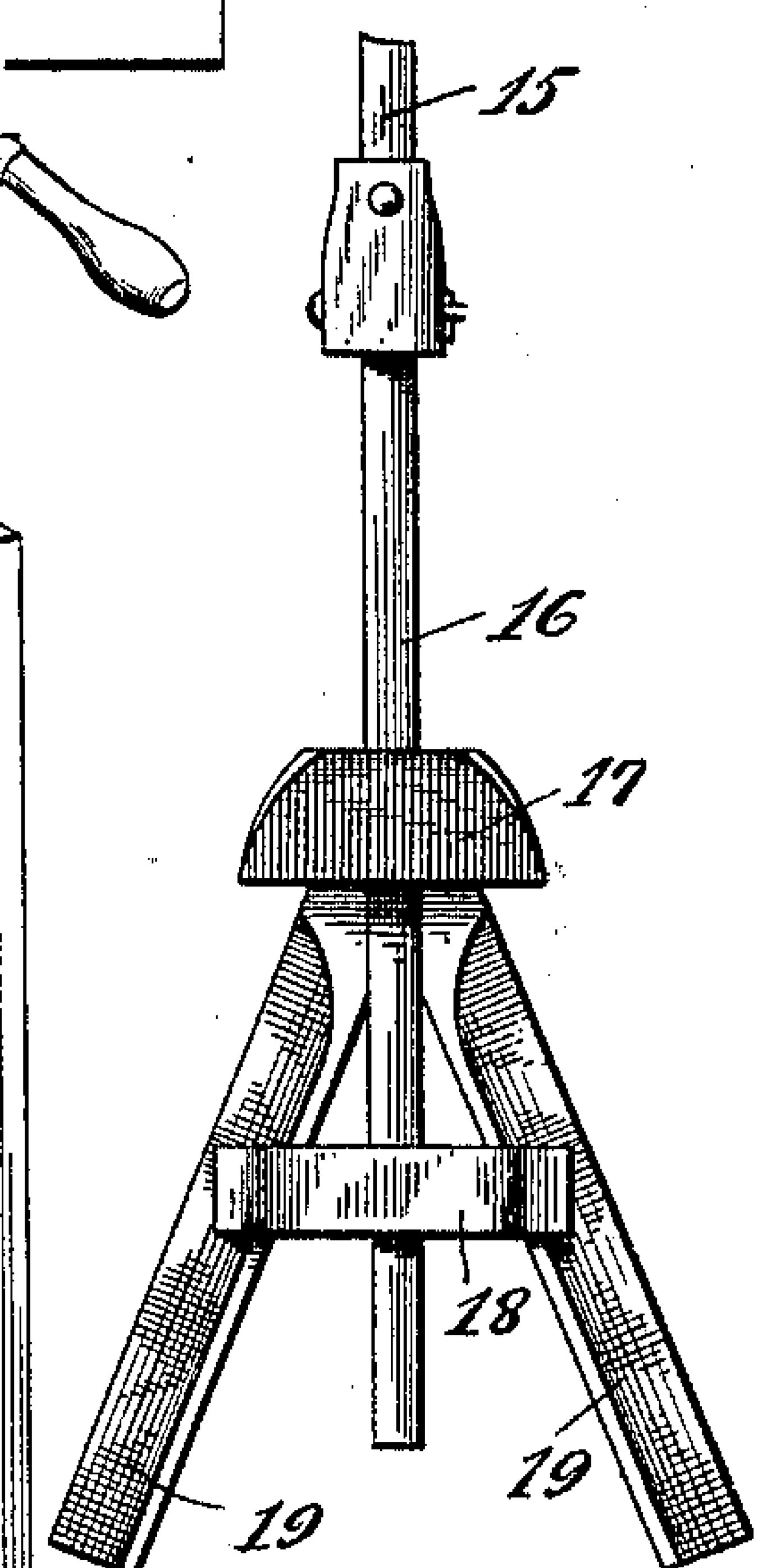


FIG. 2.

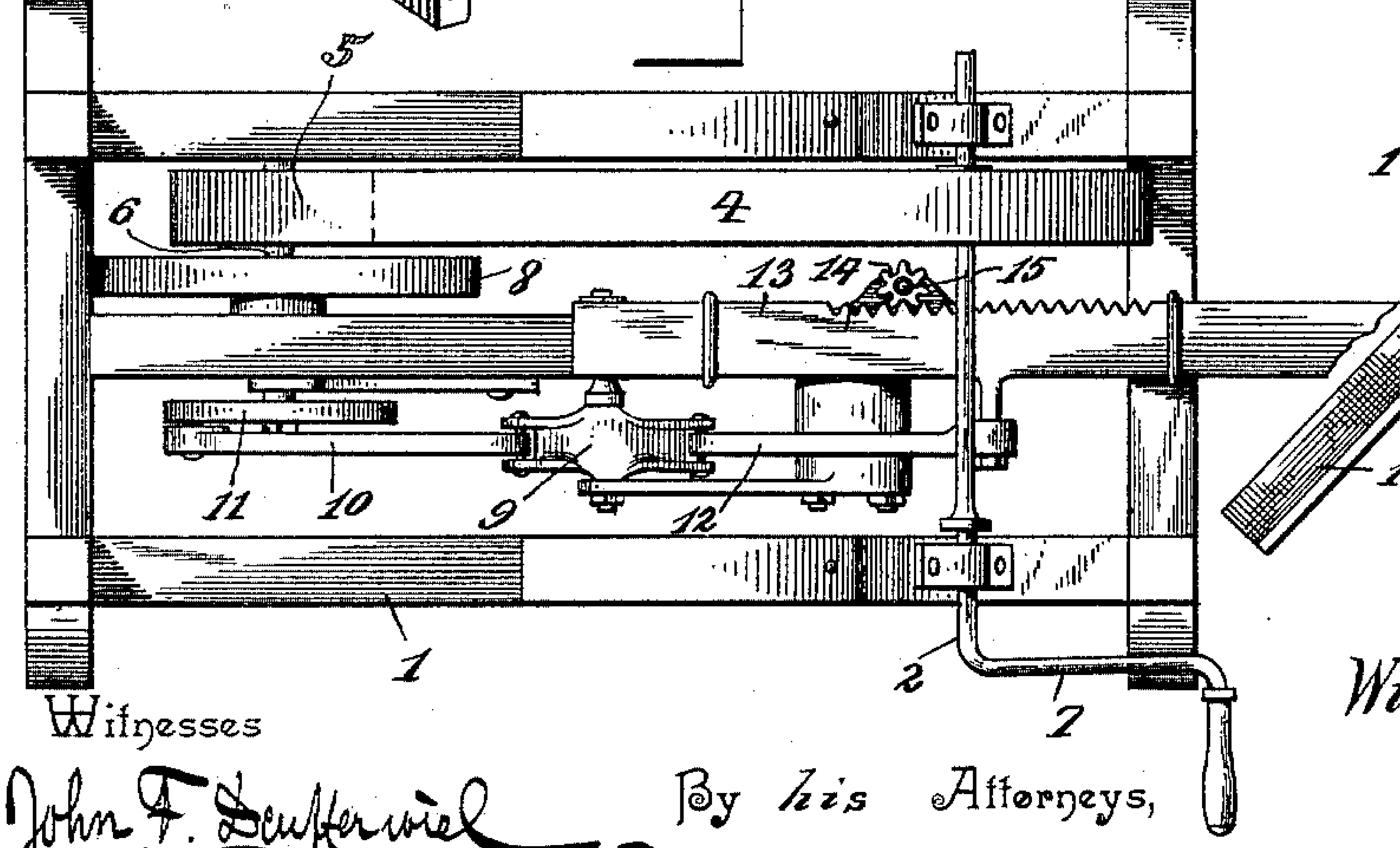
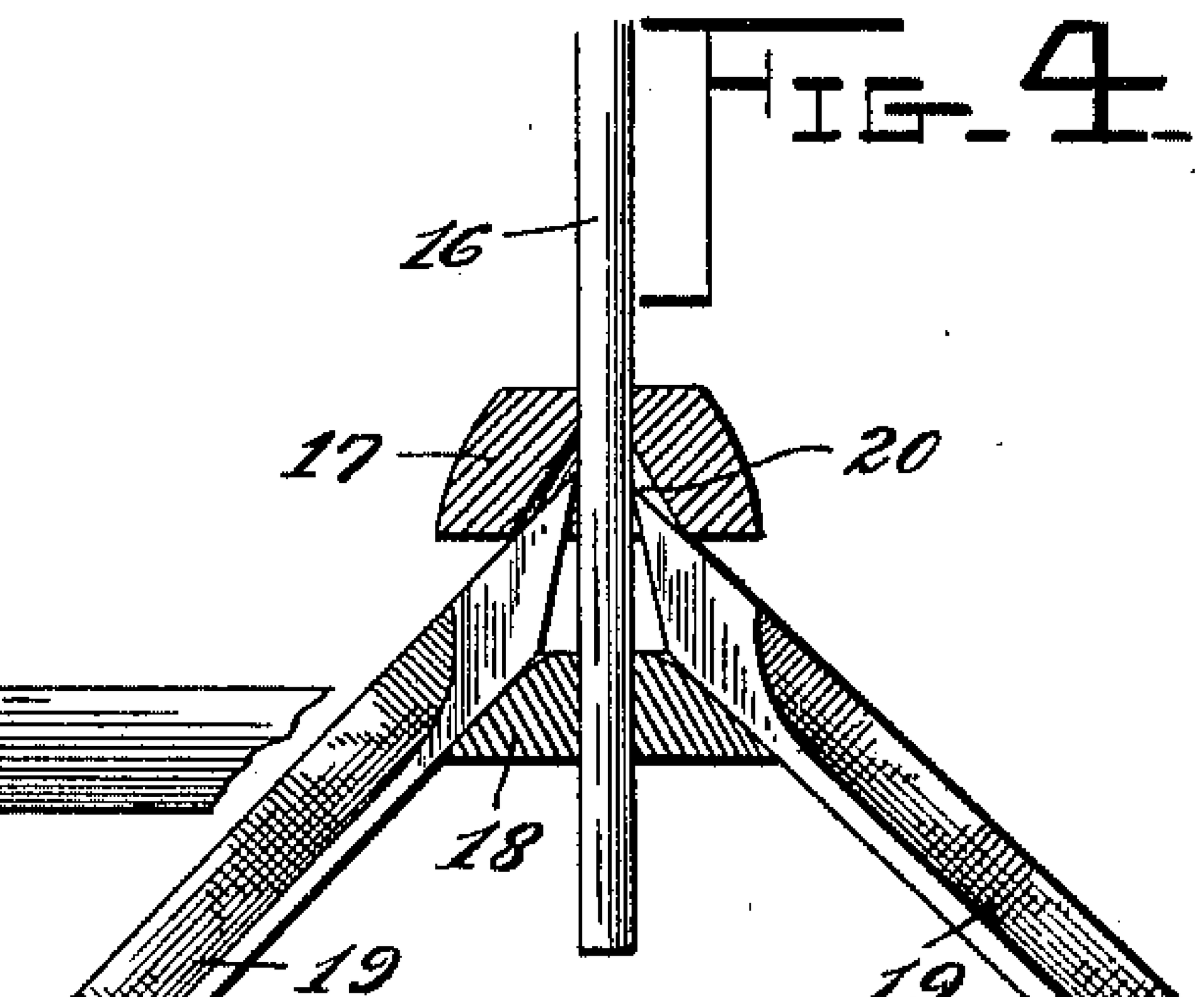


FIG. 4.



Witnesses

John F. Deufferwiel

[illegible]

By his Attorneys,

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Inventor

Wiley W. Brazell.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILEY W. BRAZELL, OF COPENHAGEN, TENNESSEE.

CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 600,400, dated March 8, 1898.

Application filed September 13, 1897. Serial No. 651,523. (No model.)

To all whom it may concern:

Be it known that I, WILEY W. BRAZELL, a citizen of the United States, residing at Copenhagen, in the county of Marion and State of Tennessee, have invented a new and useful Churn, of which the following is a specification.

My invention relates to churns, and has for its object to provide a simple, compact, and efficient construction of dasher having adjustable members whereby the circumference and depth thereof may be varied to suit the capacity of the churn-receptacle to be used in connection therewith.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a churn-motor constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a detail side view of the churn-dasher and connected parts. Fig. 4 is a detail sectional view of the dasher, showing the paddles in a different position from that indicated in Fig. 3. Fig. 5 is a detail horizontal section of the dasher.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The frame 1, which may be of any suitable construction, supports a driving-shaft 2, carrying a belt-wheel 3, and the belt-wheel is connected by means of a belt 4 with a belt-pulley 5 on a driven shaft 6. Said driving-shaft may be provided with a crank-arm 7 or an equivalent device for communicating rotary motion thereto, and the driven shaft is preferably provided with a balance or fly wheel 8. Also mounted upon the frame is a rocking lever 9, of which one arm is connected by a pitman 10 with a crank-disk 11, fixed to the driven shaft. The other arm of said rocking lever is connected by a pitman 12 with a reciprocatory rack-bar 13.

Mounted in a vertical position upon the frame and fitted at its upper end with a pinion 14, meshing with the teeth of the rack-bar, is a dasher-shaft 15, to the lower end of which is removably attached a dasher-stem 16.

The dasher consists of upper and lower blocks 17 and 18, mounted to slide upon the dasher-stem, which is preferably of cross-sectionally angular construction, and coöperating with these blocks are the dasher-blades 19, of cross-sectionally angular or dovetailed construction, which extend at intermediate points through correspondingly-shaped seats in the lower block. The upper extremities of the dasher-blades are beveled and bear against opposite sides of the dasher-stem for engagement by sockets or recesses 20 in the under side of the upper block 17. The spread of the lower extremities of the dasher-blades may be varied by altering the adjustment of said blades in the lower block, and it is obvious that when the upper extremities of said blades are drawn toward each other into contact with opposite sides of the dasher-stem and are engaged by the upper block they are locked at the desired adjustment. It is also obvious that by varying the adjustment of both blocks upon the stem the depth to which the dasher extends into a churn-receptacle may be suited to the size of the receptacle and the depth of the contents thereof.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A dasher having a stem, a transverse block carried by the stem, dasher-blades fitted for sliding movement in seats in said block on said stem, and adapted to be arranged at their upper ends in contact with said stem, and a holding-block mounted to slide upon the stem and provided with cavities for engagement with the upper extremities of the blades, substantially as specified.

2. A dasher having a stem, upper and lower blocks mounted to slide upon the stem, and blades mounted to slide in one of the blocks and terminally engaged by the other block, substantially as specified.

3. A dasher having a stem, spaced blocks carried by the stem, one of said blocks being adjustable parallel with the stem, and dasher-

blades fitted to slide in seats in one of the blocks and terminally engaged by the other block, substantially as specified.

4. A dasher having a stem, upper and lower blocks mounted to slide upon the stem, the lower block being provided with terminal dovetailed seats, and dasher-blades of cross-sectionally dovetailed construction fitted in said seats for sliding movement, and having beveled upper extremities to bear against opposite sides of the dasher-stem for engagement by cavities in the under side of the upper block, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILEY W. BRAZELL.

Witnesses:
B. A. HEARD,
W. J. MCKELVY.