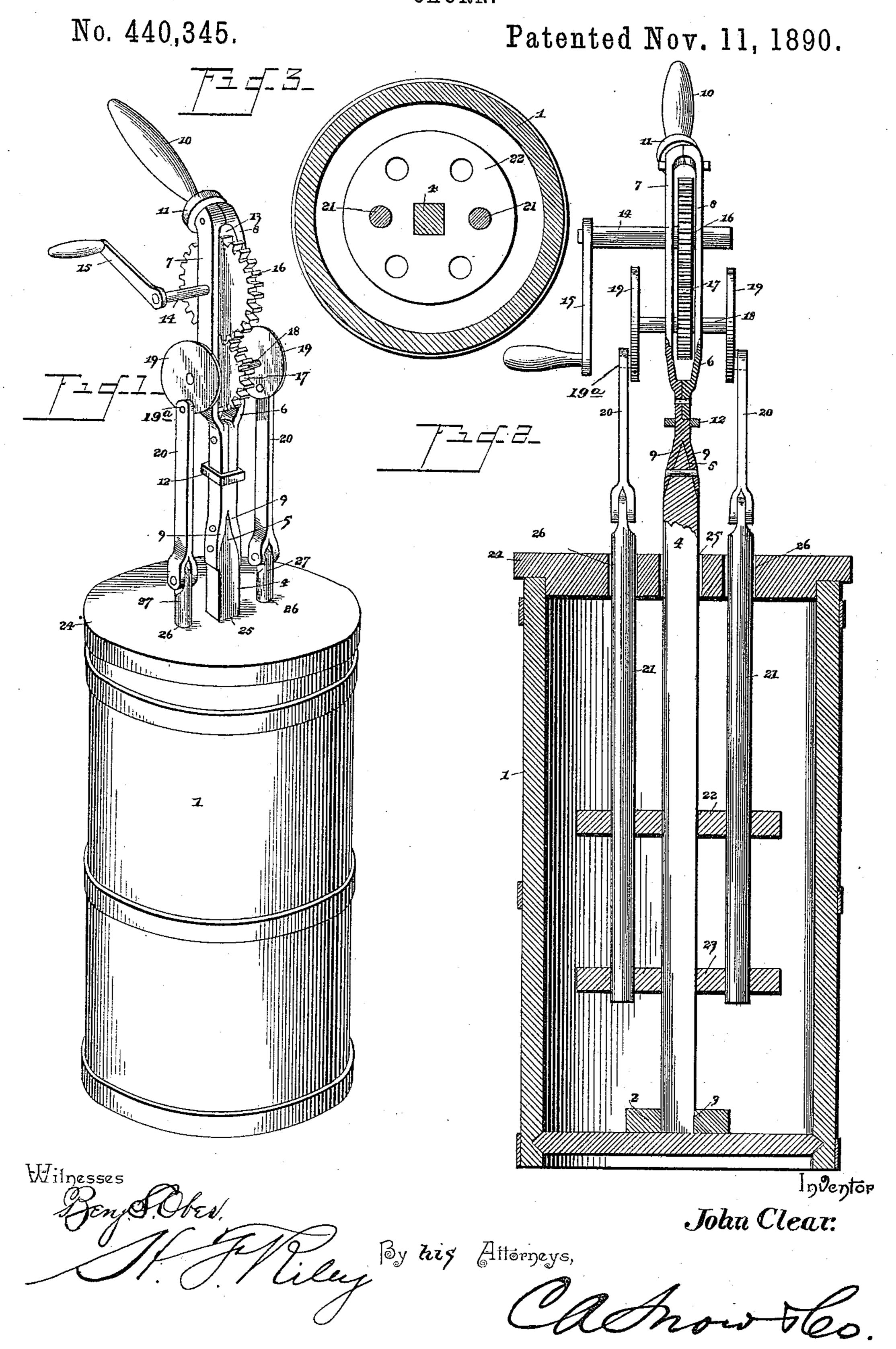
## J. CLEAR. CHURN.



## United States Patent Office.

JOHN CLEAR, OF ANDERSONVILLE, TENNESSEE.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 440,345, dated November 11, 1890.

Application filed May 19, 1890. Serial No. 352,353. (No model.)

To all whom it may concern:

Be it known that I, John Clear, a citizen of the United States, residing at Andersonville, in the county of Anderson and State of 5 Tennessee, have invented a new and useful Churn, of which the following is a specification.

The invention relates to improvements in churns.

The object of the present invention is to simplify and improve the construction of vertical double-dasher churns having parallel shafts and to enable the dashers and operating mechanism to be readily removed from 15 and replaced in the churn-body.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particu-20 larly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a churn constructed in accordance with this invention. Fig. 2 is a centrally vertical sectional view. Fig. 3 is a horizontal

25 sectional view. Referring to the accompanying drawings, 1 designates a churn-body preferably approximately cylindrical and provided on the upper face of its bottom with a block 2, having a 30 rectangular recess 3, in which is stepped a post 4, that is adapted to be readily inserted in and removed from the recess of the block. The upper end 5 of the post is oppositely beveled and pointed and supports a vertical frame 6, 35 that carries the operative parts of the churn, and comprises two sections 7 and 8, forming a longitudinal opening between them, the former of which is provided at its lower end with forked arms 9, which receive between 40 them the beveled end 5 of the post 4, and is secured thereto by bolts or the like, and the upper end of the section terminates in a handle 10, which is slanting and is adapted to be grasped to hold the post in the step during the 45 operation of the churn and to remove the same from the body after the operation of churning has been completed. The section 7 is pro-

vided near its upper and lower ends with the

against which the other section 8 abuts, and 50 the said sections are bolted together and have between them a space 13, in the upper portion of which is journaled a main shaft 14. The main shaft 14 is provided with a crank-handle 15, and has rigidly mounted upon it a cog- 55 wheel 16, that meshes with a pinion 17, mounted upon a shaft 18 and provided at its ends with wheels 19. The wheels 19 have connected to their wrist-pins 19<sup>a</sup> the upper ends of connecting-rods 20, and the lower ends of the 60 connecting-rods are bifurcated and have pivoted in their bifurcations the upper ends of dasher-rods 21. The dasher-rods are arranged upon opposite sides of the vertical post 4 and are provided with a pair of dashers 22 and 23, 65 that have central openings to receive the post.

The churn-body is provided with a cover 24, having a central opening 25 and side openings 26 to receive the dasher-rod.

From the foregoing description and the ac- 70 companying drawings the construction, operation, and advantages of the invention will be readily understood.

Having thus described my invention, I claim—

1. In a churn, the combination of the body provided with the block 2, secured to the bottom and having a rectangular recess, the post 4, having its lower end stepped in the recess, the vertical frame 6, mounted upon the post 4 80 and having a longitudinal opening, the main shaft journaled in the frame and carrying the cog-wheel arranged in the longitudinal openings of the frame, the shaft 18, provided with a pinion meshing with the cog-wheel, the 85 wheels 19, arranged at the ends of the shaft 18, the dasher-rods provided with dashers, and the pitmen connecting the dasher-rod and the wheels, substantially as described.

2. In a churn, the combination of the body, 90 the vertical post removably stepped therein and having its upper end oppositely beveled, the frame comprising the section 7, provided with the forked arms at its lower end, having secured between them the upper end of the 95 post, the upper end of said section terminating in a handle, and the section 8, secured to flanges 11 and 12, which form shoulders, I the section 7, the main shaft mounted in the

upper portion of the frame and carrying the cog-wheel and provided with a crank-handle, the shaft 18, mounted in the lower portion of the frame and carrying a pinion meshing with the cog-wheel, the wheels arranged at the ends of the shaft 18, the dasher-rods, and the pitmen connecting the dasher-rods and the wheels, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 10 presence of two witnesses.

JOHN CLEAR.

Witnesses:

J. C. Scruggs, A. B. Carns.