

No. 646,994.

J. & J. F. JANNEY.

Patented Apr. 10, 1900.

CHURN.

(Application filed Dec. 16, 1899.)

(No Model.)

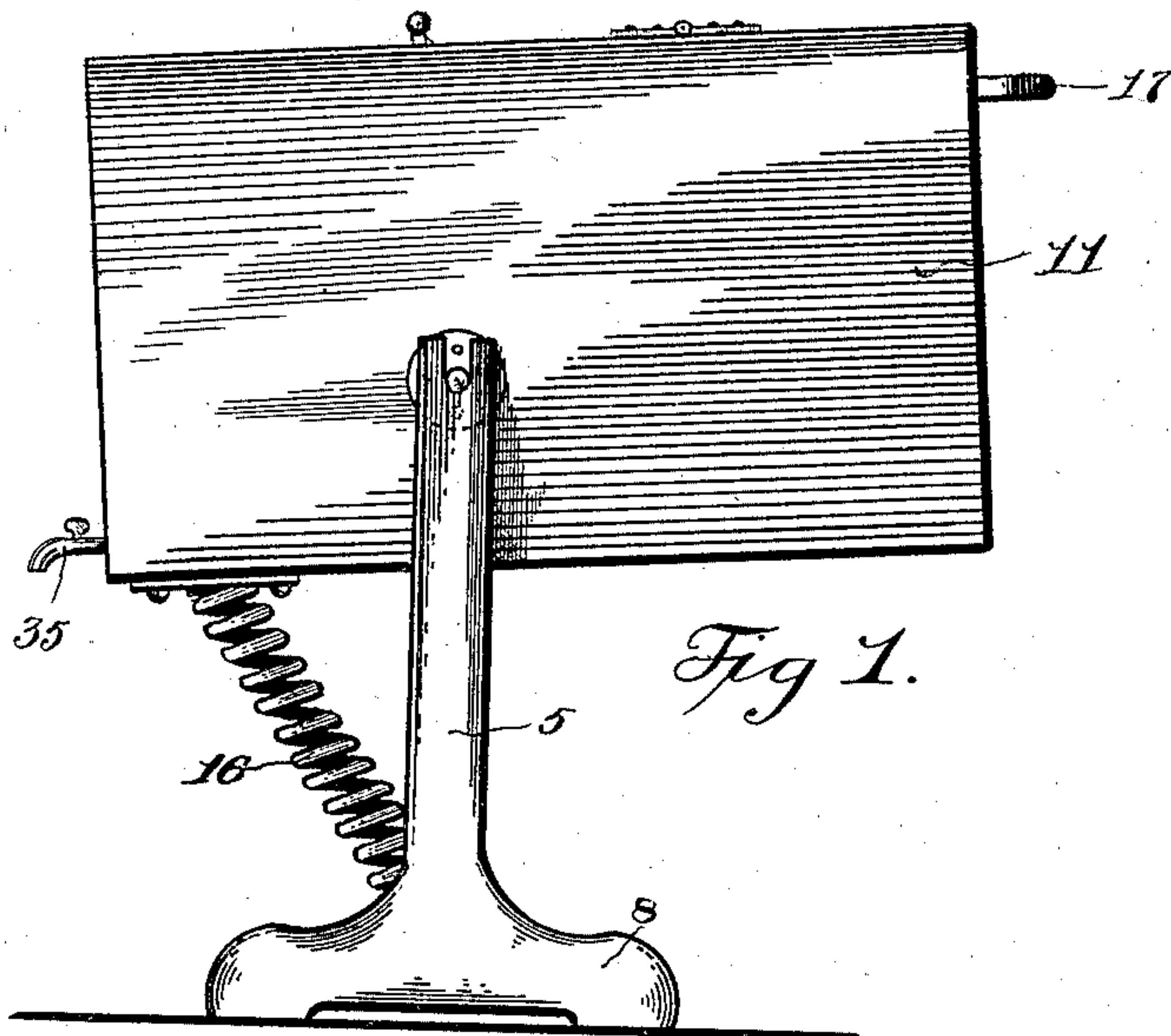


Fig 1.

Fig 2.

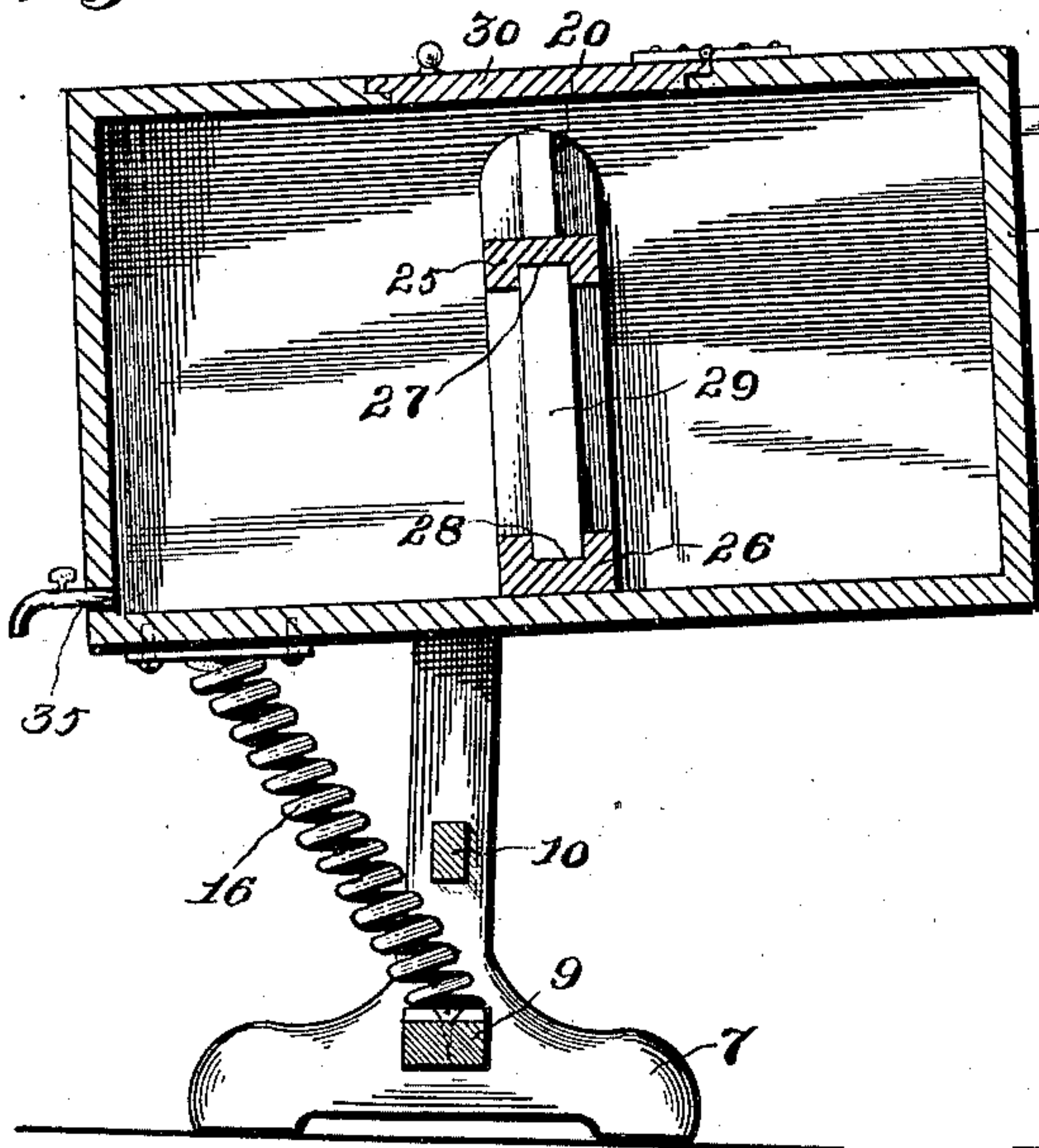
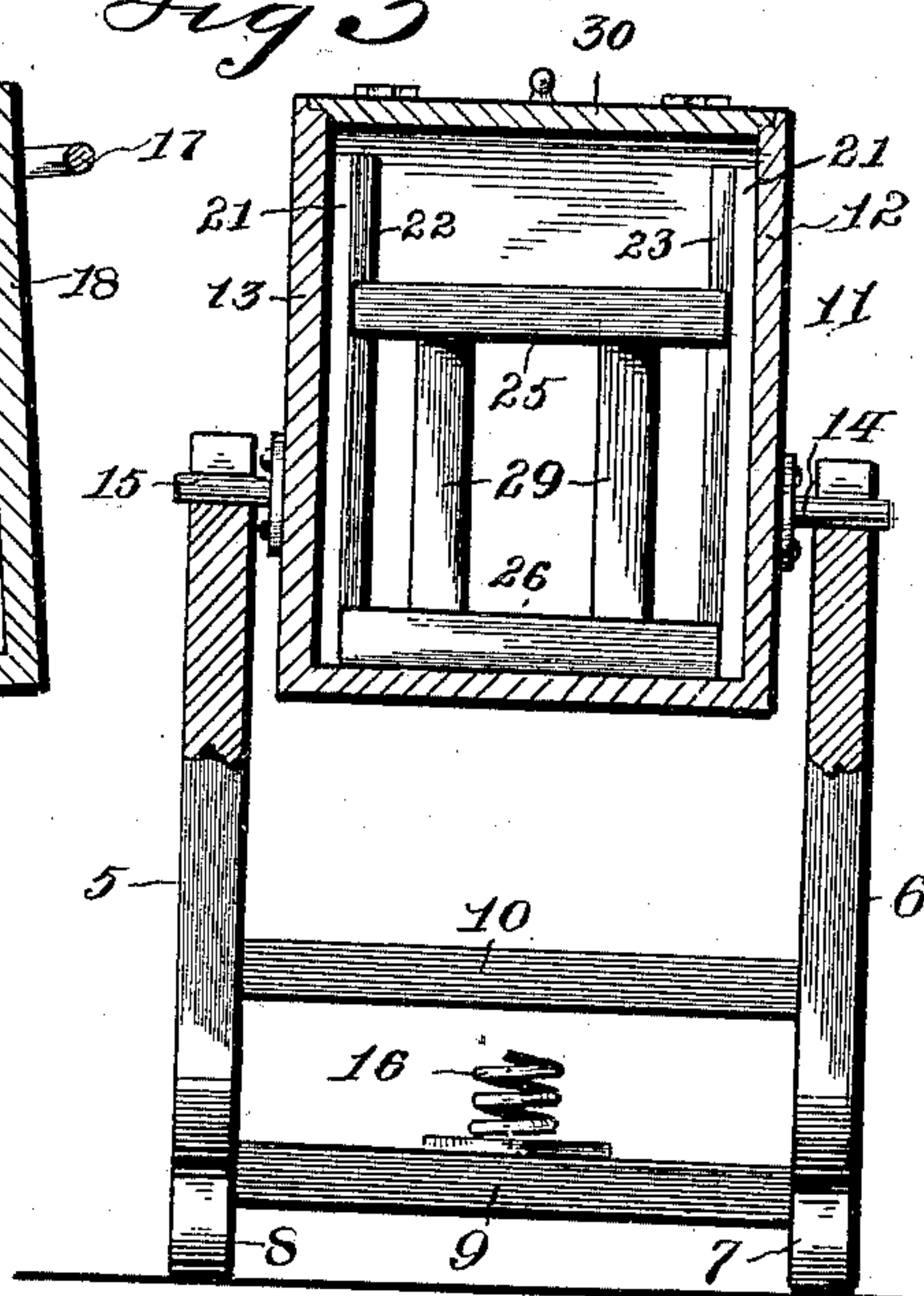


Fig 3



Witnesses

Geo. S. Donderso

Geo. H. Chandler

By Their Attorneys,

Jacob Janney Inventors  
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# UNITED STATES PATENT OFFICE.

JACOB JANNEY AND JOHN F. JANNEY, OF RICHLAND CENTRE, WISCONSIN.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 646,994, dated April 10, 1900.

Application filed December 16, 1899. Serial No. 740,578. (No model.)

*To all whom it may concern:*

Be it known that we, JACOB JANNEY and JOHN F. JANNEY, citizens of the United States, residing at Richland Centre, in the county of Richland and State of Wisconsin, have invented a new and useful Churn, of which the following is a specification.

This invention relates to churns in general, and more particularly to that class commonly known as "working-body" churns; and it has for its object to provide a construction in which the labor of operation will be reduced to a minimum and in which there will be employed a form of dasher which will effect a quick and efficient churning.

In the drawings forming a portion of this specification, and in which similar numerals of reference designate like and corresponding parts in the several views, Figure 1 is a side elevation showing a complete churn. Fig. 2 is a central vertical section taken longitudinally of the churn, the returning-spring being shown in elevation. Fig. 3 is a transverse vertical section taken through the supports of the churn, portions of the supports being shown in elevation.

Referring now to the drawings, the churn of the present invention comprises parallel uprights 5 and 6, having pedestals 7 and 8, which are connected by a cross-piece 9, above which is a second cross-piece 10, which coöperates therewith to thoroughly brace the structure.

The churn proper comprises a rectangular body 11, which is oblong on all sides and upon the side pieces 12 and 13 of which there are secured trunnions 14 and 15. These trunnions are disposed in axial alinement and are located substantially one-third of the height from the bottom of the body and nearer one end than the other, as illustrated in Figs. 1 and 3.

The churn-body is normally held in an inclined position with the end nearest the trunnion lowermost, the means for holding the body being a helical spring 16, one end of which is secured to the cross-piece 9, while the opposite end is secured to the bottom of the body adjacent the lowermost end. In order to oscillate the body 11 upon its trunnions, there is provided a handle 17, fixed to the end

18 of the body, which is the uppermost end, and by grasping this handle the churn-body may be moved against the tendency of the spring 16 and will return to the position shown in Fig. 2 when released. Thus by alternately pressing downwardly upon and releasing the handle 17 the churn-body will be given an oscillatory movement in a vertical plane.

Midway of the ends of the churn-body and at opposite points on the inner surface of the sides thereof are secured plates 20 and 21, having central longitudinal ribs 22 and 23, which form guides for the dasher, these guides extending substantially from the bottom to the top of the churn.

The dasher employed comprises an upper beam 25 and a lower beam 26, having longitudinal channels 27 and 28 therein, respectively, and in which are disposed parallel uprights 29. The ends of the beams 25 and 26 are slotted vertically, as indicated in Fig. 3, and in these slots are received the guide-ribs 22 and 23, the uprights 29 being separated from the guide-strips by interspaces. This dasher is substantially two-thirds of the height of the churn-body, and to permit its application and removal a lid 30 is hinged to the top of the body and is adapted to cover and uncover an opening extending throughout the width of the inclosure of the churn.

In practice after the dasher has been placed within the churn a suitable quantity of cream is supplied, and the churn is then rocked or oscillated upon its trunnions, with the result that the cream passes violently backwardly and forwardly through the dasher and effects the churning. After the operation of churning is completed the buttermilk may be drawn off through a spigot 35 at one end of the churn.

It has been found that with the structure above described the cream is quickly converted into butter, while the locations of the trunnions and the spring cause the weight of the milk or the cream to so distribute itself during the churning operation as to maintain the oscillatory movement of the churn for some time after it is first started, thus requiring very little labor in maintaining a constant motion.

It will be noted upon reference to the draw-



ings that the spring employed normally stands with its convolutions separated and that the weight of the churn holds the spring normally in this condition. When, however, the churn  
5 is rocked, the convolutions are moved toward each other against the tendency of the spring, so that the spring thus forms a yieldable cushion.

It will of course be understood that in practice any desired materials and proportions  
10 may be employed for the various parts without departing from the spirit of the invention.

What is claimed is—

15 1. A churn comprising supports and a body portion, trunnions upon the body portion at one side of its center of gravity and journaled in the supports, a helical spring connected with the body portion at one side of the vertical plane of the trunnions and connected  
20 with the supports below and in the vertical plane of the trunnions, said spring being

adapted to stand normally under tension and hold the body inclined, and a dasher within the body portion. 25

2. In a churn, the combination with supports, of a rectangular body portion, trunnions fixed to the body portion at one side of its center of gravity and journaled in the supports, a helical spring fixed at one end to  
30 the body at the opposite side of the trunnions from the center of gravity of the box, said spring being fixed at its opposite end to the support below and in the vertical plane of the trunnions, and a dasher within the body. 35

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JACOB JANNEY.  
JOHN F. JANNEY.

Witnesses:

W. S. McCORKLE,  
EDNA HASKELL.