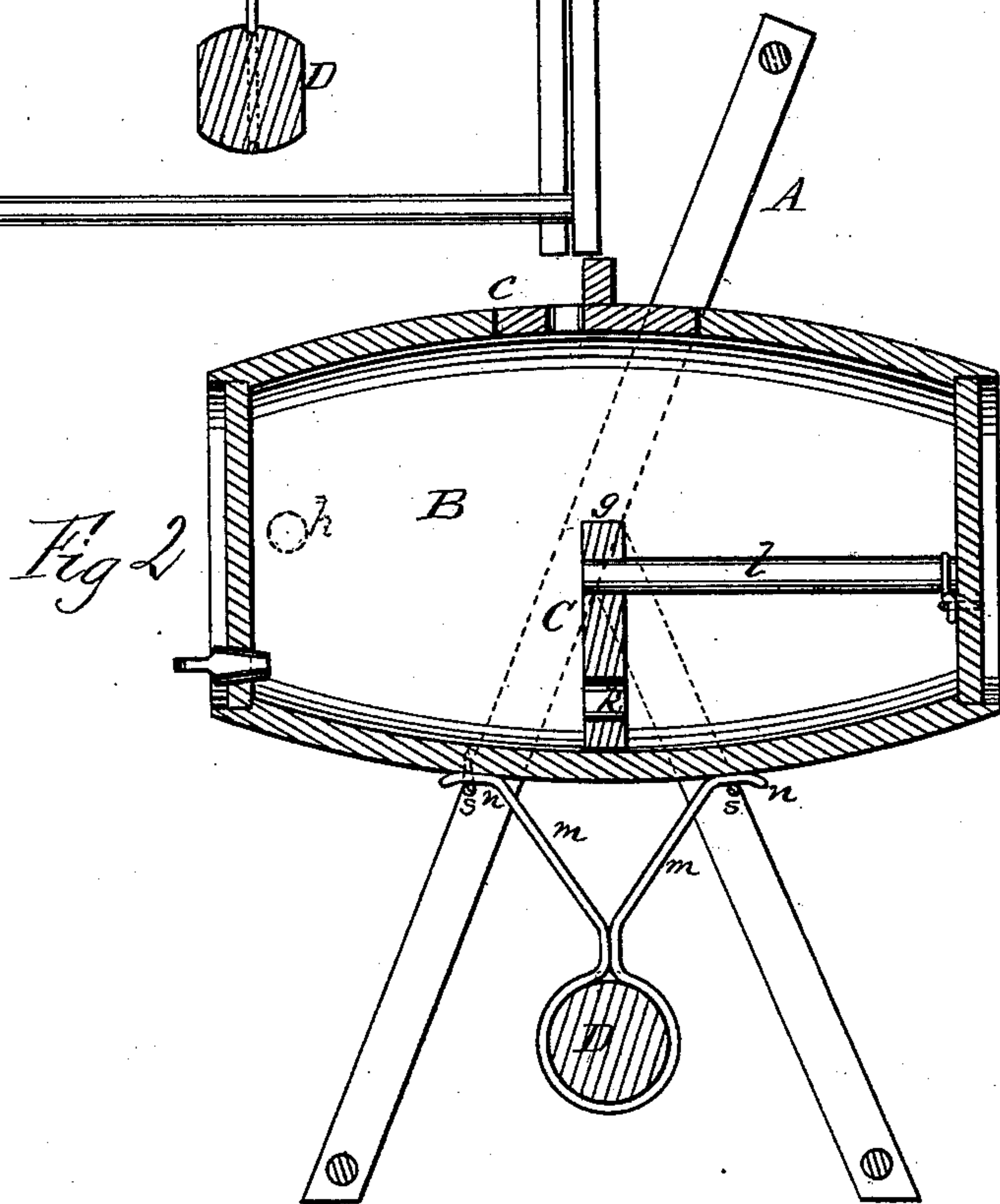
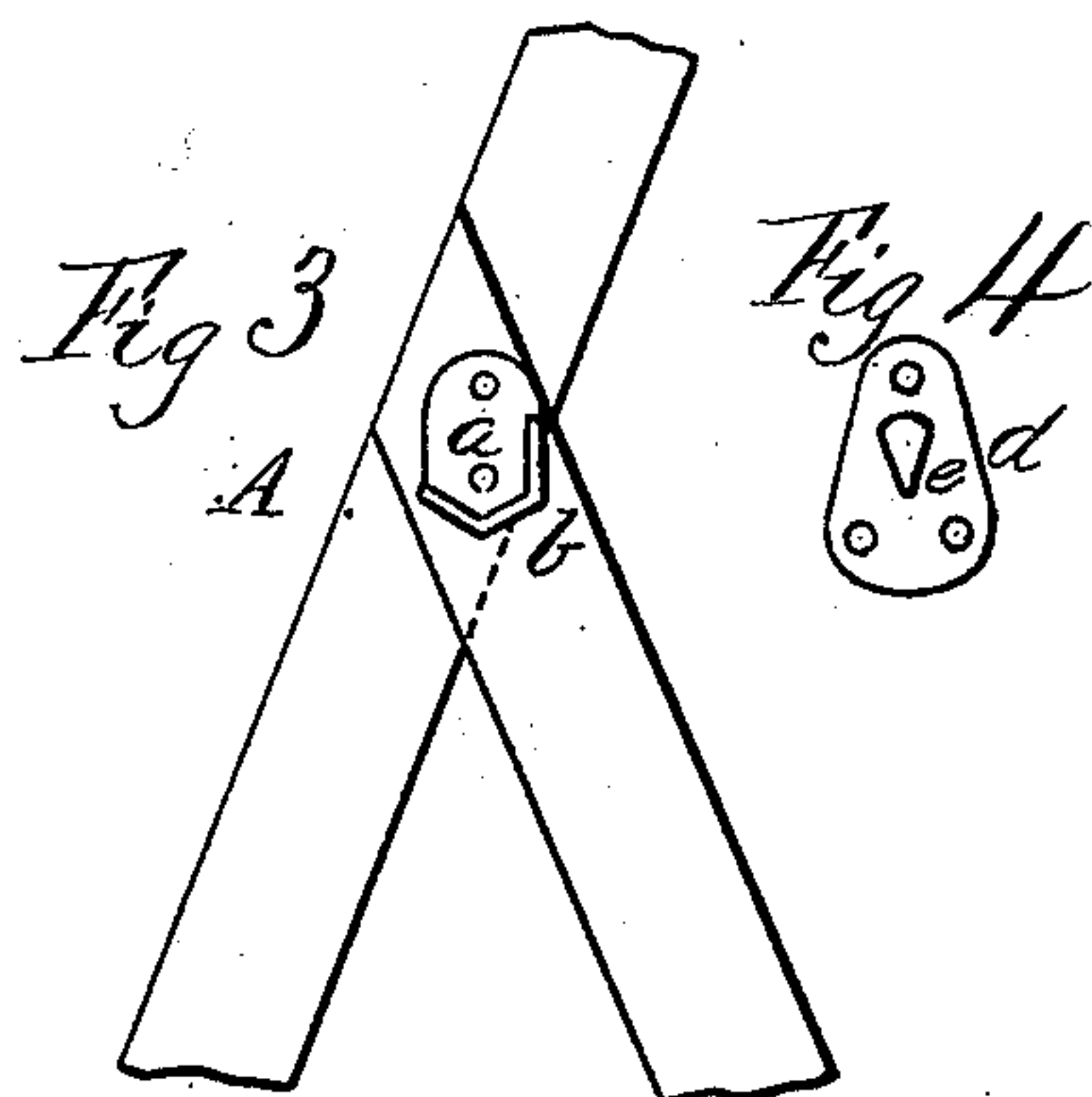
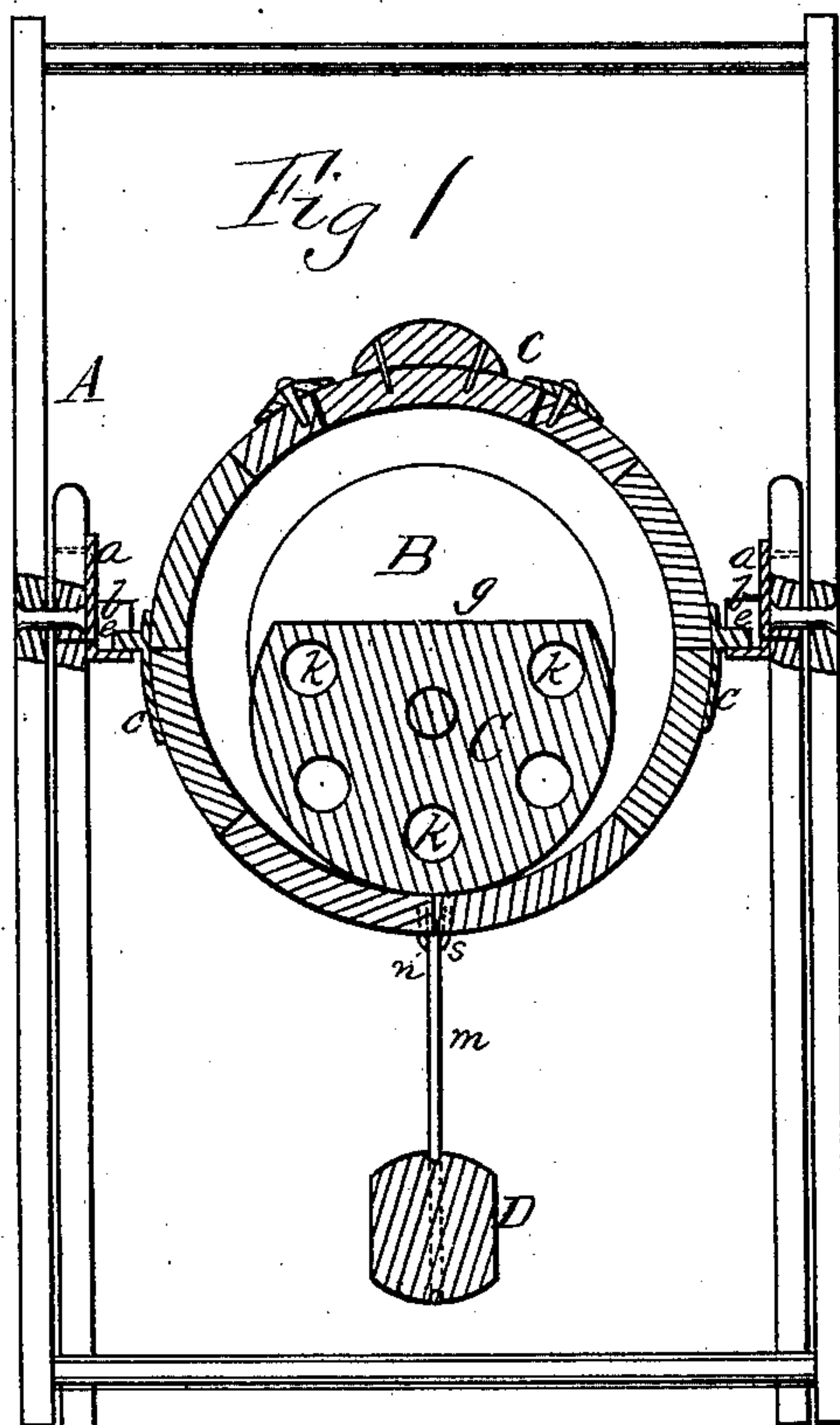


J. E. MARQUIS.
Churn.

No. 210,344.

Patented Nov. 26, 1878.



WITNESSES

Ville Anderson
Mary Utley

INVENTOR

Joseph E. Marquis,
by E. W. Anderson.

ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH E. MARQUIS, OF SHARON, OHIO.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **210,344**, dated November 26, 1878; application filed August 7, 1878.

To all whom it may concern:

Be it known that I, JOSEPH E. MARQUIS, of Sharon, in the county of Noble and State of Ohio, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a cross-section of this invention. Fig. 2 is a longitudinal section of the same. Figs. 3 and 4 are details.

The object of this invention is to provide a stem-dasher in a common keg as a churn; and it consists in the construction and novel arrangement of an oscillating keg having a perforated semicircular dasher resting on the lower wall of said keg about the middle of its length, and provided with a stem attached to the head of the keg by a hook and staple, so that the dasher is removable, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the frame, between the side bars of which the keg is designed to be suspended. This frame is conveniently made by attaching short oblique legs or braces to the long inclined side bars, and connecting the ends of the braces and side bars by transverse rods or ties. To each side of the frame is fastened a socket-plate, *a*, having an angular bearing, *b*, whereof the rear flange or guard-wall is vertical, or nearly so, and the lower flange or bearing is a little inclined from the horizontal toward the rear or guard flange. Each bearing is therefore open in front.

B designates the keg, which is of any ordinary manufacture, or may be an elongated vessel made especially for the purpose. For this use it is provided with an opening in the side, to be closed by means of a suitable cover, as indicated at *c*. This opening may be made in the keg by sawing through its wall, the portions of the staves removed being secured together with a cleat, to form the cover.

In its operation the keg is designed to rock about a transverse axis below the opening, and therefore on its sides, at the ends of such

transverse axis, are secured the pivot-plates *d*, which are provided with projecting angular or knife-edge bearings *e*, whereby the churn is suspended in the sockets of the frame, these knife-edge bearings engaging with the lower flanges thereof, and being kept from falling off in rear by the guard-flanges. When placed in the frame the keg is therefore in the horizontal position, with its ends projecting in front and in rear of said frame, as shown in the drawings.

A handle, *h*, is secured to the front end of the keg for the convenience of the operator, both in rocking the churn and in lifting it to or from its bearings in the frame.

Within the keg is arranged a removable dash, C, consisting of a circular board, having a part of its upper edge cut away at *g*, so that it can be readily introduced through the side opening of the churn. This board is provided with perforations *k*, through which the cream passes in falling from one end of the keg to the other, and it has also a stem, *l*, which is attached by means of an end hook and staple to the inside of either head of the keg, and thereby fixes the location of the dash at about the middle of the interior cavity, and holds it in proper position parallel to said head.

D indicates the hanging weight. This is connected to the under side of the keg by means of arms *m*, which are spread toward each end thereof, and have end hooks *n*, whereby they are attached to the staples *s* on the under side of the keg. These arms are detachable from the staples, so that the weight can be removed from the keg readily when the churning is over. The weight also is preferably made in cylindrical form with a middle annular groove, so that it may be slipped out of the sustaining-loop of the arms, to be replaced by a heavier or lighter weight, according to requirement.

Usually the hooks and staples forming the connections of the weight-arms are so arranged that the weight can be swung side-wise when the keg is set on end, so as to take up less room and avoid oversetting.

This weight forms an important adjunct to a churn of this character, governing and regulating its rocking movements, and serving,

when the churn has been set in motion, to throw the cream out of the ends of the keg toward the dash in the middle.

Having described this invention, I will state that I am well aware that a rocking churn is an old device, and that it is not new to employ a weight to assist the rocking operation. Hence I do not claim such devices.

What I claim, and desire to secure by Letters Patent, is—

The oscillating keg B, provided with the perforated semicircular dasher C, resting on

the lower wall of said keg about the middle of its length, and having a stem, *l*, attached to the head of the keg by hook and staple, so that the dasher is removable, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH E. MARQUIS.

Witnesses:

W. F. GRAHAM,

F. M. GILL.