

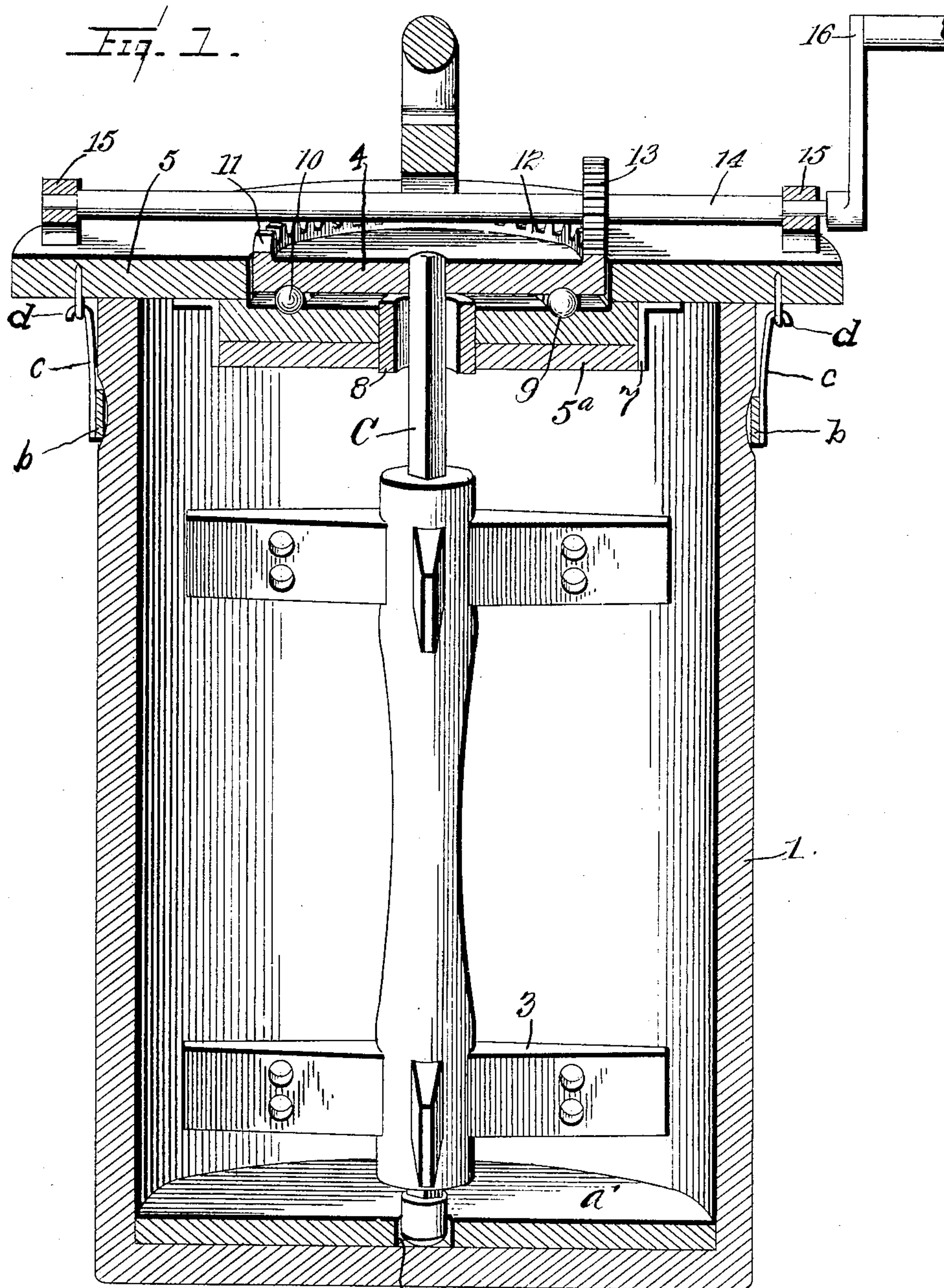
No. 771,471.

PATENTED OCT. 4, 1904.

A. L. GRIFFIN.
CHURN.

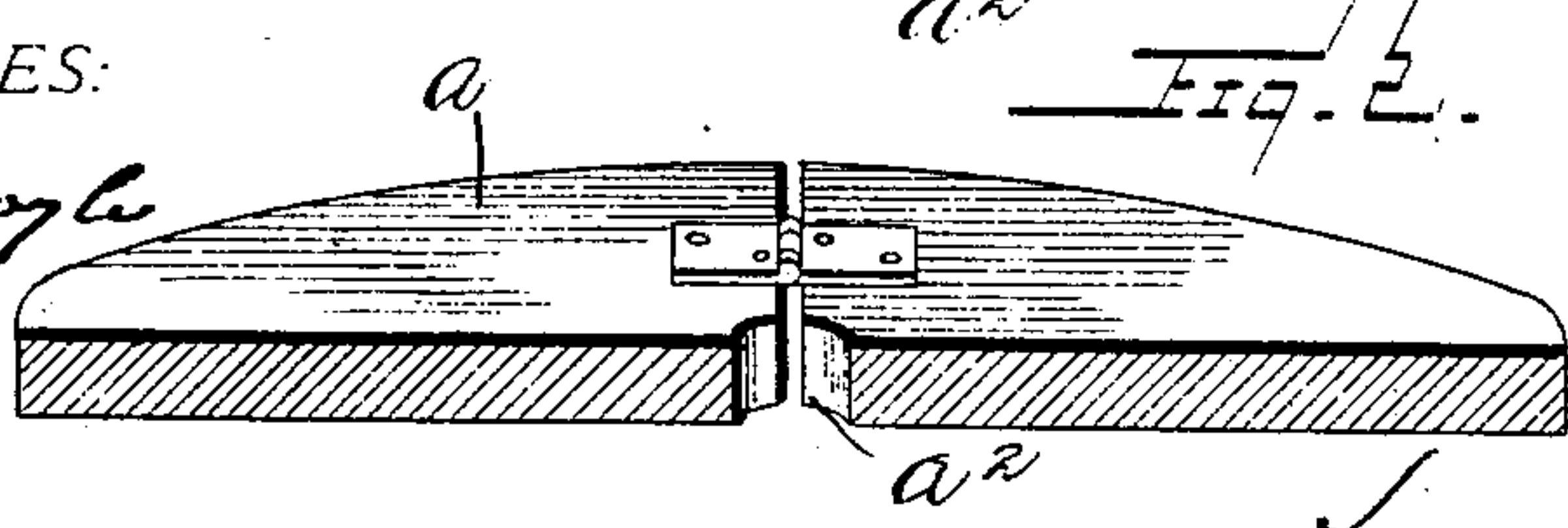
APPLICATION FILED APR. 13, 1903.

NO MODEL.



WITNESSES:

W. F. Doyle
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INVENTOR

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BY *James L. Applegate*
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UNITED STATES PATENT OFFICE.

ALVIN L. GRIFFIN, OF EUFAULA, ALABAMA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 771,471, dated October 4, 1904.

Application filed April 13, 1903. Serial No. 152,373. (No model.)

To all whom it may concern:

Be it known that I, ALVIN L. GRIFFIN, a citizen of the United States of America, residing at Eufaula, in the county of Barber and State of Alabama, have invented certain new and useful Improvements in Churns, of which the following is a specification.

This invention relates to improvements in churns, and particularly to that class known as "vertical-dasher."

The object of the invention is to produce a churn having a cap or cover for the churn-body and novel dasher-operating mechanism carried by the cap.

Furthermore, the object of the invention is to provide a dasher mechanism which is readily dismantled for the purpose of cleaning or renewing worn or broken parts and to produce novel means whereby the cover and operating mechanism can be applied to an ordinary jar or receptacle in which a removable guide or bearing is supplied for the purpose of receiving the lower end of the dasher.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

Figure 1 is a sectional view of a jar, showing the invention partly in perspective and partly in section. Fig. 2 is a view, partly in perspective and partly in section, of the guide used in the device.

The top 5 is attached to the receptacle by the hooks *d* engaging eyes on the under surface of the top, said top having a depending portion 5^a supported by the strips 7 and having a central hole through which the spindle C of the dasher 3 of any ordinary construction projects. The spindle C is angular in cross-section.

A ball-channel 9 is formed in the upper

surface of the depending portion, and balls 10 therein support the gear-wheel 4. The said gear-wheel comprises a body having an angular hole in its center for the reception of the end of the spindle C of the dasher 3, and the rim of the wheel is provided with teeth 11, engaged by a toothed wheel 13, which is mounted on the shaft 14. Said shaft 14 rests in the bearings 15, supported by the top. A crank 16 is provided for the shaft.

The guide *a'* is formed in two sections hinged together for convenience in inserting same in a receptacle. The recesses *a*² form a bearing for the end of the dasher. This is to be used in jars or receptacles not provided with the usual socket for the end of the dasher.

The jar 1 has a strap *b* buckled therearound, and branches *c* from the strap have hooks *d* to engage the eyes on the under side of the cover.

Having fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

In a churn, a jar, a strap therearound, branches on the strap, hooks on the branches, a cover having a depending portion with a ball-channel, balls therein, a gear-wheel rotatable on the balls, means for driving the gear-wheel, a hinged piece adapted to fit in the bottom of a jar and having recesses, to form a bearing, a dasher resting in the bearing, a spindle on the dasher engaging the gear-wheel to be rotated thereby, and means on the cover engaged by the hooks.

In testimony whereof I affix my signature, in the presence of two witnesses, this 8th day of April, 1903.

ALVIN L. GRIFFIN.

Witnesses:

J. B. LASSITER,
E. H. MILLER.