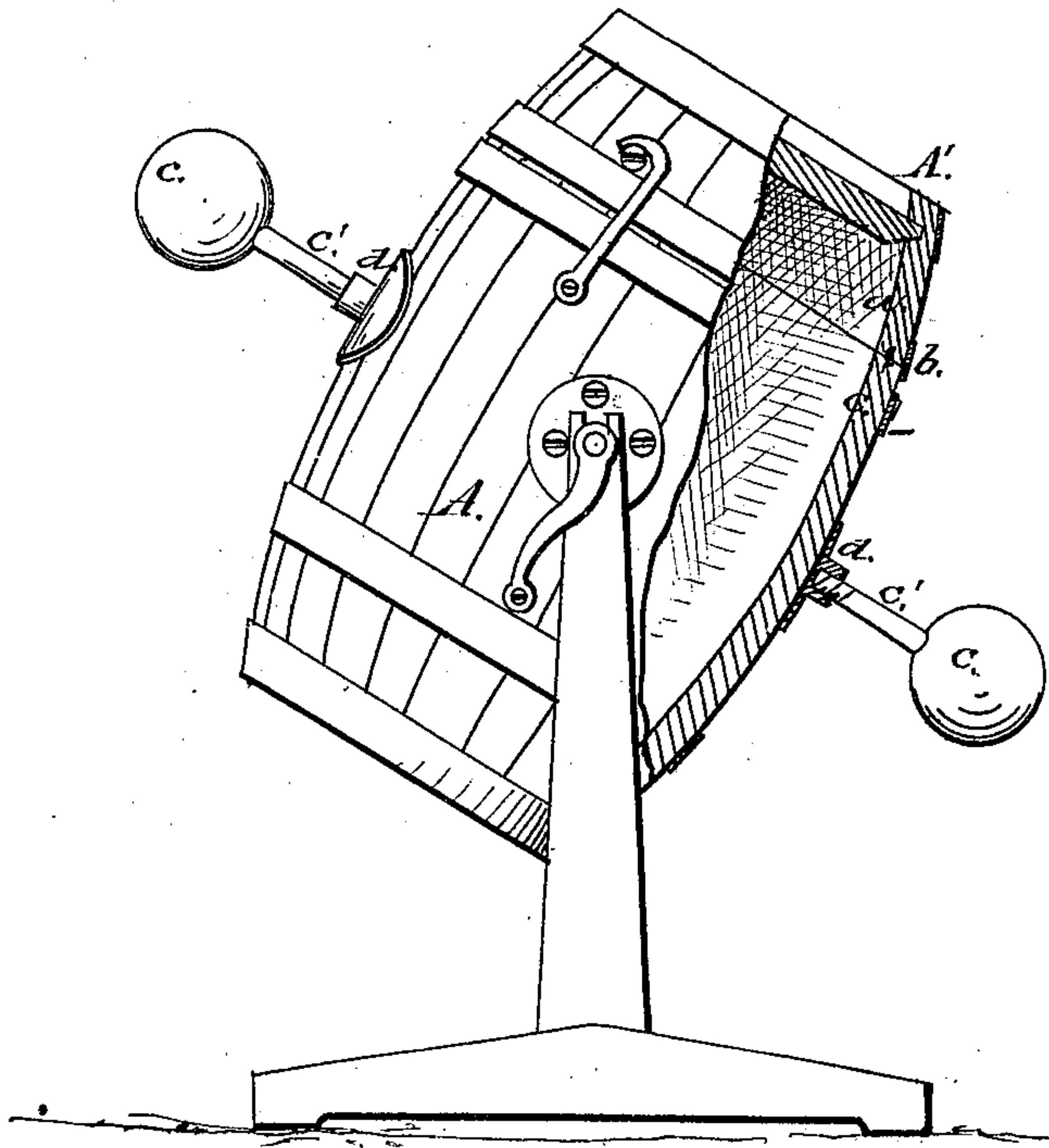


*R. Murphy:*

*Churn.*

*N<sup>o</sup> 86,999.*

*Patented Feb. 16, 1869.*



*Witnesses:*  
*G. A. Pettit*  
*J. C. Beach.*

*Inventor:*  
*R. Murphy*  
*Mum & Co.*  
*Attorneys.*



ROBERT MURPHY, OF JASPER, NEW YORK.

*Letters Patent No. 86,999, dated February 16, 1869.*

**IMPROVEMENT IN CHURNS.**

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ROBERT MURPHY, of Jasper, in the county of Steuben, and State of New York, have invented a new and improved Churn; 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 accompanying drawings, making a part of this specification, in which the figure is a perspective view of one of my churns, a portion of the shell being removed, to show the flange in the cover fitting into the groove in the churn.

This invention is an improvement on that for which Letters Patent were issued to me, bearing date July 5, 1864, in which the cover of the churn was provided with a rim at its lower end, which, while closing the seam between the cover and body of the churn, also serves the purpose of a hoop.

My present improvement consists in placing, in the lower end of the cover, a circular flange, and in making a corresponding groove in the upper end of the body of the churn, so that when the cover is placed in position, its flange shall fit within the said groove, and make a tight joint.

The invention also consists in attaching the balls, which were screwed into the shell of my former churn, for the purpose of lending it momentum in its movements, to plates fastened upon the outside of the churn, instead of into the churn itself, whereby I avoid making holes through the shell, which constituted one of the objections to my former invention.

In the drawings—

A, represents my barrel-churn, mounted upon a central pivot. Into the lower end of the cover A' of the

same, I insert a metallic flange, *a*, which projects an eighth of an inch, or thereabouts, below the bottom of the cover.

In the upper end of the body of the churn, I make a groove, of the size and in the location requisite to receive the flange *a*. By means of this flange and groove, I obtain a tight joint when the cover is in position, which it was found impossible to secure through the agency of the hoop *b* alone. The hoop and flange, when used together, however, admirably supplement each other, and the hoop is especially useful as a guide, directing the flange at once unerringly to its place.

In my former arrangement, the stems *c c* of the balls *c c* were screwed directly into the wood-work of the churn, and consequently two holes had to be made therein, which it is found desirable, in practice, to dispense with. I succeed in dispensing with them by screwing the stems into disks *d d*, having holes for the purpose, and the disks I attach in any suitable manner to the outside of the churn. I thus retain all the advantageous peculiarities of the balls, without the disadvantages which have heretofore attended their use.

Having thus described my invention,

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

1. The hoop *c*, in combination with the flange *a* and groove *e*, as and for the purpose described.
2. The balls *c*, with the stems *c'*, in combination with the disks *d*, as and for the purpose specified.

ROBERT MURPHY.

Witnesses:

F. W. BARRY,  
J. M. SIMPSON.