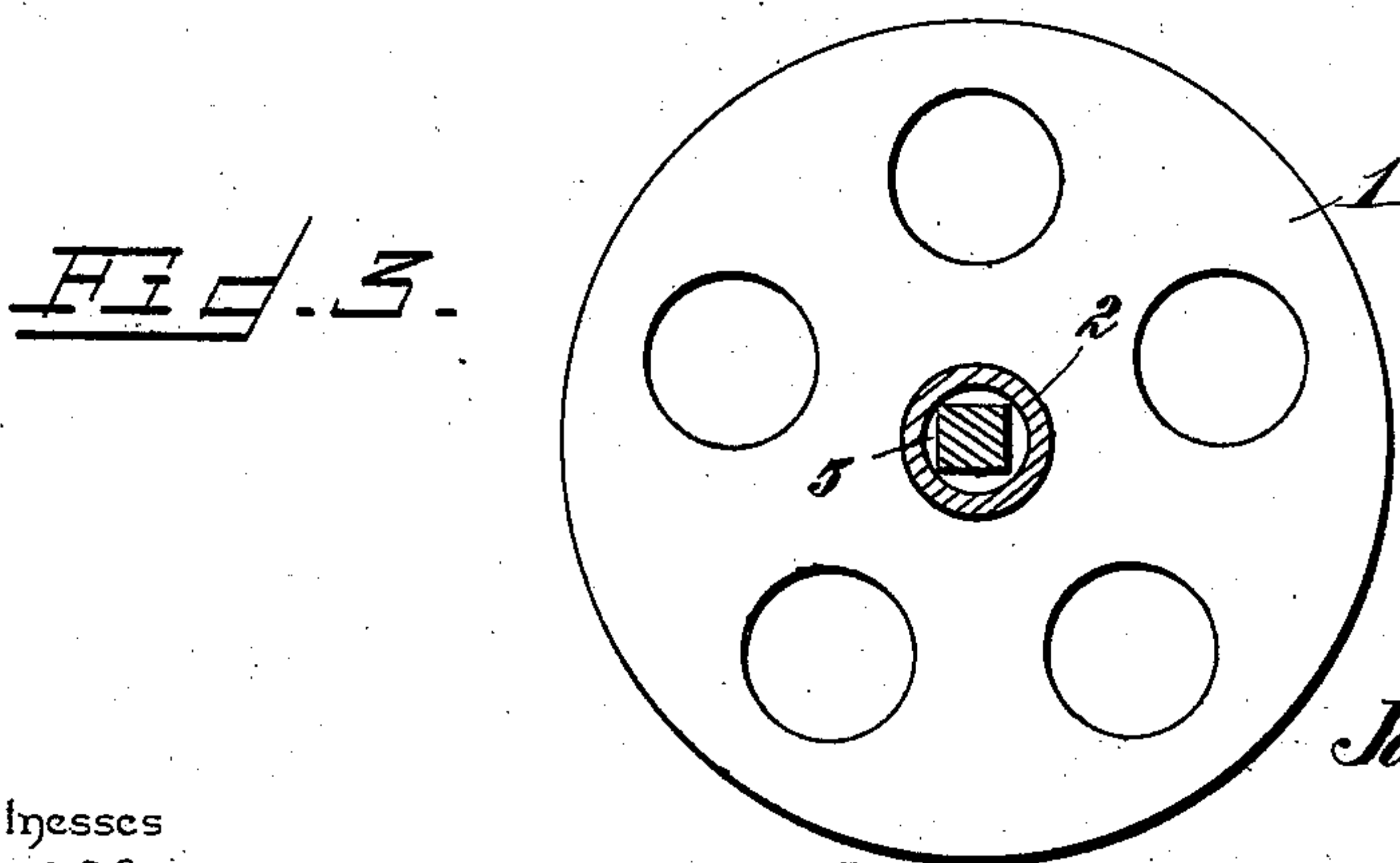
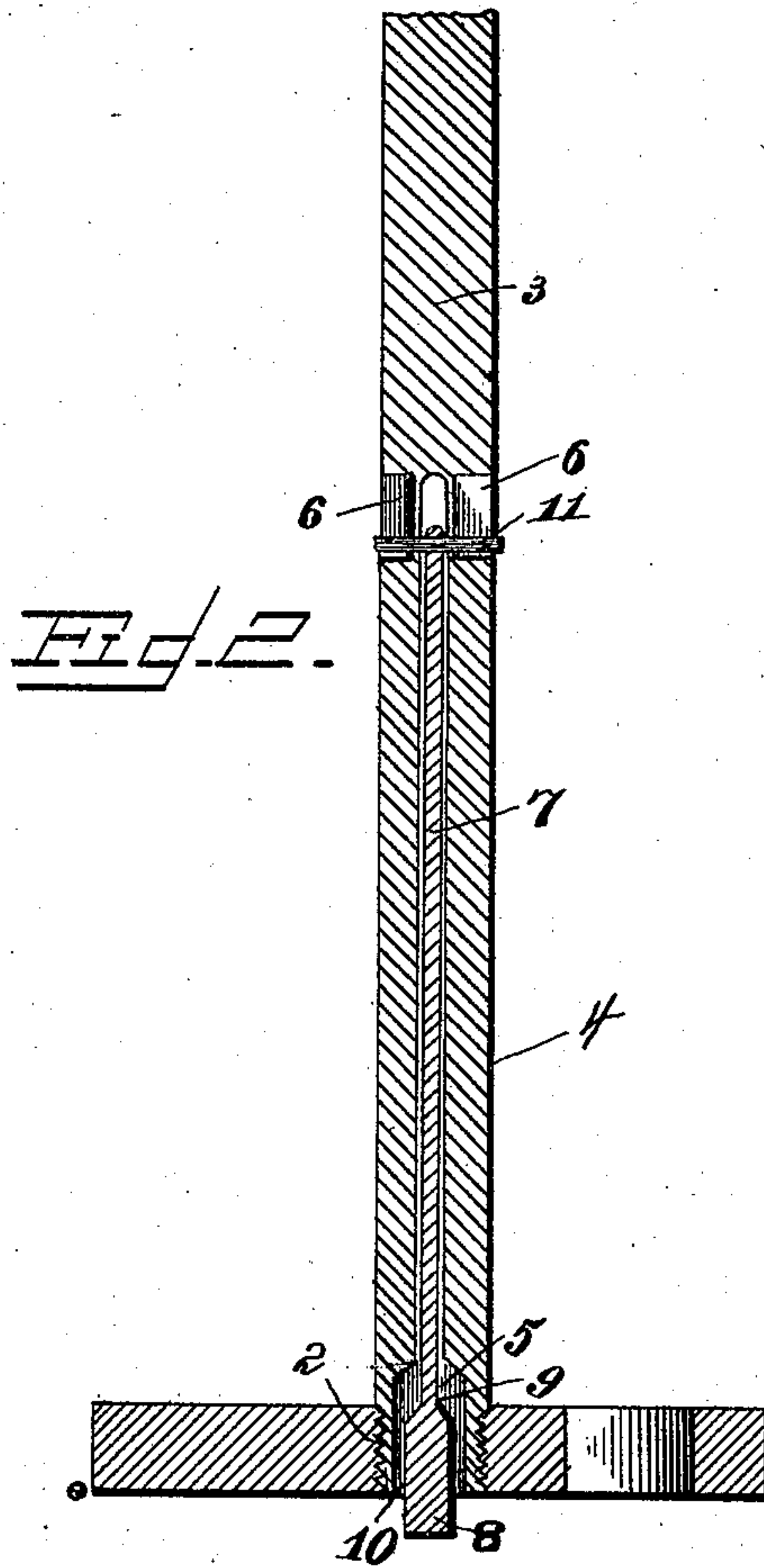
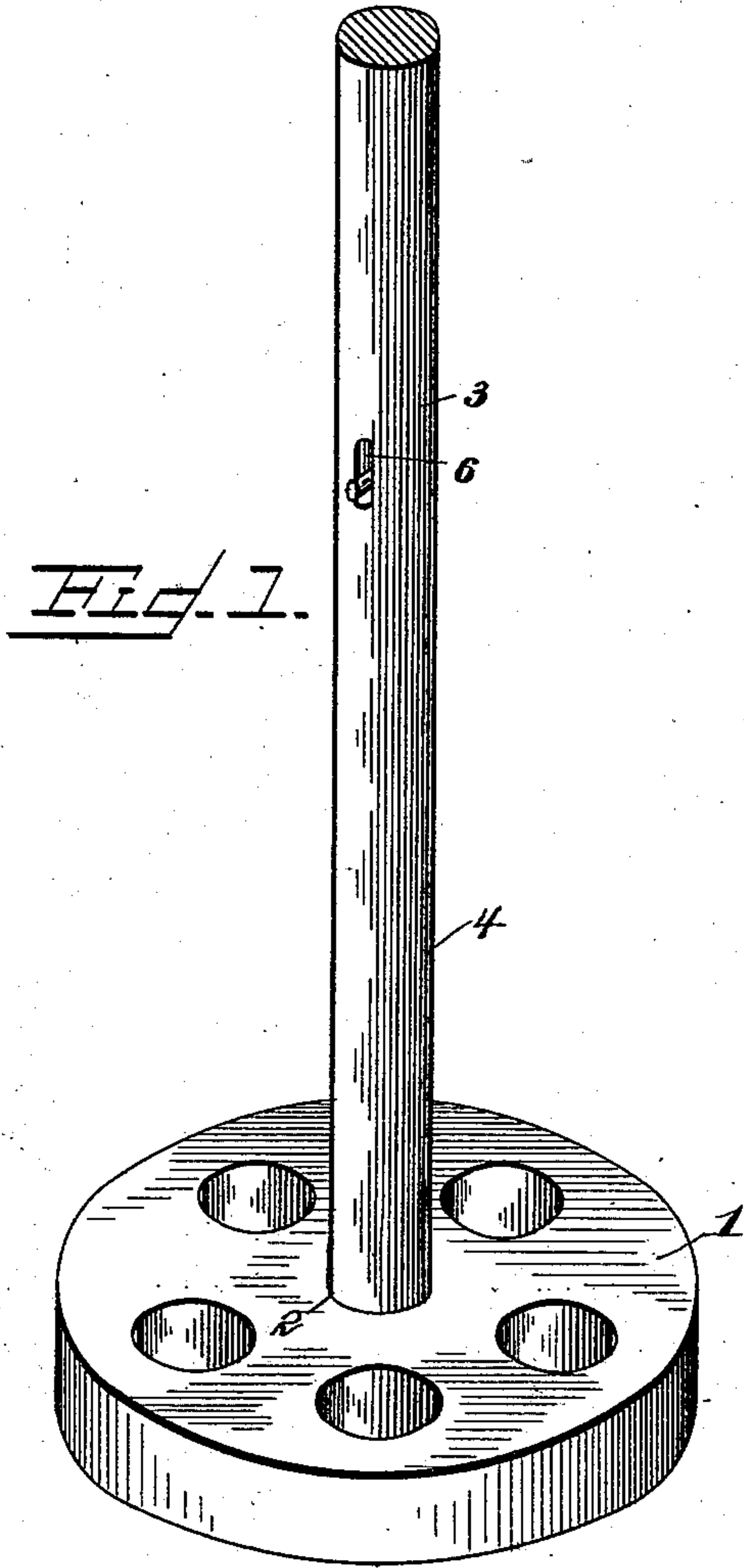


(No Model.)

J. J. A. MORATH.
CHURN DASHER.

No. 548,838.

Patented Oct. 29, 1895.



Witnesses

W. J. Pates
J. P. P. Pates

By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

JACOB J. A. MORATH, OF CLAYTON, MISSOURI.

CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 548,838, dated October 29, 1895.

Application filed April 25, 1894. Serial No. 508,983. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. A. MORATH, a citizen of the United States, residing at Clayton, in the county of St. Louis and State of Missouri, have invented a new and useful Churn-Dasher, of which the following is a specification.

My invention relates to churn-dashers, and particularly to those of the class having valves to provide for forcing air into the contents of a churn without necessitating the elevation of the head of the dasher above the surface of the contents at each stroke in order to receive air; and the objects in view are to provide a valve mechanism in connection with a churn-dasher having an indicator to show the position of the valve and enable the operator to see that it is working properly and also to provide means whereby the valve may be unseated when it becomes choked and held from operation by the accumulation of cream or separated butter in the passage around the valve.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a dasher embodying my invention. Fig. 2 is a vertical central section of the same. Fig. 3 is a plan view showing the dasher-staff and valve in section.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The dasher-head 1 is provided with a threaded opening 2, in which is secured the extremity of the dasher-staff 3, the lower portion 4 of said dasher-staff being tubular or provided with an axial bore, in which is arranged the stem 7 of a valve 8. The bore of the staff is enlarged at its lower end to form an air-cavity 10, at the upper end of which is a conical valve-seat 5 to receive the conical upper end 9 of the valve.

The bore of the staff is designed to extend to a point above the top of the churn-tub in which the dasher is used, at which point I employ lateral radially-disposed slots 6, in which operates a transverse pin 11, carried by the valve-stem, said pin projecting to the surface

of the staff, whereby it is visible to the operator.

The valve is held in place by means of the pin 11, which also serves to limit the reciprocation thereof, and in addition to this function the pin serves as an indicator to show the operator the position of the valve, and hence whether it is operating properly or not. When the valve becomes clogged and is held from proper operation by accumulations in the cavity 10, it may be loosened by the operator without removing the dasher-head from the churn by reciprocating the pin 11 vertically in the guide-slots. In other words, said pin not only indicates the condition of the valve, but enables the operator to relieve it of accumulations.

It will be seen that air is supplied to the cavity 10 through the lateral slots 6 and the communicating bore of the dasher-staff, whereby the dasher may be reciprocated without raising it above the surface of the contents of the churn, and hence without the exertion due to suction or the formation of a vacuum below the dasher-head, which is incident to the use of a valveless dasher.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. The combination of a dasher having a tubular staff provided at its lower end approximately in the plane of the dasher with a valve-seat, a valve arranged in operative relation with the seat and provided with a stem extending upwardly from the valve through the bore of the staff, and a visible indicator carried by the upper end of the valve-stem within reach of the operator without withdrawing the dasher from the churn, said indicator being at such a distance from the dasher as to be permanently exposed above the contents of the churn, substantially as specified.

2. The combination of a dasher having a longitudinal bore terminating at its lower end approximately in the plane of the dasher in a valve-seat and terminating at its upper end in lateral aligned slots, a valve arranged in

operative relation with said seat and having
a stem extending upwardly through said bore
of the staff, and a transverse pin secured in
the upper extremity of the stem and extend-
5 ing at its ends into said lateral slots whereby
the pin forms a visible indicator to show the
position of the valve and an exposed means
for unseating the valve when the operation
of the latter is impeded by accumulations in
10 the valve-seat, and whereby the contact of
the extremities of the pin with the lower

ends of the aligned slots limits the down-
ward movement of the valve, substantially as
specified.

In testimony that I claim the foregoing as 15
my own I have hereto affixed my signature in
the presence of two witnesses.

JACOB J. A. MORATH.

Witnesses:

JOHN G. WEBER,

HENRY C. HELMERING.