

S. DARLING.
Inkstands.

No. 156,840.

Patented Nov. 17, 1874.

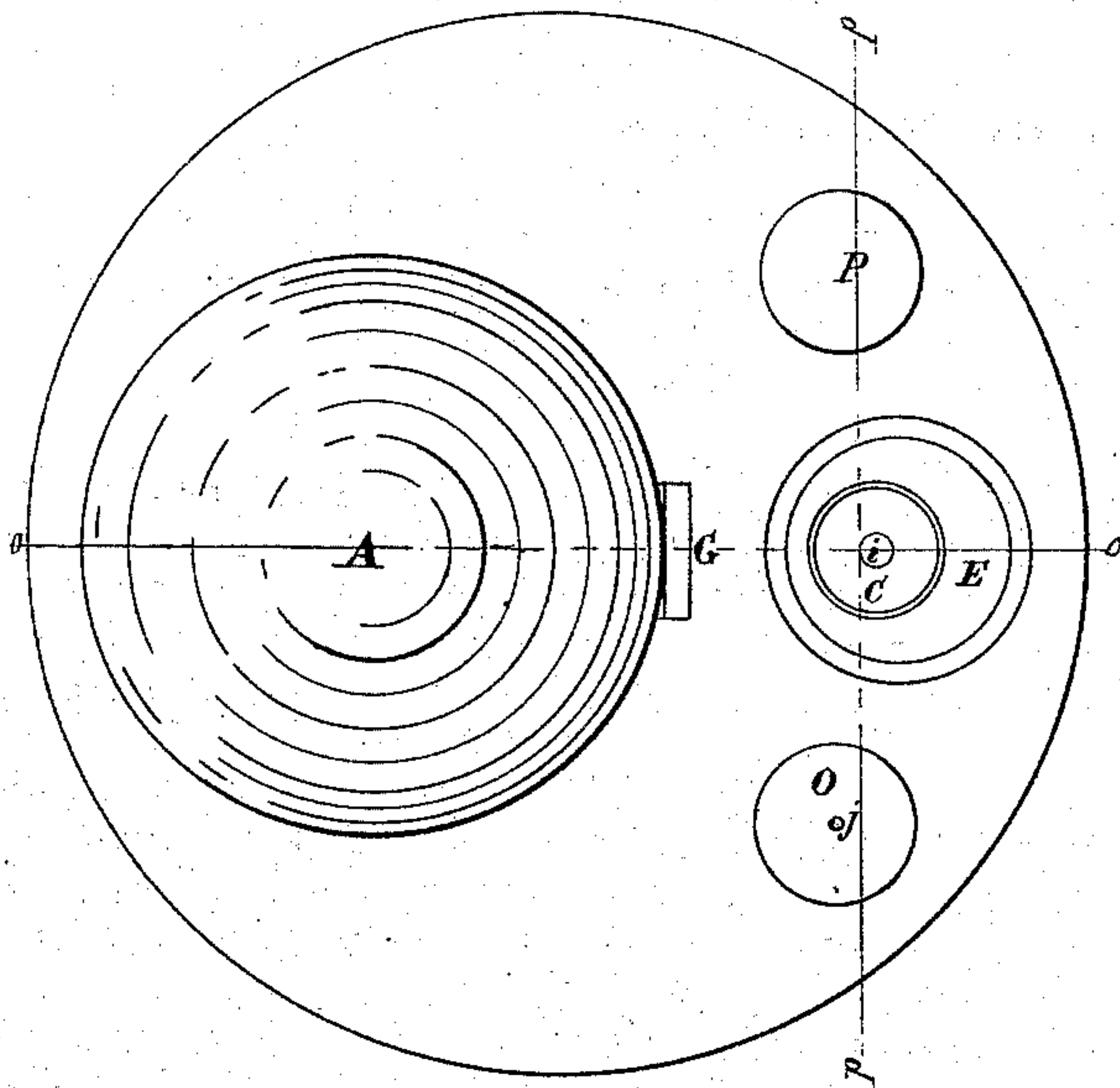


Fig. 1

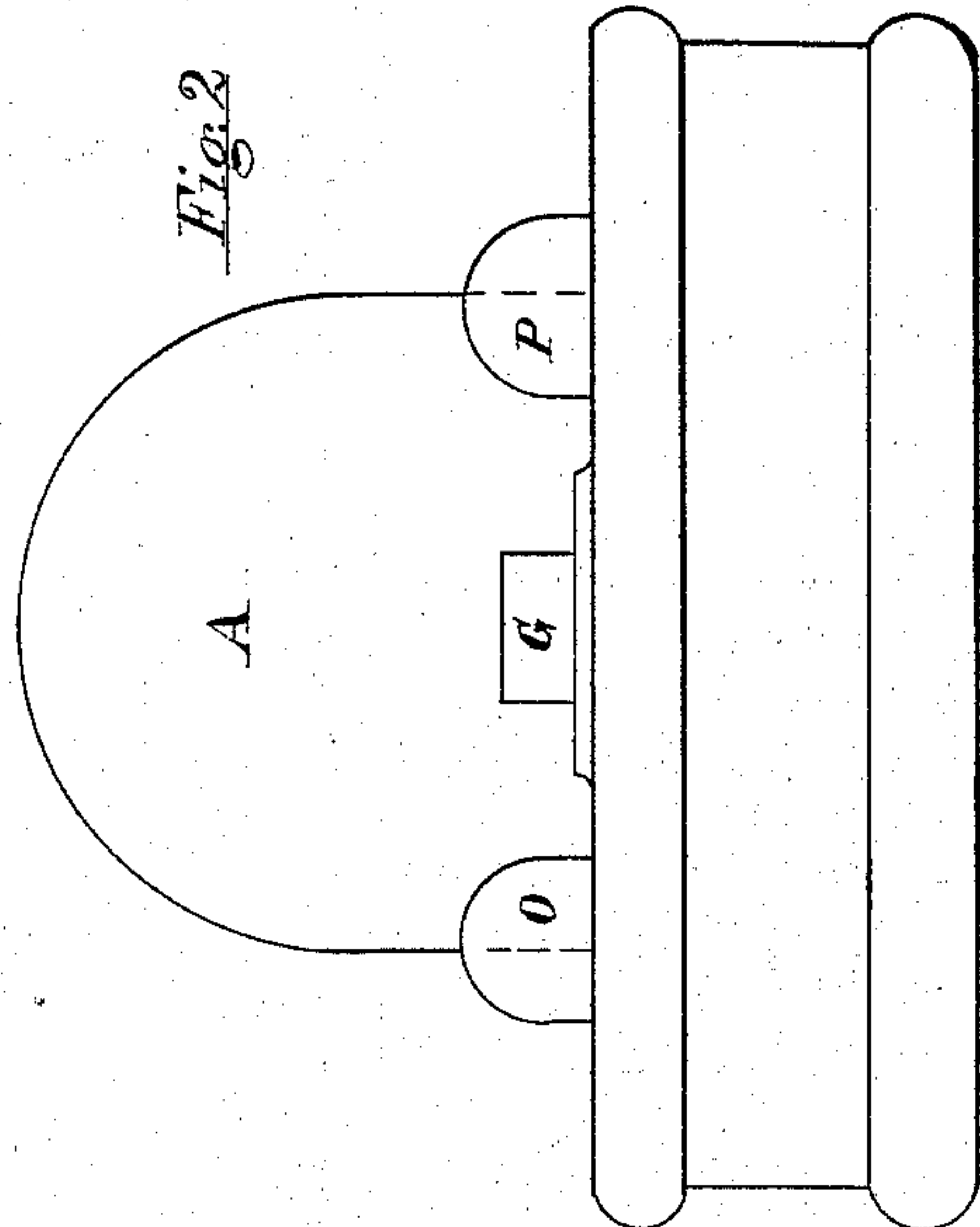


Fig. 2

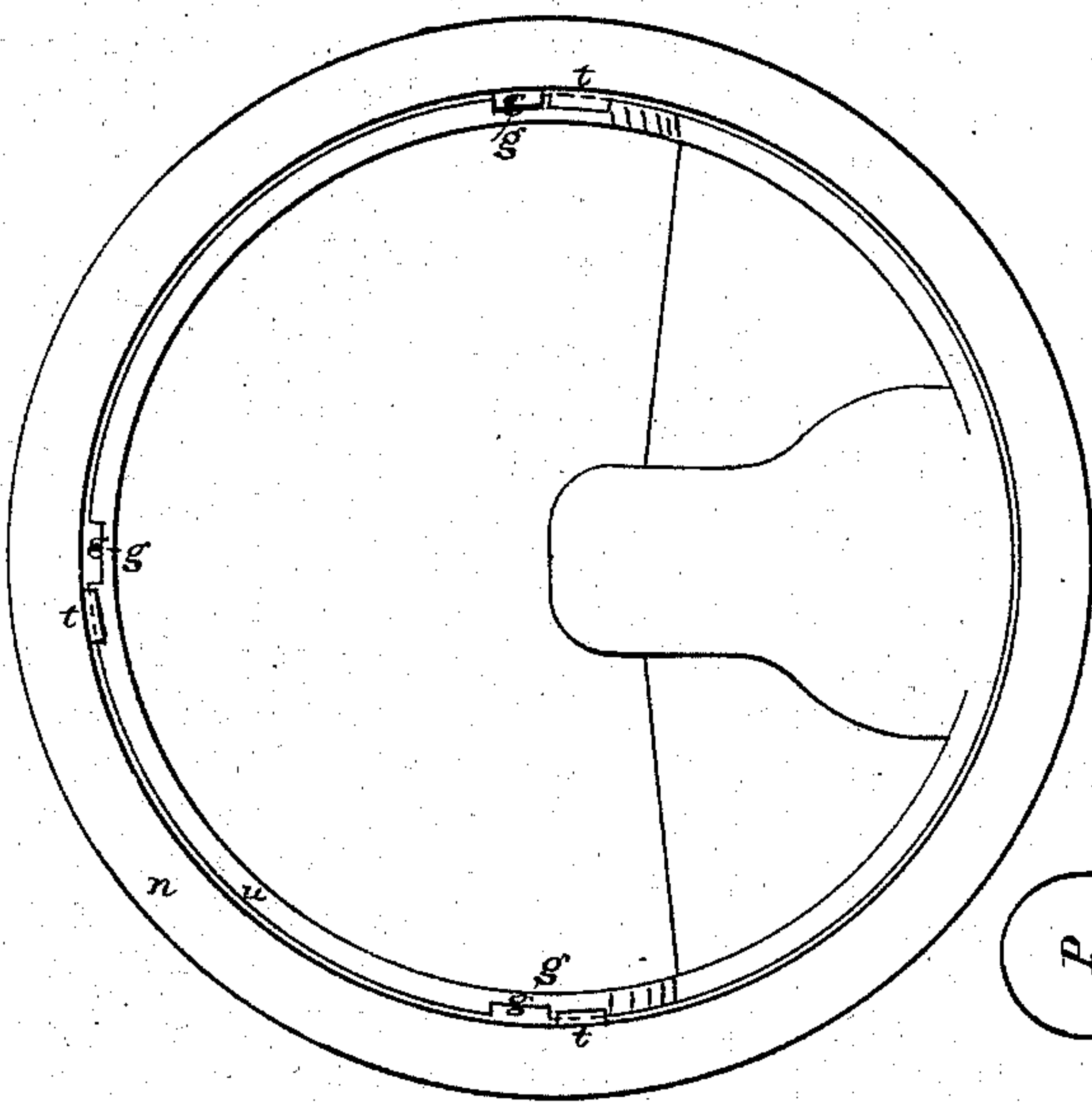


Fig. 3

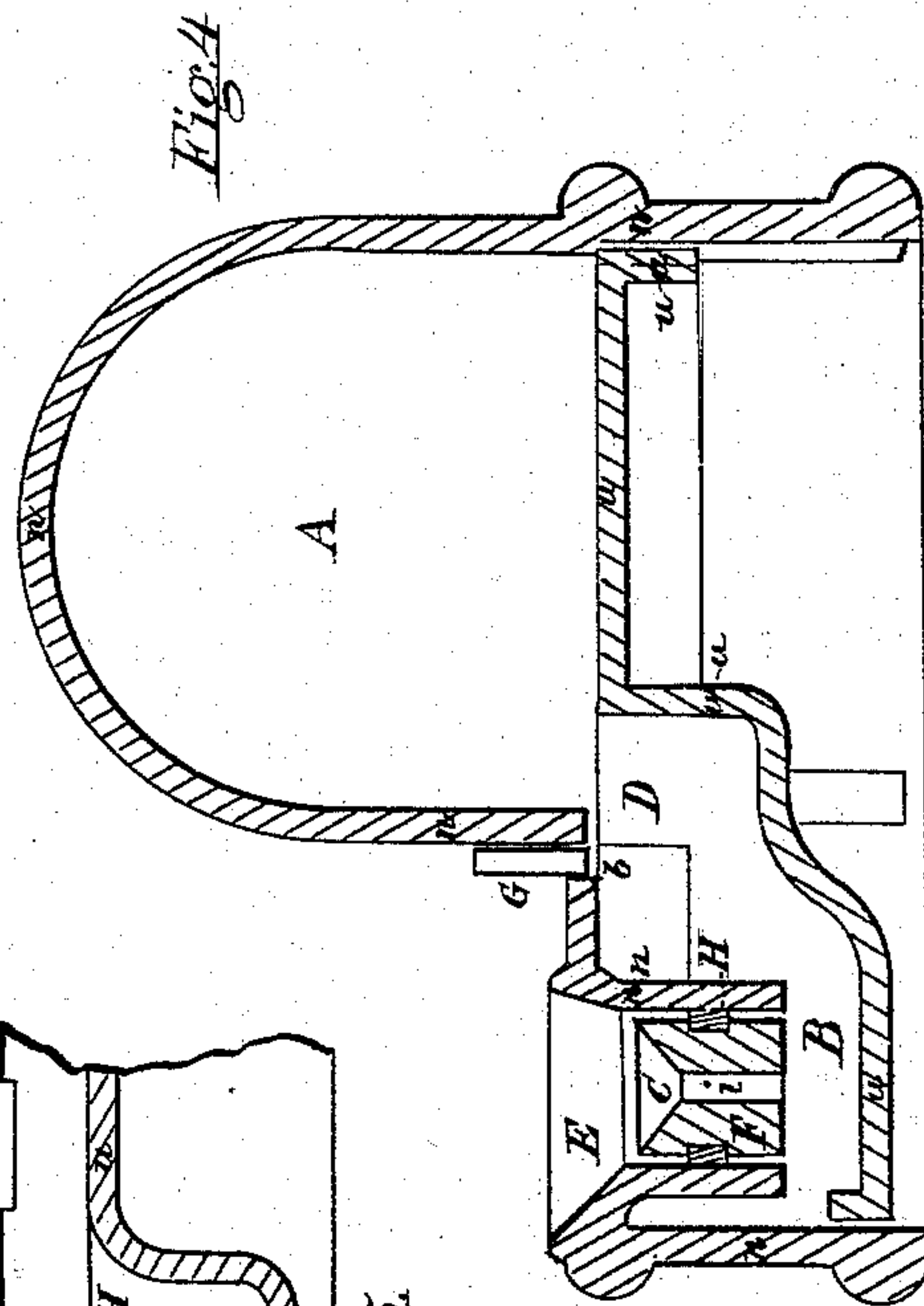


Fig. 4

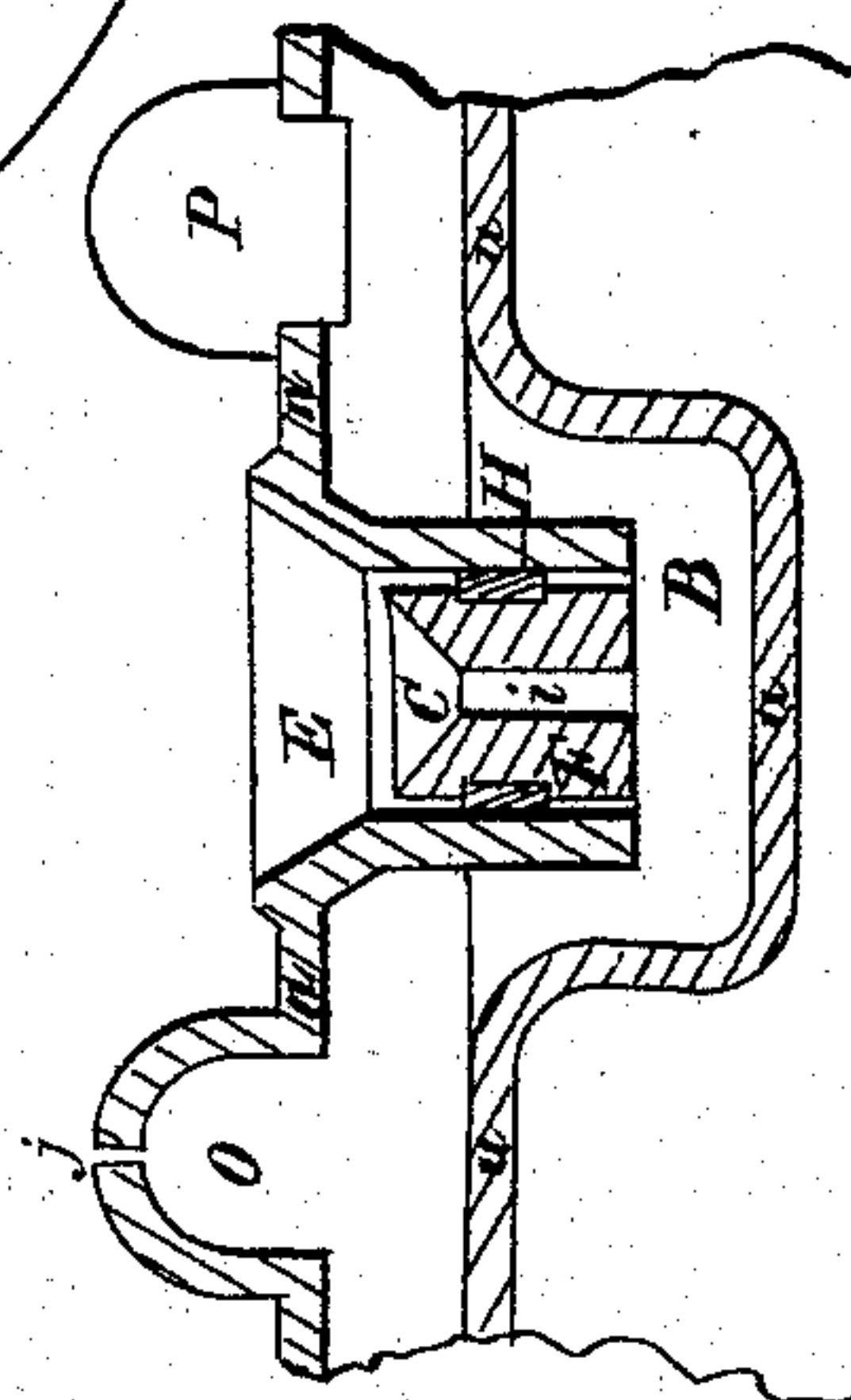


Fig. 5

Witnesses:

John E. Hall
William E. Ripley.

Inventor

Samuel Darling

UNITED STATES PATENT OFFICE.

SAMUEL DARLING, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN INKSTANDS.

Specification forming part of Letters Patent No. **156,840**, dated November 17, 1874; application filed August 24, 1874.

To all whom it may concern:

Be it known that I, SAMUEL DARLING, of Providence, in the county of Providence, State of Rhode Island, have invented certain new and useful Improvements in the Manufacture of Inkstands; and I do hereby declare that the following is a full, clear, and exact description thereof, sufficient, in connection with the accompanying drawings, to enable those skilled in the art to practice my invention.

My invention relates to a novel mode of constructing barometer-inkstands; and consists in making an ink and an air cavity or space below and in front of the reservoir; in making a dipping-cup directly over and with its lower part extending down into the cavity, so that it may be immersed in ink when the inkstand is in working order; in making the lower portion of the dipping-cup a straight tube, and the upper part above the level of the ink flaring; in providing the dipping-cup with an adjustable pen-gage; in making an opening for the passage of air to and from the ink-reservoir; in attaching a gate or regulator to the outlet of the reservoir; in making the inkstand in two parts, and securing them together by means of grooved projections and cement, and in making the bottom of the ink-reservoir above the ink-level in the dipping-cup.

Figure 1 represents a top view of my improved inkstand; Fig. 2, a side view; Fig. 3, a bottom view; Fig. 4, a vertical section at line *o o*, Fig. 1; Fig. 5, a front vertical section at line *p p*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the ink-reservoir, which is placed above the level of the ink in the dipping-cup C, to avoid the great waste of ink which takes place when the bottom of the reservoir and the bottom of the dipping-cup are on the same level. B is the cavity in which is deposited any sediment that may settle down from the dipping-cup. The ink passes from the reservoir through the lower part of this cavity to the dipping-cup, which also extends down into it, so as to be immersed in the ink. That part of said cavity which is above the ink-level is made very broad, so that the ink which may be forced out of the reservoir by the expansion of the air within it may spread over that broad

space, and not change materially the height of the ink in the dipping-cup.

This cavity need not necessarily be made in the exact shape herein described, but may be made in any desirable form without departing from the nature of my invention. For example, it may be made to increase in size gradually or regularly from the bottom upward, so that there shall always be a considerable depth of ink in the upper part of the cavity, to prevent the drying of the ink.

D is an ink and air passage or duct from the upper part of cavity B to the reservoir. The upper part or margin of the duct D and the upper part or ceiling of the cavity B are nearly on the same plane or level. The upper part of said cavity may be made still lower down, say about an eighth of an inch. It requires a space of about one-quarter of an inch above the ink at *b* before the air will pass into the reservoir through the duct D; hence it will be seen that the ink in the dipping-cup will stand about one-quarter of an inch below the upper margin of the passage or duct D. The upper part of the dipping-cup (represented by E) is made sufficiently flaring to enable the writer to see the ink in the ordinary position of the inkstand. F is an adjustable pen-gage, by which the writer can regulate the amount of ink that he will take upon his pen. This gage is held in position by a rubber band or packing, H, and is arranged to produce sufficient friction to keep it in place, but not so much but what it can be readily moved and regulated when desirable. When this gage is used in an inkstand in which the ink is continually being lowered by use, it can be pressed down from time to time as needed. It can be removed from the dipping-cup by means of a hooked wire. The hole *i* through the center of the gage is to be smaller than the pen which is to be used, and its upper part may be made flaring for convenience in dipping. *j* is an opening through the elevated part *o*, for the passage of air to and from the overflow-chamber in the upper part of cavity B, and may be of any suitable size or shape desirable, and lead into said cavity from any convenient point above the ink. It is preferable, however, to have it well elevated, to prevent its being filled with ink by accident. P is a stopper,

which is to be removed when the inkstand is to be cleansed.

This inkstand may be supplied with ink through the dipping-cup or the hole *o* when the plane of the base is nearly in a vertical position.

It is well known to those familiar with the process of manufacturing glass that the articles manufactured by pressing or blowing will vary in thickness, and in such an article as an inkstand there is liable to be a difference of about one-eighth of an inch, and it will be obvious that in my inkstands the height of the ink in the dipping-cups will vary according to the different thicknesses of the tops, were there no way to regulate it. To avoid such a defect I supply the duct or passage *D* with a gate or regulator, *G*, by the raising or lowering of which the ink in the dipping-cup may be changed. This gate may be made of rubber or any suitable material.

Wishing to make my improved inkstand of glass, and finding it impracticable to make it in one piece, I make it in separate parts and cement them together; and to make the union more permanent and secure I press the upper part, which is represented by *n n n n n*, with projections or supports *t t t* on the inside wall, from a sixteenth to an eighth of an inch thick and about one-quarter of an inch wide. The lower piece, *u u u u*, is pressed with grooves *g g* in its rim or edge, to correspond with the projections in the upper part. Previous to putting the parts together the projections are to be cut out, so that after the two pieces are brought together the lower piece may be revolved to bring the grooves away from, and the full-size rim under, the projections. They may be cemented together with any of the known cements for such purposes.

I do not claim an inkstand with an overflow-chamber, when there is a free passage for air from said chamber through the dipping-orifice, as described in Patent No. 73,284, to N. Gray Bartlett, January 14, 1868; neither do I claim an inkstand having a float in the dipping cup or orifice, as described in Patent No. 32,207, to J. W. Ross, April 30, 1861; nor do I claim in this application an inkstand having a pen-gage in any form except substantially as herein described; nor an inkstand made in separate parts and cemented together, when the parts are not secured together by cut projections, as described above; but

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

1. A barometer-inkstand having, in combination with the ink-reservoir, an overflow-chamber which has no air communication with the dipping-cup, a dipping cup or orifice the lower part of which is rendered air-tight by being immersed in ink, and a suitable vent or air-passage above and leading into said chamber, substantially as described.

2. A barometer-inkstand having a gate between the reservoir and dipping-cup, for regulating the height of the ink, substantially as described.

3. An inkstand having, in combination with the dipping orifice or cup, a pen-gage, which is held stationary with due permanence when in use, and is susceptible of being raised or depressed in said cup from time to time, as the height of the ink requires, substantially as described.

SAMUEL DARLING.

Witnesses:

JOHN E. HALL,

WALTER B. VINCENT.