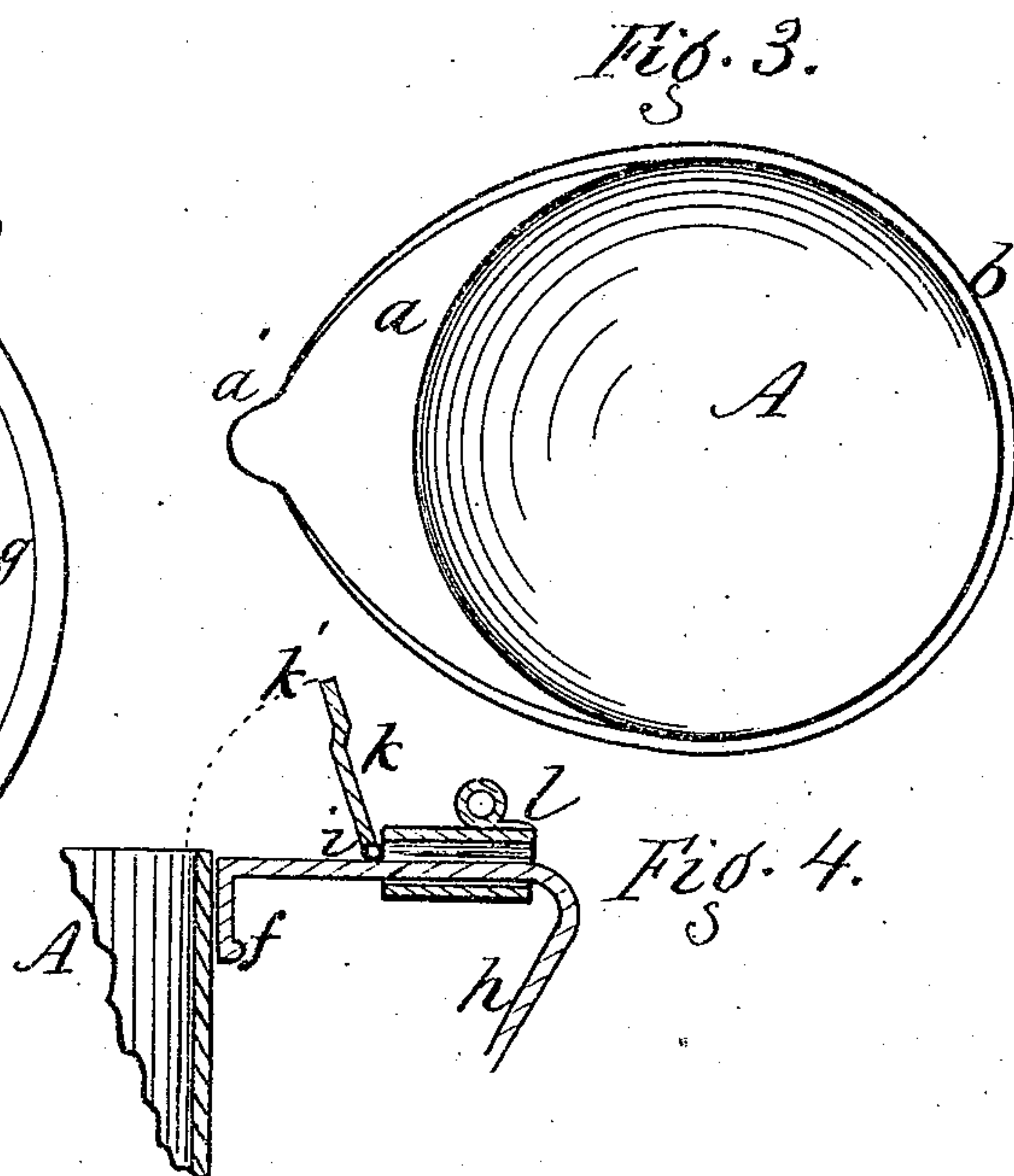
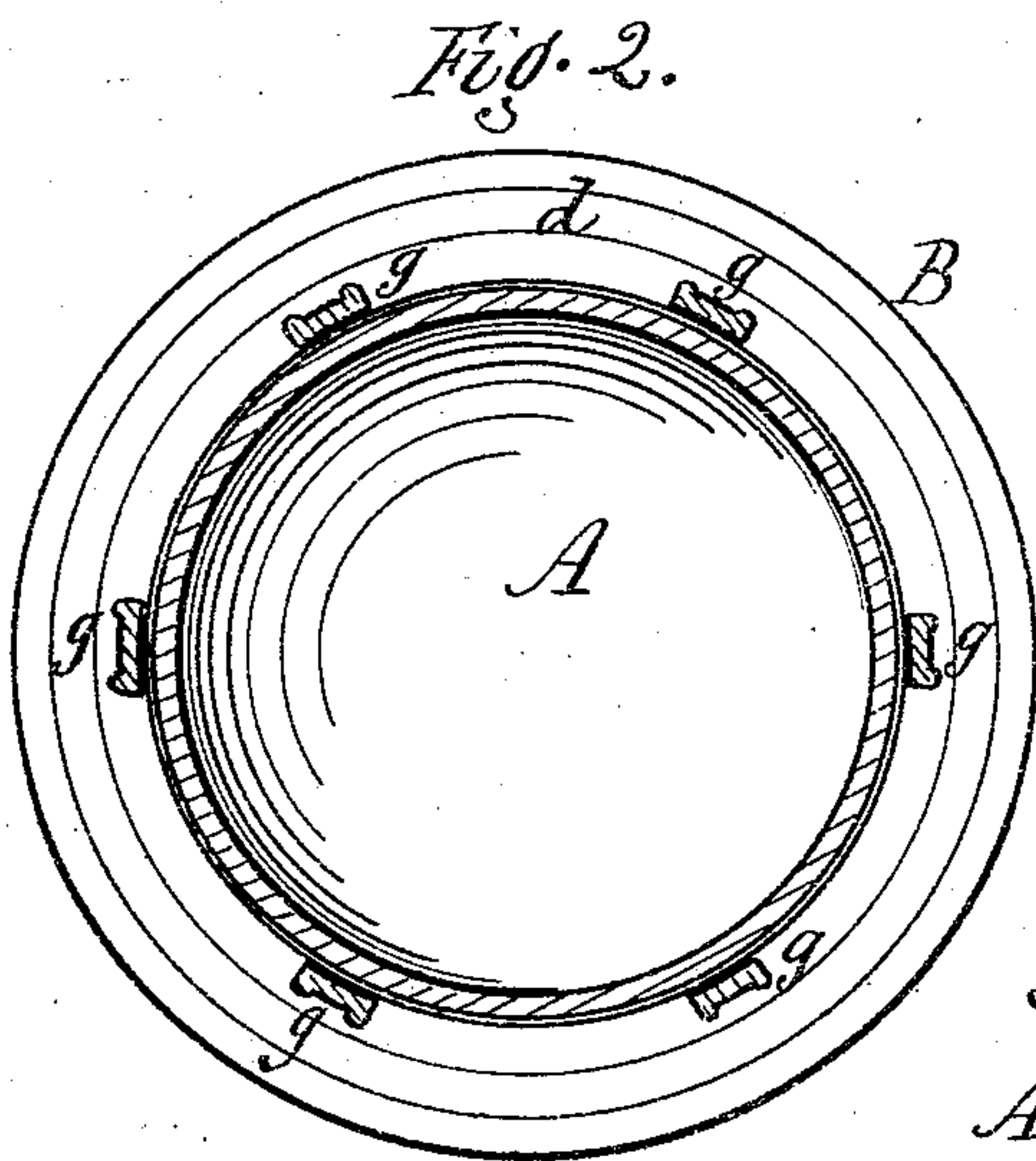
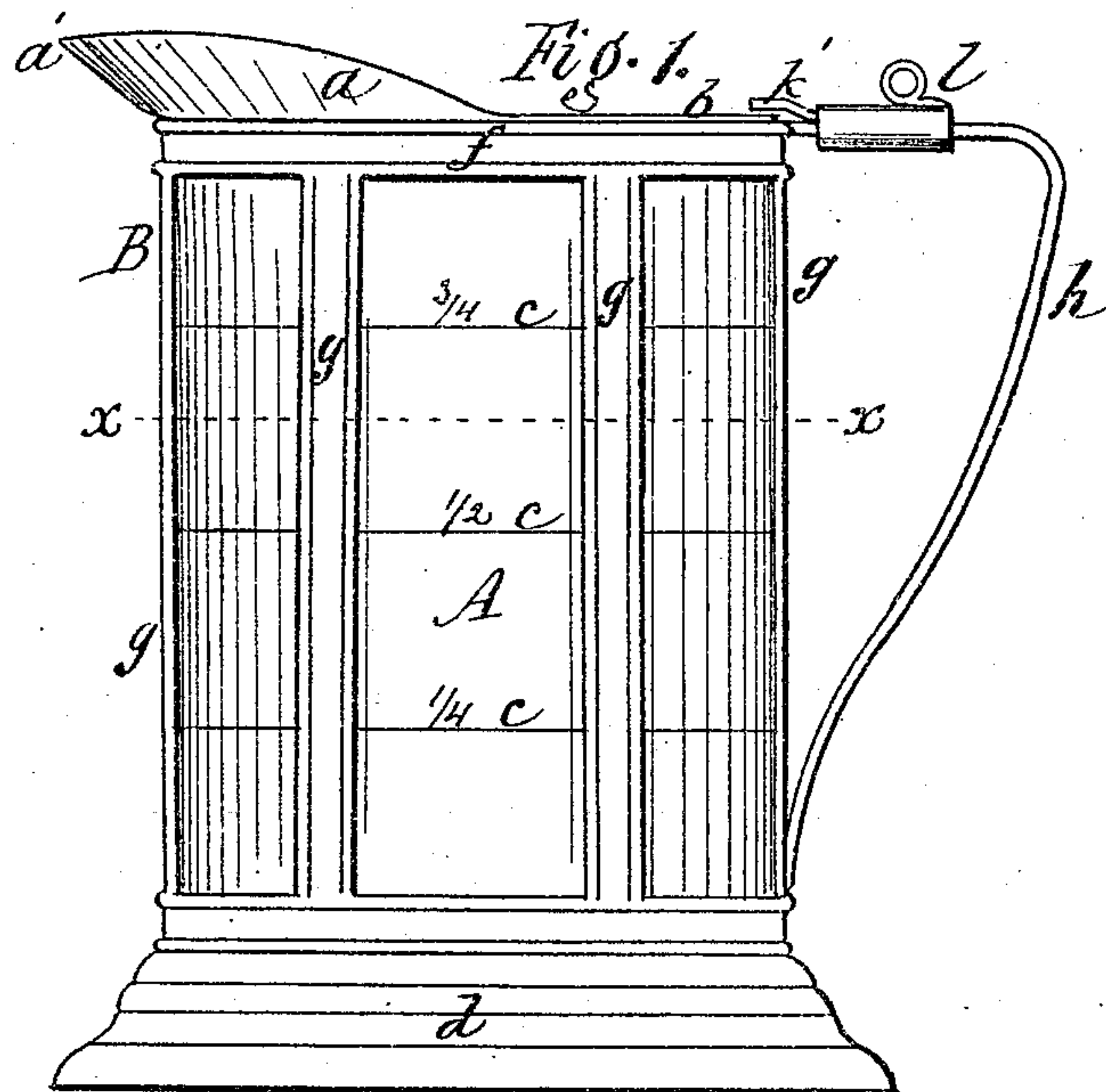


S. C. REDGRAVE.  
Liquid-Measures.

No. 157,222.

Patented Nov. 24, 1874.



Witnesses.  
Edwin B. Scott.  
Louis Spahn.

Inventor.  
Samuel Cole Redgrave,  
per R. F. Asgood,  
Atty.



# UNITED STATES PATENT OFFICE.

SAMUEL COLE REDGRAVE, OF LYONS, NEW YORK.

## IMPROVEMENT IN LIQUID-MEASURES.

Specification forming part of Letters Patent No. **157,222**, dated November 24, 1874; application filed November 2, 1874.

*To all whom it may concern:*

Be it known that I, SAMUEL COLE REDGRAVE, of Lyons, in the county of Wayne and State of New York, have invented a certain new and useful Improvement in Liquid-Measures; 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, in which—

Figure 1 is a side elevation. Fig. 2 is a cross-section in line *x x* of Fig. 1. Fig. 3 is a plan of the glass vessel. Fig. 4 is a detail view, showing the fastening at the top.

My improvement relates to transparent liquid-measures for druggists, grocers, household uses, and other purposes. A large number of devices are already in use. Glass vessels, such as vials and measures, are known, also metallic vessels with glass plates set therein, and marked with an index or scale for measuring the quantity of liquid; but in all such cases with which I am acquainted no exterior covering or holder is employed.

My invention consists in the combination of a glass vessel and a skeleton holder constructed and arranged as hereinafter described, so that the vessel may be turned in the holder to any position for pouring the liquid, either at the front or side; also, in a fastening of a peculiar kind at the top for retaining the vessel in the holder, and for holding it firm at any position.

In the drawings, A indicates the vessel, and B the holder. The vessel A is made entirely of glass, which is blown in a mold in cylindrical form, with a closed bottom and an open top. At the top is a spout, *a*, which starts from about half-way back, and gradually rises to the front, and which has a pointed lip, *a'*, projecting outward to such an extent as to give direction to a thin and light stream of the liquid in pouring. This is of especial use to druggists and others who have to pour liquids accurately and into small vials and bottles. The horizontal back edge *b* allows the vessel to be turned in the holder and under the fastening, so that the liquid may be poured at the side instead of at the front, when desired. The vessel is also marked with rings or lines *c c c*, blown in the glass all the way around,

to indicate the measure, and these may be subdivided to any extent, and may be marked in figures to indicate different measures. The holder B consists of a base, *d*, a top ring, *f*, and vertical bars *g g*, which unite them. It also has a handle, *h*, at the rear. The bottom of the vessel rests in a seat formed for it in the base of the holder, while the top comes even with or projects a little above the top of the ring *f*. The vessel is made to fit closely in the holder, but yet to turn freely, the friction between the parts being attained by the fastening or clamping device hereinafter described, to hold it in position for pouring either at the front or side. The bars *g g* are made as few in number as consistent with strength, in order to expose as much as possible of the vessel to exhibit the contents in measuring. The upper part of the handle *h* is made horizontal, and to this is hinged, at *i*, the clamp *k*. The clamp has a bent end, *k'*, which, when the clamp is turned down, projects over and rests on top of the horizontal edge *b* of the vessel. Over this clamp rests a loop, *l*, which slides on the horizontal part of the handle. When the loop is slid forward it covers and presses the clamp down upon the edge of the glass, and thereby retains it fast, as shown in Fig. 1. When it is slid back it uncovers the clamp and allows the latter to be turned up to free the glass, as shown in Fig. 4. When the vessel is thus freed it can be turned to position for pouring the liquid either at the front or the side, and can be clamped in place again. The horizontal back edge *b* of the glass is necessary to allow this to be done.

The device before described is simple and cheaply made, as the glass is blown in one piece, and it has the advantage of exposing the whole surface of the glass, so that exact measurement can be made looking on either side. At the same time it is covered by a holder, which is easily handled and protects the glass. In these respects it is superior either to a glass measure which has no outside protection, or a metallic measure which has a transparent plate set within it. The latter is very expensive, and the liquid contents can be seen only at one point.

One particular object of my improvement is

cheapness, as well as facility of view, and my device can be manufactured at much less cost than a metallic measure such as described.

Another important object of my invention is to make the vessel adjustable to pouring the liquid either at the front or side, which effect I accomplish by making the rear portion of the top of the glass horizontal, as at *b*, and combining with it the fastening before described. This adjustment of the glass vessel is particularly valuable to druggists, who have to pour liquids very accurately and into small vials.

Having thus described my invention, I do not claim, broadly, a graduated glass vessel; nor a metallic measure with a transparent plate; neither do I claim two metallic vessels resting one within the other; but

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

1. The combination of the interior vessel A and exterior holder B, the said vessel being made of glass and transparent over its whole surface, and capable of adjustment in the holder for pouring either at the front or side, as herein shown and described.

2. The combination, with the transparent vessel A and skeleton holder B, of the fastening, consisting of the hinged clamp *k* and sliding loop *l*, for securing the vessel in the holder at any adjustment, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

S. COLE REDGRAVE.

Witnesses:

FRANK A. FARMER,  
M. A. HUFF.