

*E. Bigelow,
Syrup Fountain,*

N^o 58,205,

Patented Sept. 25, 1866.

Fig. 1.

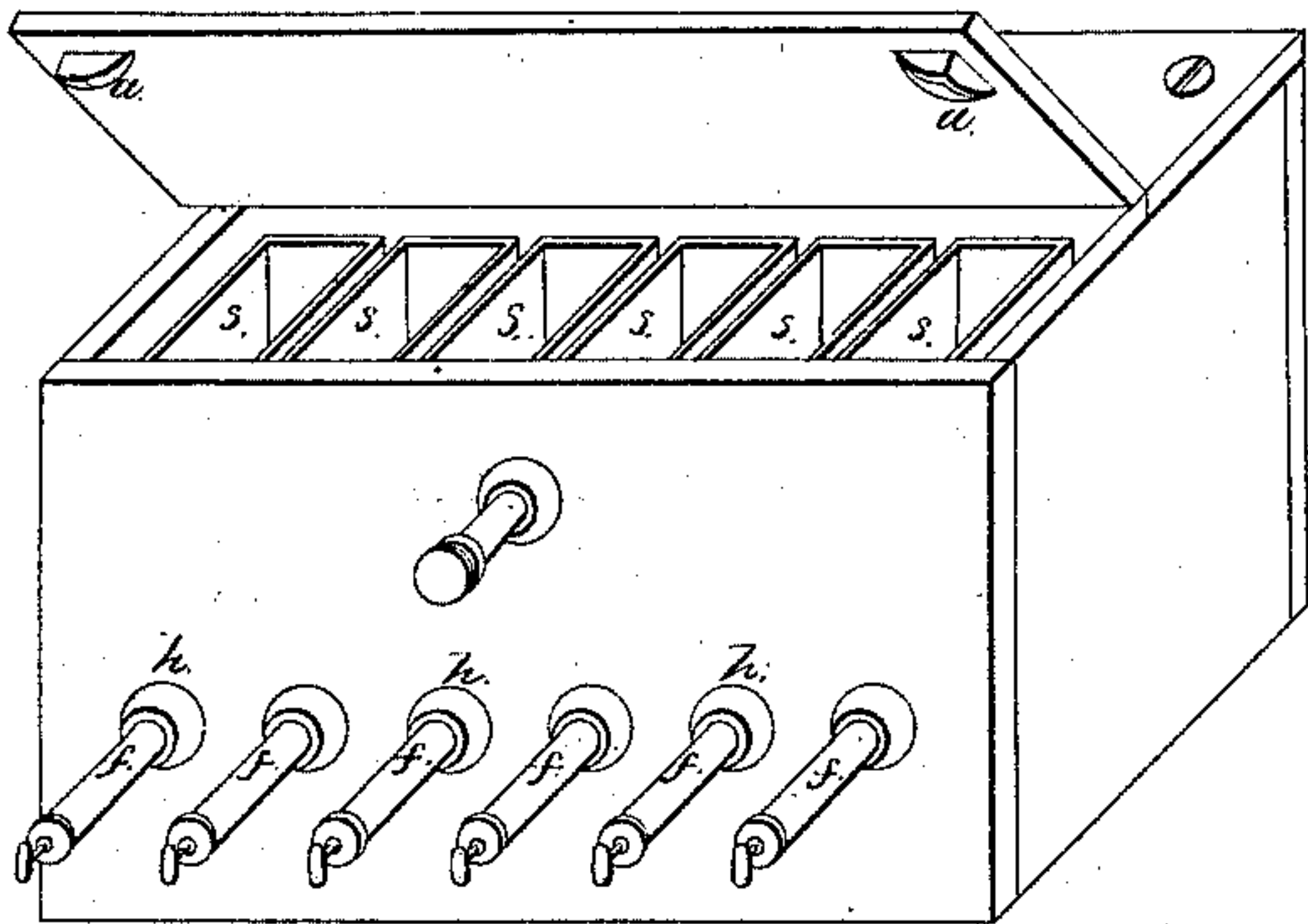


Fig. 4.

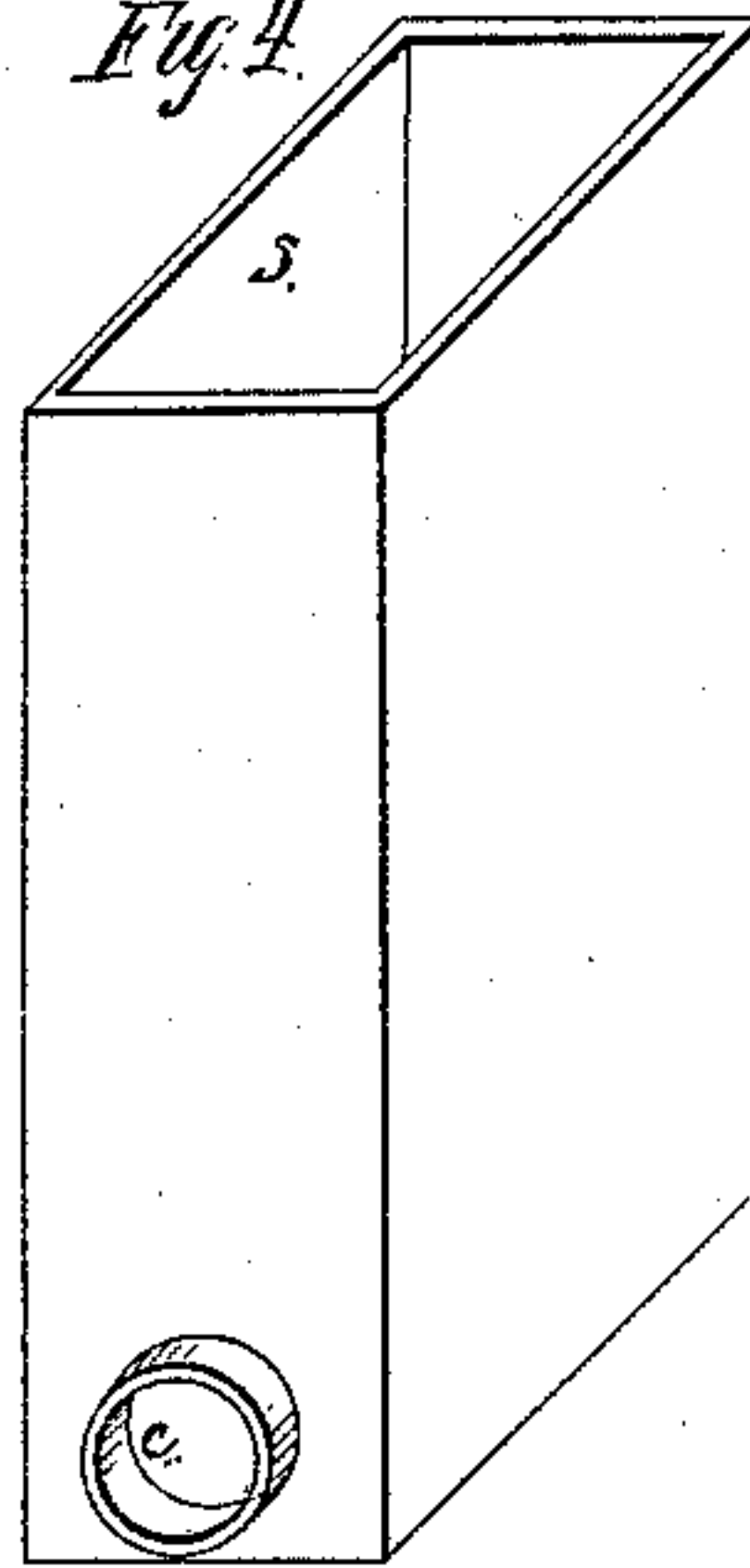


Fig. 2.

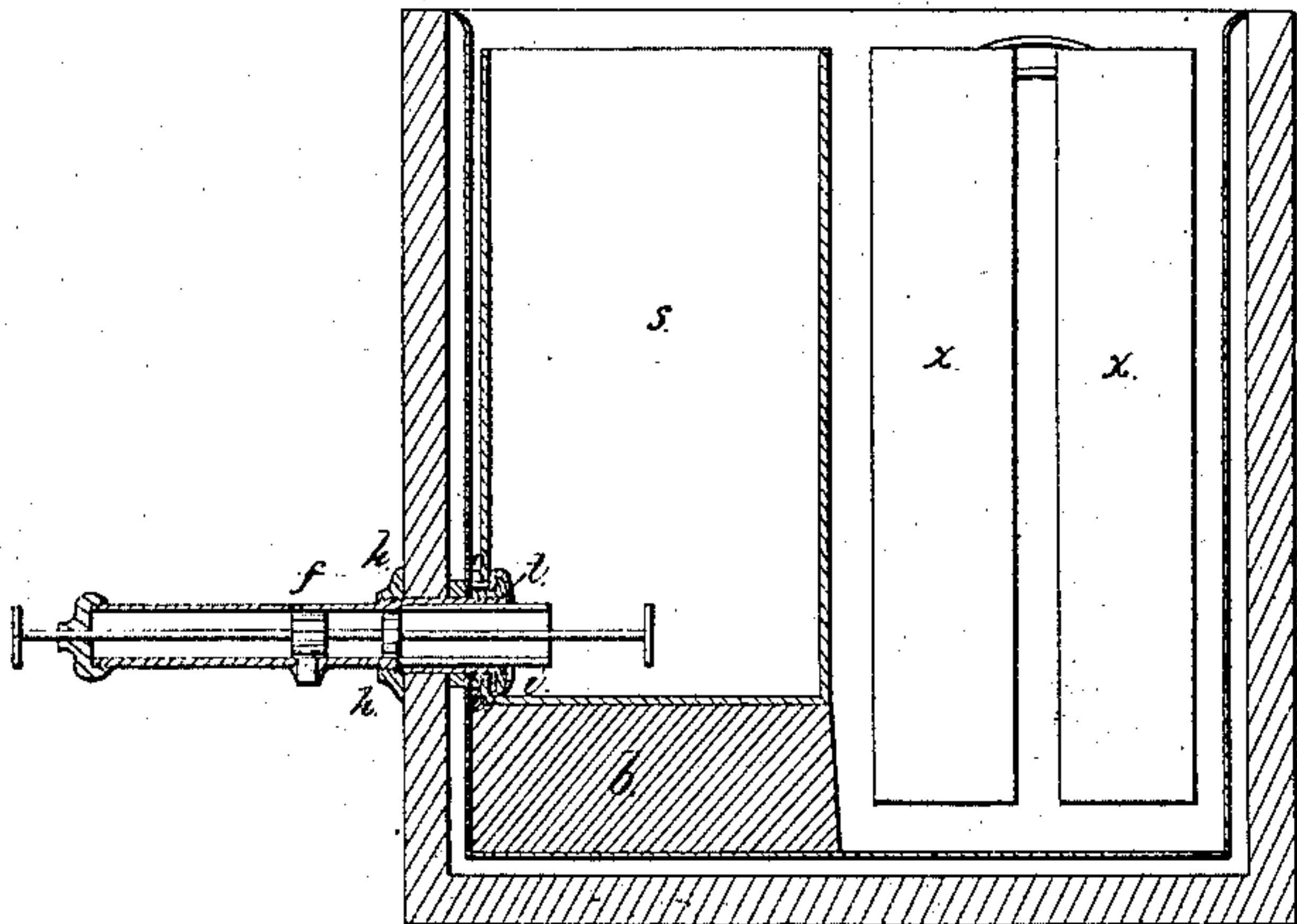


Fig. 5.

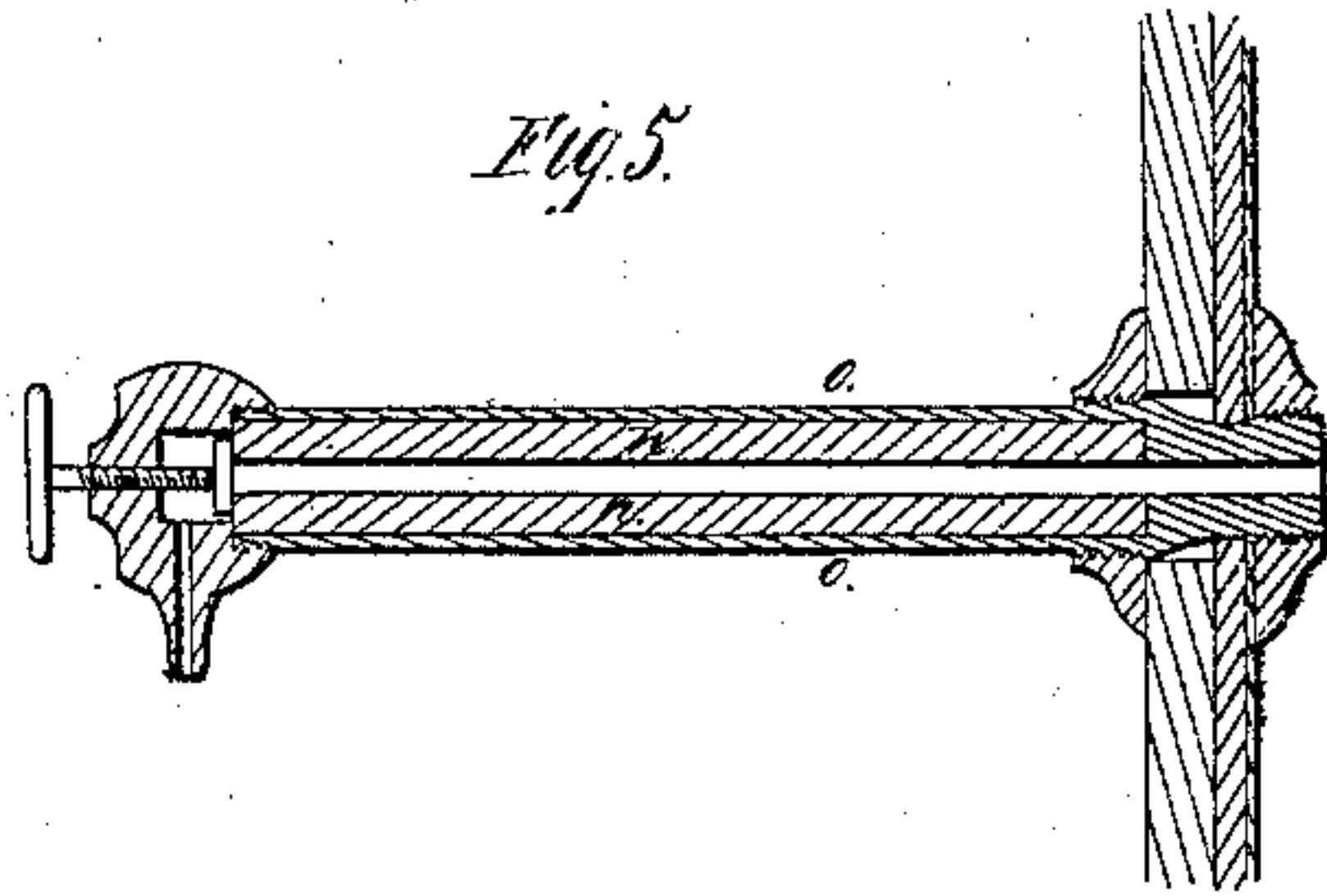
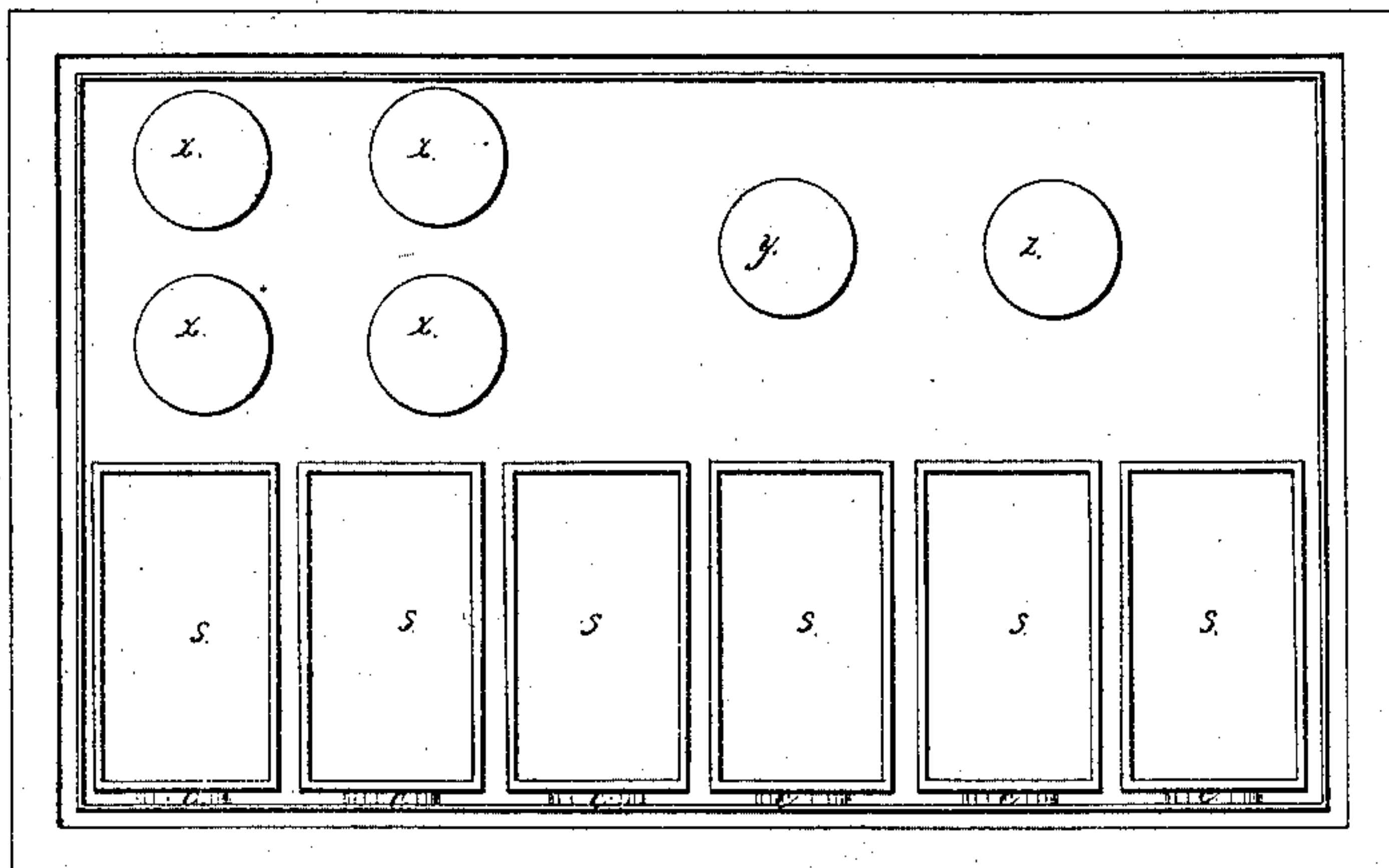


Fig. 3.



Witnesses,

*A. H. B. A.
Thomas Boy.*

*Inventor,
E. Bigelow.
per J. H. Greenough Atty.*

UNITED STATES PATENT OFFICE.

EDMUND BIGELOW, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVED SIRUP-STAND AND SODA-FOUNTAIN.

Specification forming part of Letters Patent No. 58,205, dated September 25, 1866.

To all whom it may concern:

Be it known that I, EDMUND BIGELOW, of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Holding, Cooling, and Distributing Soda and Sirups at the Counter, which I designate as the "non-corrosive sirup-stand and polar-cooler;" and I do hereby declare and ascertain my said improvements as follows, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of the whole apparatus, with one-half of the cover raised. Fig. 2 is a vertical section through one of the sirup-jars and cooler. Fig. 3 is a plan of the cooler, showing the positions of the coolers for soda (*x*) and for other mineral waters, (*y z*.) Fig. 4 is a sirup-jar detached; Fig. 5, draft-tube.

Heretofore manufacturers of sirup apparatus have made their reservoirs therefor of plate-tin, block-tin, tinned copper, &c., which, in consequence of the sirup generally used at soda-fountains being strongly acidulated with citric, tartaric, or other acids, are acted on thereby so as to destroy the tinned coating of the iron or copper, and thus injure the sirup contained therein, as well as the reservoir; besides which, the sirups have been drawn through brass cocks, the inner surfaces of which are not shielded by plating or otherwise, by all of which causes acetate and sulphate of copper are produced to a dangerous degree, and the flavor of the materials is injured. To remedy these serious objections, as well as to improve the apparatus, has been the purpose of the invention I now desire to patent; and I hereby premise that certain parts of this apparatus I have already patented. It is now free from corrosion, durable, and free from deleterious action under any of the ordinary conditions of a soda-fountain.

My apparatus is composed of a series of reservoirs or jars, with vitrified non-corrosive interior surfaces, and each attached to a faucet, the surfaces of which in contact with the sirup are also non-corrosive. These reservoirs are located in a non-conducting case, which also contains a soda-cooler on my patented plan. The reservoirs for sirup, the case, and faucets

are connected in a new way, and combined as will hereinafter appear.

The construction is as follows: The jars and coolers are contained within an exterior ornamental case, which I prefer to make of marble or other suitable stone. The cover of this case I form in two parts, which I hinge together, and at each of the four corners I affix, on the under side, metallic corner-pieces or stops, *a*, that project downward into the corners of the case to hold the cover in place and prevent its slipping when either half is raised. This arrangement allows either half to be lifted while the other remains steadily in its place as the permanent part of the cover, and the whole cover can by this device be removed. Within the outer case there is an inside one, with an air-space between them. This inner case is furnished with a drain-pipe to let off the water opening into its bottom, and conducting pipe or pipes to bring in the mineral waters to be cooled from the fountain connected with the coolers before named. Along the front side of this inner case, inside, there is a form or bench, *b*, on which the sirup-jars or reservoirs *s* stand, by which they are elevated to the proper height, so as to bring the faucet-holes for the delivery of the sirup high enough to place a tumbler or goblet under them. The sirup-jars *s* I prefer to make of earthen-ware, with outer and inner surfaces vitrified. These I deem the best for lightness and other requisites, but any substance having a vitrified coating on the interior surface would be equivalent thereto for the purpose of holding sirup. These jars *s* stand off from the inside of the case to allow a flow of ice-water in the space between them. To effect this, I construct the jar with a projecting flange or rim around the faucet-hole *c*, which, when brought against the side of the case and the jar, is fastened properly in place, covers the faucet-hole through the case, and sets off the jar.

The faucet I use is a measuring-faucet, and all that portion of it that stands in contact with the sirup or other fluid contained in the jars is made of glass, or covered with some vitrified or other non-corrosive material. The faucet consists of a tube (seen in the section Fig. 2 at *f*) having a rod run through its cen-

ter, upon which are two pistons that slide forward and back within the tube by means of the rod upon which they are affixed, which rod projects out in front through the front end of the tube for the purpose. When the pistons are pushed back to their extreme limit the inner one is beyond the opening of the tube into the jar, and there is a free inlet of the sirup into the tube, filling it up to the front piston, and when the pistons are drawn forward the measured quantity of sirup between the pistons is discharged, and the pistons are returned back again for a fresh charge.

Thus much is necessary to describe in this specification in order to make clear my present invention; but for a detailed description of the faucet reference may be had to my application for patent therefor now pending.

This faucet I use to fasten the sirup-jars securely in place, and this feature and the mode of attachment are important parts of my invention. The faucet is so constructed and connected with the jar as to have the front piston, when pushed back to receive the charge within the outer case, so that all the sirup in the faucet will be inside the cooler, and not exposed to the warm exterior air, it being forced back by this piston.

The jars *s*, case, and faucet are connected and combined together as follows: On the faucet-tube *f* there is a flange, *h*, screwed, that when the faucet is in place rests against the marble exterior of the case. That part of the tube *f* in rear of this flange *h* passes through into the jar *s*, into which it extends a proper distance for the purposes hereinbefore named. A screw is cut on the part of the tube *f* within the jar, onto which a flanged bushing or nut, *i*, is turned, and serves to hold the parts together. When the nut *h* is turned up it will be noticed that this bushing *i* extends through flush with the projecting flange on the jar *s*, thus strengthening and supporting the connected parts, and decreasing the risk of injury of the fragile materials.

To properly secure all the parts with water-tight joints, I surround the bushing *i* with gutta-percha, or other analogous suitable substance that can be made plastic and is insolu-

ble in ordinary liquids, such as soda-water, alcohol, or sirups. The bushing and gum are heated properly, so as to render the gum plastic, and then inserted and cooled in proper position, and the parts are screwed tightly together, as seen in Fig. 2, by screwing up the flange-nut *h*, thus bringing the several parts up to their bearings and crowding the plastic gum into the interstices in the joints, which are thus made water-tight.

The bushing *i* may be made without a screw, and an independent nut screwed onto tube *f* to hold it. When the parts are all in place a portion of the plastic gum should be turned down over the flange of the bushing *i*, so as to cover all the metal parts within the jar to guard against corrosion.

The tube through which the soda is drawn from the cooler is shown in Fig. 5, and is lined either with glass or some vitrified material. *n* is the lining. *o* is the exterior tube. The drawings leave all details of description unnecessary, and the form of the details may be varied to suit the taste of the manufacturer.

Having thus fully described my improvements, what I claim therein as my invention, and for which I desire to secure Letters Patent, is—

1. The combination of sirup-jars with faucets, substantially as and for the purposes herein specified.
2. The employment of plastic gum, as herein set forth, for connecting the faucet with a sirup-jar and case, by means of the metallic bushing, gum, and screws, substantially as above described.
3. The corner-stops *a*, for holding the divided cover in place, so that either section can be raised without the other part being displaced, substantially as specified.
4. The setting of the sirup-jars, substantially as herein specified, and fixing the same in place by means of the projection at *c* and the gum packing.

EDMUND BIGELOW.

Witnesses:

J. J. GREENOUGH,
MOSES M. ROBINSON.