

Weaver & Allen,

*Bung.*

*N<sup>o</sup> 85,260.*

*Patented Dec 22, 1868.*

Fig. 1.

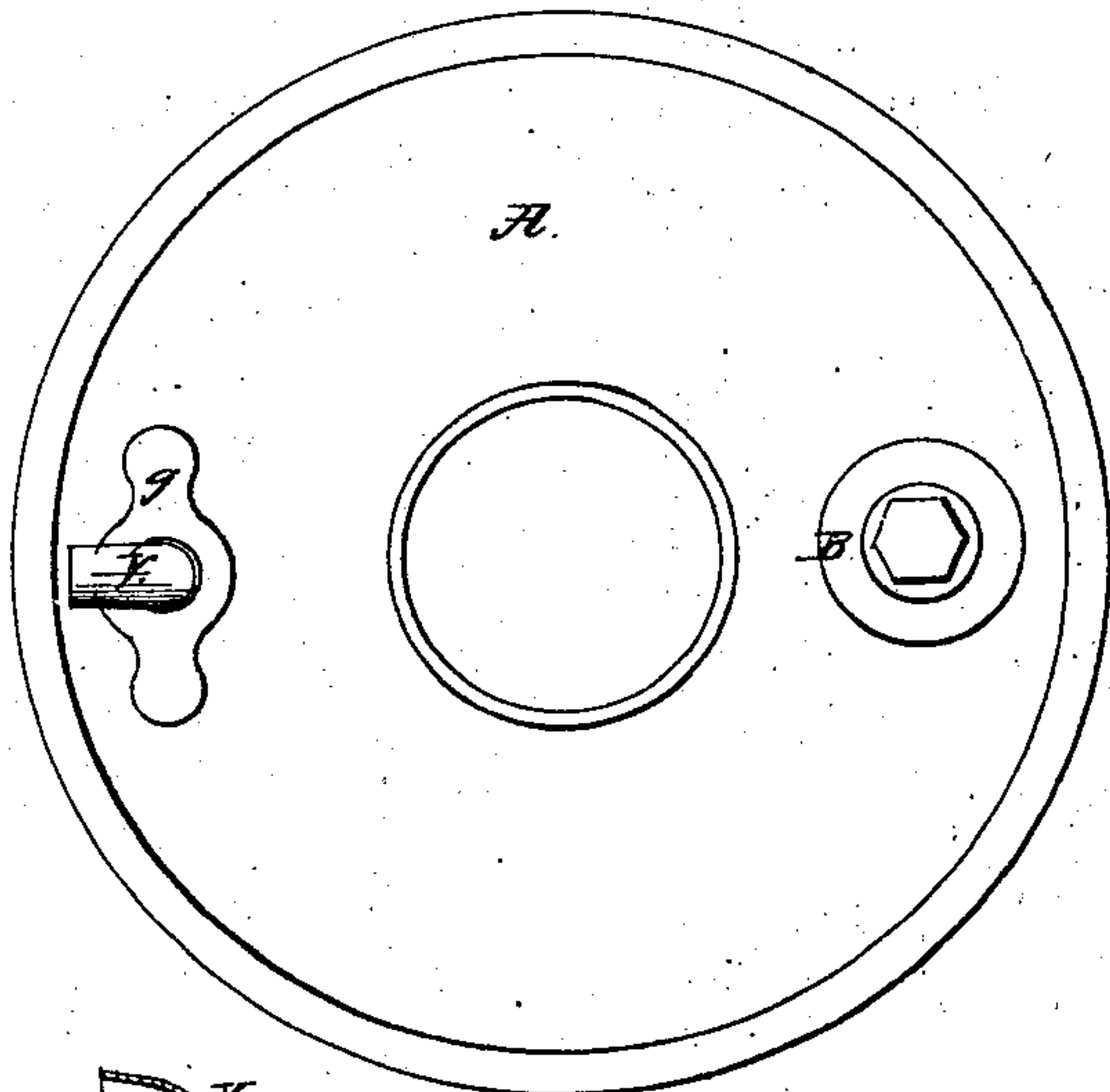


Fig. 5.

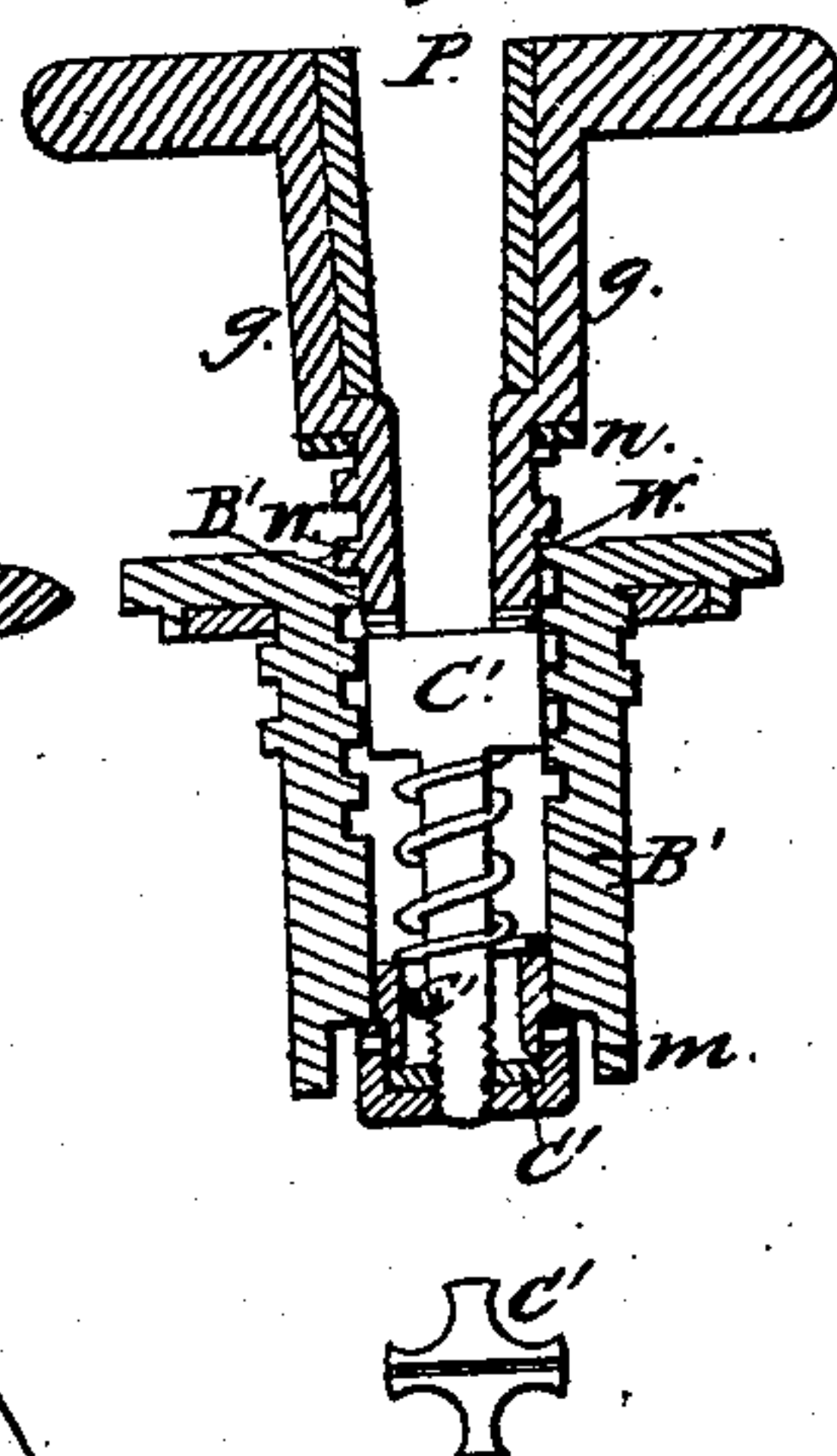


Fig. 2.

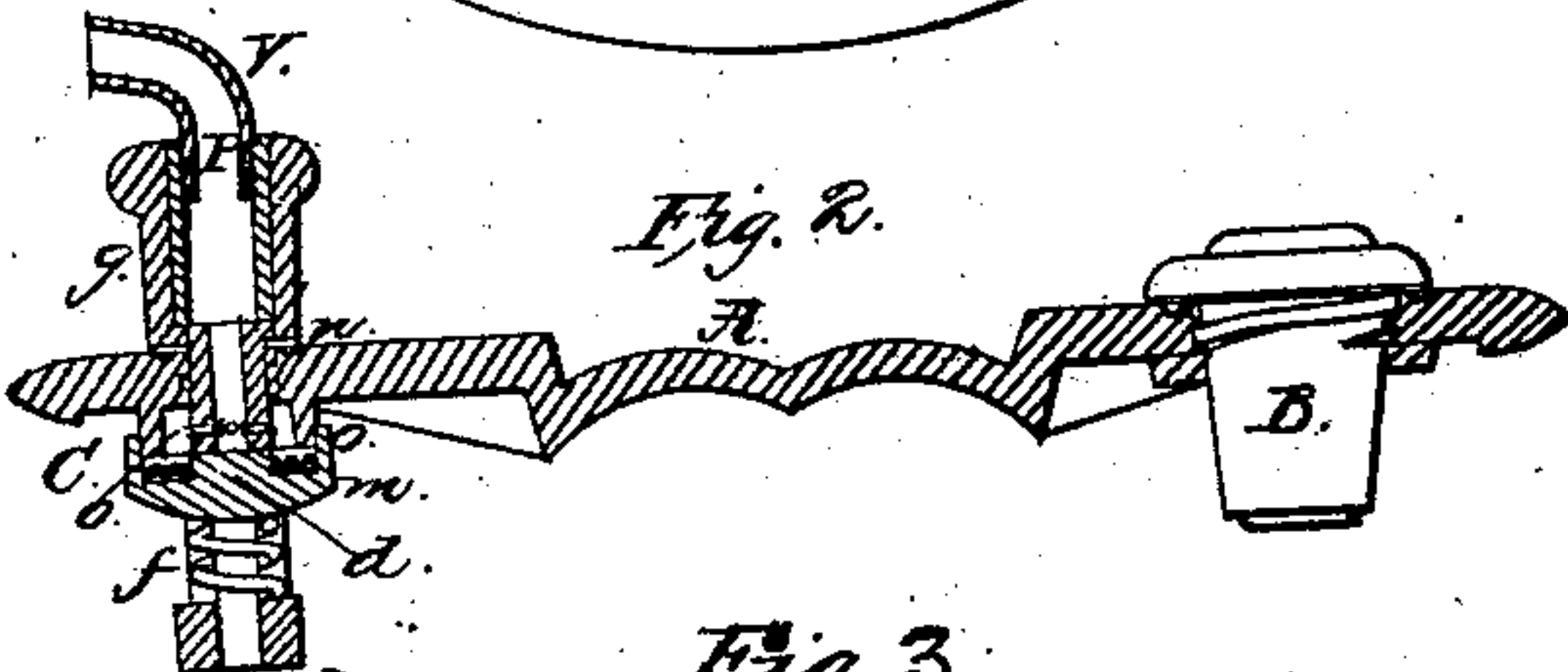


Fig. 3

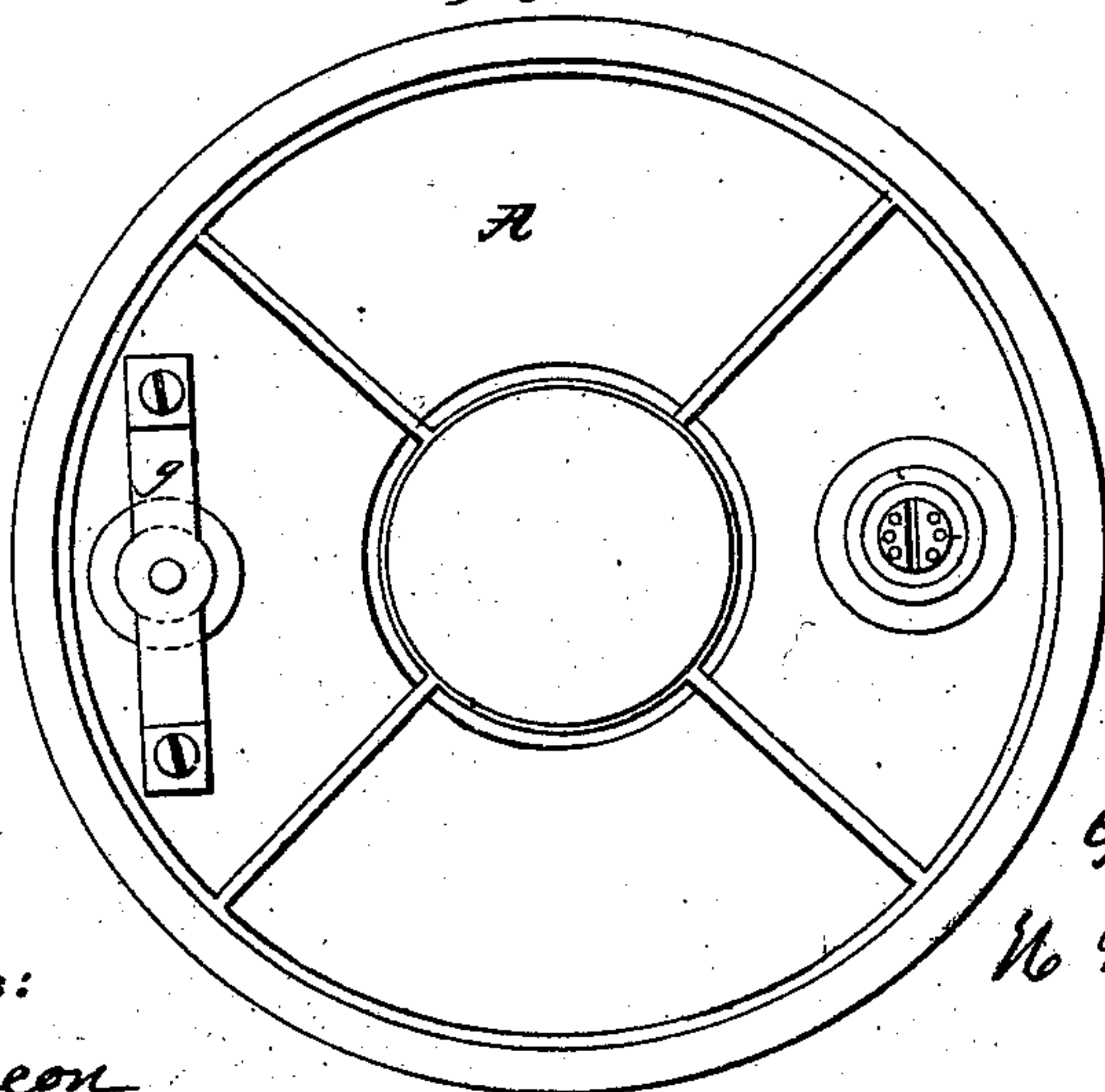
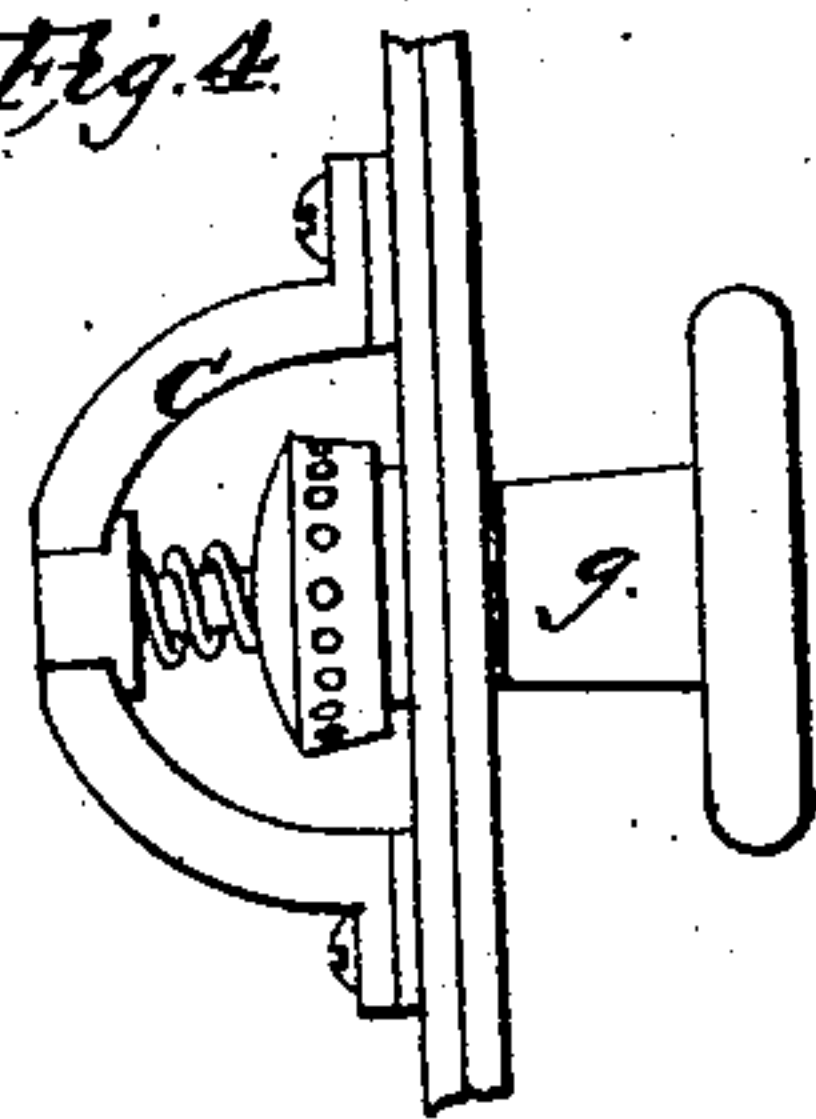


Fig. 4.



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# United States Patent Office.

GEORGE WEAVER AND H. NELSON ALLEN, OF BOSTON, MASSACHUSETTS, ASSIGNORS  
TO THEMSELVES AND E. R. CHENEY, OF SAME PLACE.

Letters Patent No. 85 260, dated December 22, 1868.

## IMPROVEMENT IN BARREL-HEADS AND TAPS.

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

### To whom it may concern:

Be it known that we, GEORGE WEAVER and H. NELSON ALLEN, of Boston, Massachusetts, have invented new and useful Improvements in Casks for Ale and other Liquids; and we hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications, in which—

Figure 1 is a plan view of the cask or barrel-head, from without.

Figure 2, sectional view, cut at right angles to the plane of the disk forming the head.

Figure 3, plan of the head, from within the cask.

Figure 4, section showing the devices connected with the faucet.

Figure 5, longitudinal section of the bung B', and the key g attached.

Figure 6, longitudinal section of the bung B, with its interior parts.

Letter A, metallic head, and, if made of iron, is to be coated with zinc or tin.

Letter B is the bung by which the cask is filled, dispensing with the bung in the bilge.

Letter C, the tap whence the liquor is drawn from the cask. This tap consists of the cap d, the yoke e, the spring f, and key g.

Letter C' is a tap, the same as C, only placed in the bung B', and thus obviates the use of the yoke e, and the necessity of making a separate attachment for it in the head A, as is the case in fig. 2.

Letter B' is a bung, with the tap within it, as just above mentioned, and, when this is used, the separate tap C and the bung B may be dispensed with.

The cask-heads A, when made of metal, are cast, and a bung-opening, with female screw, cast therein, and the corresponding male screw is cast upon the bung itself, and forms a part thereof, being moulded at the same time and with the body of the bung.

So, also, for the key g, are the threads cast upon and at the same time with the said key; and, in the same way, the threads of the female screw for the key g in the head A.

This plan of structure is adopted as one of great cheapness, saving large expense in cutting and fitting threads.

To keep the interior parts of the tap C in place, we use the yoke e, as in fig. 4.

By turning this piece S further in, the cask will be made to bear more pressure before relief will be given, and if casks are old, and thought to be weak, the piece S should be turned only to give less pressure upon the inner end of the tube y, as it will be seen that relief comes from the pressure of the contents of the cask on the inner surface of the flange z, which, when sufficient to compress the cushion x, relieves the inner end of the tube y from its seat on the inner end of S, and

allows the liquid to flow into the said tube at this point, and out at O.

When the cask is sufficiently relieved, the reaction of the cushion x will close the tube y upon its seat on S, and the flow will cease. We call this an "adjustable safety-bung."

In considering tap C, we find the permanent parts attached to the inside, while the key g is made readily detachable, and not to be brought in contact with the cask until it is desired to draw from the contents within.

This provision for having the key g readily removed, secures the cask against those accidents of breaking or loosening the spigot, now so common when they are being rolled about, or piled one upon another, as is generally the case in the ordinary transportation.

In our arrangement, there are no projections from the cask, to be bruised or injured, or to cause leakage and waste.

The structure of this key g is very simple, having threads on its spindle, to turn into the cask, and openings o o, to let the liquid flow into the tube, in its central portion, and in having this tube much enlarged in its outward end, for the purpose of allowing the insertion of a tube, of wood, leather, or other suitable yielding substance. (See fig. 2.)

The object of the peculiar structure and combination of parts in this key g is to provide against the expense of a separate stop-cock, as combined with a tap or bung. In other devices, much fitting of screw-threads and a large amount of metal, involving great expense, were required, while the application of the tube of wood i, in the key g, enables one to turn in the simply-bent tube r, with slight threads cut on it, where it enters the wood, and without expensive fitting. (See fig. 2.)

We consider this an important feature of our invention, and improvement in the right direction, simple in structure, and saving expense.

The operation of this tap is as follows:

Turn the key g in, when you would draw liquor from the cask, and the inner end thereof will carry the cap d back against the spring f, relieving the close contact upon the cushion at m, and the liquid is free to flow in and through the openings o o, and out at P.

N is a packing around the spindle of the key g, to prevent leakage at this point.

When, in the manufacture of these cask-heads, it may be thought the safety-vent in bung B may not be required, this bung, with its vent, and the faucet C, may be left off, and the bung B', the tap C', and the key g, may all be combined in one and the same article, and thus answer the double purpose of bung and faucet. (See fig. 5.)

With this arrangement, if any one, with a number of casks of ale or beer, or other fermenting liquor, on



hand, finds the too ardent fermentation is straining the casks, he can bring immediate relief by using the key *g* to draw off a little of the contents. Any key will fit the corresponding part in any tap.

It will be seen, from the manner already described, that the bent tube *v* may be easily detached from the key *g*, as, when the cask stands on end, while its contents are being drawn off, this tube *v* would not be required.

Our invention also relates to the construction of the detachable key *g*, and its use, either with or without the tube *v*.

Taps have heretofore been fitted in bungs, and made to use in connection with the ordinary stop-cock, which is always of much cost. (See Albert Hollowell's patent, of June 20, 1865.) We especially disclaim all such, as their great expense could not be borne in use upon the thousands of beer, ale, and other casks, for containing cheap beverages.

What we do claim as of our invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a cask-head, as described, that is, composed of the disk *A*, of cast-metal, and having a bung-opening, with female screw moulded and cast therewith, and corresponding bung, with male screw cast in the same way.

2. The key *g*, constructed as described, and used in connection with the tap *C*, or tap *C'*, and bung *B*, for the purposes specified.

3. The combination and arrangement of the tap *C* with and upon the disk *A*, substantially as set forth.

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