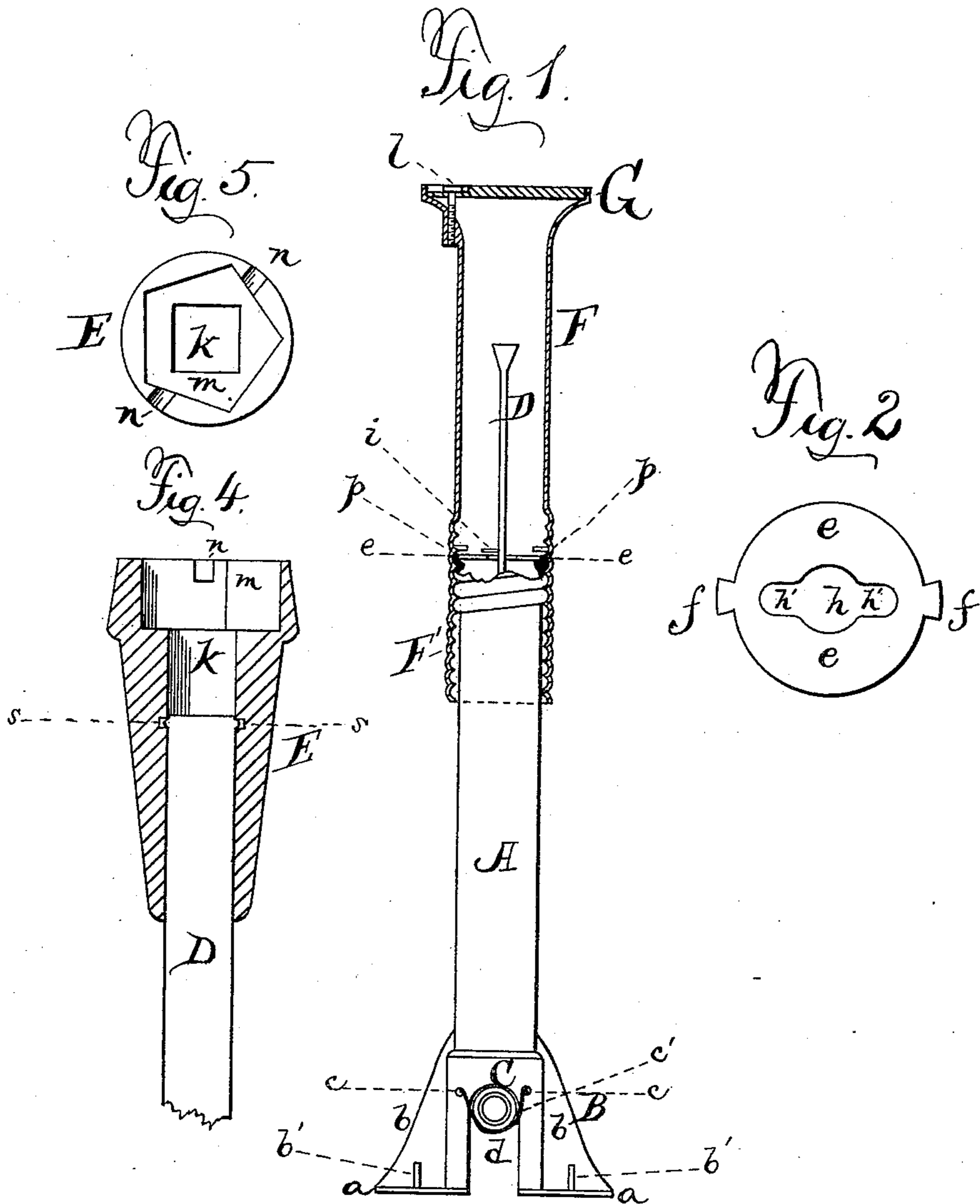


(No Model.)

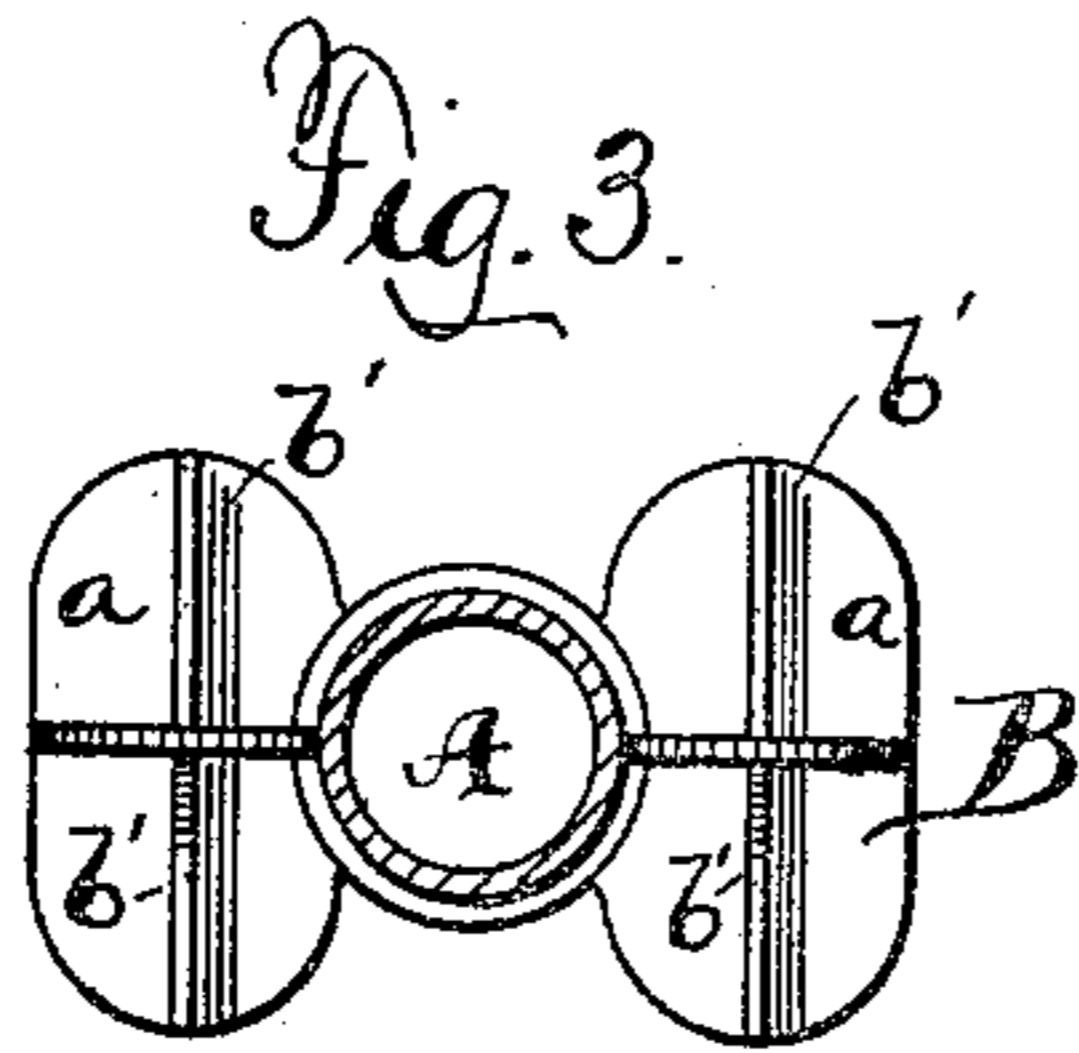
A. W. MORGAN.
STREET WATER AND GAS BOX.

No. 429,733.

Patented June 10, 1890.



Witnesses:
T. H. Garrison.
J. R. Drake.



Amos W. Morgan,
Inventor,
by J. R. Drake,
Atty.

UNITED STATES PATENT OFFICE.

AMOS W. MORGAN, OF BUFFALO, NEW YORK.

STREET WATER AND GAS BOX.

SPECIFICATION forming part of Letters Patent No. 429,733, dated June 10, 1890.

Application filed October 19, 1885. Serial No. 180,297. (No model.)

To all whom it may concern:

Be it known that I, AMOS W. MORGAN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Street Water and Gas Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the construction of stop-cock boxes, and will be readily understood from the following description and claims.

In the drawings, Figure 1 is an elevation, partly in cross-section, of the whole device, except the key; Fig. 2, a top plan of the washer; Fig. 3, a top plan of the base and foot of the box; Fig. 4, an elevation, full size, in cross-section of the combination-key; Fig. 5, a bottom plan of same, showing the different springs for the rod.

A represents the lower part of box, and B the base and foot. On the smaller-sized boxes it is necessary to have a larger flange *a*, forming the foot, in proportion to the size of the box, than on the larger ones, and with longer upright brackets *b b*, as shown in Fig. 1, to strengthen the foot. In addition to these, I provide cross-arms *b' b'*, (see Figs. 1 and 3,) cast on the foot and at right angles to the brackets and forming a part thereof. This is important to prevent breaking off the foot, as is now the case, in shipping or in setting in the ground, as a smart blow on the foot is apt to break it, thereby preventing it setting evenly on the ground and permitting the frost to heave it unevenly.

C represents the projecting end of an ordinary stop-cock. To hold this in place is a matter of importance, and to do this in a simple way I make holes *c c*—one each side of the opening *d* in the base—and fasten a wire *c'* through them and around the stop-cock, as shown in Fig. 1. This keeps it in position in shipping and while being set in the ground, and also aids in holding it thereafter.

In the top of the standard or case A is the

usual metal washer *e*, for keeping the rod D in the center. It has the usual lugs *f* on the sides, which set into the openings in the case A, and in addition is fastened to the case by a lug and screw.

My improvement in the washer consists in elongating the central hole *h* by extensions *h' h'*, as shown in Fig. 2, for the purpose of permitting the passage through of a flat-headed rod D, such as shown in Fig. 1. The hole *h* is usually round to hold either a round or square rod; but when a flat-headed rod is used the washer has to be first put on the round or square rod, and then the head flattened by the hammer, and when once on cannot be withdrawn. My improvement overcomes this difficulty, and allows a flat-headed rod to pass through when set in place, and keeps the rod centered as well. The rod is usually fastened to the cock C, and as an additional preventive to the cock dropping out I set a pin *i* into or through the rod D just above the washer *e*, (see Fig. 1,) and long enough and in such a position as not to drop through the slot-openings *h' h'* in the washer. If the wire below should break, this pin will keep the rod and cock in place, though the wire is especially for the cock and the pin for the rod, as oftentimes these boxes and rods and cocks are sold and shipped separately, the rods and boxes being sold together and a key on the rod to fit the cock, where it is afterward permanently fastened. This pin *i* is therefore used to keep each rod with its box, and also prevent its being lost from the box when sold with it.

To operate the flat-headed rod D and open the cover G (which has a five-sided bolt *l*) and also turn the usual square rods, I provide a single combination-key E, having, first, a square opening *k* deep in the center; second, a five-sided opening *m* in the mouth for the cover, and, third, a horizontal straight cut or slot *n* across the center, so that if the rod is flat-headed, as shown, it will fit thereon, thus making three different keys in one, saving greatly in trouble, loss of one or more, and expense of different keys. The keys can be made with two different sized and shaped openings, if only required. Another improvement in these keys is in making an offset *s* in the inside of the base of the key, (see Fig. 4.)

and after the rod D is set in the base to force, by hammering, the end to spread into the offset *s*, as shown. This is a simple and effectual way of holding the key and rod together.

Another important improvement in these boxes is in making the upper half of case F a plain cylinder and its lower part F' only into spirals or screw-threads—that is, instead of making the whole extension top or case into a screw, as in my previous patents, I form the screw or spirals only on the lower end, as shown in Fig. 1 at F'. In this form it gives a large upper section and is easier to cast in extra lengths. It is also easier to clean out, and does not collect dirt and rust on the sides so readily as when spiraled all the way, and does not get jammed in the lower pipe by reason of coal, dirt, and pebbles getting into the screw threads or spirals. It also gives more space above the rod D, and when the two sections are screwed together is not liable to be turned down too far, so as to strike the rod against the cover and perhaps break one or

both. As an additional preventive, stops *pp* are provided on the inside of case F.

I claim—

1. The combination, with the tubular part of a stop-cock box provided at its lower end with a recess, of a stop-cock C, seated in said recess and provided with a rod D, a washer *e*, seated within the stop-cock box and provided with a central opening, through which the rod D passes and whereby the rod is centered in the box, and a holding-pin *i*, secured to the rod D above said washer, substantially as set forth.

2. In street gas and water boxes, in combination with the case or standard A, the washer *e*, provided with the slots *h' h'*, leading from the central opening *h*, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

AMOS W. MORGAN.

Witnesses:

J. R. DRAKE,

T. H. PARSONS.