

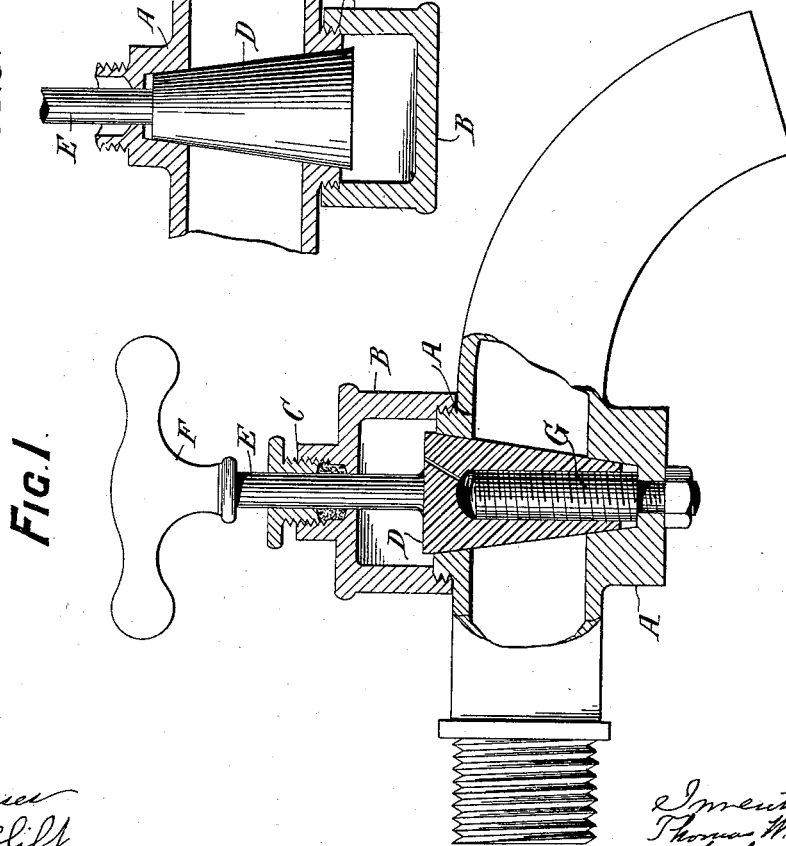
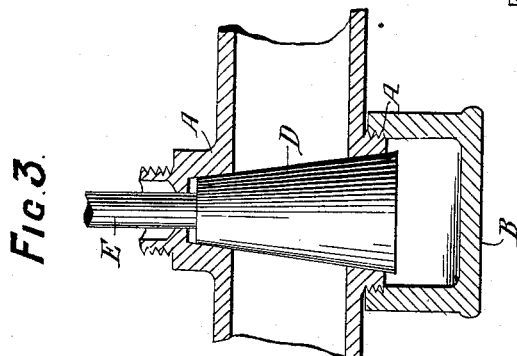
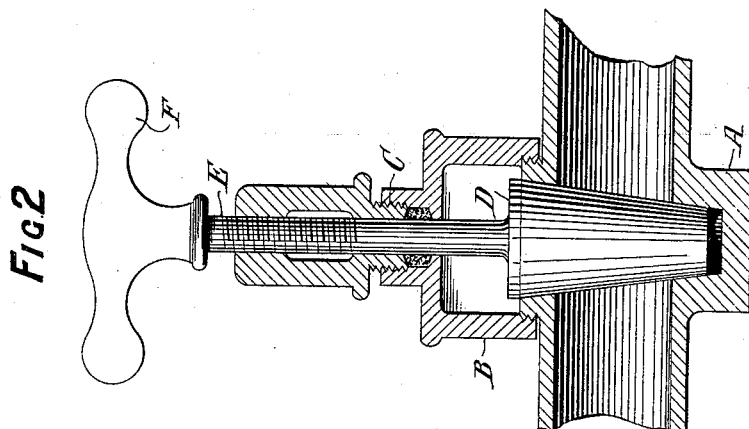
No. 647,882.

Patented Apr. 17, 1900.

T. W. SCOTT.
SCREW DOWN TAP OR COCK.

(Application filed Oct. 7, 1899.)

(No Model.)



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THOMAS W. SCOTT, OF LONDON, ENGLAND.

SCREW-DOWN TAP OR COCK.

SPECIFICATION forming part of Letters Patent No. 647,882, dated April 17, 1900.

Application filed October 7, 1899. Serial No. 732,924. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WILLIAM SCOTT, engineer, of 2 Walpole Villas, Walpole road, Bromley, London, in the county of Kent, England, have invented certain new and useful Improvements in Screw-Down Taps or Cocks, of which the following is a specification.

In the accompanying drawings I have shown at Figure 1 in side elevation, partly in section, the preferred form of tap or cock. Fig. 2 is a similar view of an obvious modification in the mechanical details of construction, and Fig. 3 is a similar view of another modification in the said mechanical details of construction.

This invention relates only to what are known as "screw-down" taps and cocks, and has no reference whatever to ordinary plug taps or cocks; and the invention consists in the adaptation of a plug to a screw-down tap or cock.

The advantages of a screw-down tap or cock compared with the ordinary plug tap or cock are well known, more especially in connection with a water-supply; but the screw-down taps or cocks as at present constructed require washers or other devices to make them tight, which devices are continually requiring repair.

In carrying out this invention I make the plug conical and solid and in one piece with the spindle, the handle being adapted to the spindle in any convenient manner. The plug may be arranged to rise off its seat or to descend from its seat, and the fluid will pass around the plug instead of through it, as heretofore. This arrangement of plug will provide for grit being crushed between the plug and the barrel as the plug finds its seat, and the crushed grit will be driven away the next time the tap or cock is used.

In order that my invention may be more clearly understood, I will now describe it with reference to the accompanying drawings, in which the same letters refer to corresponding parts in all the figures.

A is the barrel of the tap or cock, which is formed with a conical seat for the plug and with the usual inlet and outlet ports. In Figs. 1 and 2 the bottom end of the barrel is solid, but in Fig. 3 it is open. The top end of the barrel is open in Figs. 1 and 2, and it is fitted

to receive a cap B, which forms a chamber to receive the plug as it is moved off its seat. In Fig. 3 this chamber B is at the bottom end of the barrel. In the top of the chamber B is a gland and stuffing-box C for the spindle of the plug.

D is the plug, which in Fig. 1 is solid in the sense that it presents an unbroken surface to both the inlet and outlet of the barrel, while in Figs. 2 and 3 it is absolutely solid, and formed in one piece therewith is the spindle E, on the end of which is secured the handle F. This plug may be bored longitudinally and internally threaded to take onto a threaded pin G, which projects upward from the bottom of the barrel, to which it is secured in any convenient manner, or the spindle may be threaded and turn in a nut secured to the stuffing-box or gland C.

In Figs. 1 and 2 the plug will screw down onto its seat, while in Fig. 3 it will be just the reverse and screw down off its seat. In both cases, however, the larger end will enter the chamber B, which is formed to receive it.

It will be seen that by the above construction of tap or cock the use of washers or other devices to make a tight valve will be entirely obviated.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A screw-down tap or cock comprising a conical plug having an unbroken peripheral surface, an attached stem for turning the plug, a barrel having a conical seat to receive the plug, and threaded means upon the barrel to engage the plug to raise it from or lower it into its seat when turned, substantially as described.

2. A screw-down tap or cock provided with a barrel having a conical seat, a conical plug to occupy said seat, having an unbroken peripheral surface and a bore with an internal thread, a screw-threaded standard upon the barrel engaging in said bore, and means for turning the plug upon said standard to move it into or from its conical seat, substantially as described.

3. A screw-down tap or cock comprising a conical plug having an unbroken peripheral surface, a stem integral therewith, a barrel

having a conical seat to receive the said plug,
an inclosing cap to receive the enlarged end
of the plug, a stuffing-box for the spindle, the
said plug being hollow and provided with in-
5 ternal screw-threads, a screw-threaded stand-
ard secured to the barrel and adapted to ex-
tend into the hollow portion of the conical
plug, and a handle for turning the spindle
and plug, the structure being such that when

the plug is turned it will be raised or lowered 10
by means of its internal threads acting upon
the threads of the standard, substantially as
described.

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Witnesses:

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