R. H. BYRNE & E. D. KNIGHT.

Tap for Barrels.

No. 203,706. Patented May 14, 1878.

Fig. 1

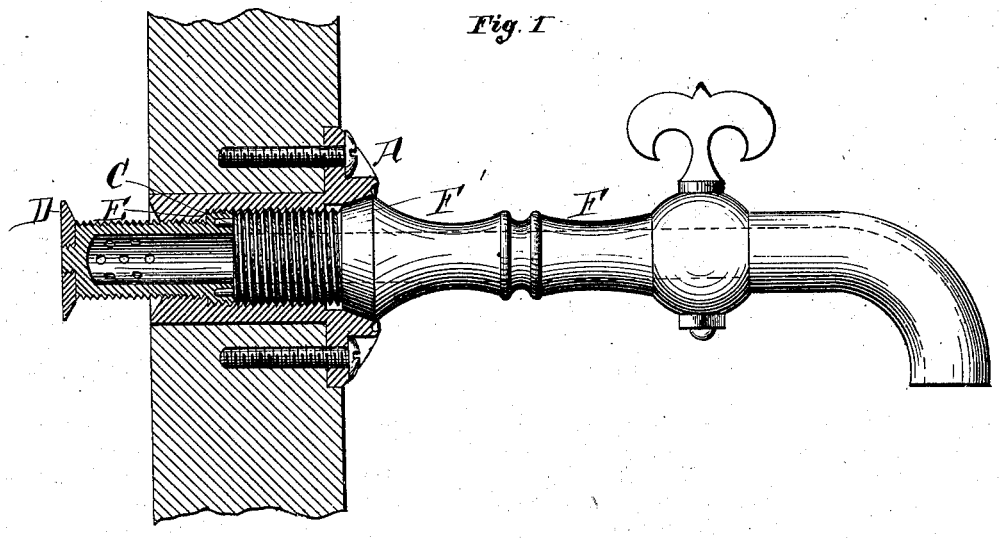


Fig. 2.

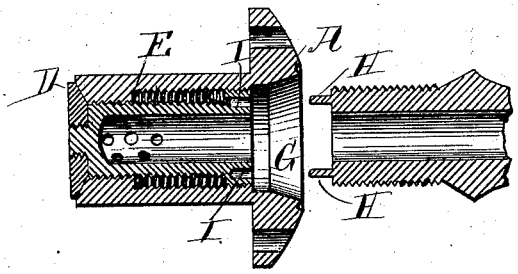
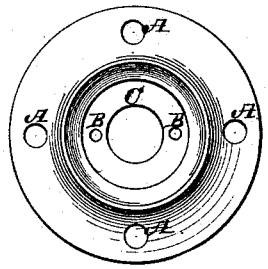


Fig. 3.



Attest

Henry Knight.

Sam'l E. Schertz.

Inventor.

Robert Henry Byrne

Edward D Knight.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT H. BYRNE AND EDWARD D. KNIGHT, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN TAPS FOR BARRELS.

Specification forming part of Letters Patent No. **203,706**, dated May 14, 1878; application filed August 9, 1877.

To all whom it may concern:

Be it known that we, ROBERT H. BYRNE and EDWARD D. KNIGHT, both of Camden, in Camden county, New Jersey, have invented an Improvement in Stop-Cocks for Barrels, of which improvement the following is a specification:

Our invention relates to stop-cocks such as have metallic bungs permanently fixed in the heads of barrels, faucets being attached to or detached from such cocks by screw-threads, as desired.

The object of our invention is to construct the cock in such form that, while faucets may be attached thereto with the utmost facility, the cocks shall be freed from leakage at all times.

Our said invention consists of, first, a beveled or valve-faced shoulder formed on the faucet's neck, near its extremity; second, a correspondingly-beveled recess or valve-seat formed in the bung; third, a beveled or valve-faced flange attached to the inner end of the tapper; fourth, a shoulder on the outer end of the tapper; fifth, a shoulder and a beveled recess in the inner end of the body of the bung, the several parts being constructed and combined as hereinafter set forth.

In the drawings, Figure 1 is a longitudinal section of the bung and tapper as applied to the head of a barrel, the faucet being shown in elevation attached. Fig. 2 is a longitudinal section of the bung and tapper in the relative positions these parts hold toward each other when the orifice for the escape of liquids is closed. Fig. 2 also shows, in like section, the neck of the faucet detached. Fig. 3 is a front elevation of the bung and tapper.

Like letters designate like parts in the several figures.

A represents the bung as permanently affixed by screws or other fastenings to the head of a barrel. B represents the tapper, which is a hollow cylinder with a shoulder, C, on its outer end, and a beveled or valve-faced flange, D, on its inner end. E is a shoulder formed in the body of the bung, corresponding in depth with the shoulder C of the tapper. F is the faucet, having the beveled or valve-faced shoulder F′ formed on its neck. G is a recess in the head of the bung. The recess G is beveled to correspond with the shoulder F′, the two, when brought into contact, forming a valve-joint.

Projecting from the neck of the faucet are pins H, differing in diameter, which are inserted into corresponding holes I in the shoulder C of the tapper.

When the cock is closed the bevel-faced flange D is in close contact with the correspondingly-beveled inner end of the bung, as shown in Fig. 2.

When it is desired to tap a barrel the faucet is applied to the cock by inserting the pins H in the holes I, and then, by turning the faucet, screwing the tapper B until the bevel-faced shoulder F′ comes into close contact with the beveled sides of the recess G in the bung, thus opening the cock and permitting liquids to flow out through the tapper into the faucet.

The shoulder C prevents the tapper from getting beyond the reach of the faucet-pins H by any accidental turning of the tapper, such as might be occasioned by the shaking or rolling of the barrel when the tapper consists of a plain cylinder without a shoulder, as shown in Zoller's Patent No. 163,717, of the date of May 25, 1875. The shoulder C also acts as an additional means to prevent leakage.

We claim—

The tapper B, constructed with the bevel-faced flange D on its inner end and the shoulder C on its outer end, in combination with the bung A, constructed with the shoulder E and the beveled seat for the flange or valve D, in the manner and for the purpose substantially as set forth.

ROBERT H. BYRNE.
EDWARD D. KNIGHT.

Witnesses:
HENRY KNIGHT,
SAML. E. SCHEETZ.