Sept. 9, 1924. 1,507,718

G. RILLING

WOODEN TAP FOR WINE, CIDER, OR THE LIKE

Filed Oct. 29, 1921

Fig. 1.

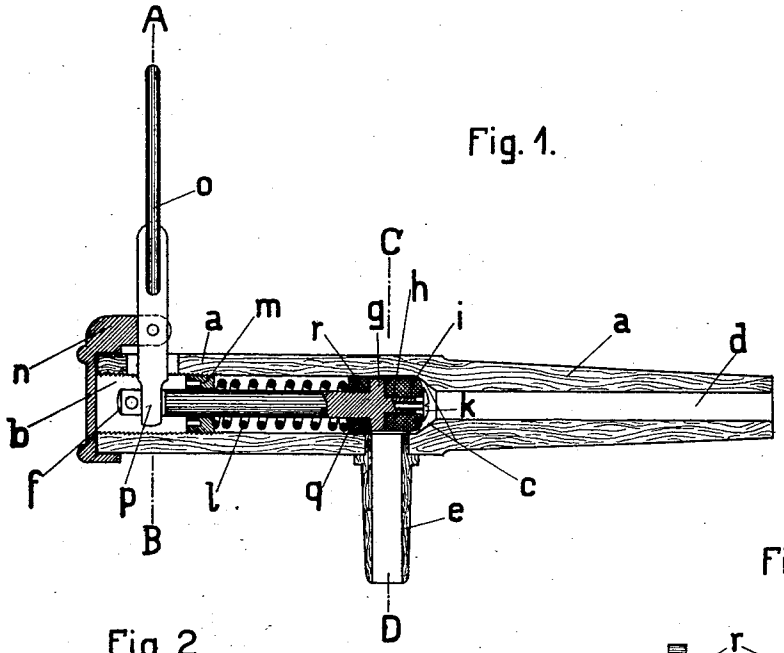


Fig. 2.

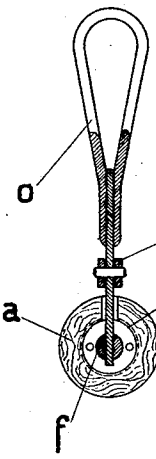


Fig. 3.

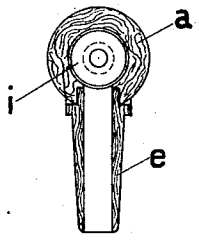


Fig. 4.

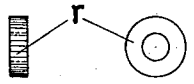


Fig. 5.

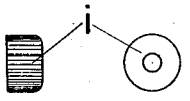


Fig. 6.

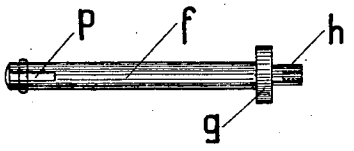
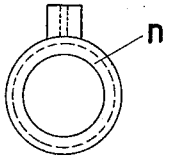


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORG RILLING, OF OBERSONTHEIM, GERMANY.

WOODEN TAP FOR WINE, CIDER, OR THE LIKE.

Application filed October 29, 1921. Serial No. 511,515.

To all whom it may concern:

Be it known that I, GEORG RILLING, a citizen of the German Republic, residing at Obersontheim, Germany, have invented certain new and useful Improvements in Wooden Taps for Wine, Cider, or the like, of which the following is a specification.

This invention relates to a wooden tap, which is specially designed for drawing wine, cider or the like. The improved tap comprises, like the metal taps of known type, a valve pressed upon its seat by the action of a spring and adapted to be opened against the action of said spring by means of a handle connected with the valve rod. With the taps of known construction metal parts are situated in the path of the outflowing liquid consisting either of valve bodies, valve rods or valve casings and liable to corrosion by the acid containing liquid, whereby the taste and the durability of the liquid and the continuous tight closing of the tap are unfavourably influenced.

According to this invention a spring pressed cylindrical member of acid proof material is located in a cylindrical boring of the tap, and a packing of suitable material at the rear end of said member is adapted to seat in a conical boring which connects the cylindrical boring of the tap with the inlet provided in the rear part of the tap, said inlet being of less diameter than the cylindrical boring at the front part. In the cylindrical boring of the tap body a valve stem is arranged which has an annular packing engaging the front end of the member of acid proof material. Means are further provided for pulling said valve stem forward so as to permit communication between the inlet and the outlet of the tap. The annular packing seals the cylindrical boring from the inlet.

In the improved tap the parts which come in contact with the liquid are of acid proof material and none of the parts made of metal, as for instance the valve spring, can come in contact with the liquid.

In order that the invention may be clearly understood, I shall proceed to describe the same with reference to the form of construction shown by way of example on the accompanying drawing, wherein—

Fig. 1 is a longitudinal section.

Figs. 2 and 3 are cross sections on lines A—B and C—D of Fig. 1.

Figs. 4 and 5 show the packing parts of the valve in side elevation and plan view respectively.

Fig. 6 shows the valve stem, and

Fig. 7 shows the closing cap of the tap.

Referring to Fig. 1 the wooden body *a* of the tap has a cylindrical boring *b* at the front part and an inlet *d* in the rear part. This inlet *d* is of less diameter than the cylindrical boring *b*. The boring *b* and the inlet *d* are connected the one with the other by a conical boring *c* of about 30° situated above the tubular outlet *e*.

In said cylindrical boring *b* a cylindrical member *g* of acid proof material is located which is slightly less in diameter than said cylindrical boring. This cylindrical member *g* consists preferably of a collar on the valve stem *f* which may be made also of acid proof material, for instance of wood and the rear end *h* of which projects from said cylindrical member *g*. A packing *i* of suitable material is fixed on the rear end *h* of the valve stem, for instance by means of a screw *k* of acid proof material, so that it is adapted to seat in said conical boring *c* under the action of a spiral spring *l* which is mounted, upon the valve stem *f* and enclosed between the front end of said annular packing, and an externally threaded disk *m* mounted upon said valve stem *f* and screwed into the threaded part of the cylindrical boring *b*. The inlet *d* is thus shut off from the tubular outlet *e*. A closing cap *n* covers the front end of the tap *a*. A lever *o*, whose lower end engages in a slot *p* of the valve stem *f* is pivoted to said closing cap *n*.

If the outer end of the lever *o* is depressed towards the rear end of the tap *a* the valve stem *f* is pulled forward so that the liquid can flow from the barrel through the inlet *d* into the tubular outlet *e*, whilst, as soon as the lever *o* is released again spring *l* effects the tightly packed closing of the tubular outlet.

Between the inner end of spring *l* and the member *g* an annular packing *q*, *r* is arranged. The packing *q* is preferably made from leather and the packing *i* from rubber or from leather. The screw *k* is preferably made from acid proof material but may be of metal, but in the latter case it must be covered by the packing *i* so that no liquid can come in contact with said screw. The diameter of collar *g* and of the packing *i* are of such dimensions that sufficient space is left between said collar and

packing and the wall of the cylindrical bore so that if the wood swells no jamming of parts *g*, *i* can happen.

I claim:—

1. A wooden tap for drawing wine, cider or the like comprising in combination with the body of the tap having a cylindrical boring at the front part, an inlet in the rear part of less diameter than said boring and a conical boring connecting said cylindrical boring and said inlet, an outlet tube branching off from said cylindrical boring adjacent said conical boring, a spring pressed cylindrical member of acid proof material located in said cylindrical boring, said member slightly less in diameter than the said cylindrical boring, a packing of suitable material at the rear end of said member adapted to seat in said conical boring, a valve stem arranged in said cylindrical boring of the body and connected to said member, an annular packing on the stem engaging the front end of the said member, and means for pulling said valve stem forward so as to permit communication between said inlet and said outlet, said annular packing sealing said cylindrical boring from the inlet.

2. A wooden tap for drawing wine, cider or the like comprising in combination with the body of the tap having a cylindrical boring at the front part, an inlet in the rear part of less diameter than said boring and a conical boring connecting said cylindrical boring and said inlet, an outlet tube branching off from said cylindrical boring adjacent said conical boring, a spring pressed cylindrical member of acid proof material located in said cylindrical boring, said member slightly less in diameter than the said cylindrical boring, a packing of suitable material at the rear end of said member adapted to seat in said conical boring, a valve stem arranged in said cylindrical boring of the body and connected to said member, an annular packing on the stem engaging the front end of the said member, a cap covering the front end of said tap, and a lever pivotally mounted in said cap and connected with said valve stem for pulling said valve stem forward so as to permit communication between said inlet and said outlet, said annular packing sealing said cylindrical boring from the inlet.

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

GEORG RILLING.

Witnesses:

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CARL MÜLLER.