G. F. BOHNE & C. RENBURG.

HYDRANT WRENCH.

APPLICATION FILED MAY 8, 1915.

1,170,138. Patented Feb. 1, 1916.

Fig. 1.

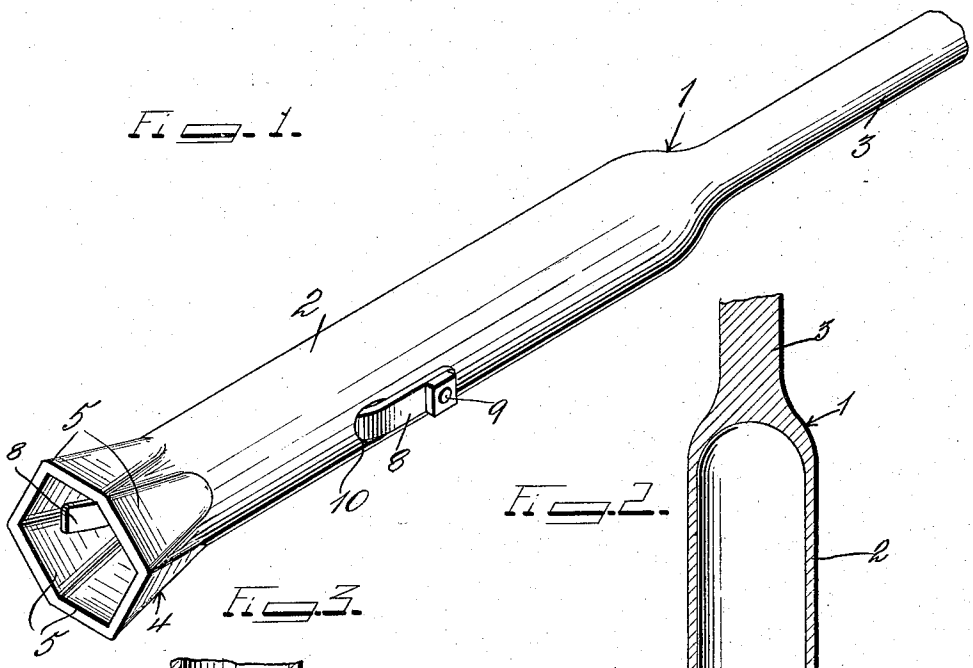


Fig. 2.

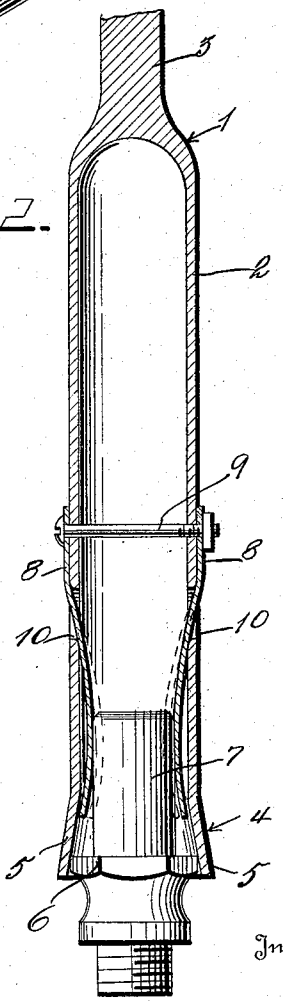


Fig. 3.

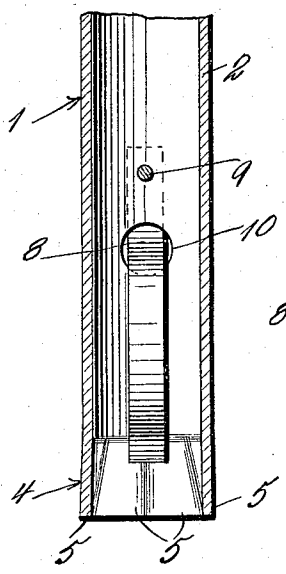
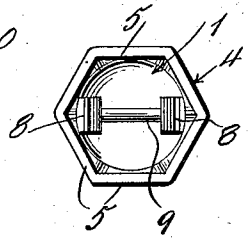


Fig. 4.



Witnesses

E. E. Stokel

H. B. Crooman

Inventors

G. F. Bohne.

C. Renburg

By E. E. Crooman & Co.,

their Attorneys

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GUY F. BOHNE AND CHARLES RENBURG, OF MOUNT PLEASANT, UTAH.

HYDRANT-WRENCH.

1,170,138. Specification of Letters Patent. Patented Feb. 1, 1916.

Application filed May 8, 1915. Serial No. 26,889.

To all whom it may concern:

Be it known that we, GUY F. BOHNE and CHARLES RENBURG, citizens of the United States of America, residing at Mount Pleasant, in the county of Sanpete and State of Utah, have invented certain new and useful Improvements in Hydrant-Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to wrenches and has special reference to hydrant wrenches and is so formed as to facilitate the removal of a hydrant stem for repairing without necessitating the digging up of the hydrant.

Another object of this invention is the production of a hydrant wrench wherein the body portion is provided with a gripping head which is adapted to fit over the stem of a hydrant without necessitating the adjustment of the wrench whereby upon the rotation of the wrench the stem may be turned.

Another object of this invention is the production of a hydrant wrench which is provided with a plurality of springs so formed as to extend into the gripping portion of the wrench for retaining the stem in engagement therewith whereby the same may be removed without danger of accidental displacement as the same is lifted.

A still further object of this invention is the production of a hydrant wrench wherein simple and efficient means have been provided for the positive holding of the gripping springs in their correct positions for operation.

With these and other objects in view, this invention consists of certain novel combinations, constructions, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing: Figure 1 is a detailed perspective view of the wrench as constructed in accordance with this invention. Fig. 2 is a central vertical section through the wrench, a portion thereof being broken away, and showing the same engaging the hydrant stem. Fig. 3 is a fragmentary vertical sectional view taken at right angles to Fig. 2. Fig. 4 is an end view of the wrench.

Referring to the accompanying drawing by numerals 1 indicates the wrench which comprises a cylindrical body 2 from which the vertical handle extends as shown at 3. The handle 3 may be of any desired length and provided with any suitable means for rotating the same or with the usual transverse gripping portion now ordinarily in use and not being deemed necessary to be so disclosed. The body 2 being hollow and cylindrical as set forth, is flared at its lower end as shown at 4. This flared lower end may be hexagonal as herein disclosed or of any number of angular sides. These sides 5 diverge from the body 2 as clearly shown in Fig. 2. Therefore, different sized hydrant stems may be accommodated inasmuch as the hydrant stem may pass upwardly into the inner portions of the body 2 until the nut of the hydrant stem as shown at 6 may come into a binding engagement with the inner portions of the flared end 4. At this time the body 2 of the wrench 1 may be rotated by means of the handle 3 whereby the sides 5 of the flared end 4 will rotate the hydrant stem 7 by means of the nut 6 formed thereon.

In order to prevent this hydrant stem from falling from engagement with the wrench 1 as the stem is lifted from the inner portions of the hydrant, there are provided a plurality of gripping springs for retaining the stem in engagement with the wrench. These springs 8 have their outer ends secured to the outer portions of the body 2 by means of the bolt 9 which passes through the outer ends of the springs and also through the body 2. Adjacent the portion of the body which carries the bolt 9 there are formed alined openings 10 through which the springs 8 are adapted to extend so as to pass into the inner portions of the body 2. These springs extend so as to have their free ends positioned within the flared end 4 of the body 2 as clearly shown in Fig. 2. Therefore, when the hydrant stem 7 passes into the body 2 it will necessarily pass between the springs 8. The springs normally extend in the position indicated in dotted lines in Fig. 2 and therefore when the hydrant stem passes therebetween, it will force the same apart as disclosed in Fig. 2. This action will cause the springs to bind firmly upon the hydrant stem and will allow the same to be removed from the hydrant after it has disengaged its connecting portion, which is caused by the rotation thereof by means of the flared end constituting the hexagonal sides. It will be seen that since the bolt 9 is carried in alinement with the

central portions of the openings 10 the springs will be held against swinging movement and therefore will also extend in their correct positions so as to positively retain the hydrant stem when it is desired to lift the stem from the hydrant.

It is of course obvious that different sized wrenches may be employed which may require any number of springs necessary to its efficient operation. It is therefore intended to include all such devices as properly come within the scope of the invention as claimed, and not limit the case to the specific construction herein disclosed.

What we claim is:—

1. In a wrench of the class described, the combination of a hollow cylindrical body having a handle formed upon one end thereof, a flared end formed upon the lower end of said body, said flared end comprising a plurality of outwardly diverging integral sides, said flared end being adapted to be positioned over a hydrant stem or nut, whereby upon the rotating of said body the hydrant stem or nut may be rotated, said flared end having its sides diverging so as to fit over and accommodate various sized stems or nuts.

2. In a wrench of the class described the combination of a hollow cylindrical body having a handle formed upon one end thereof, a flared lower end formed upon said body and comprising a plurality of diverging integral sides, said body provided with enlarged openings at a spaced distance from its outer end, said body also provided with reduced openings in alinement with said enlarged openings, flat springs having their outer ends fitting snugly upon said body, a bolt passing through said outer ends and through said reduced openings for retaining said springs in position, said springs extending through said enlarged openings and extending for a considerable distance within said hollow body, said bolt and enlarged openings holding said springs in parallel alinement with each other, whereby a hydrant stem or nut may be engaged by said flared end so as to be moved when said body is rotated, said springs being adapted to retain a stem or nut within said flared end when desired, said springs being protected from injury by having their major portions fitting within said body and having their outer ends fitting snugly upon said body.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

GUY F. BOHNE.
CHARLES RENBURG.

Witnesses:
GEORGE CHRISTENSEN,
RUTH ROLFSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."