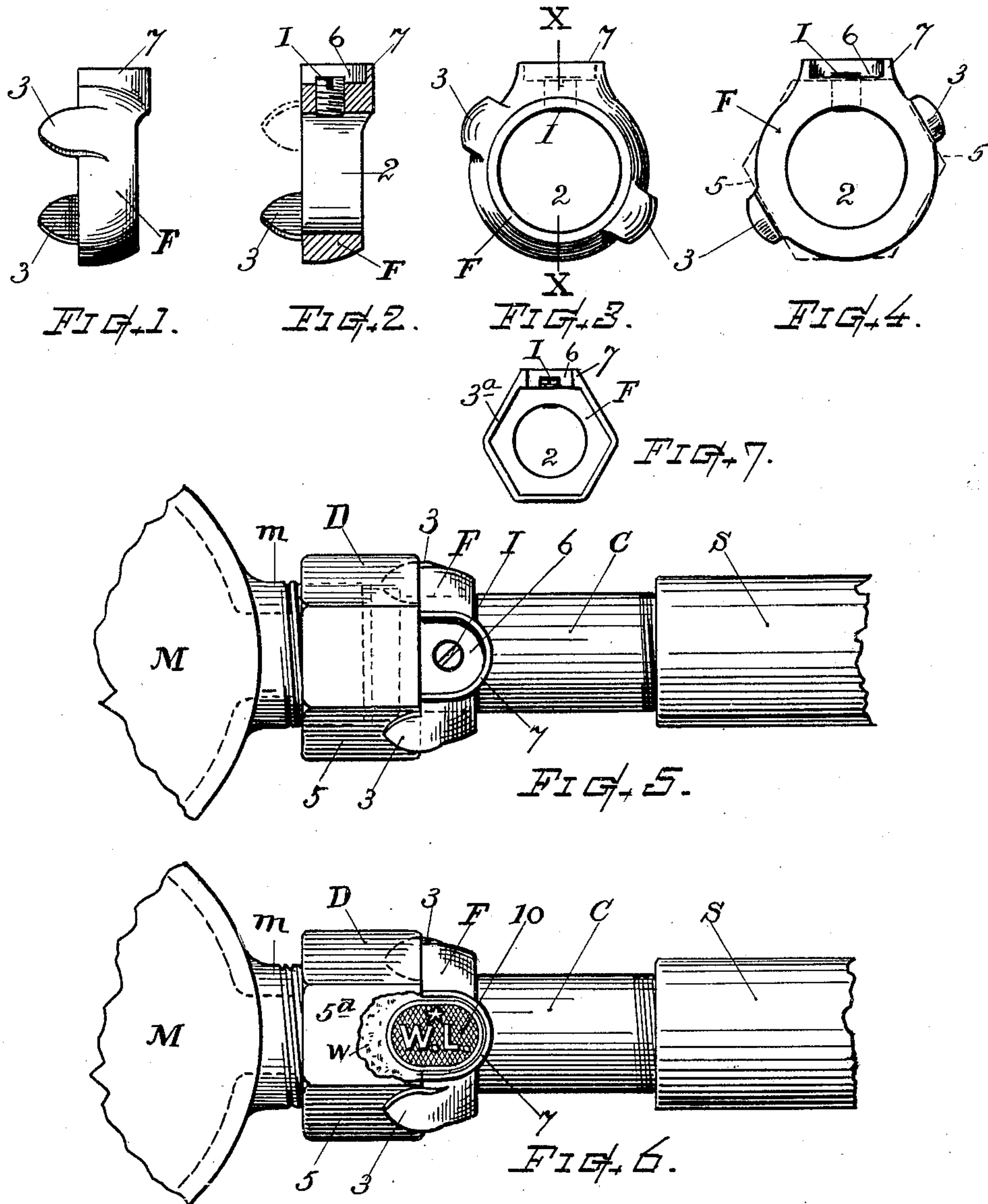


No. 770,812.

PATENTED SEPT. 27, 1904.

W. H. LARRABEE.
METER COUPLING SEAL.
APPLICATION FILED APR. 16, 1904.

NO MODEL.



Witnesses.

Charles A. Bacon
Simon C. King

Inventor.

William H. Larrabee
By Chas. H. Burleigh
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. LARRABEE, OF WORCESTER, MASSACHUSETTS, ASSIGNOR
TO UNION WATER METER COMPANY, OF WORCESTER, MASSACHU-
SETTS, A CORPORATION OF MASSACHUSETTS.

METER-COUPLING SEAL.

SPECIFICATION forming part of Letters Patent No. 770,812, dated September 27, 1904.

Application filed April 16, 1904. Serial No. 203,426. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LARRABEE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Meter-Coupling Seal, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of my present invention is to provide a simple, inexpensive, convenient, and efficient means for sealing the attaching-couplings of water-meters and the like, so that an unauthorized person may not detach, disturb, or tamper with the meter without such disturbance being discovered.

To this end my invention consists in a device constructed as more fully hereinafter explained, and illustrated in the accompanying drawings, wherein—

Figure 1 represents a side view of my improved meter-sealing device; Fig. 2 a cross-section view at line X X, Fig. 3 a rear view, and Fig. 4 a front view, of the same. Fig. 5 represents a top view of the device as applied to the meter-coupling. Fig. 6 represents a similar view with the seal complete, and Fig. 7 illustrates a modification in the engaging member.

Referring to the drawings, the part marked M represents a water-meter of any approved kind, *m* its threaded attaching-spud, and S indicates the service-pipe.

C indicates the coupling-nipple, and D the coupling-nut, both of which parts may be of the ordinary construction, as my sealing appliance requires no change in the form and arrangement of those parts.

In accordance with my invention I provide an annulus or ring member F, having an opening 2 to fit over the cylindrical nipple C. Said annulus is provided with projections, lips, or means 3 for engaging with one or more of the exterior flat side faces 5 of the nut D, so that when engaged thereon the annulus is non-rotatively united with the nut.

In one side of the annulus F there is a transverse threaded opening within which is fitted a set-screw I, and around said opening there is a cavity 6, surrounded on all sides, except the side which comes adjacent to the nut, by a rim 7, which is preferably somewhat higher than the side face of the nut. The head of the set-screw is within the cavity and stands some distance below the level of the rim. When combined for use, the annulus F is arranged on the nipple C, as shown. After the coupling-nut D has been screwed onto the spud *m* the annulus F is moved up against the end of the nut, so that the projections 3 engage with the flat exterior sides thereof, (see Fig. 5,) and the set-screw I is turned in so as to firmly clamp the annulus in position upon the nipple C. The cavity 6 is then filled with melted sealing-wax W or similar substance, completely covering and burying the head of the set-screw and filling the space within the rim 7, preferably with a portion of the wax extending out at the open side of the rim and covering a part of the nut-surface 5^a. (See Fig. 6.) A distinctive authorized seal-mark, signet device, or symbol 10 is then impressed upon the wax before it hardens, so as to indicate that the authorized person has properly connected the meter with the service. When thus arranged, the set-screw of the seal-annulus cannot be reached for loosening it without destroying the seal, nor can the coupling-nut be turned without turning or forcing the annulus, which if effected would cause the point of the screw to cut or visibly score the surface of the nipple or by breaking of the embracing members 3, in either case showing if the connections have been tampered with by unauthorized persons.

In Fig. 7 I have shown the nut-engaging means made as a continuing rim 3^a, adapted for overlocking the full hexagon angles at the periphery of the nut in lieu of fingers or projections 3. Such modification may in some instances be employed, the nature and effect being practically the same as above described.

My improved means for sealing meter-couplings is comparatively inexpensive, is efficient,

and is conveniently applicable to use. It has the further advantage that it requires no special fitting of or change in the construction of the coupling members C and D, which can be
5 of the ordinary kind now in general use.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. A meter-coupling sealing device, consisting of an annulus adapted for mounting upon
10 a coupling-nipple, and having nut-engaging projections suitable for its non-rotative connection with a coupling-nut, said annulus provided with a set-screw threaded into a radially-disposed opening through the side thereof,
15 of, and with a cavity surrounding the set-screw opening adapted for containing a mass of sealing material for covering the head of the set-screw.

2. The combination, with the meter-spud,
20 the coupling-nipple, and coupling-nut; of an annular body member mounted upon and surrounding said nipple, and provided with projecting portions that engage with the exterior face, or faces, of the coupling-nut, a set-screw
25 threaded in said body member whereby it is firmly clamped upon the nipple, and a cavity

about the screw-opening for containing sealing-wax, whereby the head of the set-screw is inclosed and adapted for receiving a stamp or seal-mark impressed thereon over said screw. 30

3. The combination, with the meter having the threaded attaching-spud, a coupling-nipple, and coupling-nut; of a ring fitting around said nipple adjacent to said nut and provided with means for its non-rotative engagement
35 with the exterior flat sides thereof, a set-screw in the side of said ring adapted for impinging against the nipple for clamping said ring in position, a rim and cavity surrounding the set-screw head, said rim having an opening
40 toward the nut, and an impression-receiving sealing-wax that includes and buries the head of the set-screw and extends outward upon the surface of the coupling-nut, substantially
45 as set forth.

Witness my hand this 14th day of April, 1904.

WILLIAM H. LARRABEE.

Witnesses:

CHAS. H. BURLEIGH,
ELLA P. BLENUS.