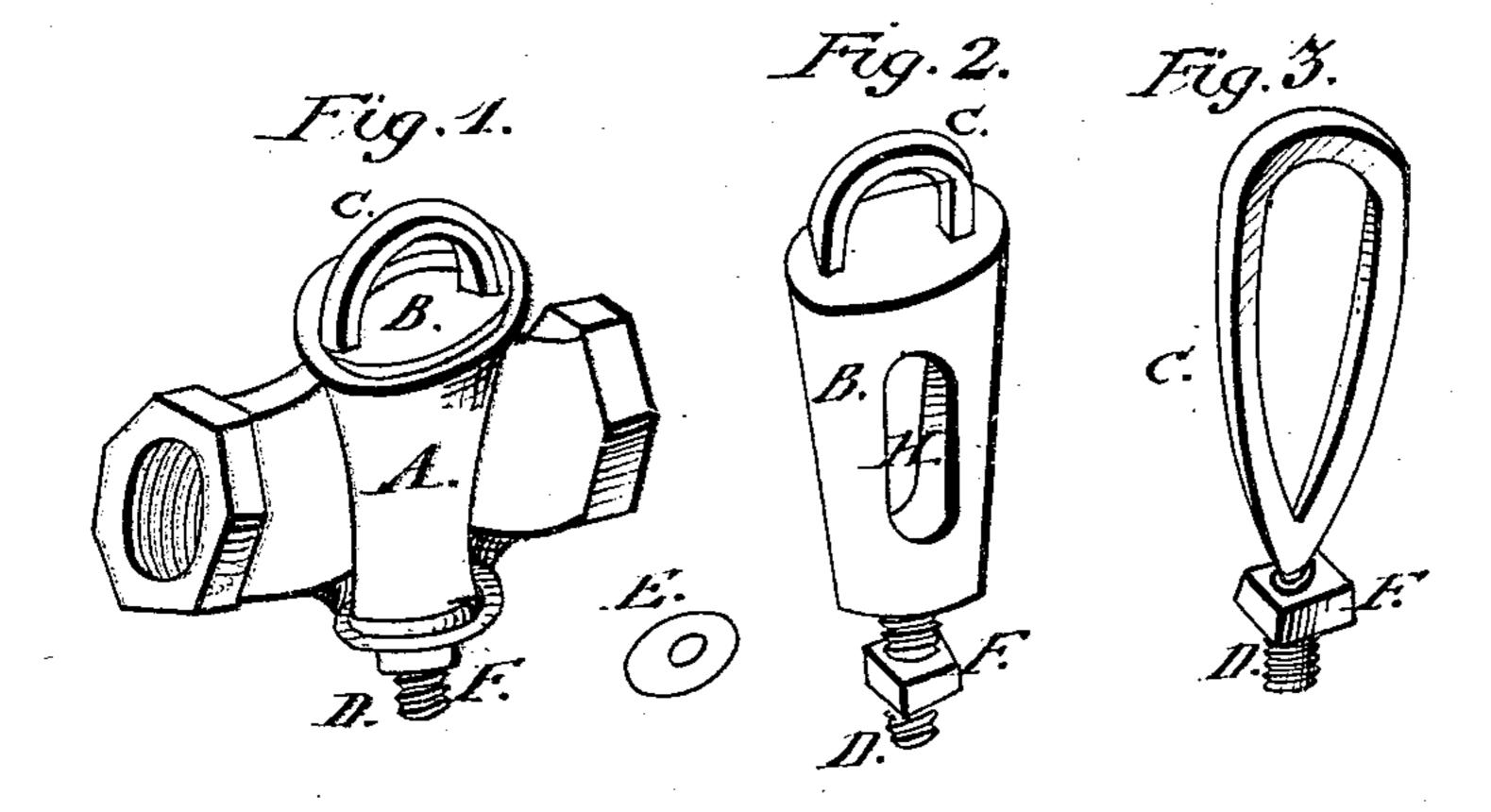
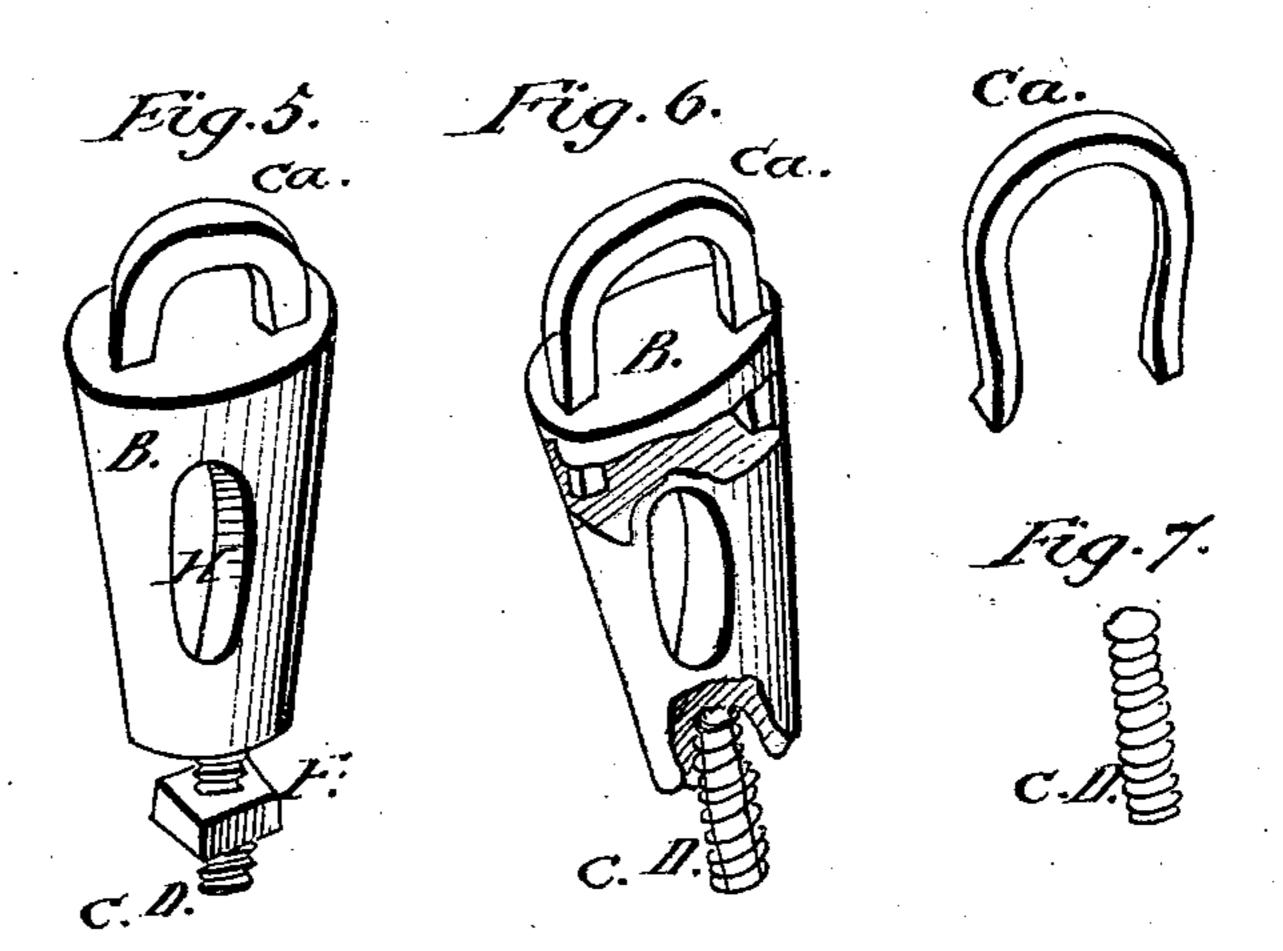
# G. Howland E. T. Ford,

Faucet.

Nº92,725.

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## Anited States Patent Office.

### GARDNER HOWLAND, OF BRUNSWICK, AND ELIAS T. FORD, OF STILLWATER, NEW YORK.

Letters Patent No. 92,725, dated July 20, 1869.

#### IMPROVEMENT IN FAUCET-PLUGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, GARDNER HOWLAND, of the town of Brunswick, county of Rensselaer, and State of New York, and Ellas T. Ford, of the town of Stillwater, county of Saratoga, and State of New York, have invented new and useful Improvements in the Construction of a Faucet-Plug, which consists in uniting a steel-wrought or malleable-iron loop with castmetal, so as to form a plug for faucets; and we do hereby declare that the following is an exact and full description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists in the uniting a steel-wrought or malleable-iron loop with cast-metal, so as to form a plug for faucets, by first constructing the loops, either whole or in sections, uniting them by placing them in a mould, and then filling around the same, in a melted state, any suitable metal, as brass, type, melted tin, or cast-iron, to form a plug of suitable size and shape for the faucet in which it is to be used, affording a larger orifice through the plug, and retaining the strength.

And to enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

Figure 1 represents a faucet, A, with the plug B inserted.

Figure 2, the plug B.

Figure 3 shows the loop C as a whole.

Figures 5 and 6 show the plug, with portions removed, to illustrate the construction.

Figure 7 represents the loop and screw in sections.

#### Construction.

The loop C, as seen in fig. 3, is placed within the faucet A.

The lower extremity of the faucet is closed by means of the washer E and nut F, and the ends of the faucet are closed.

The metal is poured in at the top surrounding the loop C, and conforming to the einterior surface of the shell A.

A core is also placed within the shell A, forming the

orifice H, as seen in fig. 2.

The plug B may be cast independent of the faucet-shell A, by the use of a pattern moulded in sand, then the loop C laid within the cavity, together with the core for forming the passage H through the plug. The metal is now poured into the cavity surrounding the loop and core.

The plug B, as seen in fig. 6, is cast by means of a pattern moulded in sand, and the sections C A and C D, as seen in fig. 7, are laid into the cavities provided by the pattern, and then the metal is poured in, encompassing the lower extremity of the loop C A, and the upper extremity of screw C D.

A thread is cut upon the screw C D, giving a better hold. When surrounded by the lower portion of the plug C, the lower extremities of the loop C A are enlarged so that it cannot be removed by its operation.

In fig. 6, a portion of the plug B is removed, in order to show the arrangement of the loop C A and screw C D.

The loop C A may be first cast and made malleable, or it may be first forged and formed of steel or wroughtiron, which affords great strength and durability, also allowing a large orifice through the plug C.

#### Operation.

The operation is effected by the insertion of a bar, constituting a wrench, through the upper portion of the loop C A and C, then turning the plug B right or left, as seen in fig. 1.

What we claim as our invention, and desire to secure

by Letters Patent, is—

As a new article of manufacture, a plug for a faucet, consisting of a loop, C, of wrought-metal, and part B, of cast-metal, both constructed as described, when the part B is cast upon said loop, as set forth.

G. HOWLAND. E. T. FORD.

Witnesses:

WILLIAM A. PETERS, EDGAR O. HOWLAND.