No. 627,728. Patented June 27, 1899.

C. W. GOULD.

FIRE NOZZLE.

(Application filed May 13, 1898.)

(No Model.)

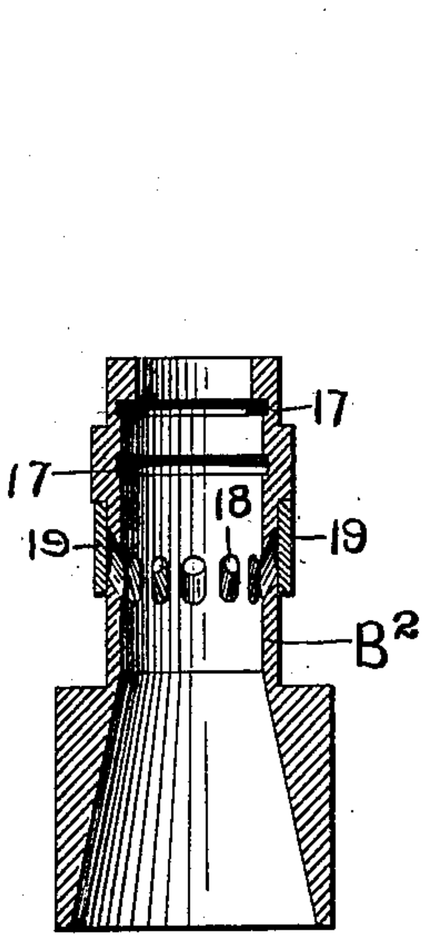

Fig. 2.

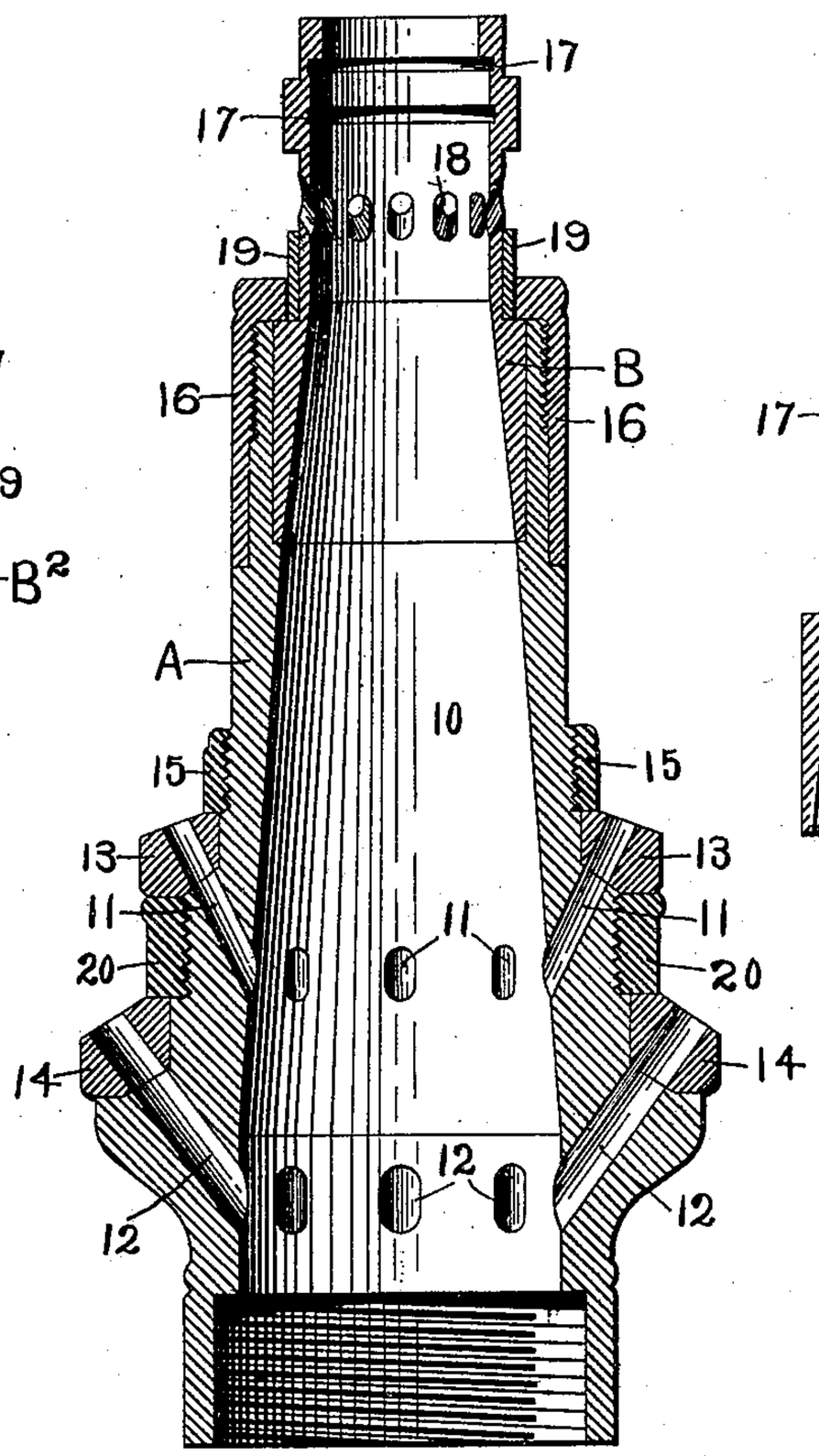

Fig. 1.

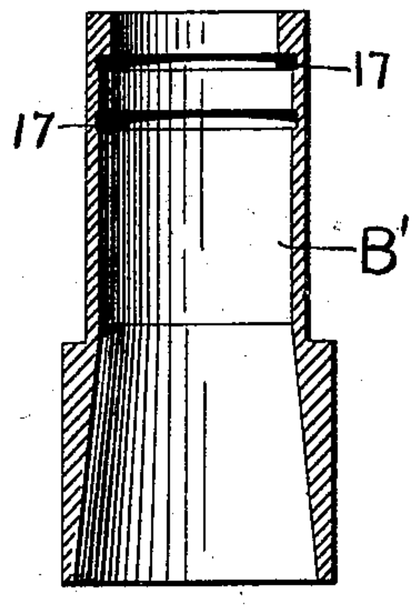

Fig. 3.

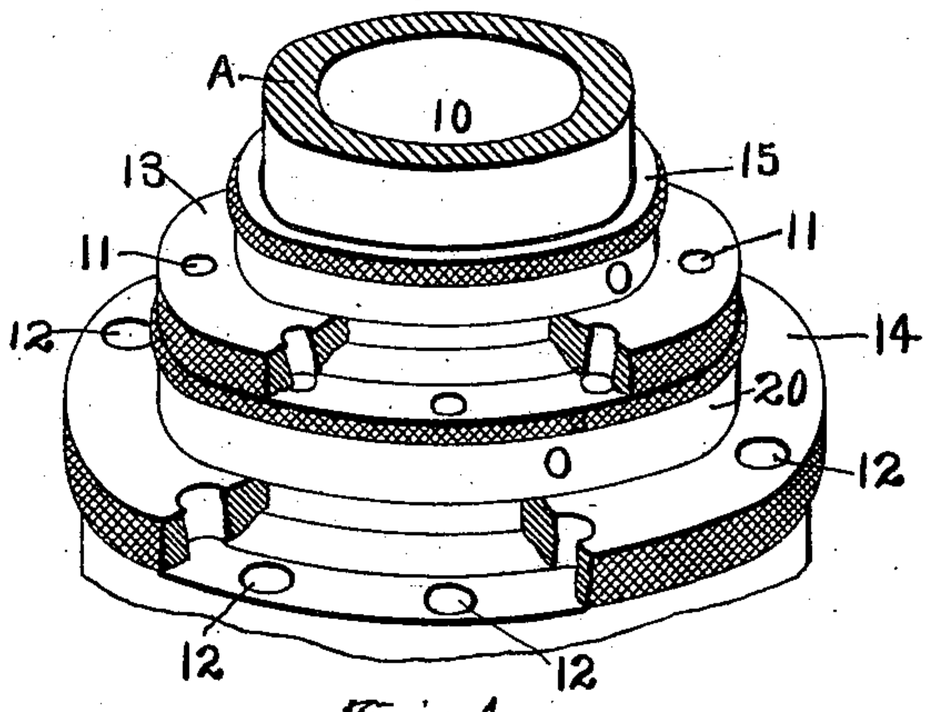

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHESTER W. GOULD, OF MARLBOROUGH, MASSACHUSETTS.

FIRE-NOZZLE.

SPECIFICATION forming part of Letters Patent No. 627,728, dated June 27, 1899.

Application filed May 13, 1898. Serial No. 680,548. (No model.)

To all whom it may concern:

Be it known that I, CHESTER W. GOULD, a citizen of the United States, residing at Marlborough, in the county of Middlesex and State of Massachusetts, have invented a new and useful Fire-Nozzle, of which the following is a specification.

The object of my invention is to provide a simple, efficient, and inexpensive fire-nozzle which may be utilized to throw either a solid stream of water or a stream which is partly subdivided into finer streams or sprays.

A further object of my invention is to provide a fire-nozzle which may be used in connection with tip-sections of different diameters.

To these ends my invention consists of the fire-nozzle as an article of manufacture and the combination of parts, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a sectional view of a fire-nozzle constructed according to my invention. Figs. 2 and 3 are detail sectional views illustrating detachable tip-sections that may be used, and Fig. 4 is a partial broken-away perspective view to be hereinafter referred to.

In extinguishing fires it is desirable that the stream of water should be directed accurately to the point where the fire is kindled or where the same is burning most freely. It frequently happens, however, that this cannot readily be done, as dense volumes of smoke prevent the firemen seeing exactly where the stream could be directed with the greatest efficiency. In practice I have found a stream of water which is spread or divided into the form of spray to be an efficient means for clearing away or driving back dense volumes of smoke, so that the location of fires can be accurately observed.

The object of my present invention is therefore to provide a composite fire-nozzle having sprinkling-passages which may first be opened to throw finely-divided streams or sprays and which may be thereafter closed, so that the entire volume of water may then be thrown in a concentrated stream.

Referring to the drawings and in detail, A designates the body portion of a fire-nozzle constructed according to my invention, which may be internally threaded to engage the ordinary hose-coupling. The body portion A, as illustrated, is provided with a tapering main water-passage 10 and a plurality of sets of branching spraying-passages, as 11 and 12.

Rotatably mounted on the body portion A and ground to fit accurately thereon are collars 13 and 14, having perforations which may be turned into and out of register with the spraying-passages 11 and 12, respectively. The perforated collars 13 and 14 are secured in place by means of collars 15 and 20, threaded onto the body portion A, as shown.

At its end the body portion A is provided with a socket for receiving interchangeable tip-sections, as B, B′, or B^2.

The tip-section which is being used may be secured in the body portion A by means of a collar 16, threaded onto said body portion.

The plain tip-section B′ (illustrated in Fig. 3) may be provided with a tapering water-passage of any desired diameter and may have near the mouth thereof the ordinary annular recesses 17 for concentrating the stream or "coating" the same, as it is termed.

The tip-section B (illustrated in Fig. 1) is provided with branching spraying-passages 18, which may be opened or closed by a longitudinally-movable collar 19.

The tip-section B^2 (illustrated in Fig. 2) is similar in construction to the tip-section B, but the water-passage therethrough is of a somewhat smaller diameter.

In the use of a fire-nozzle constructed according to my invention one or more of the sets of branching spraying-passages may be opened to dissipate or force back the smoke of the fire, and the concentrated stream may then be directed at the point where the same will produce the best results.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. As an article of manufacture, a fire-nozzle comprising a body portion A having a tapering main water-passage 10, a socket at its end for receiving a detachable tip-section B, a threaded collar 16 for holding the tip-section in place, spraying-passages 11 branching from the main water-passage 10, a perforated collar 13 rotatably mounted on the body portion

for opening and closing the spraying-passages 11, and a collar 15 threaded onto the body portion A for securing the perforated collar 13 in place, substantially as described.

2. As an article of manufacture, a fire-nozzle comprising a body portion having a tapering main water-passage, a socket at its end for receiving a detachable tip-section, a threaded collar for holding the tip-section in place, a plurality of sets of spraying-passages branching from the main water-passage, perforated collars rotatably mounted on the body portion for opening and closing the spraying-passages, and collars threaded onto the body portion for securing the perforated collars in place, substantially as described.

3. In a device of the class described, the combination of a body portion A having a tapering water-passage 10, two sets of sprinkling-passages 11 and 12 branching therefrom, a tip-section B fitting into a socket in the body portion A and having branching sprinkling-passages 18 controlled by a longitudinally-movable collar 19, a collar 16 threaded onto the body portion for holding the tip-section in place, perforated collars 13 and 14 for controlling the spraying-passages 11 and 12 respectively, and retaining-collars 15 and 20 for holding the perforated collars 13 and 14 in place respectively, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHESTER W. GOULD.

Witnesses:
PHILIP W. SOUTHGATE,
HENRY EVELETH HILL.