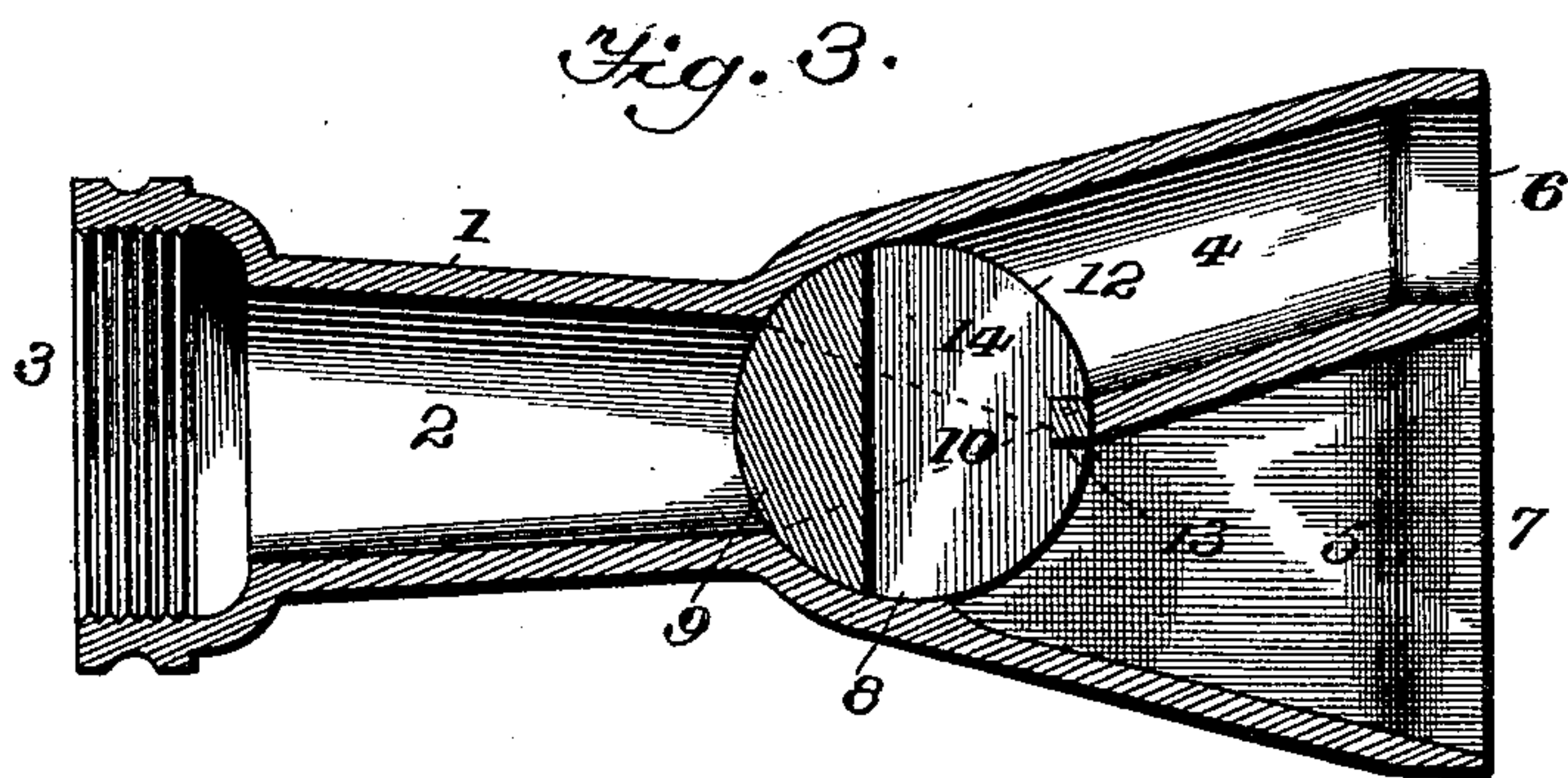
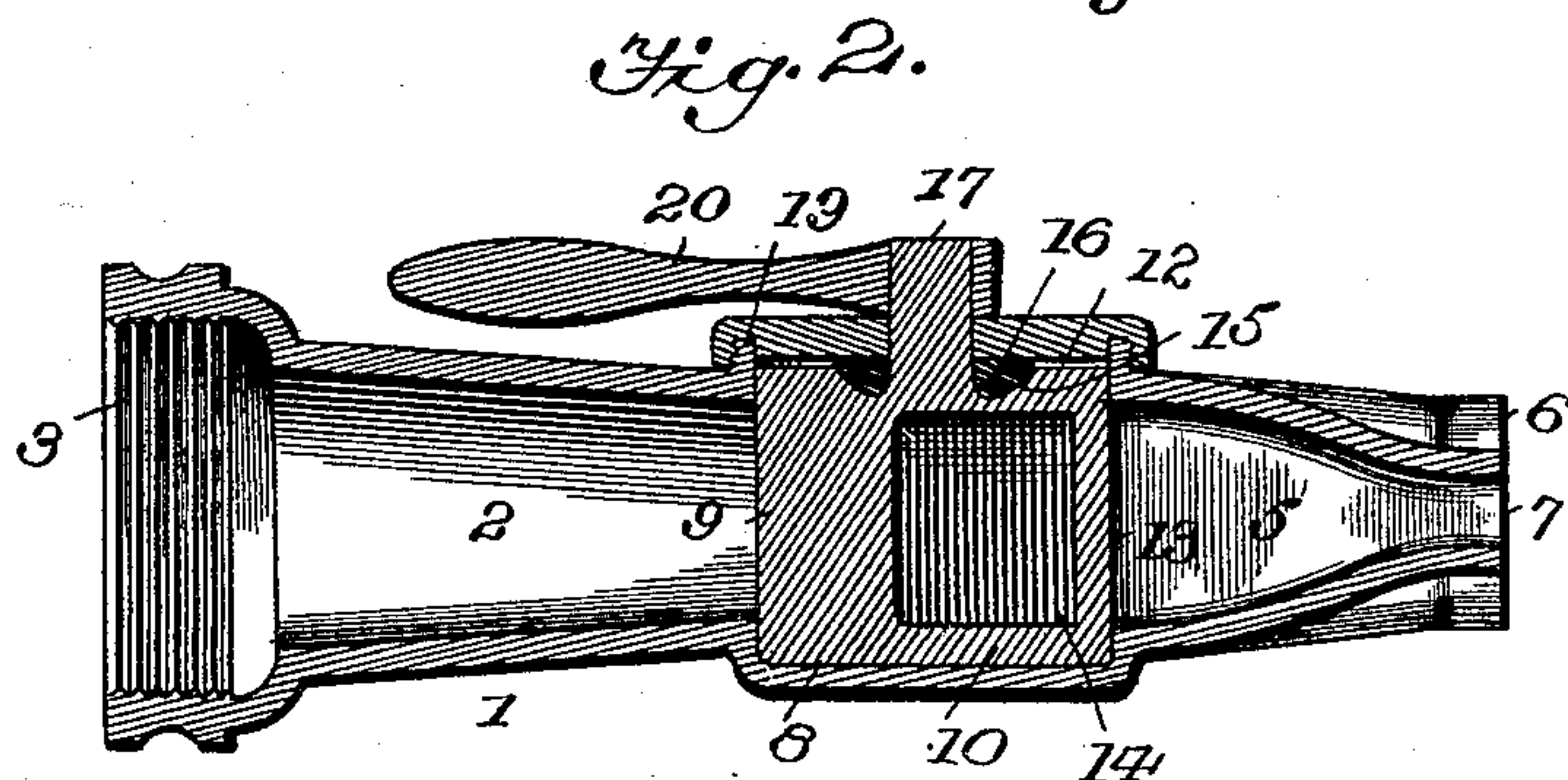
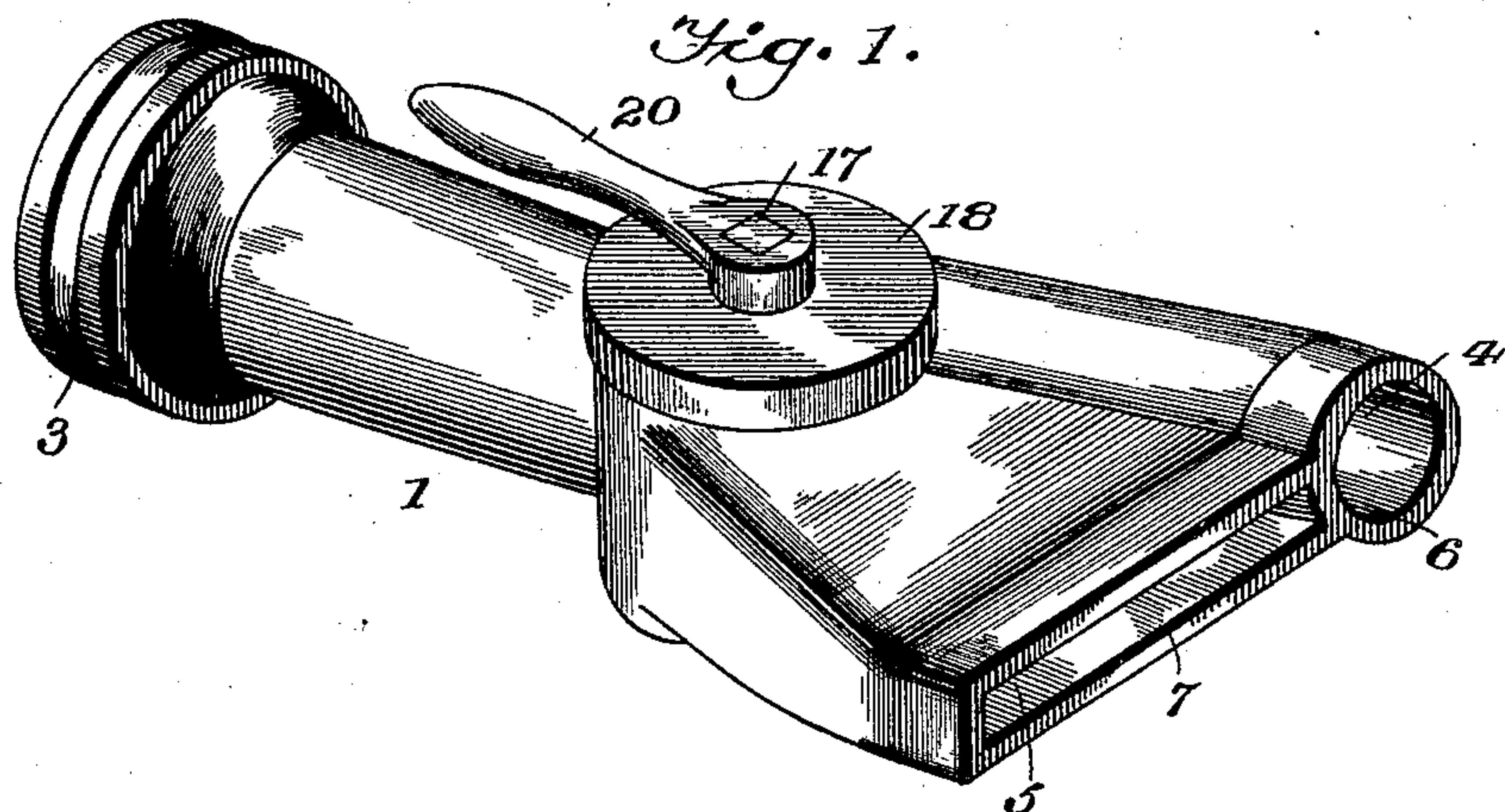


(No Model.)

J. ASKINS.
HOSE NOZZLE.

No. 586,955.

Patented July 27, 1897.



Witnesses

John Smith
Albert H. Norris.

Inventor

Joseph Askins

By James L. Norris
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH ASKINS, OF RIDGEFIELD, NEW JERSEY.

HOSE-NOZZLE.

SPECIFICATION forming part of Letters Patent No. 586,955, dated July 27, 1897.

Application filed November 19, 1896. Serial No. 612,739. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ASKINS, a citizen of the United States, residing at Ridgefield, in the county of Bergen and State of New Jersey, have invented new and useful Improvements in Hose-Nozzles, of which the following is a specification.

This invention relates to that class of hose-nozzles particularly designed for firemen, but useful for other purposes, wherein a nozzle-body is provided with means for throwing at will either a cylindrical or a flattened stream of water.

The chief objects of my present invention are to improve the prior construction of hose-nozzles of the character referred to, to provide a nozzle-body made as a single casting with a cylindrical delivery and a flattened delivery having their mouths substantially coincident and the flattened delivery extending longitudinally of the cylindrical delivery, and to provide novel means for packing and retaining in position a rotary plug, which controls the flow of water through the nozzle-body.

To accomplish all these objects, my invention consists in the features of construction and in the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of a hose-nozzle constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view taken vertically through the nozzle, and Fig. 3 is a similar view taken horizontally through the nozzle.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, reference being made to the drawings, wherein—

The numeral 1 indicates a nozzle-body, which, as here shown, is of tapering form and is provided with an approximately cylindrical bore 2. The nozzle-body is constructed at one end with a screw-threaded socket 3, by which to connect it with a hose-pipe, and the other end is widened out laterally in a horizontal plane and contains a cylindrical delivery-passage 4 and a flattened delivery-passage 5, having their mouths 6 and 7 substantially

or exactly coincident. The cylindrical and flattened delivery-passages 4 and 5 diverge from a comparatively large transverse opening or socket 8, formed vertically in the nozzle-body, and in order that the cylindrical delivery-passage may deliver the cylindrical stream of water in a right line substantially coincident with the geometrical axis of the nozzle-body I form the delivery-mouth portion 6 at a slight angle of inclination to the diverging passage 4, as clearly shown in Fig. 3. The wall of the cylindrical passage 4 serves as a wall at one side of the flattened delivery-passage 5, and the latter extends longitudinally along the cylindrical passage and projects laterally therefrom.

The parts above described are susceptible of being made as a single casting, which materially facilitates the manufacture of the nozzles and renders it possible to economically produce the same, while at the same time a nozzle of desirable appearance and symmetrical form or shape is provided. The transverse opening or socket 8 contains a cylindrical valve-plug 9, composed of the section of a cylinder having parallel cheek-pieces 10 and 12 connected by somewhat narrow brace-bar 13, so that a comparatively large passage 14 is provided in the valve-plug for the passage of water from the bore 2 to either the cylindrical delivery-passage 4 or the flattened delivery-passage 5.

In Fig. 3 the valve is shown in the position it occupies when the flow of water through the nozzle-body is cut off or closed, in which position the solid body portion of the plug closes the outer end of the cylindrical bore 2. The plug is indicated by dotted lines in Fig. 3 in the two positions to which it may be adjusted for directing the water from the bore 2 to the cylindrical delivery-passage 4 or to the flattened delivery-passage 5.

The cheek-piece 12 of the valve-plug is provided in its outer side with a concavity 15, designed to contain a packing 16, and this cheek-piece of the valve-plug is also provided with a projecting shaft or stem 17, extending through a central hole in a cap 18, which is screwed to a lateral externally-screw-threaded ring 19, formed integral with the upper side of the nozzle-body. The outer end of

the shaft or stem 17 is provided with a handle 20, which is preferably in the form of a crank, but which may be of any construction or shape suitable for the purpose of conveniently rotating the valve-plug to close the flow of water through the nozzle-body or to direct the water through either the cylindrical delivery-passage 4 or the flattened delivery-passage 5. The screw-cap 18 serves to confine the valve-plug in proper position in the opening or socket 8, and the packing effectually prevents leakage around the exterior surface of the shaft or stem 17, where it passes more or less loosely through the central hole in the screw-cap.

The outer end or mouth portion of the delivery-passage 7 is in the form of a rectangle, and it gradually decreases in lateral capacity and increases in height or vertical capacity, so that it is approximately circular where it joins the edge of the opening or socket 8.

The cylindrical delivery-passage 4 serves to throw a cylindrical stream of water when it is not desired to spread the stream over a comparatively large space—as, for instance, where a fire is local or confined to a comparatively small area. The flattened delivery-passage 5 serves to transform the approximately cylindrical stream of water into a flat sheet or stream which will cause the water to distribute over a wide area, say from thirty to forty feet wide.

The screw-cap 8 may be provided with suitable means to indicate the position of the plug within the nozzle, but as such means are well known in valves having plugs adjustable to various positions I do not deem it necessary to illustrate the same.

Having thus described my invention, what I claim is—

1. A hose-nozzle, consisting of a casting formed integral with a cylindrical bore, a transverse opening or socket, a cylindrical delivery-passage and a flattened passage arranged laterally to, extending longitudinally of the cylindrical delivery-passage and having its mouth approximately coincident with the mouth of the latter, a rotary valve-plug located in the transverse opening or socket and provided with a shaft or stem, a handle for turning the plug, and means for retaining the plug in place, substantially as described.

2. A hose-nozzle, consisting of a casting formed integral with a cylindrical bore, a transverse opening or socket, a projecting screw-threaded ring, a cylindrical delivery-passage and a flattened delivery-passage arranged laterally to, extending longitudinally of the cylindrical passage and having its mouth approximately coincident with the mouth of the latter, a rotary valve-plug located in the transverse opening or socket and provided with a shaft or stem, a handle for turning the shaft or stem, a screw-cap engaging the said screw-threaded ring, and a packing between one end of the plug and the cap, substantially as described.

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

JOSEPH ASKINS.

Witnesses:

ALBERT H. NORRIS,
THOS. A. GREEN.