

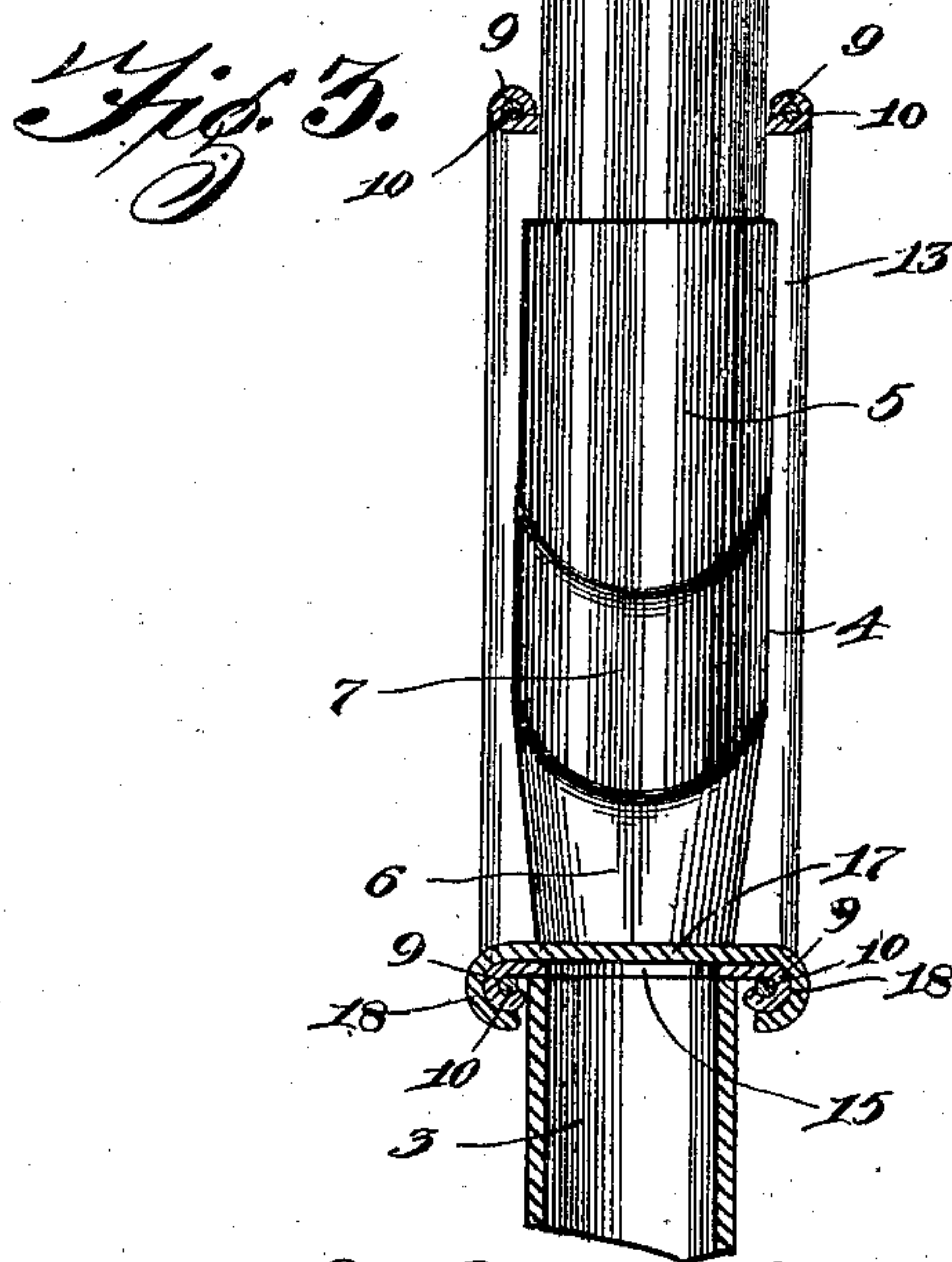
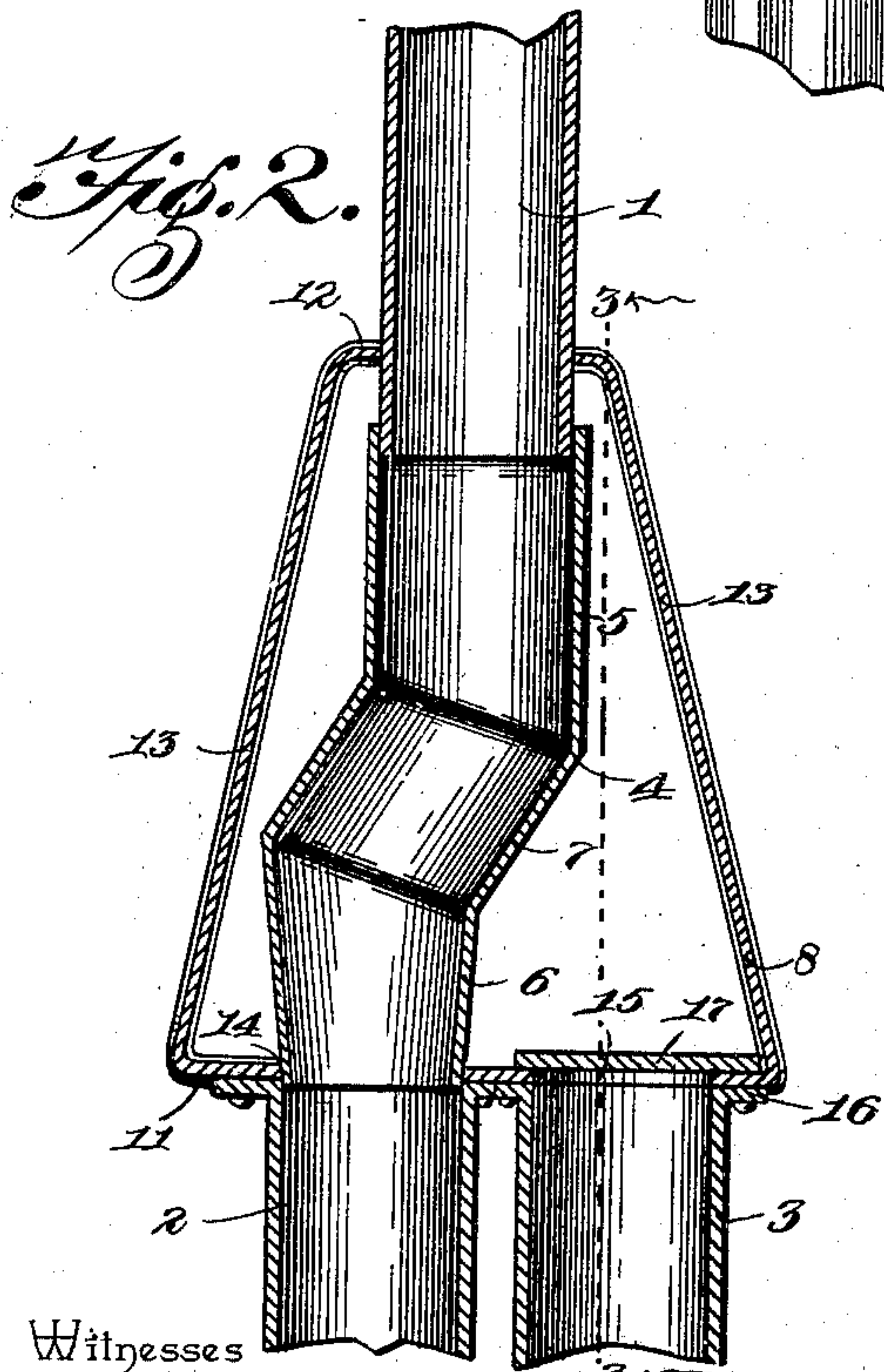
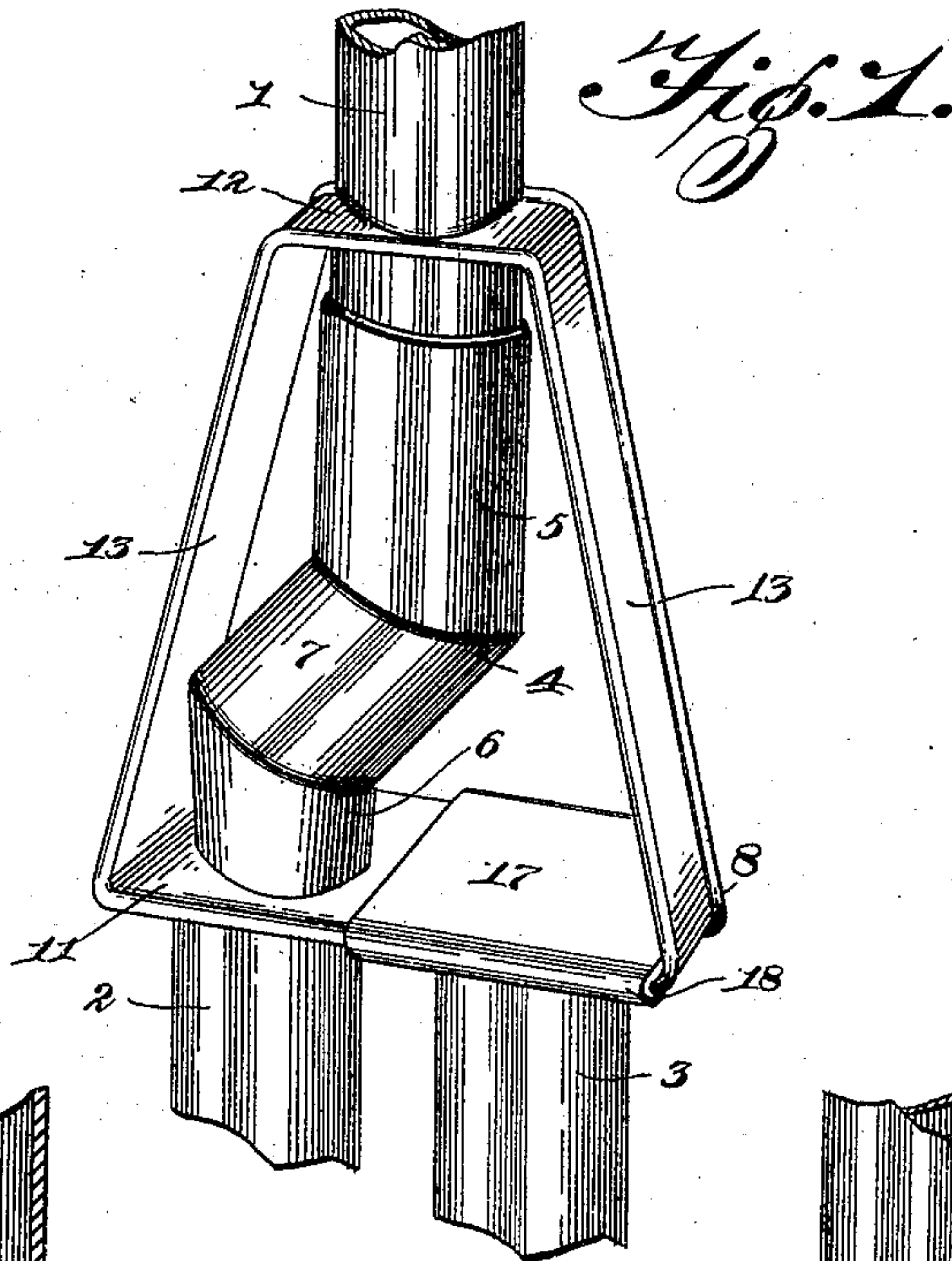
No. 664,548.

Patented Dec. 25, 1900.

G. A. HIGGINS.  
CUT-OFF FOR DOWN SPOUTS.

(Application filed June 5, 1900.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE ALLEN HIGGINS, OF GALESBURG, ILLINOIS.

## CUT-OFF FOR DOWN-SPOUTS.

SPECIFICATION forming part of Letters Patent No. 664,548, dated December 25, 1900.

Application filed June 5, 1900. Serial No. 19,165. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ALLEN HIGGINS, a citizen of the United States, residing at Galesburg, in the county of Knox and State of Illinois, have invented a new and useful Cut-Off for Down-Spouts, of which the following is a specification.

This invention relates to down-spouts for rain-water, and has for its object to provide an improved cut-off therefor, so that the rain-water may be directed to a cistern or storage-tank or to a waste-pipe, as may be desired. It is furthermore designed to provide for the convenient adjustment of the device, so as to readily control the direction of the passage of the rain-water and to insure the closure of the passage or conveyer-pipe which is not in use.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a cut-off for down-spouts constructed and arranged in accordance with the present invention. Fig. 2 is a central longitudinal sectional view thereof. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 2.

Corresponding parts are designated by like characters of reference in all of the figures of the drawings.

Referring to the drawings, 1 designates the lower end portion of an ordinary down-spout which is connected to the eaves of a building, so as to convey the rain-water collected thereon to a cistern or tank in order to maintain a supply of water.

The object of the present invention is to direct the water from the down-spout to either of the two pipes 2 or 3, one of which conveys the water to a cistern or storage-tank, and the other is a waste-pipe to carry away dirty water or to be used in the event of the cistern or tank being filled, and thereby to prevent overflow of the cistern.

In carrying out the invention there is pro-

vided a coupling-pipe 4, which has its upper end swiveled upon the lower end of the down-spout, so that it may be rotated to bring its lower end into connection with either of the discharge-pipes 2 and 3. This coupling comprises a double elbow and is formed by the opposite longitudinally-disposed end sections 5 and 6, which are connected by an intermediate laterally-inclined section 7, the end sections being laterally offset from each other. The upper end section 5 telescopically receives the lower end of the down-spout, so that the coupling may be elevated thereon for the purpose of raising the lower extremity of the tapered lower end section 6 out of either discharge-pipe, so that said coupling may be turned or rotated upon the down-spout to bring the lower end section 6 into connection with the other discharge-pipe. By reason of the tapered shape of the lower end section the latter may be forced downwardly into either of the discharge-pipes, so as to form a tight and rigid connection therewith, and at the same time permitting of the coupling being conveniently raised out of engagement therewith when it is desired to change the direction of the rain-water.

The down-spout and the discharge-pipes are connected by means of a quadrilateral frame 8, preferably formed of sheet metal, having its longitudinal edges beaded, as at 9, for the reception of marginal stiffening and strengthening wires 10. The base 11 of the frame is substantially parallel with the shorter top or upper end 12, while the opposite longitudinal sides 13 converge inwardly from the bottom to the top, thereby forming a substantially triangular frame. The top is provided with a central opening for the reception of the lower end of the down-spout, which projects a suitable distance within the frame, so as to permit of the slidable connection of the coupling, and the base or lower end is provided with a pair of openings 14 and 15, located equally at opposite sides of the longitudinal axis of the down-spout, about which the coupling rotates, so that the latter may be adjusted to be received within either of the openings with which the respective discharge-pipes register. The walls of these openings are preferably beveled inwardly and downwardly, so as to snugly receive the



tapered lower end section of the coupling. The pipes 2 and 3 may be connected to the base of the frame in any preferred manner—as, for instance, by means of outwardly-directed marginal flanges 16, which are bolted or riveted to the frame.

When the coupling is connected to one of the discharge-pipes, the upper end of the other is open, and in order that said open end may be conveniently closed there is provided a closure-plate 17, which is provided with opposite longitudinal rebent flanges 18 to slidably embrace the opposite longitudinal edges of the base 11, so that the plate may be slid longitudinally across the upper face of the base and beneath the lower end of the coupling when the latter is elevated, so as to close either opening in the base, the opposite sides of the frame forming stops to limit the movement of the slidable closure and stop the latter in proper positions to close the openings.

From the foregoing description it will be seen that besides connecting the down-spout with the discharge-pipes the frame also forms a housing to protect the adjustable coupling and prevent accidental displacement thereof, while at the same time permitting of the convenient adjustment of said coupling. Moreover, should the coupling-pipe become clogged by dirt or any foreign matter deposited therein by the rain-water from the eaves of the building said coupling may be elevated out of engagement with either of the pipes 2 and 3 and then swing clear of the bottom of the frame, whereby the interior of the coupling is conveniently accessible from the lower end thereof to remove whatever foreign matter may have collected therein.

What is claimed is—

1. A cut-off for down-spouts, comprising a frame, having an opening in the upper side thereof, a down-spout-pipe section projecting in opposite directions through the opening, the lower side of the frame having a pair of openings, which are arranged equally at opposite sides of the longitudinal axis of the down-spout-pipe section and designed to communicate with a pair of discharge-pipes, a coupling-pipe, which has its upper end telescopically mounted upon and also swiveled to the inner end of the down-spout-pipe section, the opposite lower end of the pipe being adjustable from one to the other of the discharge-openings in the lower side of the frame, and an adjustable closure slidably mounted upon the lower side of the frame, adjustable from one to the other of the discharge-openings, and also entirely independent of the coupling-pipe.

2. In a device of the class described, the combination with a down-spout, and a plurality of discharge-pipes, which are located longitudinally opposite the down-spout, of an intermediate coupling-pipe, which is adjustable to connect the down-spout with the respec-

tive discharge-pipes, and a closure, which is adjustable from one to the other of the discharge-pipes, mounted independently of the coupling-pipe, and closing only one discharge-pipe at a time, the other discharge-pipe being connected to the coupling-pipe.

3. In a device of the class described, the combination with a down-spout, and a plurality of discharge-pipes, which are disposed longitudinally opposite the down-spout, of an intermediate connecting-frame therefor, an intermediate coupling-pipe, which is telescopically mounted upon the down-spout, and also adjustable to fit the respective discharge-pipes, and a closure, which is slidable upon the frame between the coupling and the discharge-pipes, and arranged to close the latter.

4. In a device of the class described, the combination with a down-spout, and a plurality of discharge-pipes located longitudinally opposite the down-spout, of a connecting-frame therefor, having corresponding openings for the down-spout and the discharge-pipes, an intermediate coupling-pipe, which has one end telescopically connected to and also swiveled upon the down-spout, and its opposite end arranged for adjustable connection with the respective discharge-pipes, and a slidable closure mounted upon the side of the frame having the openings for the discharge-pipes and movable between the latter and the adjacent end of the coupling, when the latter is adjusted away from the discharge-pipes.

5. In a device of the class described, the combination with a down-spout, and a pair of discharge-pipes located longitudinally opposite and also equally at opposite sides of the longitudinal axis of the down-spout, of a connecting-frame, the upper end thereof having a centrally-located opening for the reception of the lower end of the down-spout, and the base of the frame having a pair of openings corresponding with the discharge-pipes, an intermediate coupling-pipe, comprising opposite end sections, which are laterally offset, and a transversely-inclined intermediate section connecting the inner ends of the end sections, the upper end section telescopically receiving the lower end of the down-spout and also rotatable thereon, the lower end section being tapered to fit within the respective discharge-pipe openings, and a slidable closure-plate, having opposite flanges embracing the opposite longitudinal edges of the base of the frame, said plate being slidable longitudinally of the base to close either of the discharge-pipe openings.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE ALLEN HIGGINS.

Witnesses:

C. W. HIGGINS,

J. T. WASSON.