

No. 814,214.

PATENTED MAR. 6, 1906.

D. C. JOHNSON.
RAIN SPOUT CUT-OFF.
APPLICATION FILED JUNE 3, 1905.

Fig. 3.

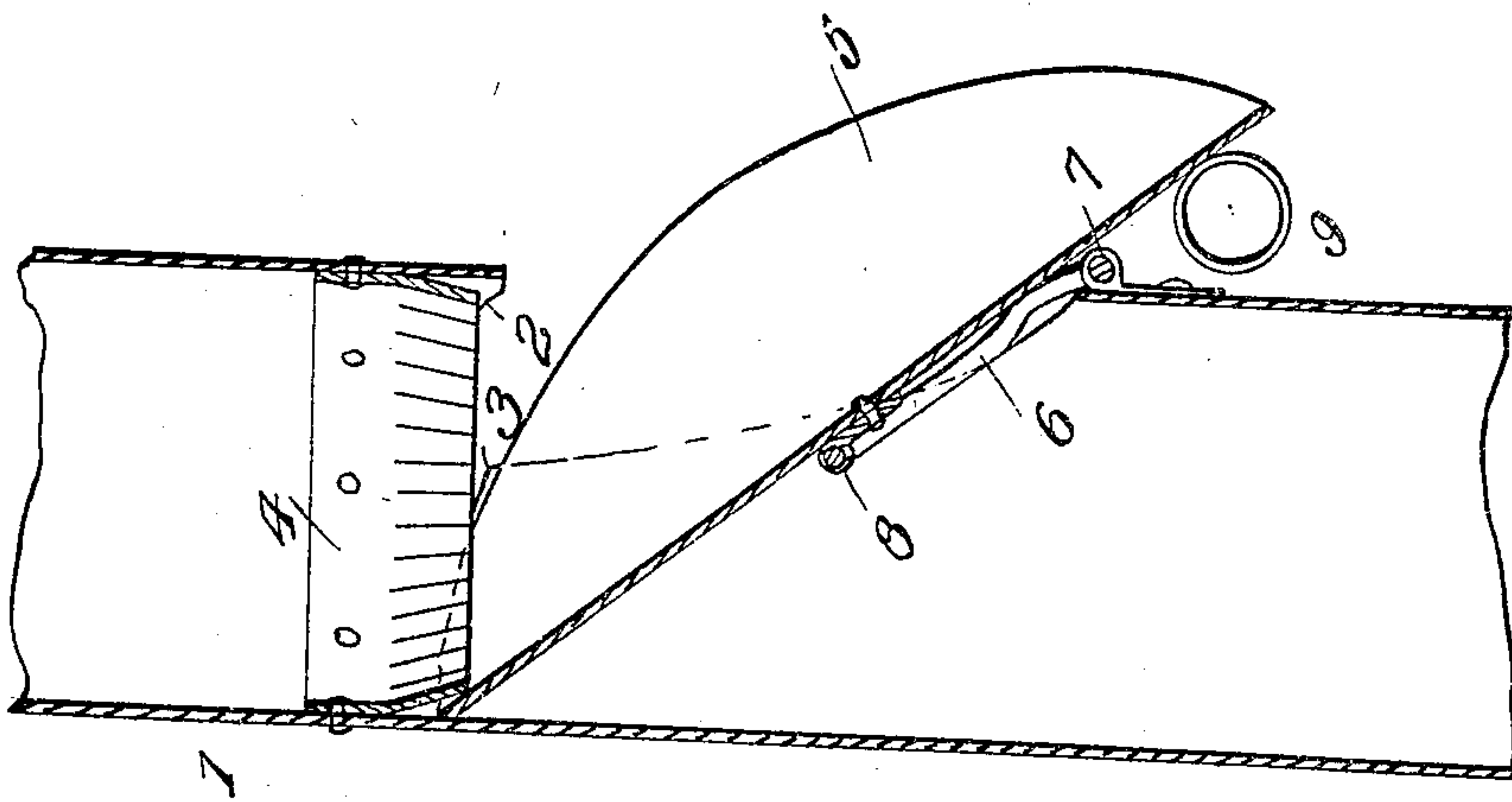
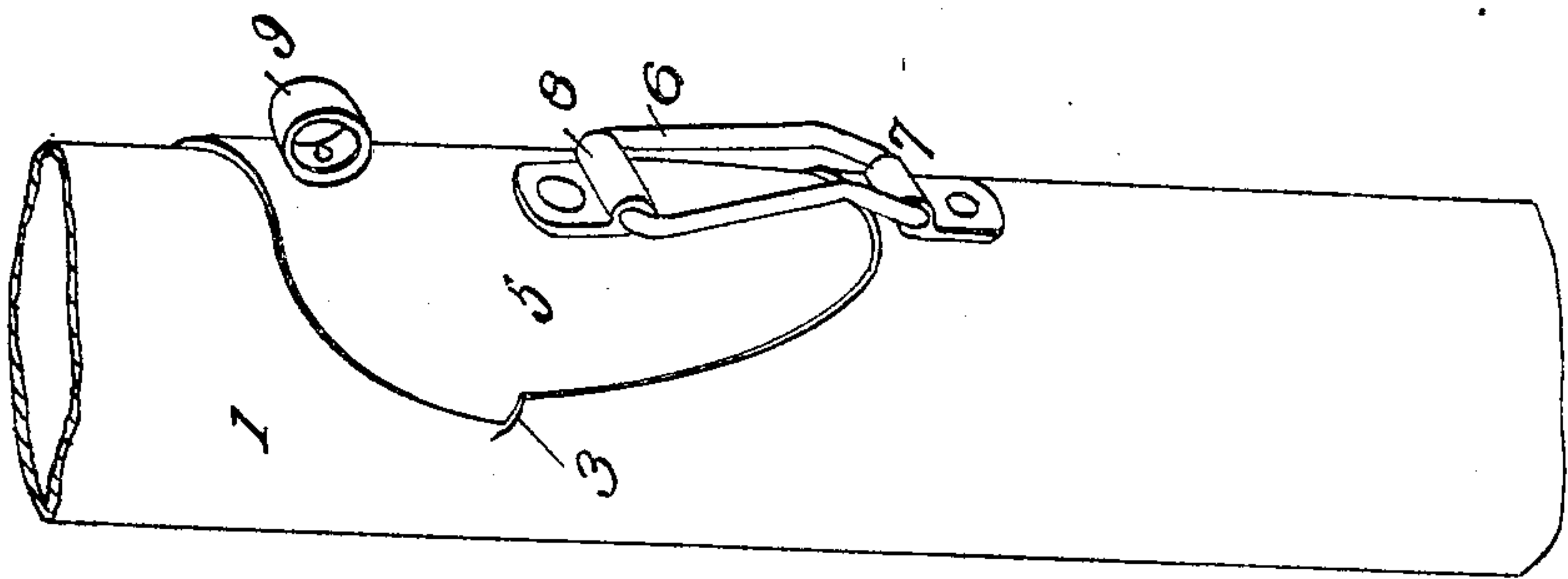
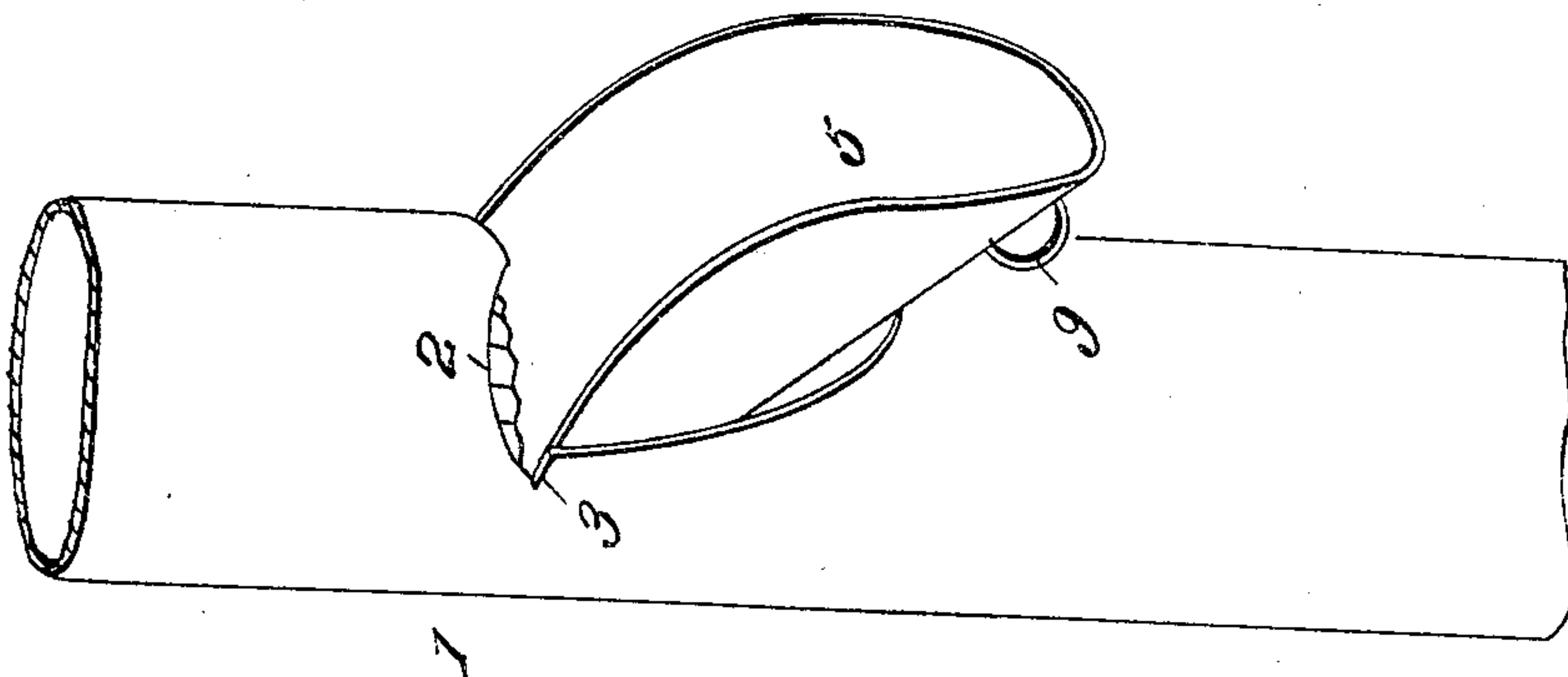


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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RAIN-SPOUT CUT-OFF.

No. 814,214.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed June 3, 1905. Serial No. 263,620.

To all whom it may concern:

Be it known that I, DON C. JOHNSON, a citizen of the United States, residing at Frederick, in the county of Comanche and Territory of Oklahoma, have invented certain new and useful Improvements in Rain-Spout Cut-Offs, of which the following is a specification.

This invention relates to improvements in rain-water cut-offs; and it consists, essentially, of a pipe having an opening in a side thereof and means above the opening for deflecting the flow of the water from the sides of the pipe and a cut-off normally closing the opening and adapted to be turned so as to carry the water away from the pipe and prevent its flowing into the cistern.

It has for its object to produce a device of this character which will positively prevent any water from leaking through into the cistern when the cut-off is in operative position, which can be easily operated, and which is at the same time simple and durable in construction.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view showing the cut-off in its normal position. Fig. 2 is a similar view showing the cut-off turned down, so as to deflect the flow of water from the pipe. Fig. 3 is a vertical longitudinal sectional view showing the cut-off turned down, so as to prevent the water from flowing into the cistern.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numeral 1 designates the pipe, which is provided with an opening formed in its sides by cutting diagonally upward to meet a transverse cut. It will be noticed that the transverse cut extends somewhat beyond its intersection with the diagonal cut and that each end of the transverse cut is curved upward and then downward at 2 to form V-shaped slots 3. A ring 4 is situated within the pipe immediately above the opening and has its lower end contracted, so as to deflect the water from the sides of the pipe. A cut-off 5 operates in conjunction with the opening, and the ring 4 and is attached to the pipe by means of a link 6, which is connected

thereto immediately below the opening at 7 and is similarly connected to the cut-off at 8. A handle 9 of any suitable form may be attached to the upper part of the cut-off.

In operation the cut-off is normally folded up into the position shown in Fig. 1, so that it closes the opening, the lower portion lying against the inside of the pipe, while the upper portion lies against the outside of the pipe. When it is wished to prevent the water from flowing into the cistern, it is simply necessary to catch hold of the handle 9 and pull the cut-off into the position shown in Fig. 3. The lower edge of the cut-off is then thrown under the contracted portion of the ring 4 and is curved so as to conform to the shape of the pipe when in this position. It will be obvious that it will now be absolutely impossible for any water to leak into the cistern. The contracted portion of the flange 4 deflects the water from the sides of the pipe and throws it on the cut-off 5, thereby preventing any leakage around the edges. When the cut-off is folded back into position, the sides thereof will engage with the edges of the curved cut 2 and be guided into the slots 3 without any undue binding.

As will be seen from reference to Figs. 1 and 3, the link 6 is curved or bent between its ends, whereby the upper portion will extend inwardly with relation to the lower portion, and the arrangement of the ring 6 with respect to the pivot-point 7 is such that a straight line drawn between the two said parts would be shorter than the combined distance between the pivot-point 7 and the pivot-point 8 and between said latter point and the normally lower edge of the cut-off 5. By means of this arrangement when the cut-off 5 is turned to the position shown in Fig. 3 the pivot-point 8 may be sprung past the center or, in other words, past the point which would be intersected by a straight line drawn between the pivot-point 7 and the edge of the ring 4, so that when the point 8 is thus sprung past said line or across the center the cut-off 5 will be automatically locked in the position shown in Fig. 3 and will require considerable force to turn it up into the position shown in Fig. 1. By this means any accidental displacement of the cut-off when it is arranged as a deflector will be prevented. In the operation of the device to change the relation of the parts from that shown in Fig. 1 to that shown in Fig. 3 the handle 9 will be grasped to turn the upper edge of the cut-off

outwardly and the lower edge into engagement with the edge of the ring 4 or between said edge and the adjacent wall of the pipe 1. The last-named edge of the cut-off 5 will thereupon act as a fulcrum, so that in the continued movement of the handle 9 to press the cut-off into the position shown in Fig. 3 the pivot-point 8 will spring past the center, as before described, and will automatically lock the cut-off, this action being assisted or accommodated by the angular or bent link 6.

From the foregoing description it will be readily understood that my cut-off is extremely durable, that it can be readily applied to any spout, and that it is easily accessible for repair. Owing to the peculiar construction of the device, the greater the pressure of the water upon the cut-off the tighter same is held in position.

Having thus described the invention, what is claimed as new is—

In a device of the character described, the combination with a pipe having a lateral opening of a ring 4 secured within the pipe at the upper edge of said opening and constituting a separate element from the pipe, the

lower edge of said ring being contracted, a rearwardly-bent or angular link 6 pivoted at one end of the outer wall of the pipe below the lower edge of said opening and a cut-off 5 pivotally secured to the other end of said link, the length of said link and its point of pivotal attachment to the cut-off being such that the combined length of the link and that portion of the cut-off between the point of attachment of the link and its lower edge will be greater than the distance between the other end of the link and the contracted ends of the ring 4 whereby when the cut-off is drawn down to deflect the water, the edge thereof will engage behind the ring 4 so as to serve as a fulcrum, so that the link may spring past the center and automatically lock the cut-off in position to deflect the water through said opening.

In testimony whereof I affix my signature in presence of two witnesses.

DON C. JOHNSON. [L. s.]

Witnesses:

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