J. BESTWICK.

Hose Pipe.

No. 231,470. Patented Aug. 24, 1880.

Fig. 1.

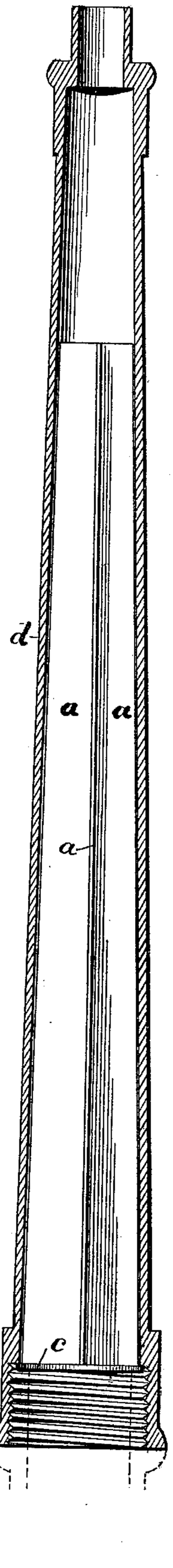


Fig. 2.

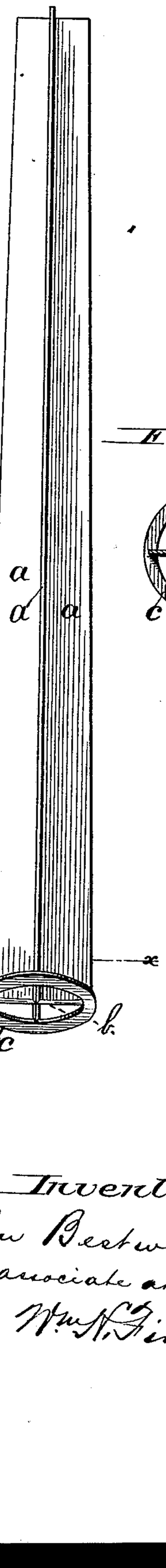


Fig. 3.

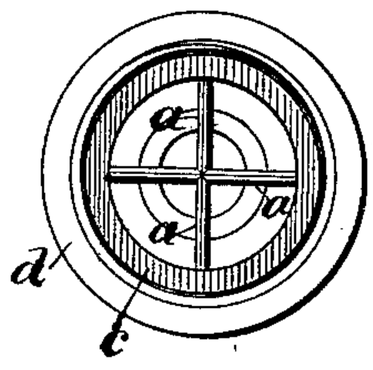
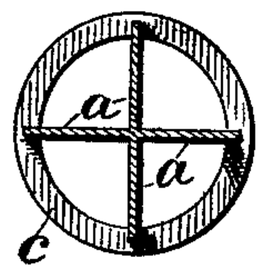


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN BESTWICK, OF DEDHAM, MASSACHUSETTS.

HOSE-PIPE.

SPECIFICATION forming part of Letters Patent No. 231,470, dated August 24, 1880.

Application filed February 21, 1880.

To all whom it may concern:

Be it known that I, JOHN BESTWICK, of Dedham, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Hose-Pipes, of which the following is a full, clear, and exact description.

The object of this invention is to arrest the rotating motion of the water in the hose-pipe, thereby increasing the density and length of the stream issuing from such hose-pipe.

It is well known that where the bore of a hose-pipe is left smooth and unobstructed, as is the case in ordinary hose-pipes, the water in its passage therethrough issues in a stream that spreads very soon after leaving the same, such spreading being due to the rotary motion imparted to the water in its course through the hose and pipe. It is desirable, as in case of fire, to condense or solidify the stream, so that it shall reach the place of the fire in a mass to be most effectual in extinguishing the same. It is also sometimes desirable to have the stream spread, as for cleansing or washing purposes; and it is the object also of this invention to construct a hose-pipe with means for condensing the stream, which means are removable to admit of the employment of the hose-pipe to spread the stream.

To these ends my invention consists in providing a hose-pipe with one or more removable metallic plates, dividing the hose-pipe into two or more water-passages, whereby the rotary motion of the water is arrested and the stream caused to issue in a dense form and at a greater length, the plates being removable, so that the hose-pipe may be used for spreading the stream.

In the drawings illustrating my invention, Figure 1 is a longitudinal section of a hose-pipe with my removable dividing-plates in position. Fig. 2 is a perspective view of the dividing-plates removed. Fig. 3 is an end view of Fig. 1; and Fig. 4 is a cross-section on line *x x* of Fig. 2, looking in the direction of the arrow.

It may be here stated that the nozzles of hose-pipes have been formed with dividing-plates, and also that a hose-pipe has been constructed with plates secured to the inner side of the pipe and projecting radially toward its center. The object in both of these constructions is to solidify the stream; but in both cases the dividing-plates are fixtures in the pipe, which I deem an imperfection.

In my invention I employ one or more metallic plates, *a a a*, secured together at their points of intersection, and cut tapering to fit the interior of a hose-pipe, *d*. These plates are connected centrally instead of peripherally, so as to arrest the rotary motion centrally of the stream as well as at its outer portions, and thereby insure the issuing of the water from the pipe in a dense stream of greater length and free from whirling. These plates may have their rearmost ends beveled or sharpened, as at *b*, to avoid retarding the stream, and they may be connected together by an annulus, *c*, which is adapted to fit against the usual shoulder in the coupling to hold them in place. These plates, further, extend only part way through the pipe, so as to admit of the consolidation of the divided stream before leaving the pipe.

My plates are removable at will, which construction will oftentimes be found very convenient and advantageous.

What I claim is—

As an improved article of manufacture, the hose-pipe plates *a*, centrally connected, and provided with the annulus *c*, for arresting the issuing water and condensing, solidifying, and lengthening the stream.

JOHN BESTWICK.

Witnesses:

ALBAN ANDRÉN,

HENRY CHADBOURNE.