

No. 613,554.

Patented Nov. 1, 1898.

H. BOGGIS.
STOVEPIPE.

(Application filed Mar. 12, 1897.)

(No Model.)

FIG. 1.

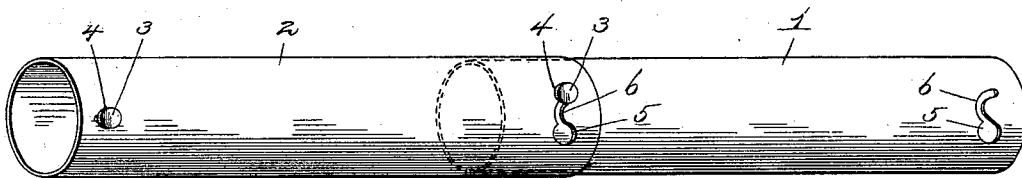


FIG. 2.

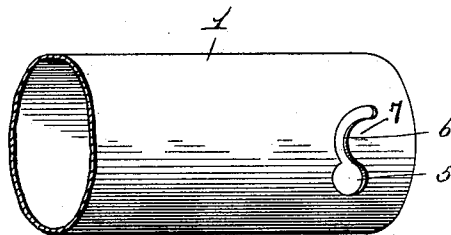
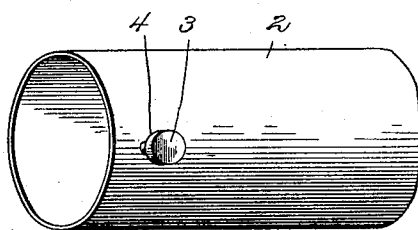


FIG. 3.



WITNESSES

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STOVEPIPE.

SPECIFICATION forming part of Letters Patent No. 613,554, dated November 1, 1898.

Application filed March 12, 1897. Serial No. 627,107. (No model.)

To all whom it may concern:

Be it known that I, HENRY BOGGIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Stovepipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a novel stovepipe-joint, and has for its object the production of a simple and efficient device by means of which the contiguous ends of two pipe-sections may be quickly joined in a manner which will prevent the unlocking of the parts by casual movement in longitudinal or lateral direction or even by a casual movement imparted longitudinally and laterally in succession, which will cause the detachment of the ordinary bayonet-slot connections familiar to those skilled in the art.

A further and subordinate object of the invention is to provide a slot-and-pin connection which will comprehend a slot of peculiar form having both ends closed to obviate the necessity for weakening the extremity of the pipe by slitting it to form a bayonet-slot, and thereby make possible the accidental distortion of the pipe-sections, which will prevent the ready insertion of the contiguous end of the opposing section.

Referring to the drawings, Figure 1 is a perspective view of two pipe-sections provided with my connecting or locking mechanism. Fig. 2 is an enlarged detail view of a portion of the female member or pipe end, and Fig. 3 is a similar view of the male member or end.

Referring to the numerals on the drawings, 1 and 2 indicate two pipe-sections provided, respectively, at their opposite ends with laterally-disposed and longitudinally-curved slot 6 and a headed pin or projection 4. The slotted ends of the sections are made slightly larger than the ends carrying the projections in order to permit of the insertion into the latter of the former. The curved slots 6 have their concave sides directed toward the contiguous end of the pipe-section and terminate

at one end in a circular enlargement 5, from which the slot extends tangentially. This peculiar arrangement of the slot not only permits of its ends being closed, but forms a substantially semicircular lip 7, which is of course more or less resilient. These pipe-sections are formed, ordinarily, of comparatively thin sheet metal, and as the projection or pin 4 needs only to be slightly longer than the thickness of the metal it does not project beyond the surface of the male section to necessitate an objectionably loose connection between the interfitting ends, as the head 3 upon said projections need be only as thick as the thinnest sheet metal. It has been found impracticable to illustrate the parts in their proper proportions, and the pin is therefore disproportionately magnified for the purpose of a clear disclosure.

By reference to the drawings it will be seen that one end of the pipe-section 1 is slipped into the slightly-enlarged contiguous end of the pipe-section 2 until the head 3 comes into alinement with the circular opening 5. The head is then passed through the opening and the sections turned to cause the pin 4 to traverse the slot 6 until it reaches its opposite end. In order to cause the pin to follow the curvature of the slot, however, it is not only necessary to exert a lateral or twisting motion to the pipe-sections, but they must first be slightly urged in the direction of each other and then drawn apart. Of course in order to disconnect the pipe-sections the reverse of this movement is necessary, and it follows that in order for the pipe-sections to become discharged they must not only be turned or twisted in opposite directions, but longitudinal strain must be exerted upon the sections in opposite directions laterally. The slight play between the sections, if any exists, may be taken up by passing the lip 7 inwardly against the section 1, and said lip not only performs this function, but also blocks the locking-pin, which in order to move into coincidence with the opening 5 must traverse a substantially semicircular line.

From the foregoing it will be observed that I have produced a pipe-joint without interrupting the continuity of the pipe end by the cutting of a slot, and that, second, in order

to separate the parts it is necessary to rotate the sections in opposite directions to exert longitudinal strain thereupon both toward and from each other, and, finally, to manipulate the male section in a manner to draw the enlarged head 3 through the circular opening and separate the sections by longitudinal strain. It is evident, therefore, that the strength of the pipe will not be impaired and that casual disconnection will be absolutely prevented.

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

15 1. A pipe-joint comprising a pair of inter-fitting sections, one of which is provided with a laterally-disposed longitudinally-curved slot, having closed ends, and the other of which

is provided with a projection designed to engage the slot, substantially as specified. 20

2. A pipe-joint, comprising a pair of inter-fitting sections, one of which is provided with a laterally-disposed longitudinally-curved slot, intermediate of the ends of the section, and terminating at one end in a discharge- 25 opening, the other section being provided with a headed pin designed to engage the slot, substantially as specified.

In testimony whereof I have signed this specification in the presence of two subscrib- 30 ing witnesses.

HENRY BOGGIS.

Witnesses:

JAMES COLVILLE,
GEORGE W. NOORE.