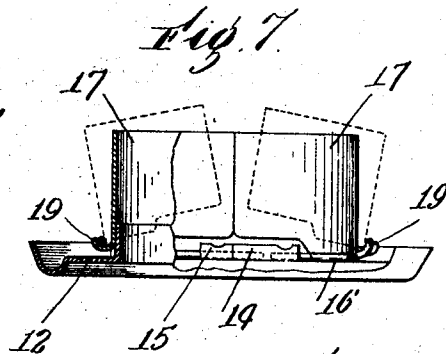
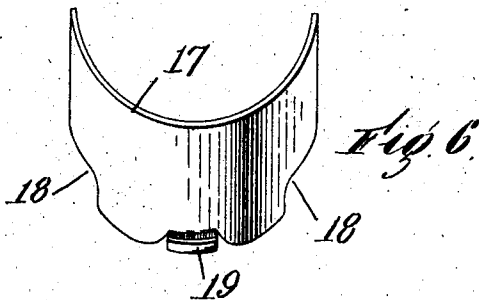
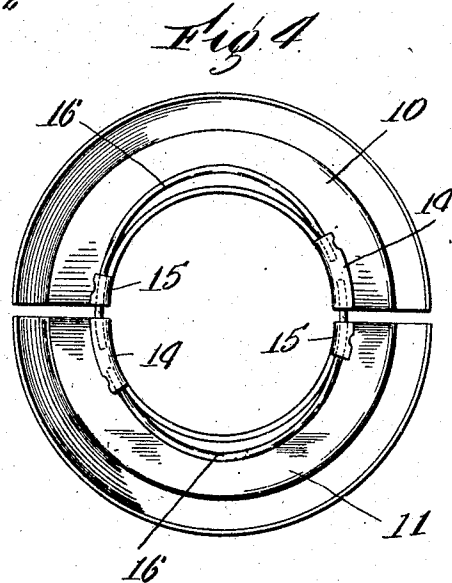
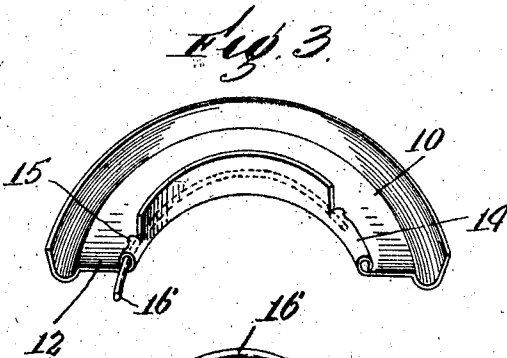
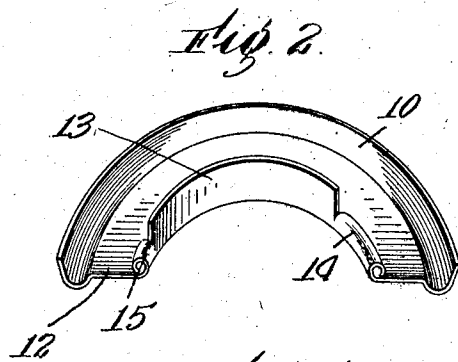
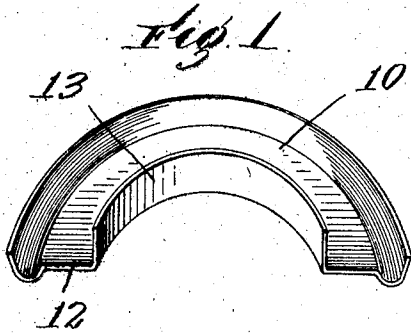


No. 839,106.

PATENTED DEC. 25, 1906.

W. H. BUXTON.
PIPE COLLAR.
APPLICATION FILED APR. 10, 1905.



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UNITED STATES PATENT OFFICE.

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PIPE-COLLAR.

No. 839,106.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed April 10, 1905. Serial No. 254,749.

To all whom it may concern:

Be it known that I, WILLARD H. BUXTON, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Pipe-Collar, of which the following is a specification.

This invention relates to that class of devices which are used as bushings inclosing steam-pipes or other piping of buildings to protect the pipes and provide a "finish" around the openings through floors or partitions through which the pipes pass.

The especial object of this invention is to provide a strong, simple, and inexpensive pipe-collar which has a body portion or bushing which can be contracted while being put into place and which is bodily expansible to hold itself in place.

Further objects of this invention are to utilize the projecting ends of the same spring-wires which give the resilience or opening tendency of the bushing for dowels for connecting the two half-ring sections which form the ceiling-plate of the pipe-collar and to provide for snapping the body-portion sections into place, so that they will be held by the spring-wires.

To these ends this invention consists of the improved pipe-collar as an article of manufacture and of the combinations of parts therein, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view showing the form in which one of the half-ring sections is first punched or shaped. Fig. 2 is a similar view showing parts of the flange of the half-ring bent down to form the wire-holding sockets. Fig. 3 is a similar view showing the spring-wire fastened in place in its sockets in one of the half-rings. Fig. 4 is a plan view showing the manner in which the projecting ends of the spring-wires act as dowels for connecting the two half-rings to form a ceiling-plate. Fig. 5 is a detached view of one of the spring-wires. Fig. 6 is a detached view of one of the body-pieces; and Fig. 7 is a side view, partly in section, showing in full lines the complete pipe-collar in its compressed or contracted condition and showing in dotted lines the expansion or swinging action of the body-pieces which spread out or expand to hold the pipe-

collar in place after insertion into the hole which is to receive the same.

In all classes of buildings, and particularly in the larger buildings which are heated by steam, it is necessary to provide some sort of a finishing-collar for protecting and giving a finish to the holes which are made through floors and partitions for the steam-pipes or other piping commonly employed in such buildings.

A considerable number of different types of pipe-collars have been proposed for this purpose. These have been put into place and fastened in a variety of ways.

In the older constructions the pipe-collars are usually made in a single permanently-connected structure. These single-pieced pipe-collars are open to the objection that they have to be secured in place before the building is piped, and it has been found in practice that it is usually more desirable to provide "split pipe-collars," which are made in halves so that they can be put into place after the piping is erected. In practice also it is desirable to provide a construction which can be secured in place without the use of wires, nails, or screws, which are liable to deface the partitions and which require labor in putting the same up.

My invention is especially designed to provide a two-part pipe-collar the sections of which are doweled together in a simple and efficient way and to provide a construction by means of which the bushing or body portion of the device will be expansible, so that the same can be compressed or contracted while being put into place and will then fly open, so as to be held or fastened in position.

In the particular construction herein illustrated a pipe-collar constructed according to this invention comprises the two half-ring sections which unite to form the ceiling-plate or finish-plate of the construction. Secured in each one of these half-rings is a spring-wire having a projecting end. The two half-rings are preferably connected or doweled together by the projecting ends of the spring-wires.

The bushing or body portion of the device is formed by two swinging body-pieces. Each of these body-pieces is provided with a projecting tongue which is snapped into place below its spring-wire, so that the spring-wires hold the body-pieces in place

and also tend to spread or swing the same open.

Referring to the accompanying drawings and in detail, a pipe-collar constructed according to this invention as herein illustrated comprises the two half-rings 10 and 11. Each of the half-rings is stamped out from a piece of sheet metal and is provided with a face part 12, which is preferably beaded or otherwise finished to present an ornamental appearance around an opening or hole for receiving a pipe.

Extending from the face portion is a flange 13. As shown most clearly in Fig. 2, the flange 13 is split at two points therein and is turned to form wire-fastening clips 14 and 15, the fastening-clips 14 being the longer, and also serving as a dowel-socket.

Secured in the fastening-clips 14 and 15 is a spring-wire 16. One end of the wire projects beyond its fastening-clip 15, as shown in Fig. 3.

When the two half-rings 10 and 11 are put together, as shown in Fig. 4, the projecting ends of the spring-wires 16 form connecting-dowels for holding the parts accurately together.

The bushing or body part of the pipe-collar is formed by two body-pieces 17. At its lower edge each of the body-pieces 17 is provided with cut-out parts 18 to clear the wire-fastening clips 14 and 15 and with a rearwardly-bent tongue 19.

In the complete pipe-collar, as illustrated in Fig. 7, each of the body-pieces 17 is fastened in place by snapping its tongue 19 under its spring-wire 16, the inner surface of the body resting against the flange when in contracted position. By this means the body-pieces will be held in place and the tension of the spring-wires will tend to swing or turn the body-pieces substantially as if pivoted, so that said body-pieces will tend to open or spread apart, as shown by the dotted lines in Fig. 7.

When a pipe-collar constructed according to this invention is to be put in place, the half-rings may be fitted around the pipe, and the bushing or body-pieces of the pipe-collar can then first be contracted or compressed, as shown by the full lines in Fig. 7, which will permit their insertion through the lathing, sheathing, flooring, or other material of which the partition may be made, and when the pipe-collar has been adjusted to proper position the body-pieces will expand or open under the tension of their springs to hold the collar in its adjusted position.

The expansion of the bushing of the pipe-collar will also tend to close the half-rings together, so that the half-rings will be held tightly joined.

I am aware that numerous changes may be made in manufacturing pipe-collars by those who are skilled in the art without de-

parting from the scope of this invention as expressed in the claims. For example, while I prefer to apply my invention to pipe-collars of divided or two-part type it is obvious that the invention is not limited in its application to this type of pipe-collar. I do not wish, therefore, to be limited to the particular construction I have herein shown and described but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. As an article of manufacture, a pipe-collar comprising two half-rings united to form a ceiling-plate, and a bushing adapted to be compressed while being put into place, and which will thereafter expand.

2. As an article of manufacture, a pipe-collar comprising two half-rings which unite to form a ceiling-plate, two swinging body-pieces forming the bushing of the pipe-collar, and springs for swinging the body-pieces outwardly.

3. As an article of manufacture, a pipe-collar comprising two half-rings which unite to form a ceiling-plate, each of said half-rings being provided with a wire having a projecting end forming dowel connections between said half-rings and body-pieces forming a bushing, said wires having means for holding the body-pieces in place.

4. As an article of manufacture, a pipe-collar comprising two half-rings which unite to form a ceiling-plate, a spring-wire secured in each of said half-rings, and body-pieces forming the bushing of the pipe-collar, each of said body-pieces having a projecting tongue engaging below its spring-wire.

5. As an article of manufacture, a pipe-collar comprising two half-rings which unite to form a ceiling-plate, each of said half-rings having a flange with sections bent therefrom to form wire-fastening clips, a spring-wire fastened by said clips in each of said half-rings with one end projecting therefrom to form a connecting-dowel, and two body-pieces forming the bushing of the pipe-collar, each of said body-pieces having a tongue held in place by one of the springs.

6. As an article of manufacture, a pipe-collar comprising two ring-sections which when united form a ceiling-plate, said sections having a flange projecting inwardly therefrom, each of said sections being provided with a resilient member and body-pieces forming a bushing for the pipe-collar, each of said body-pieces having a projecting tongue engaging under one of the resilient members, the inner side of each body-piece resting against the projecting flange, whereby the resilient member normally forces the body away from the corresponding flange.

7. As an article of manufacture, a pipe-collar having a flange projecting inwardly therefrom and provided with resilient members, and body-pieces forming a bushing for

the pipe-collar, each of the body-pieces having a projecting tongue engaging under one of the resilient members, the inner side of each body-piece resting against the projecting flange whereby the resilient members normally force the bodies away from the flange.

8. As an article of manufacture, a pipe-collar having a flange provided with sections bent therefrom to form wire-fastening clips, spring-wires fastened by said clips, and body-pieces forming the bushing of the pipe-collar, each of said body-pieces having a tongue held in place by one of the springs.

9. As an article of manufacture, a pipe-collar having spring-wires secured thereto, and body-pieces forming the bushing of the

pipe-collar, each of said body-pieces having a projecting tongue engaging below its spring-wire.

10. As an article of manufacture, a pipe-collar constituting a ceiling-plate, and having a plurality of swinging body-pieces forming the bushing of the pipe-collar, and springs for swinging the body-pieces outwardly.

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

WILLARD H. BUXTON.

Witnesses:

PHILIP W. SOUTHGATE,
A. T. MATTHEWS.