

No. 624,770.

Patented May 9, 1899.

C. EIBEE.
LEAK STOPPER FOR PIPES.

(Application filed Mar. 10, 1899.)

(No Model.)

FIG. 1.

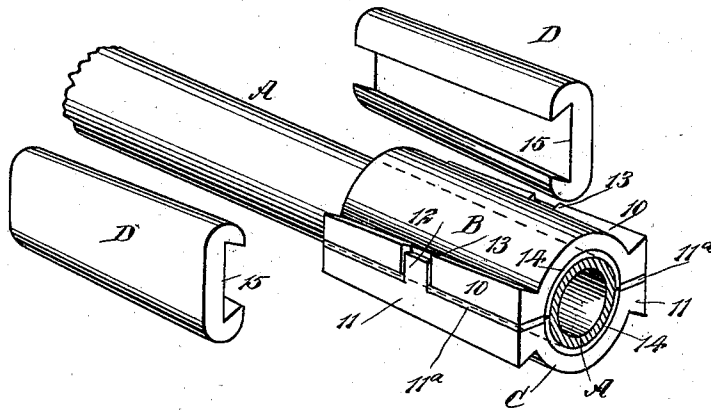
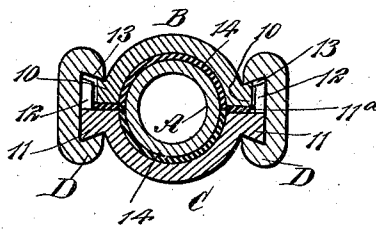


FIG. 2.



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LEAK-STOPPER FOR PIPES.

SPECIFICATION forming part of Letters Patent No. 624,770, dated May 9, 1899.

Application filed March 10, 1899. Serial No. 708,546. (No model.)

To all whom it may concern:

Be it known that I, CARL EIBEE, of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Leak-Stopper for Pipes, of which the following is a full, clear, and exact description.

The object of my invention is to provide a device adapted for temporary use that may be expeditiously and conveniently applied to a fractured or punctured pipe for the purpose of stopping a leak.

A further object of the invention is to so construct such a device that it may be applied to and secured upon the fractured section of a pipe without danger of the device slipping from the fractured part or shifting from its proper position during the process of locking it to place.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a perspective view of the improved leak-stopper, illustrating the body of the device applied to a pipe and the keys as removed from the body; and Fig. 2 is a vertical section through the device in its complete form and through the pipe to which it is applied, the section being taken through that portion of the device at which the lateral stops are formed.

A represents a pipe to which the improved stopper is applied. The stopper may be in two sections—an upper section B and a lower section C. These sections are so shaped upon their inner faces that they will conform to the exterior contour of the portions of the pipe to which they are to be applied.

The upper section B is provided at each of its sides with a tapering longitudinal flange 10, and the lower section C is provided with similar flanges 11, the longitudinal taper of the flanges of both sections being in the same direction. The opposing faces of the two flanges—namely, their inner faces—are straight; but the upper face of the flanges 10 of the upper section of the stopper is given an

upward and outward inclination, while the lower faces of the flanges of the lower section C are given a downward and outward inclination, so that when the flanges of the two sections are brought together the combined flanges at each side of the device form a dovetail. In order that there shall be no leak where the flanges connect, a washer 11^a is made to intervene the opposing faces of the flanges. The washers may be made of rubber, leather, or a similar material.

At or about the central portion of the upper faces of the flanges 11, belonging to the lower section of the stopper, lugs 12 are formed, the said lugs extending in a forwardly direction, and in the flanges 10 of the upper section of the device recesses 13 are provided for the reception of the lugs 12 when the two sections are brought together, as illustrated in Fig. 1. Each section of the device is provided with an interior gasket or packing 14 of suitable material, and in connection with the device two keys D are provided, each key being provided with a tapering dovetail groove 15 upon its inner face.

In operation, the gaskets or packings 14 having been placed in the sections of the stopper, one section is made to engage with the bottom of the pipe and the other section with the top of the pipe. The two sections are then brought together, so that their flanges will be separated only by the side gaskets 11^a, and the lugs 12 of the lower section will fit into the recesses 13 of the upper section, so that the two sections while held together cannot have end movement, and consequently will not slip from the point of fracture in the pipe over which they are placed. The device is held through the medium of the keys D, and the grooves 15 of these keys receive the dovetail projections of the body portion of the device, and the keys may be driven to place in any suitable or approved manner.

After a stopper constructed as above described has been placed on a pipe over a point of fracture the leak will be effectually stopped and will remain closed until the fracture can be permanently repaired.

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

1. A leak-stopper consisting of a body con-

5 constructed in two sections, the inner surfaces
of the sections of the body being shaped to
conform to the exterior surface of a pipe, each
section being provided with side flanges, lugs
projected from the side flanges of one body-
section, adapted to enter recesses in the side
flanges of the opposing body-section, and
keys adapted to receive said flanges, and lock
together corresponding flanges of the said
10 body-sections, as described.

2. A leak-stopper consisting of a body por-
tion constructed in two sections, the inner
faces of said sections being made to conform
to the outer contour of a pipe to which the
15 stopper is to be applied, longitudinal taper-
ing flanges located at the sides of the body-
sections, opposing inner faces of the flanges
being straight and the outer faces of the cor-
responding flanges being tapered transversely
20 in opposite directions, lugs formed upon the
flanges of one of the body-sections, adapted
to enter recesses in the flanges of the oppos-
ing body-section, and keys provided with taper-
ing dovetail recesses in their inner faces,
25 the said dovetail recesses being adapted to
receive the side flanges of the body of the
stopper, as described.

3. In a leak-stopper for pipes, the combina-
tion, with a body constructed in two opposing
sections, the inner faces of the sections being
30 shaped to conform to the exterior of the pipe
to which the stopper is to be applied, a pack-
ing located within each section of the body,
a longitudinal tapering flange formed at each
side of each section of the body, the outer
35 edges of corresponding flanges being tapered
in opposite directions to form a dovetail at
each side of the stopper, the flanges of one
section being provided with lugs and the
flanges of the opposing section with recesses
40 to receive the said lugs, and a packing lo-
cated between the opposing longitudinal faces
of the flanges of the sections, of keys pro-
vided with tapering longitudinal dovetail
grooves, each key being adapted to receive
45 corresponding flanges of the body and lock
said flanges together, the lugs preventing the
sections when placed in position from sliding
endwise one upon the other, as set forth.

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