A. MURRIE.

CRACK FILLING DEVICE.

APPLICATION FILED APR. 11, 1908.

926,129. Patented June 29, 1909.

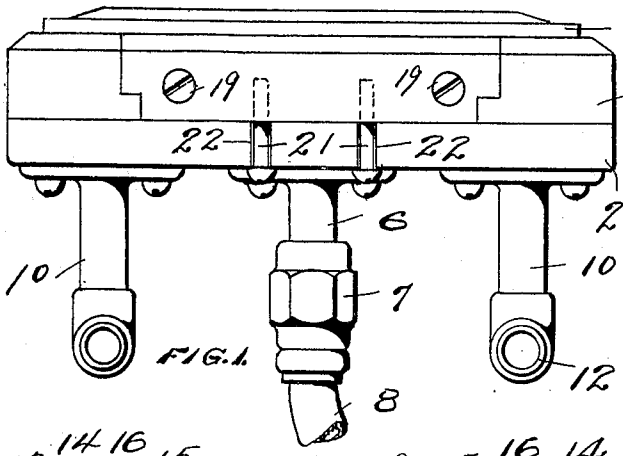


FIG. 1.

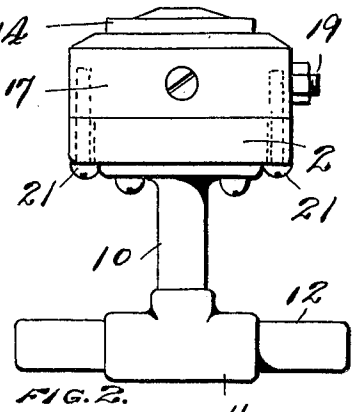


FIG. 2.

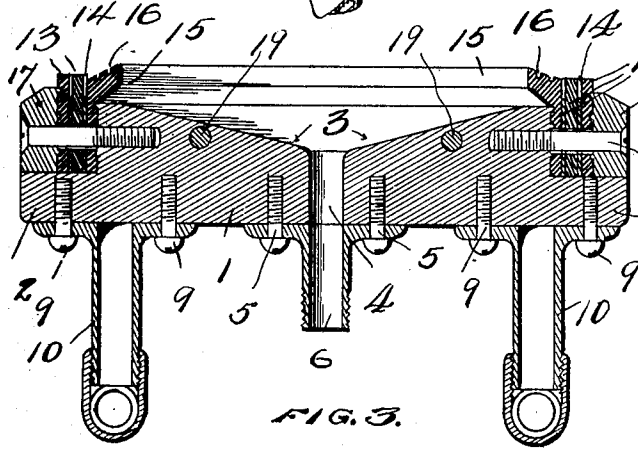


FIG. 3.

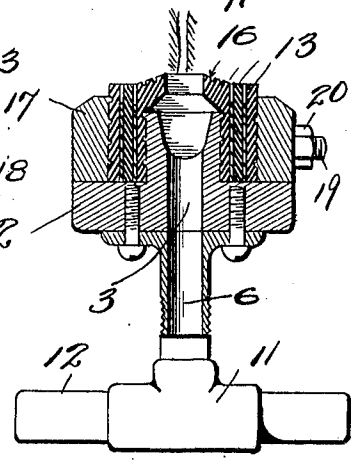


FIG. 4.

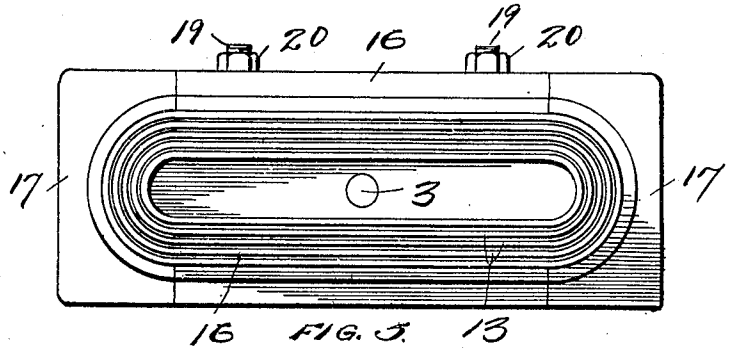


FIG. 5.

WITNESSES

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CRACK-FILLING DEVICE.

No. 926,129. Specification of Letters Patent. Patented June 29, 1909.

Application filed April 11, 1908. Serial No. 426,530.

To all whom it may concern:

Be it known that I, ALEXANDER MURRIE, 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 Crack-Filling Devices, of which the following is a specification.

My invention relates to a crack filling device, and the object thereof is to provide a means for effectually and expeditiously, filling in solid material within cracks in plastered walls, cement pavements and like constructions.

A further object of my invention is to provide a device which will force out all dirt, dust, or foreign material from the crack and then fill the same solidly with a material analogous or otherwise, to the material of the wall or pavement, and which will be forced to penetrate the innermost fibers of the crack.

Further objects and advantages of my invention will appear in the course of the following description, in which reference is made to the accompanying drawings, forming a part of this specification, in which like numerals are used to designate like parts throughout the several figures thereof, and in which,

Figure 1 is a side elevation of my improved device. Fig. 2 is an end elevation thereof. Fig. 3 is a central vertical longitudinal sectional view taken therethrough. Fig. 4 is a central transverse vertical sectional view taken therethrough, and Fig. 5 is a top plan view thereof.

In the practical embodiment of my invention, I provide a body portion 1, constructed of a suitable material, elongated and rectangular in shape, the dimensions of which may be varied according to the size of the cracks desired to be filled in. The body portion 1 is provided upon its lower edge with a continuous outstanding flanged portion 2, and has its upper face hollowed out from adjacent the edge thereof and gradually deepening to an approximately central portion, said hollowed out face 3 communicating from its central portion downwardly through the body portion 1, by an opening 4, in alinement with which opening, and secured by screws 5, upon the lower surface of said body portion, is a tubular threaded nipple 6, adapted for the reception of a coupling 7 carried upon the end of a flexible hose 8, extending from a pressure pump or other source of fluid pressure.

Mounted upon and extending from the lower surface of the body portion 1, and connected to said body portion by screws 9 at each end thereof, are tubes 10, forming handle shanks, and provided with threaded outer ends for engagement within T-couplings 11, through which the handles 12 project at right angles to said tubes 10.

Mounted edgewise upon the flanged portion 2, and bearing against the body portion 1, are a series of elastic cushioning strips 13, spaced apart by relatively narrow spacing rings 14, and the inner one of which is provided with an inwardly extending circular flange 15, at an angle thereto, overlying the extreme edge of the hollowed upper face 3 of the body portion 1, said flanged portion having circular grooves 16 extending around its external face in order that the same may securely grip the solid material around the crack to be filled, under the action of the fluid pressure communicated through the hose 8 to the hollowed face 3, and against the inner surface of said flange 15. The elastic strips 13 are securely locked in position against the body portion 1 and upon the flanged portion 2, by exterior binding strips extending thereabout and upon said flanged portion 2, said binding strips comprising side pieces 16 lying along the longitudinal sides of the body portion 1, and end pieces 7 extending for a short distance upon said longitudinal sides, said side and end pieces being provided with reduced relatively interfitting ends. The end pieces 17 of said binding strips are locked in position by screws 18 threadedly engaging within the body portion 1, through the cushioning strips 13, and the side pieces 16 are secured by headed bolts 19 extending transversely from the body portion 1, and provided with nuts 20 upon their projecting threaded ends to clamp said strips, tightly in position. The strips 16, may be further secured by screws 21 mounted within relatively deep recesses 22, cut transversely within the longitudinal outer face of the flanged portion 2, said screws being adapted for engagement within threaded openings in the side pieces 16.

From the foregoing description, it will be apparent that, when the flexible hose 8 leading to a suitable source of pressure, is connected upon the nipple 6, and the material desired to force into the crack is fed thereto,

the said material will be forced by the pressure within the crack, and will force out all dirt, dust, or other foreign matter in advance thereof. At the same time, and when the device is firmly held to span the crack, as shown in Fig. 4, by means of the handles 12, the pressure within the hollowed working face 3, will bear against the internal surface of the flexible flange 15 to force the same into close engagement with the material adjacent the crack.

Having fully described my invention, I claim:

A crack filling device of the character described, comprising a body portion having a central deepened point, and an opening therethrough, communicating with said hollowed face at said central point, means at the other end of said opening for connection with a suitable source of pressure and a cushioning element surrounding said hollowed face, and provided with an inwardly projecting flange, overlying the portion thereof, substantially as described.

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

ALEXANDER MURRIE.

Witnesses:
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