

J. LEVY.  
 PIPE STRAINER.  
 APPLICATION FILED JULY 22, 1908.

960,649.

Patented June 7, 1910.

Fig. 1.

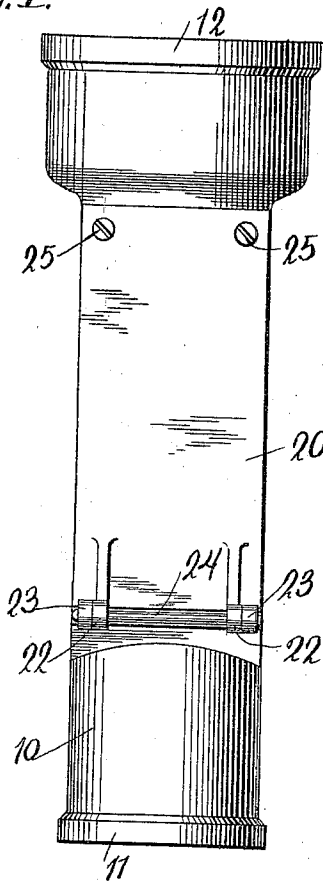


Fig. 2.

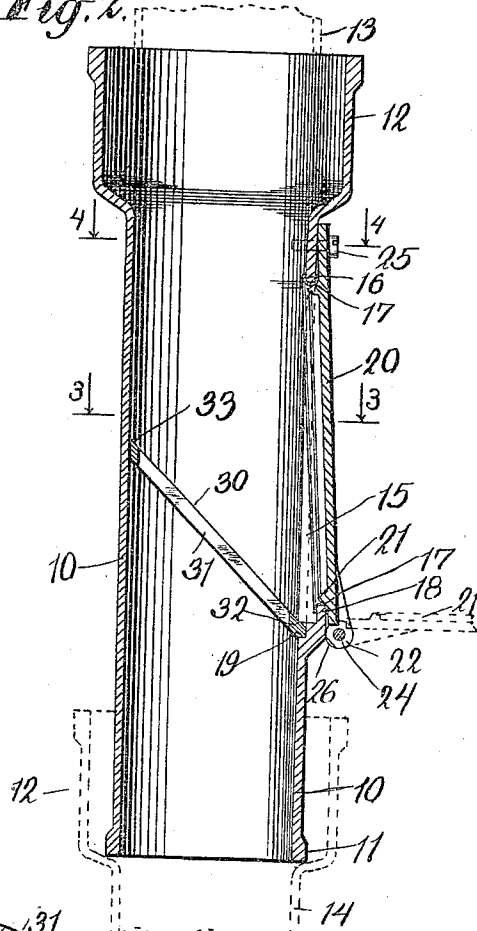


Fig. 3.

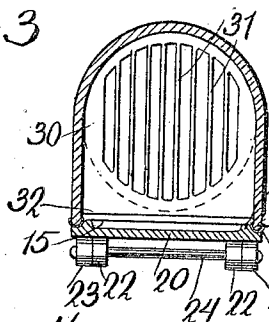


Fig. 5.

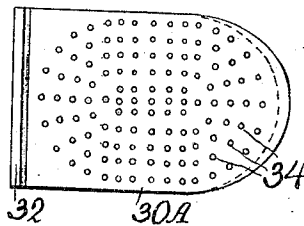
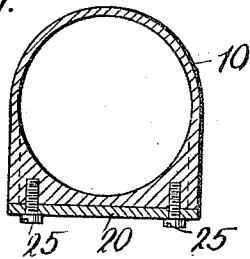


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JACOB LEVY, OF NEW YORK, N. Y.

PIPE-STRAINER.

960,649.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed July 22, 1908. Serial No. 444,709.

To all whom it may concern:

Be it known that I, JACOB LEVY, a citizen of the United States, and a resident of the city, county, and State of New York, United States of America, have invented certain new and useful Improvements in Pipe-Strainers, of which the following is a specification.

My invention relates to a pipe strainer which is arranged within a pipe for preventing the passage of dirt or other undesired material therethrough. Its object is to provide a simple device for this purpose which may be located within the pipe and yet be accessible from the outside of the pipe so that it may be cleaned or removed, or replaced.

Another object is to so place the strainer that it will perform its function efficiently, be self-clearing, and will facilitate the removal of the matter which it catches.

The further objects of this invention will appear in the following specification in which I will describe the construction and arrangement of the parts and point out the novel features thereof in appended claims.

Referring to the drawings, Figure 1 is a front elevation of my improved strainer. Fig. 2 is a sectional side elevation of the same device. Fig. 3 is a sectional plan view of the strainer, the section being taken on the line 3—3 of Fig. 2. Fig. 4 is another sectional plan view with the grating or straining member removed, the section in this instance being taken through the line 4—4 of Fig. 2. Fig. 5 is a plan view of another form of straining member.

Like characters of reference designate corresponding parts in all of the figures.

10 designates the outer casing of the strainer which, in this case, is made in a modified form of a pipe section, having the usual circular flange 11 and butt 12.

13 designates the end of a pipe section shown in dotted lines. 14 is the end of another pipe section similarly shown. These parts 13 and 14 show the manner in which my device may be interposed in a pipe line.

A portion of the casing 10 is constructed as shown to form a rectangular opening 15, the edges of which are preferably rounded as shown at 16 and provided with a packing

17 of resilient material such as rubber. The lower edge of this opening is constructed to form a lip or flange 18 which is also covered with a resilient packing 17.

19 is a shoulder formed in the casing 10 along the inner portion of the opening for a purpose which will appear hereinafter.

20 designates a lid or cover-plate. The inner surface of this cover-plate is provided with projecting ribs 21 which fit over the edges 16 and the flange 18 and are arranged to be pressed against the packing 17. At its lower edge it is provided with lugs 22, 22 which, with similar lugs 23, 23 projecting from the casing 10, and a rod 24, form a hinged joint.

25, 25 are screws passing through holes in the cover-plate and into the casing 10 for holding the cover-plate in its closed position. The lower inner portion of the lugs 22 is cut away as shown at 26 and arranged to abut against a portion of the casing to hold the cover-plate in a substantially horizontal position when opened, as shown by dotted lines in Fig. 2.

30 designates a straining member which, as shown in Figs. 2 and 3, is constructed the form of a grid or grating, having a plurality of parallel bars 31, and which is arranged to fit within the casing 10. Its lower edge 32 rests upon the shoulder 19 and its upper edge rests upon the inner cylindrical surface of the casing at 33. When in place, this straining member will be maintained in a position oblique to the axis of the casing and the pipe line into which it is interposed.

At 30<sup>A</sup> I have shown a modified form of straining member which in this case comprises a flat plate provided with a plurality of perforations 34.

The use of this device is obvious. By placing the straining member on an inclined plane the material which it arrests goes to the lower portion of the strainer, leaving the greater part of the straining surface unobstructed. When the cover-plate is loosened and swung back this material may be readily removed by scraping it down onto the cover-plate, which will then act as a shelf for receiving it. The parallel bars of the grating run longitudinally so that the material arrested by them will readily slide down over

the surface of the straining member and may be easily removed from it when the device is opened.

In some instances it is desirable to change  
 5 the kind of straining member in a given pipe, or to change the size of its mesh. With my apparatus this is easily accomplished by removing the straining member and inserting another in its place. Or, if  
 10 desired, the straining member may be entirely removed at one time and reinserted at another time. This device may be used in leader pipes, sewers, drains, and in fact in nearly any kind of a pipe in which a  
 15 strainer is needed. I have shown it interposed in a vertical pipe as this is an efficient arrangement, but I do not, of course, mean to limit myself to this use.

My invention is especially adaptable for  
 20 use in rain water leaders, in which case it is inserted in the pipe before the trap is reached. It is often necessary to break such leaders for the purpose of removing obstructions which, of course, is unnecessary  
 25 when my device is used. The construction

of this device is such that it affords convenient means for thawing out a frozen pipe.

What I claim is:—

In a pipe strainer, a casing adapted to  
 30 form a portion of a pipe line, a flat obliquely disposed straining member comprising a plurality of longitudinal ribs, loosely supported within said casing, the casing being provided with an opening opposite the  
 35 straining member, a cover-plate hinged to the casing near the lower end of the straining member, said cover-plate being arranged to form a water-tight closure for the casing when closed and a shelf projecting from  
 40 the casing at the bottom of the straining member when open.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JACOB LEVY.

Witnesses:

CHARLES LOTZ,  
 ELLA TUCH.