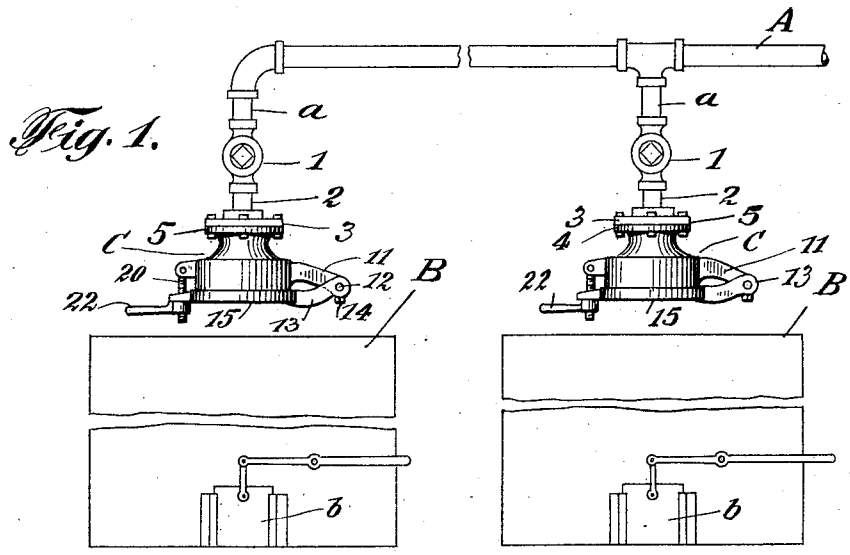
April 17, 1928. 1,666,725

E. WEINHEIM

TERMINAL STRAINER FOR DOPE SYSTEMS

Filed April 3, 1924

Fig. 1.



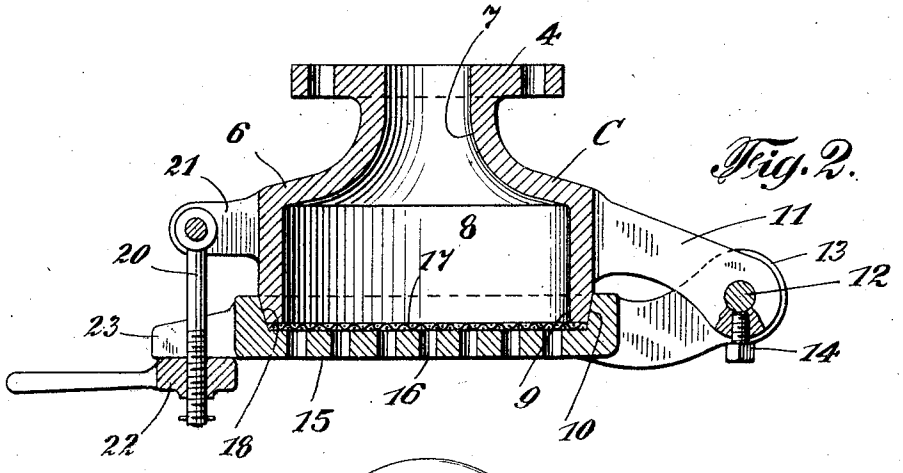




Fig. 2.

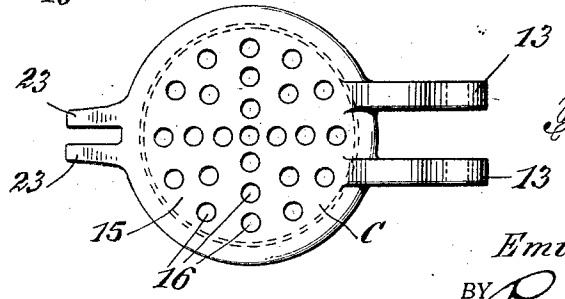



Fig. 3.

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# UNITED STATES PATENT OFFICE.

EMIL WEINHEIM, OF NEW YORK, N. Y.

## TERMINAL STRAINER FOR DOPE SYSTEMS.

Application filed April 3, 1924. Serial No. 704,080.

This invention relates to systems for the delivery and storage of dope of the kind employed in the manufacture of substitute leather.

In this art, it is customary to deliver the dope under heavy pressure in a dope main from the main to any one of a number of storage tanks. It is necessary to strain the dope at its point of emersion from the ducts into the dope tanks. In view of the fact that this dope is many time extremely viscous, sticky, gummy and also requires screens of various mesh and particularly because the screen once used as a strainer and allowed to remain uncleaned in the air becomes clogged by the coagulation of the dope, it is most expedient that great facility in the removal for cleaning and replacement of the screens be provided.

To this end I have devised a system in which an individual screen is provided for each branch from the main dope line at the point where the dope emerges into the storage tank, and it is an objective that this screen mechanism be such as to be manipulated with convenience and dispatch and without requiring any mechanical skill.

The above and further objects of the invention will better be understood by reference to the following specification, which is directed to the accompanying drawings as illustrative of my invention and not in limitation of the claims.

In the drawings, Fig. 1 is a diagram illustrating the system;

Fig. 2 is a vertical section, part shown in elevation of my terminal strainer, and

Fig. 3 is a bottom plan view of the strainer sustaining lid.

A dope main A conveniently of 4″ piping delivers the dope under heavy pressure. From the main A are provided one or more branches *a* which lead downwardly to a storage vat B, from which vat individual charges of refuse may be removed through the gates *b*.

In each branch duct *a* is preferably provided a control valve 1, downwardly connected, through the nipple 2, into the upper half 3 of a flange union.

I preferably form my strainer C to provide the complementary half 4 of the flange union 5. The strainer C comprises a body casting 6 within which is formed downwardly enlarging throat 7, disgorging into the expansion chamber 8, the mouth 9 of which is directed downwardly and is surrounded by the bevelled fluid sealing flange or rim 10.

A hinge lug 11 is preferably cast integrally with the strainer C and is perforated to pass the hinge pin 12, held in lugs 13 formed on the lid *c*. Upwardly projecting and threaded into the boss at the end of lug 12 is preferably provided a set screw 14, which is serviceable in adjusting the lid *c* by bearing against the pin 12, and functions to take up any wear in the hinge.

The lid *c* comprises a horizontal plate 15, provided with perforations 16 and is also adapted to sustain, in a horizontal position, the disk 17 of cleaning fabric. A bevelled flange 18 machine to fit the bevelled flange 10 is also provided to complete a fluid type closure for the lid about the mouth of the chamber 8.

The lid is clamped home by means of any suitable clamping device 20. The embodiment shown is the threaded eye-ball swivelled to the lugs 21 formed on casting 6 and fitted with the hand-operable clamping nut 22, which bears against the lugs 23 formed opposite the lugs 13 on the lid *c*. This bolt may be swung clear of these lugs to permit an opening of the lid *c* and the removal of the disk 17 for cleaning and other purposes.

The inventive thought may have a variety of expressions as is contemplated in what I claim and desire to secure by United States Letters Patent as follows:

1. A terminal strainer for ducts adapted to deliver dope of the type employed in the manufacture of substitute leather comprising a walled structure having at its top provisions for connection with a dope duct and providing a downwardly enlarged expansion chamber, and having a downwardly directed open mouth the interior of which structure is smooth throughout and freely accessible through said mouth for manual cleaning; a perforated screen supporting lid adapted to make a fluid tight fit about said mouth the perforations of which open directly to the exterior of said strainer; means for readily clamping and unclamping said lid to and from said structure including a laterally offset hinge for maintaining said lid permanently fastened to said walled structure and causing it to swing clear of said open

mouth when unclamped; and a screen for overlying said lid.

2. A terminal strainer for ducts adapted to deliver dope of the type employed in the manufacture of substitute leather comprising a casting, providing an expansion chamber, having a downwardly directed open mouth surrounded by a fluid sealing rim; a perforated screen carrying lid adapted horizontally to underlie said open mouth and to be clamped fluid-tight about said rim; hinge lugs and a hinge pin with an adjustment to take up wear provided on said casting and said lid for hinging the same together, and a manually manipulatable adjustable clamping device on the opposite side of said lid.

3. In a terminal strainer, a body casting, providing an internal chamber with an open mouth; a lid openably and closably seated about said mouth; cooperating lugs and hinge pin for hinging said lid to said casting, and a take-up screw piercing one of said lugs and engaging said hinge pin to compensate for wear in said lugs and to insure the snug fit of said lid about said mouth.

4. A terminal strainer for ducts, comprising a casting, providing an expansion chamber having a downwardly directed open mouth surrounded by a fluid sealing rim; a perforated screen carrying lid adapted horizontally to underly said open mouth and to be clamped fluid-tight about said rim the perforations of which open directly to the exterior of said strainer; a removable screen for said perforated lid; long hinging lugs for hinging said lid to said casting in such a way that said lid when hanging downwardly in open position is suspended completely to one side of the space below said open mouth; and a manually manipulatable clamping device for clamping said lid to said rim.

In witness whereof, I have signed my name to this specification, this 28th day of Sept., 1923.

EMIL WEINHEIM.