

Nov. 15, 1932.

S. A. NEIDICH

1,888,046

TRAY

Original Filed Feb. 12, 1929

FIG. I.

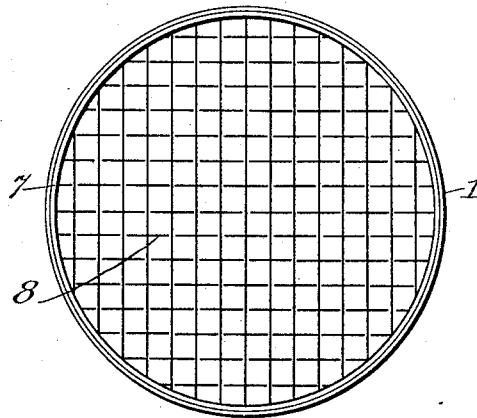


FIG. II.

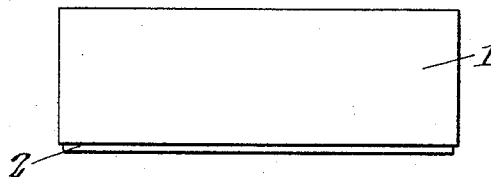
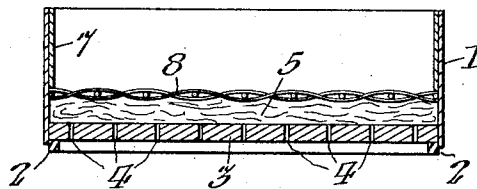


FIG. III.



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UNITED STATES PATENT OFFICE

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TRAY

Original application filed February 12, 1929, Serial No. 339,470. Divided and this application filed May 3, 1930. Serial No. 449,513.

This is a division of my application Serial No. 339,470 filed February 12, 1929, for Letters Patent of the United States for improvement in viscose treating apparatus of the type claimed in Letters Patent of the United States 1,616,918 granted to me February 8, 1927; in which trays of the character herein claimed are adapted to be used to temporarily hold filaments of viscose in massed relation but so that they may be treated by liquids into which the trays are dipped.

However, trays of the character herein claimed are adapted to withstand subjection to the action of liquids which would corrode and destroy trays of ordinary construction. For example, such trays withstand the corrosive action of aqueous solutions of sulphuric acid, aqueous solutions of sodium phosphate, and dye liquors. Therefore, such trays are adapted for other uses than in such viscose treating apparatus.

My invention includes the various novel features of construction and arrangement hereinafter more definitely specified.

In said drawing; Fig. I is a plan view of a circular tray conveniently embodying my invention.

Fig. II is a side elevation of said tray.

Fig. III is a vertical sectional view of said tray taken on the line III, III, in Fig. I.

In said figures; the body 1 of the tray is a cylinder formed of flexible sheet material such as a material compounded of phenol and formaldehyde, having an inner annular flange 2 at the bottom thereof formed of rubber, upon which rests a disk of frangible ceramic material such as porcelain 3 having perforations 4 and forming a foraminous bottom for such tray adapted to support a mass of filaments 5 but permit liquid to rise and fall between them through the perforations.

In order to prevent the filaments 5 from being displaced out of the tray by their flotation, when said tray is lowered into the liquid, I find it convenient to provide each tray with an upper screen closure 7 comprising an annular band of flexible sheet material, such as a material compounded of phenol and formaldehyde, slip fitting in the tray body 1 and having a foraminous bottom such as a screen

mesh fabric 8 preferably formed of Monel metal wires in reticulated spaced relation and preferably rigidly connected to said band at their ends.

It is to be understood that said screen closure 8 may be merely frictionally held in the position shown in Fig. III, by engagement of its band 7 in said body 1; so that it may be readily removed and replaced to permit the material to be treated to be readily inserted and removed with respect thereto.

Although I have indicated said body 1 and band 7 without any seams; it is to be understood that they may be formed of one or more convolutions of sheet material compounded of phenol and formaldehyde having their ends secured thereto in any convenient manner or by any suitable means.

Therefore, I do not desire to limit myself to the precise details of construction and arrangement herein set forth, as it is obvious that various modifications may be made therein without departing from the essential features of my invention, as defined in the appended claims.

I claim:

1. In a tray adapted to hold filaments; the combination with an outer cylindrical band; of an internally extending annular flange in the lower portion of said band; a ceramic disk fitted to said band, resting upon said flange, and having perforations therethrough permitting the passage of liquid to and from filaments supported by said disk; a closure for said tray, including a cylindrical band, frictionally engaging the inner wall of said outer band; and a screen formed of Monel metal wires, in reticulated spaced relation, at the lower end of said inner band; whereby filaments supported by said disk may be held in position during the raising and lowering of said tray in a liquid.

2. A structure as in claim 1; wherein the screen is rigidly connected with said inner band.

3. In a tray adapted to hold filaments; the combination with an outer cylindrical band; of an inwardly extending annular flange in said band; a disk fitted to said band, resting upon said flange, and having perforations

therethrough permitting the passage of liquid to and from filaments supported by said disk; a closure for said tray, including a cylindrical band, frictionally engaging the inner wall of said outer band; and a screen engaged by said inner band at the lower end thereof; whereby filaments supported by said disk may be held in position during the raising and lowering of said tray in a liquid.

10 In testimony whereof, I have hereunto signed my name at Burlington, New Jersey, this fourth day of March 1930.

SAMUEL A. NEIDICH.

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