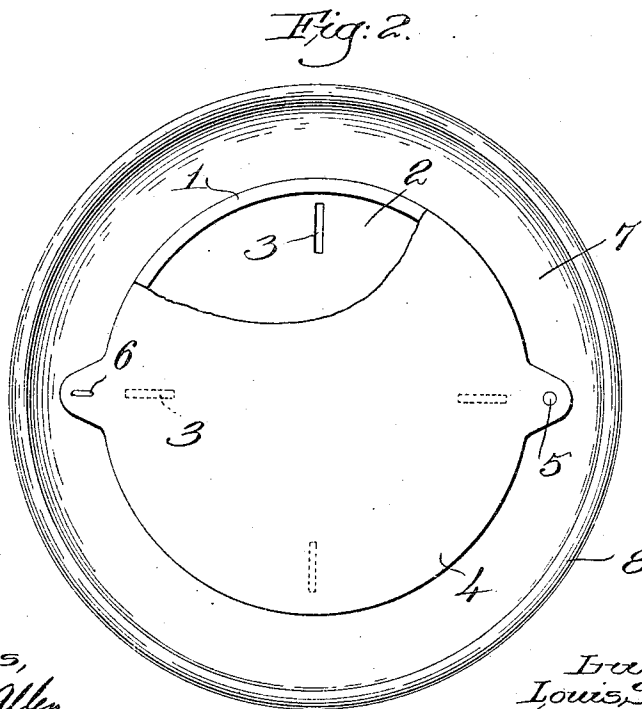
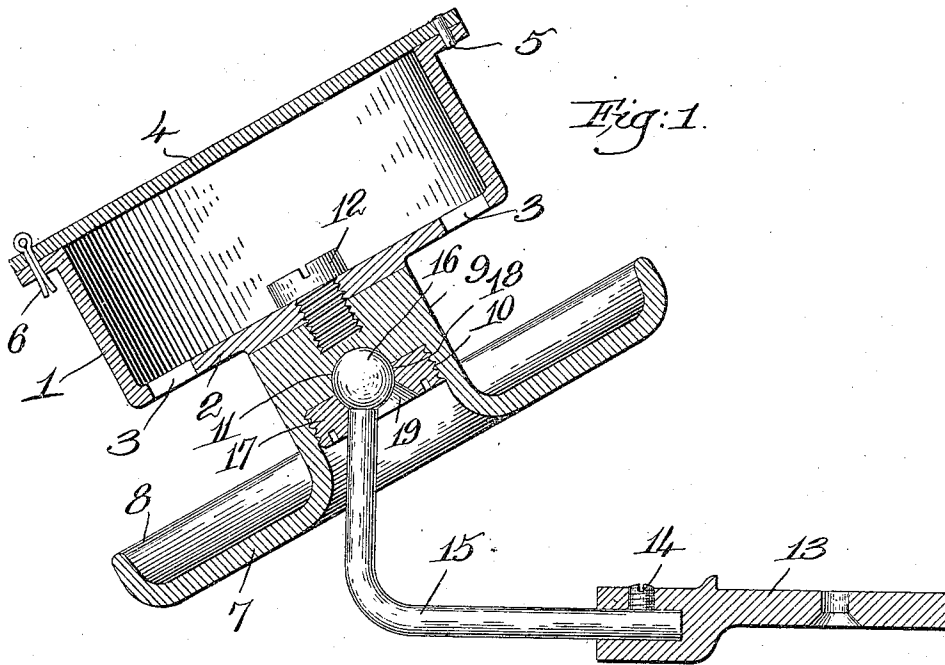


L. S. BURBANK.
 MEANS FOR RETAINING AND DELIVERING TRAVELERS FOR SPINNING RINGS.
 APPLICATION FILED JULY 12, 1909.

945,907. Patented Jan. 11, 1910.



Witnesses,
 Edward F. Allen,
 Joseph M. Ward.

Inventor,
 Louis S. Burbank,
 by Lewis J. Gregory,
 atty.

UNITED STATES PATENT OFFICE.

LOUIS S. BURBANK, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO DRAPER COMPANY,
OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

MEANS FOR RETAINING AND DELIVERING TRAVELERS FOR SPINNING-RINGS.

945,907.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed July 12, 1909. Serial No. 507,091.

To all whom it may concern:

Be it known that I, LOUIS S. BURBANK, a citizen of the United States, and resident of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Means for Retaining and Delivering Travelers for Spinning-Rings, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention has for its object the production of simple and effective means for retaining or holding in bulk travelers for spinning rings, and for delivering the same in small quantities in convenient position for use when required.

The travelers used on the rings of spinning and other similar forms of textile apparatus are apt to bunch together in clusters or chains, and when the operator requires a few travelers he dips his thumb and finger into the mass of travelers, picks up a bunch and shakes it vigorously, with the result that the few required are separated while at the same time probably a much larger number are thrown off onto the floor. Such travelers as drop to the floor are practically wasted, as the operator has neither time nor inclination to pick them up, and in the course of a year the waste amounts to no inconsiderable sum.

By means of my invention the travelers in bulk are placed in a closed receptacle provided with an outlet orifice, and when travelers are needed the operator tilts the receptacle, thereby shaking out a few travelers which pass from the orifice into an open, shallow pan-like receiver below and fixedly attached to the receptacle. When the travelers are in the receiver they can be removed easily and quickly, without waste, whenever they are required. The connected receptacle and receiver are mounted on a fixed support, (secured in a convenient position on the spinning frame,) in such manner that the connected parts can be tilted in various directions by hand, to thereby shake up and separate the travelers from each other so that they will be expelled through the outlet orifice.

I have so constructed the device that normally the receptacle and receiver rest in an inclined position, so that the travelers in the receiver slide down toward its lowest portion, thereby facilitating removal therefrom from time to time.

By means of the device hereinafter described as embodying a practical form of my invention all waste is prevented, the travelers are presented in a convenient form for use, and they are protected from dust and dirt.

The novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a vertical sectional view of a traveler retaining and delivering device embodying one form of my invention, a portion of the support being shown in elevation; Fig. 2 is a top plan view of the connected traveler receptacle and receiver or pan the cover of the receptacle being partly broken out.

In accordance with the present embodiment of my invention, I provide a traveler receptacle 1, preferably cylindrical in form and conveniently made as a casting, its bottom 2 having outlet orifices 3 therein, shown as slits, of sufficient size to permit the passage of individual travelers therethrough. A cover 4 for said receptacle is herein shown as pivotally connected therewith at 5, and it is held in closing position by a cotter-pin 6, or other suitable fastening, as shown clearly in Fig. 1.

The travelers in bulk are placed within the receptacle 1 and the cover is then secured in place, protecting the contained travelers from dust and dirt. Below the receptacle and fixedly attached thereto is a receiver 7, shown as a circular member having an upturned annular rim or curb 8, thereby forming a shallow pan, of considerably greater diameter than the traveler receptacle. At its center the bottom of the receiver is shaped to present an upturned hub 9, recessed at its lower end and internally threaded, as at 10, Fig. 1, and having a central, semi-spherical seat or socket 11. The bottom 2 of the receptacle 1 seats on the flat

upper end of the hub and is rigidly connected therewith by a suitable screw 12, so that said receptacle and pan move together, as a unitary device. I have provided a support for the said attached parts, comprising a casting 13, Fig. 1, adapted to be secured to any suitable part of the spinning frame, and having fixedly attached to it, by a set-screw 14, an L-shaped extension 15, the upturned end thereof terminating in a ball 16. Said ball seats in the socket 11 in the hub of the pan and is retained therein by a socketed nut 17 which is screwed into the threaded part 10 of said hub, the socket 18 in the nut communicating with a flared aperture 19 in the nut, through which aperture passes the part of the extension 15 adjacent the ball. A ball and socket or universal joint thus connects the rigidly attached receptacle and receiver with the upturned support, the said attached parts being free to tilt in various directions upon the ball, which is in the central axis of the receptacle and receiver or pan. The angle to which the tilting can be effected is limited by the engagement of the flared wall of the aperture 19 with the adjacent part of the extension 15, as shown in Fig. 1, and therein is shown the normal angle at which the receiver and the superposed receptacle stand. Such travelers as have been expelled into the pan or receiver 7 will thus collect against or adjacent the lowest portion of the curb 8 from which they are readily removed when required for use. When a fresh supply is necessary the operator tilts the pan and receptacle, thereby agitating or shaking up the mass of travelers in the receptacle 1, so that some travelers will be separated and expelled through an outlet orifice 3, dropping into the pan beneath. As the center of gravity of the pan and receptacle is above the ball 16 the said parts will tilt naturally as far as possible, even if a very few travelers remain in the receptacle, but when the latter is well filled the added weight of such travelers acts in conjunction with the weight of the receptacle and pan to tilt such parts into an inclined position. At such time there will be very slight chance of escape of travelers through an orifice, for the mass of travelers will bunch or crowd together over the orifice and will tend to close it until manual and relatively rapid tilting shakes the travelers apart.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. Means for retaining and delivering travelers for spinning rings, comprising, in combination, a traveler receptacle having an outlet orifice, an open receiver below and fixedly connected with said receptacle, an upright support, and a loose ball and socket connection between the upper end of said

support and said connected receptacle and receiver, whereby said connected parts may be tilted freely at all times and in various directions to expel travelers through the orifice into the receiver.

2. Means for retaining and delivering travelers for spinning rings, comprising, in combination, a traveler receptacle having an outlet orifice in its bottom, a pan-like receiver below and fixedly connected with said receptacle to receive travelers expelled through the orifice, and an upright support on which the receptacle and receiver are mounted to tilt freely in various directions and maintain normally an inclined position with relation to the support.

3. Means for retaining and delivering travelers for spinning rings, comprising, in combination, a cylindrical receptacle for the travelers, having outlet orifices in its bottom, an attached pan below the bottom of and coaxial with said receptacle and extended laterally beyond the bottom of the receptacle, a fixed support, and a tilting connection between it and the pan, located in the axis of said pan and receptacle and above the bottom of the pan.

4. Means for retaining and delivering travelers for spinning rings, comprising, in combination, a circular pan having a central, upturned hub, a traveler receptacle mounted on the upper end of the hub and having a plurality of outlet orifices in its bottom, an upturned support, and a ball and socket joint between it and the lower end of said hub, whereby said pan and receptacle can be tilted upon the support to deliver travelers through an orifice into the pan.

5. In combination, a fixed support, a circular pan having a central hub, a universal joint between the lower end of the hub and the support, and a cylindrical traveler receptacle fixedly mounted on the upper end of the hub and having an outlet orifice, said receptacle being of less diameter than the pan.

6. In combination, a fixed, upturned support, a receiver having a raised, annular curb and a central, upturned hub, a universal joint connecting the lower end of the hub and the upper end of the support, means to limit tilting movement of said receiver, and a covered cylindrical traveler receptacle fixedly mounted on the upper end of the hub and having outlet orifices in its bottom above the receiver.

7. In combination, a fixed support, a traveler receptacle having an outlet orifice in its bottom, an open pan below and fixedly attached to the bottom of said receptacle and extended laterally beyond the same, to receive travelers expelled therefrom, and a universal joint positively connecting the support and said attached pan and traveler receptacle between their respective bottoms

and permitting free tilting movement of the
pan and receptacle about such joint, tilting
of the pan and receptacle disintegrating and
separating travelers in the latter and ex-
5 pelling them through the orifices into the
pan.

In testimony whereof, I have signed my

name to this specification, in the presence
of two subscribing witnesses.

LOUIS S. BURBANK.

Witnesses:

J. W. DAVIS,
E. D. OSGOOD.

It is hereby certified that in Letters Patent No. 945,907, granted January 11, 1910, upon the application of Louis S. Burbank, of Hopedale, Massachusetts, for an improvement in "Means for Retaining and Delivering Travelers for Spinning-Rings," an error appears in the printed specification requiring correction as follows: Page 3, line 5, the word "orifices" should read *orifice*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 25th day of January, A. D., 1910.

[SEAL.]

C. C. BILLINGS,

Acting Commissioner of Patents.