

(No Model.)

A. GERSDORFF.
FUNNEL.

No. 453,798.

Patented June 9, 1891.

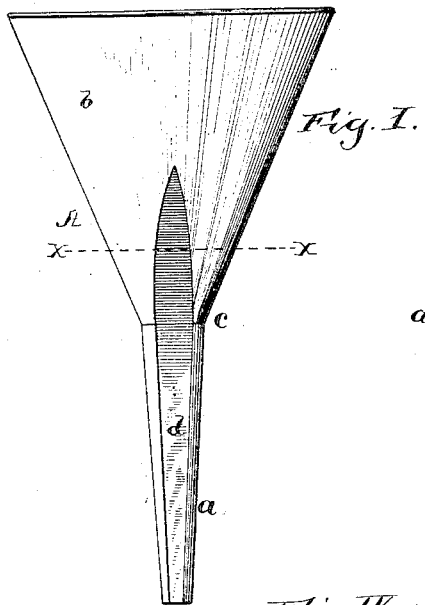


Fig. I.

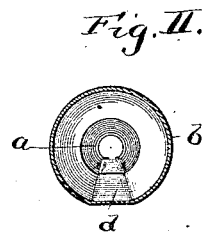


Fig. II.

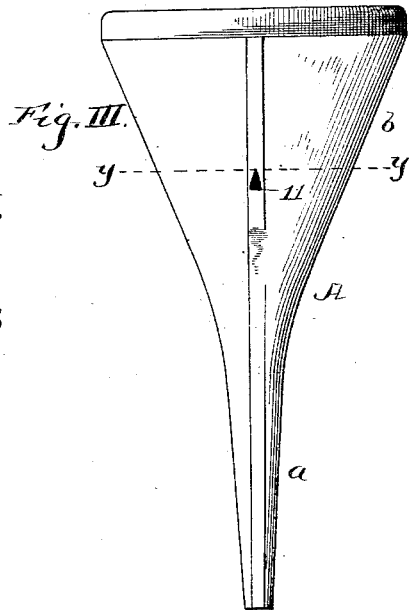


Fig. III.

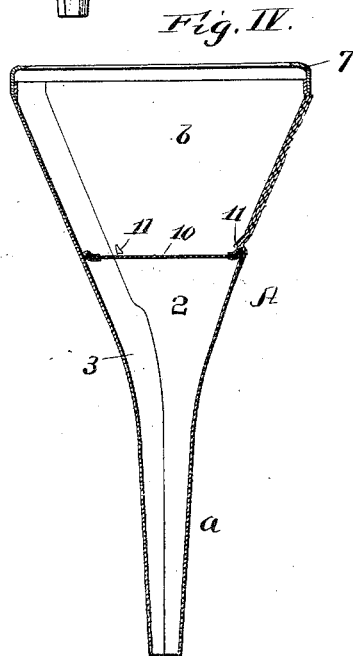


Fig. IV.

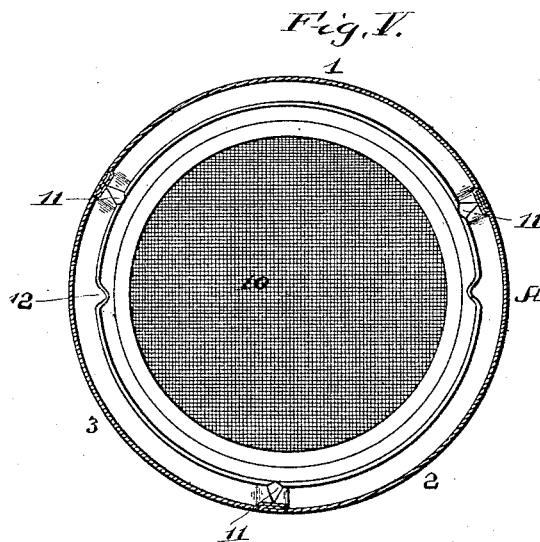


Fig. V.

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UNITED STATES PATENT OFFICE.

AUGUSTUS GERSDORFF, OF BRIDGETON, NEW JERSEY.

FUNNEL.

SPECIFICATION forming part of Letters Patent No. 453,798, dated June 9, 1891.

Application filed June 23, 1890. Serial No. 356,435. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS GERSDORFF, a citizen of the United States, residing at Bridgeton, in the county of Cumberland and State of New Jersey, have invented certain new and useful Improvements in Funnels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved funnel of that class in which vents are provided in the nozzle for the escape of air while liquids are being poured through the funnel into a vessel.

My invention consists in the combination of a funnel having seats or lugs arranged interiorly within the body thereof and a removable strainer seated within said funnel and having a spring-flange bearing upon the interior seats or lugs, which operate to hold the strainer against displacement, all as will be hereinafter more fully described and claimed.

To enable others to more readily understand my invention, I will now proceed to a detailed description of the same in connection with the accompanying drawings, in which—

Figure I is an elevation of the funnel embodying my invention. Fig. II is a transverse sectional view through the body of the funnel above the joint between the nozzle and body on the plane indicated by the dotted line *x x* of Fig. I. Fig. III is an elevation of my preferred form of funnel having the body and nozzle made of longitudinal sections. Fig. IV is a vertical sectional view through the funnel shown in Fig. III, and Fig. V is a transverse section on the line *y y* of Fig. III.

Like letters and numerals of reference denote corresponding parts in all the figures of the drawings.

A designates my improved funnel, which comprises the tapered body *b* and the nozzle *a*. The body and nozzle may be made of separate pieces and connected together by the joint *c* in the ordinary manner; but as a better and cheaper manner of making the funnel I prefer to construct it in longitudinal sections 1 2 3, which may consist of two, three, or more, each section forming a part of the body and nozzle of the funnel.

The device constructed as shown in Figs. I and II has its round nozzle flattened on one side to form a vent *d*, which vent extends longitudinally of the nozzle and into the body *b* to a point about or above midway of the length of said body, which is advantageous, as it provides for the escape of air should the funnel be placed in a vessel having a mouth of greater diameter than the cross-sectional area of the nozzle.

The preferred form of the funnel shown in Figs. III and IV has its nozzle provided with a plurality of flat sides and forming a series of vents, and the nozzle in the cross-section preferably has the form of a triangle, as shown and described in a prior patent issued to me February 8, 1887, and numbered 357,476.

The sections 1 2 3 of the funnel extend from the top of the body to the lower end of the nozzle, each section forming a part of the body and nozzle. The parts of the section which form the body of the nozzle are each made segmental in cross-section, and the lower parts of said section that form part of the nozzle are flattened. The sections are united together along their side edges through the body of the funnel by bending the same to form flanges and interlocking and soldering the flanges together, thus forming longitudinal seams; but in the nozzle the sections are united by soldering, instead of interlocking the flanges, thus forming continuous smooth seams. The segmental portions of the sections form the body, which is circular in cross-section, and the flattened lower portions of said sections form the triangular nozzle, as shown. The upper end of the funnel is finished and the ends of the joints between the side sections 1 2 3 concealed by an annulus or ring 7, which is bent or curved to extend inward a short distance.

In connection with my improved funnel I employ a strainer 10, which is adapted to be fitted within the body of the funnel and to be held therein by means of lugs 11, formed interiorly within the funnel. In order to provide lugs which shall be sufficiently strong and not easily broken and without weakening the funnel, I stamp or press the lugs through the locked seams which unite the sections of the funnel, and these lugs are preferably tapered and have their lower ends made broad to pro-

vide a bearing-surface against which the screen impinges or bears. To permit the screen to be readily adjusted or fitted within the funnel below the lugs and to remove the screen when desired, I form recesses 12 (one, two, or more) in the edge of the screen by indenting or forcing the edge inwardly. The screen can be readily sprung or forced into position within the body of the funnel and below the lugs therein, which lugs operate to firmly secure the same in place; but to remove the screen from the funnel it must be turned so that one of the lugs enters one of the recesses, after which the screen will readily drop out of the funnel when it is inverted, or it can be removed by hand.

A funnel constructed as contemplated by my present invention can be readily and easily cleaned, as the absence of the joint between the body and nozzle of the funnel provides a smooth surface, which facilitates the cleaning of the funnel.

Changes in the form and proportion of parts can be made without departing from the spirit or sacrificing the advantages of my invention, and I would therefore have it understood that I reserve the right to make such modifications as fall within the scope of my invention.

No claim is herein made to the funnel made of longitudinal sections, each section forming a part of the body and nozzle of the funnel and extending from the point of the nozzle to the top of the body, the sections being joined together by longitudinal seams, nor to the nozzle formed with the flattened side or sides, as these features form the subject-matter of a separate application filed by me on the 19th day of March, 1888, Serial No. 267,645.

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

1. In combination with the funnel having within the interior of its body the inwardly-projecting lugs, a strainer having a spring-flange, which is adapted to pass downward over and be locked in place by said lugs, substantially as described.

2. In combination with the funnel provided with the inwardly-projecting locking-lugs, and the strainer having a spring-flange, which is thus adapted to pass downward over and to be locked in place by said lugs, and is provided within its edge with notches that when caused to coincide with said lugs will operate to release said strainer and permit of its removal, substantially as herein shown and described.

3. The combination of a funnel provided with the retaining-lugs, which are arranged interiorly within the body of the same, and which lugs are stamped or pressed from the seams which unite the sections of the funnel together, and a strainer provided with a spring-flange, which is adapted to pass downward over and be locked in place by the said lugs, substantially as and for the purpose described.

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

AUGUSTUS GERSDORFF.

Witnesses:

JAMES J. REEVES,
HUGH L. REEVES.