

(No Model.)

C. W. BARNEKOV.
GRADUATE GLASS.

No. 598,891.

Patented Feb. 15, 1898.

Fig. 1.

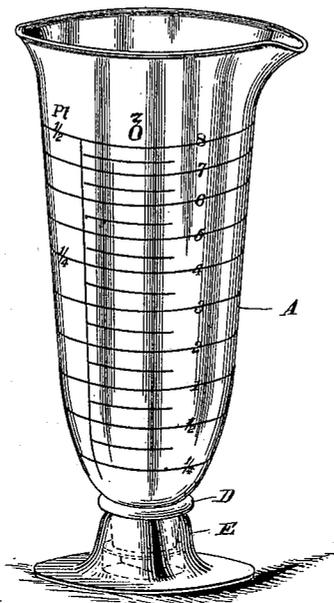


Fig. 2.

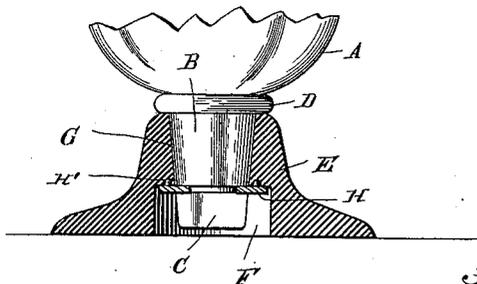


Fig. 3.

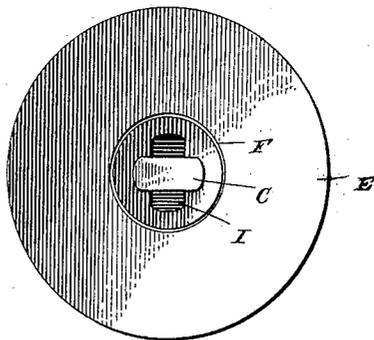
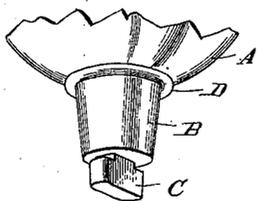


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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GRADUATE-GLASS.

SPECIFICATION forming part of Letters Patent No. 598,891, dated February 15, 1898.

Application filed October 24, 1896. Serial No. 609,910. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. BARNEKOV, residing at Perth Amboy, in the county of Middlesex and State of New Jersey, have invented a new and useful Graduate-Glass, of which the following is a specification.

This invention relates generally to a graduate-glass for druggists' and chemists' use, and more particularly to a detachable foot or base foot-piece constructed of non-breakable material and capable of ready attachment to or detachment from the graduate-glass.

The principle of the invention is also applicable to all varieties of glass vessels which have heretofore been constructed with a glass base or foot-piece.

Graduate-glasses are usually formed with an integral glass base or foot-piece, which is invariably the first part to break, so that it is impossible to set the glass upright when not in use; but, on the other hand, it must be turned down.

The object, therefore, of my invention is to provide a detachable base or foot-piece of non-breakable material in order to prolong the life of the ordinary graduate-glass.

Another object of the invention is to provide a connection by means of which the base and glass can be quickly and easily united or separated, as desired; and a still further object is to provide such a construction that should the stem of the glass be broken off in the base the portion contained within the base can be readily removed.

Another object is to provide a connection which will readily accommodate itself to sudden changes in temperature, expansions, and contractions of the various parts.

With these various objects in view my invention consists, essentially, of a graduate-glass having a tapering stem provided with a T-shaped head at the lower end, said stem being adapted to be inserted into a base of hard rubber or other suitable material, the T-shaped head being adapted to be passed through a slotted locking-plate, but in the bottom of the base and turned at a right angle to the said slot for the purpose of locking the parts together.

The invention consists also in certain details of construction and novelties of combi-

nation, all of which will be fully described hereinafter, and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a perspective view of a graduate-glass constructed in accordance with my invention. Fig. 2 is a detail view showing the stem and stud in side elevation, the base or foot-piece and locking-plate being shown in section. Fig. 3 is a bottom plan view. Fig. 4 is a detail perspective view of the stem and stud. Fig. 5 is an inverted perspective view of the locking-plate.

In carrying out my invention I employ a graduate-glass A, the body of which is constructed in substantially the same manner as the glasses now in common use. At the lower end of the said glass is produced a tapering stem B, having an inverted-T-shaped stud C projecting from the bottom thereof, and at the top of the stem B, I prefer to provide a bead or collar D, though it is not absolutely essential.

The base or foot-piece E is preferably constructed of hard rubber, though any suitable material can be employed, said base or foot-piece being of substantially the same shape as those now in common use, said base or foot-piece having a circular recess F produced centrally in the bottom thereof, and leading into said recess and passing through the base from the top thereof is a tapering opening G, which is adapted to receive the tapering stem B, said stem fitting snugly within the same, and when the parts are so assembled the T-shaped stud C rests within the recess F, and in order to securely connect the parts I employ a locking-plate H, circular in form and adapted to fit in the top of the recess F, and is held against rotation by means of studs or prongs H', which engage the top wall of the recess F.

The plate H is formed with a longitudinal or elongated opening I of such a size and shape as to permit the T-shaped stud to pass freely therethrough, and in assembling the base and glass the locking-plate H is first set in place in the bottom of the base, the stem of the glass inserted into the base, and the T-shaped stud passed through the slot or opening of the locking-plate. The glass or base is then given a quarter-revolution in or-

der to turn the T-shaped stud at a right angle to the longitudinal diameter of the elongated opening I, thereby securely locking the base or foot-piece to the glass.

5 In practice I prefer to construct the plate H of spring metal and shape the same with a slight concavity, so that it will have a certain amount of elasticity, whereby a tighter connection is had, and, furthermore, by means
10 of which any expansion or contraction of the parts will be readily accommodated.

By constructing the base with the smooth opening and the glass with the smooth stem it will be seen that the attachment of the base
15 to the glass can be accomplished in a very quick and easy manner. It will also be noticed and understood by any person skilled in the art to which my invention pertains that the advantages of a graduate-glass having a non-breakable base over one having a
20 glass base are too many and great to be referred to in this specification. It will also be understood that the details of construction can be changed slightly without departing
25 from the broad principles of my inven-

tion, and it will also be understood that I do not limit the application of my invention to a graduate-glass, but can apply the same to any glass or breakable vessel.

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

A graduate-glass, comprising a glass provided with a tapering stem having a T-shaped head at its end, a non-breakable base having
35 a recess in its bottom, and a tapering opening leading from the recess out through the top of the base, said opening being of less diameter than the recess, whereby a shoulder is formed at the top of the recess, a spring
40 locking-plate provided with a slot through which the head of the stem is passed and then partially turned, said plate resting against the said shoulder and provided with studs
45 engaging the same to prevent it from rotating, substantially as shown and described.

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Witnesses:

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