

(No Model.)

J. F. BRUSO.

SUPPLEMENTAL BASE FOR GRADUATE GLASSES.

No. 455,094.

Patented June 30, 1891.

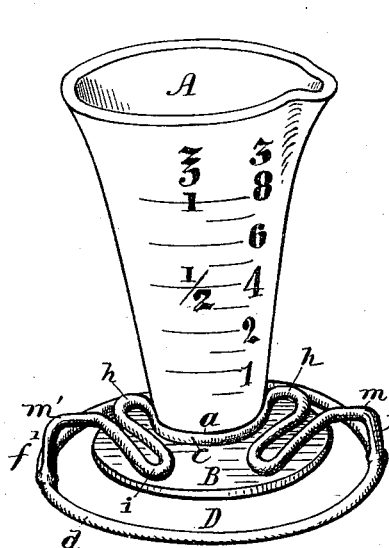


FIG. 1

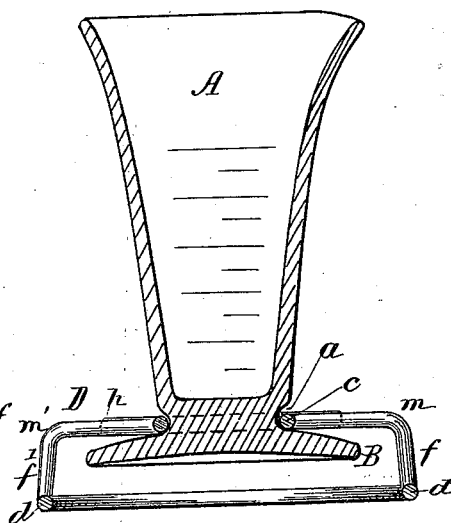


FIG. 2

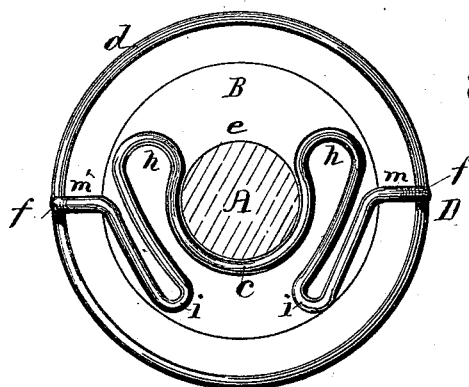


FIG. 3

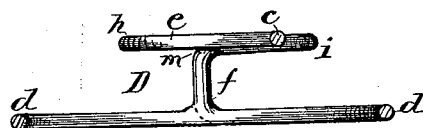


FIG. 4

Witnesses.

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# UNITED STATES PATENT OFFICE.

JOHN F. BRUSO, OF WORCESTER, MASSACHUSETTS.

## SUPPLEMENTAL BASE FOR GRADUATE-GLASSES.

SPECIFICATION forming part of Letters Patent No. 455,094, dated June 30, 1891.

Application filed March 18, 1891. Serial No. 385,557. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. BRUSO, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Supplemental Base for Graduate-Glasses, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

Graduate-glasses such as used by chemists, druggists and others for measuring liquid chemicals and drugs are usually made with a flange or flat spreading disk at their foot or base, and when in use the side of this foot is liable to be broken off by the shock of hastily setting down the graduate on a table or marble counter, or by contact with any article or substance, thus leaving the graduate-glass in such condition that it cannot stand upright, while the cup portion is uninjured. In practice the continual breakage of graduates in any business place yearly amounts to quite an item of expense and loss.

The object of my present invention is to provide a supplemental bottom or supporting-base for glass graduates, that can be readily attached to and detached from the graduate-glass, and which will protect the glass base and prevent shock or breakage thereof when in use by contact with the table, marble counters, or with any other article or substance; also, to afford a supplemental base applicable for the support of a graduate the glass base of which has become broken or partially destroyed, so that such graduate can be used while the cup portion remains unbroken, being provided with a yielding connection or spring-grip, whereby it is combined with the graduate-glass in a manner to be put on and taken off at will.

To this end my invention consists in a supplemental base or foot device formed of wire bent and shaped substantially as shown, and in the combination of the same with a glass graduate, as hereinafter more fully set forth.

In the drawings, Figure 1 is a perspective view illustrating my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a hori-

zontal section showing a plan of the supplemental base, and Fig. 4 is a section of the supporter at line *x x*.

Referring to parts, A indicates the graduate-glass, having the usual foot or base flange B, with neck-groove *a* at the junction of the cup and base, and provided with the usual graduated scale on its sides. D indicates the supplemental base or guard-foot, which is made of wire bent to form a circle or foot-ring *d* of somewhat larger diameter than the glass base B; the wire at the side of said ring being turned upward, as at *f*, and carried across to the opposite side at a height above the plane of the ring, and then down and again connected to the ring *d*, as at *f'*, that part of the wire at the higher level being formed into a series of bends, substantially as shown, comprising a central circular loop *c*, of proper dimension to clasp the neck *a* of the graduate-glass, which is formed open at one side *e* to admit the neck, the wires being turned back in loops *h h* and extended along the sides of the circle for some distance and then bent, as at *i*, and returned in the opposite direction to a position near the upright portions, where by outward and downward bends *m* and *m'* the horizontal portions meet and join the upright portions *f* and *f'* in the manner illustrated, the whole being preferably formed of a single piece of wire, or, if desired, of two pieces attached together at the junction of said upright portions with the foot-ring *d*.

This supplemental base is combined with the graduate-glass by slipping the loop *c* laterally onto the neck *a*, which can readily be done without injury to the glass, or the same can be as readily removed when desired. The double return-bends *h* and *i* serve as springs for holding the neck of the glass with a firm but yielding pressure.

The height of the clasp-loop *c* above the foot-ring *d* is greater than the thickness of the graduate-bottom, so that the glass base B is supported in a manner to prevent contact thereof with the table, counter, or surface on which the graduate is placed, the foot-ring *d* taking the brunt of service and protecting the glass from shock and breakage.

This supplemental base can also be applied

to a graduate after the base B has become broken, thus affording a means whereby such baseless graduates can be made useful until the cup is destroyed.

5 I am aware that wire stands of essentially different structure from that herein shown and described have been heretofore employed for supporting vases, jars, &c.; but I do not claim, broadly, a wire stand or base irrespec-  
10 tive of its particular construction, combination, and use.

What I claim, and desire to secure by Letters Patent, is—

1. The supplemental base for graduate-  
15 glasses, made from wire in the form shown and described, composed of the annular foot-ring *d* and the clasp-loop *c*, disposed at a higher level and joined at the sides thereof to said foot-ring by the lateral spring-bends

*h* and *i* and upright connecting portions *ff'*, 20 substantially as and for the purpose set forth.

2. The combination, with the graduate-glass A, formed with the base-flange B and neck *a*, of the supplemental base D, formed of wire and having the foot-ring *d*, the open 25 clasp-loop *c*, with side bends *h* and *i*, that afford yielding pressure on said loop, and the upright side connections *ff'*, supporting said clasp-loop with the graduate base B above the plane of the foot-ring *d*, substantially as 30 shown and described.

Witness my hand this 10th day of March, A. D. 1891.

JOHN F. BRUSO.

Witnesses:

CHAS. H. BURLEIGH,  
ELLA P. BLENUS.