Nov. 18, 1941. W. B. WARREN 2,263,112

HOLDER FOR LABORATORY DEVICES

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FIG. 1.

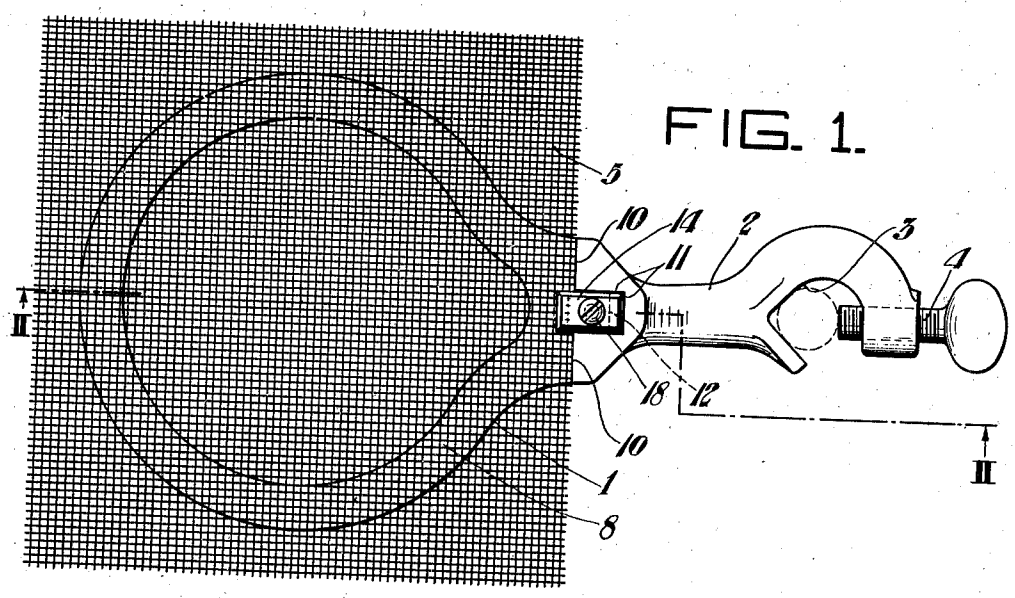


FIG. 2.

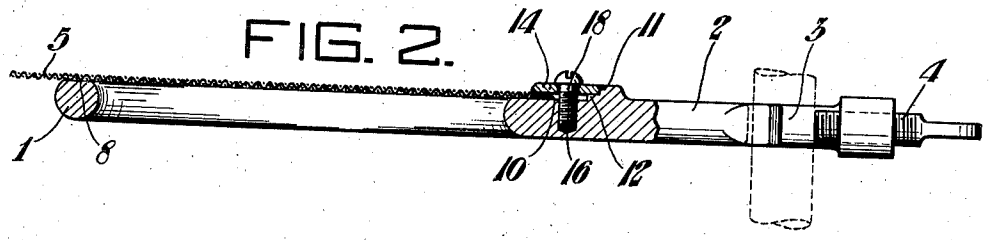
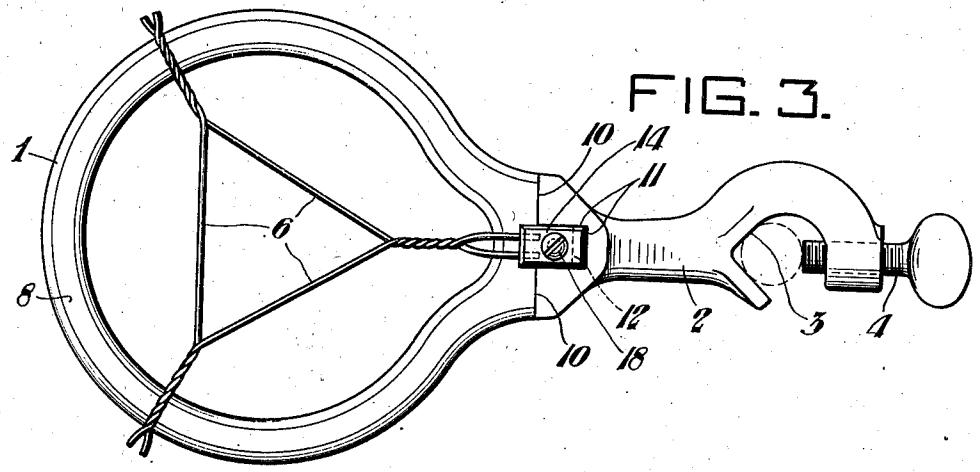


FIG. 3.



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HOLDER FOR LABORATORY DEVICES

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4 Claims. (Cl. 248—229)

This invention relates to holders for laboratory devices, and more particularly to rings usually of metal, which are clamped to, and extend at right angles from, a vertical support for purposes which include the holding of a vessel or other object over a source of heat.

Conventionally, rings of the type referred to merely comprise, in addition to the clamping instrumentality, a circular metallic ring which is usually round in cross section, and adapted, when in use, to assume such a position that its major axis occupies a substantially horizontal plane. When so disposed, there is usually placed on top of the ring a piece of metallic gauze or a metallic triangle for the purpose of supporting a beaker, or other object. These metallic gauzes may be circular, but most frequently are square; while the metallic triangles are composed of intertwisted wires with the corners thereof extended for providing contact with the upper surface of the ring.

In laboratories, the rings, metallic gauzes and metallic triangles are usually kept in a drawer or other suitable depository, and because of their complete detachment, become separated and lost at inopportune times.

It is among the objects of the present invention to provide for laboratory devices such as metallic gauzes, metallic triangles, etc., a holder which is so constructed that the said devices may be quickly and easily attached thereto, thereby eliminating trouble and lost time accruing from detachment.

Another object is the provision of a metallic ring of the type described which comprises a simple clamping instrumentality with which the metallic gauzes, metallic triangles, etc. may be rigidly held at one portion thereof, whereby the remaining portions are permitted to expand and contract due to temperature variations, thereby eliminating buckling.

To the accomplishment of these and other desirable objects and purposes, I have designed the present, preferred embodiments of the invention presented in the accompanying drawings forming a part of this specification and to which reference should be had in connection with the following detailed description, and in this drawing, for simplicity, like reference numerals have been employed to designate the same parts throughout the several views.

In said drawing:

Figure 1 is a plan of the apparatus of the present invention as it occupies a position extending horizontally from a vertical standard, and carrying secured thereto a laboratory device in the form of a square of metallic gauze.

Figure 2 is a sectional view on the line II—II of Figure 1.

Figure 3 is a view similar to that of Figure 1 but disclosing in combination a substituted laboratory device in the form of a metallic triangle.

Referring more particularly to the drawing, wherein there is illustrated a preferred embodiment of a holder made in accordance with the teachings of the present invention, the numeral 1 generally designates a ring which conventionally is made of iron and has formed integrally therewith, and in substantially the same plane, a shank 2 having at its outer end a rod-receiving recess 3 for which there is provided a clamp-screw 4.

According to such construction and arrangement, the ring 1 may be attached to, and made to extend at right angles from, a vertical rod or standard (not shown). Upon the upper side of the ring 1, which, so far as I am aware, has always been substantially round in cross-section, there is placed a piece of metallic gauze 5, or an intertwisted wire triangle 6, and upon this there is superposed a beaker or other object (not shown) usually for the purpose of subjecting the same to heat which is applied from below.

The teachings of the present invention contemplating, as hereinbefore stated, the firm attachment of the laboratory device (i. e. metallic gauze, triangle formed of intertwisted metallic wires, etc.), there is provided on what will in service be the upper side of the ring 1 a flat surface 8 which extends onto the shank 2 and terminates in a right-angular abutment or wall 10. In the mid-portion of this abutment or wall 10 there is formed a generally rectangular recess 11, the bottom of which, for the most part, occupies the plane of the flat surface 8. Immediately adjacent to, and connecting with, the back wall of the generally rectangular recess 11, there is provided on the bottom thereof a short and shallow step 12.

Disposed with its inner end upon the step, and projecting substantially from the generally rectangular recess 11, is a rectangular block 14. The width and thickness of this rectangular block 14 correspond, respectively, to the width of the generally rectangular recess 11, and the distance between the top of the step 12 and the upper surface of the shank 2. Accordingly, then, the projecting end of the rectangular block 14 overlies an area, however small, of the flat surface 8 of the shank 2; and into the space therebetween is disposed an edge or end of the sup-

porting medium (i. e. the aforesaid metallic gauze, triangle formed of intertwisted metallic wires, etc.).

Disposed between the edge or end of the supporting medium and the abutment or wall 10, there is formed in that portion of the flat surface 8 of the shank 2 which is beneath the rectangular block 14 a screw-threaded recess 16. This screw-threaded recess 16 receives a screw 18 which extends through the rectangular block 14. This, the supporting medium, is firmly attached to the ring 1, whereby the desired ends are attained.

While I have shown and described certain specific embodiments of the present invention, it will be readily understood by those skilled in the art that I do not wish to be limited exactly thereto, since various modifications may be made without departing from the scope of the invention as defined by the following claims.

I claim:

1. A holder for laboratory devices comprising a ring adapted to assume a subtsantially horizontal plane, and when in such position to support a laboratory flask or the like, means for clamping said ring to a support or standard, a detachable supporting instrumentality extending across the upper surface of said ring, a fulcrum on the upper surface of said ring, a lever carried by said fulcrum and adapted to overlie said detachable supporting instrumentality, and means for holding one end of said lever in contact with said detachable supporting instrumentality whereby the latter is maintained against displacement.

2. A holder for laboratory devices comprising a ring adapted to assume a substantially horizontal plane, and when in such position to support a laboratory flask or the like, an extension carried by said ring, means on said extension for clamping the same to a support or standard, a detachable supporting instrumentality extending across the upper surface of said ring and onto said extension, a fulcrum on the upper surface of said extension, a lever carried by said fulcrum and adapted to overlie said detachable supporting instrumentality, and means for holding one end of said lever in contact with said detachable supporting instrumentality whereby the latter is maintained against displacement.

3. A holder for laboratory devices comprising a ring adapted to assume a substantially horizontal plane, and when in such position to support a laboratory flask or the like, means for clamping said ring to a support or standard, a detachable supporting instrumentality extending across the upper surface of said ring, the upper surface of said ring having a recess, a fulcrum within said recess, a lever carried by said fulcrum and adapted to project from said recess and overlie said detachable supporting instrumentality, and means for holding the projecting end of said lever in contact with said detachable supporting instrumentality whereby the latter is maintained against displacement.

4. A holder for laboratory devices comprising a ring adapted to assume a substantially horizontal plane, and when in such position to support a laboratory flask or the like, an extension carried by said ring, means on said extension for clamping the same to a support or standard, a detachable supporting instrumentality extending across the upper surface of said ring and onto said extension, the upper surface of said extension having a recess, a fulcrum within said recess, a lever carried by said fulcrum and adapted to project from said recess and overlie said detachable supporting instrumentality, and means for holding one end of said lever in contact with said detachable supporting instrumentality whereby the latter is maintained against displacement.

WILLIAM B. WARREN.