Sept. 21, 1948. C. DEVELAY ET AL 2,449,805

AUTOMATIC CUPPING DEVICE

Filed Feb. 1, 1947

Fig.1

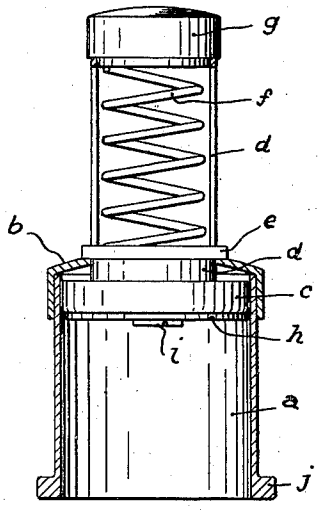


Fig.3

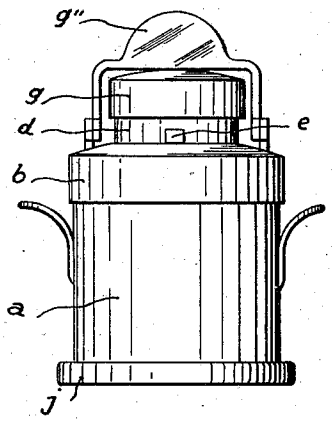


Fig.2

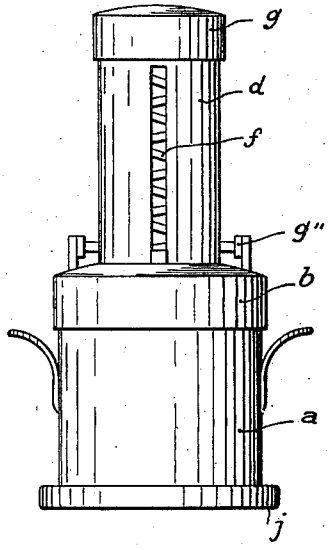


Fig.4

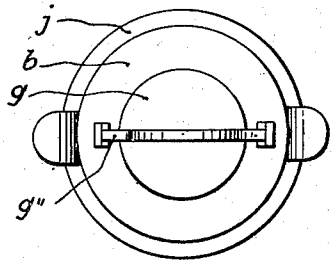
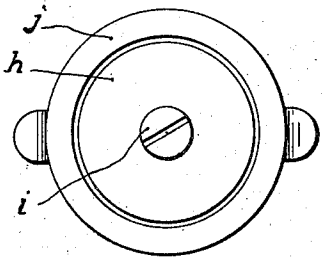


Fig.5



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AUTOMATIC CUPPING DEVICE

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Paris, France

Application February 1, 1947, Serial No. 725,800
In France February 25, 1946

1 Claim. (Cl. 128—300)

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Our invention relates to a cupping device for medical use.

The object of our invention is to provide a cupping device which when applied to a patient will function more or less automatically.

The novel features which we consider as characteristic for our invention are set forth in particular in the appended claim. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of a specific embodiment when read in connection with the accompanying drawings, in which:

Fig. 1 is a longitudinal section through the device, showing the same in inoperative condition;

Fig. 2 is a side elevation of the device at an angle offset by 90° from the view shown in Fig. 1 and illustrating the device in inoperative condition;

Fig. 3 is a view similar to Fig. 2, showing the device in operative condition;

Fig. 4 is a top view of the device; and

Fig. 5 is a bottom view of the same.

Our new cupping device consists, as shown in the drawings, of a cylinder *a* which is provided with a bead edge *j* at its bottom and a centrally apertured cover *b*. A pipe or tube *d* is adapted for movement in the aperture of the cover and has secured to its inner end a piston *c*. The securement is effected by means of a plate *h* and screw *i*. The outer end of the tube *d* is closed by a plug *g*. A helical compression spring *f* is placed inside the tube *d*. One of the ends of the spring rests against the plug *g* while the other end is secured to a transversal bar or key *e*. As appears from Fig. 2, this key extends through opposed longitudinal slots in the wall of the tube *d*. A U-shaped latch bar, which is shown in the form of a yoke *g''* but may also have any other suitable form, such as a hook, a knob controlled lever, etc., is pivotally secured to the exterior of the cover *b*.

The use and operation of the device are as follows:

The tube *d* and piston *c* are forced inwards by compressing the spring *f*. The latch bar is then swung into its upright position so as to straddle the plug *g*. The spring is thereby held under compression and the tube remains positioned inside of the cylinder *a* with the extreme end of the plug *g* bearing against the underside of the latch bar *g''*. The apparatus is now ready for application to the patient.

It is now only necessary to swing the latch bar to one side in order to cause the piston and tube to be propelled outwards in response to the expanding action of the spring. This will create

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the necessary vacuum and will effect the cupping.

The cylinder *a* may be formed of metal, glass or plastic material. The piston *c* may be formed with a leather covering to ensure a perfect vacuum action. However, if desired any other material may be used.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of devices for medical use, differing from the types described above.

While we have illustrated and described the invention as embodied in automatic cupping devices, we do not intend to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of our invention.

Without further analysis, the foregoing will so fully reveal the gist of our invention that others can by applying current knowledge readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention, and, therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalence of the following claim.

What we claim as new and desire to secure by Letters Patent is:

An automatic cupping device comprising a cylinder which is intended to be applied by its open under end upon the body of the patient and a piston movable in said cylinder and secured to a member formed as a pipe closed by a plug at its upper end and sliding through an opening of the cylinder top cover, said pipe containing a compression spring resting by its upper end upon the pipe plug and by its lower end upon a key supported by the cylinder cover and being able to glide into two opposite longitudinal slots of the pipe, the lowering of the latter compressing the spring and the pipe being maintained in that position by a yoke pivoting over the cylinder cover, and the piston being raised when the pipe is unlatched operating thus a cupping effect as the lower side of the piston.

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REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Name	Date
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