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W. GERBER

PARTITION MEANS FOR FLUID CONTAINERS, PARTICULARLY FOR DYEING MACHINES AND THE LIKE

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Fig. 1.

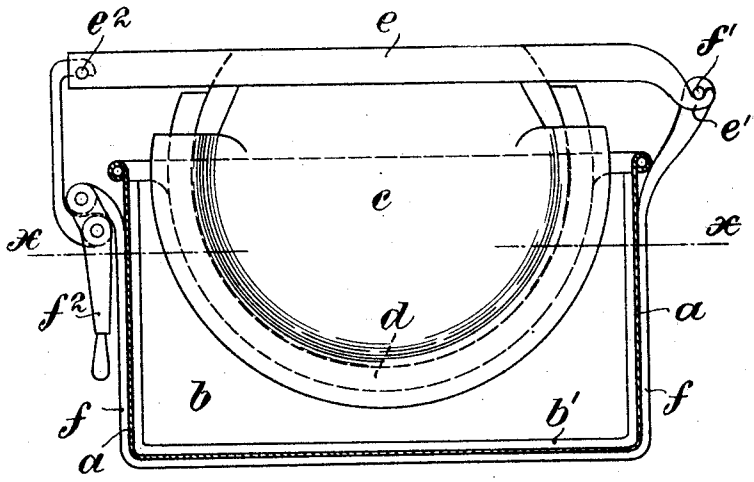
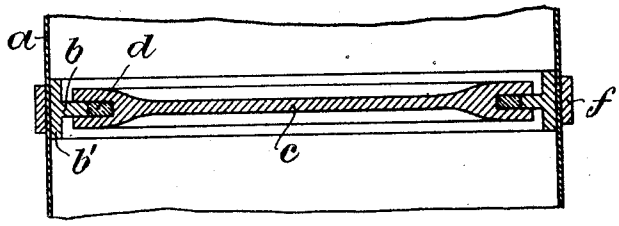


Fig. 2.



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PARTITION MEANS FOR FLUID CONTAINERS, PARTICULARLY FOR DYEING MACHINES AND THE LIKE.

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For the division of fluid containers of dyeing machines and the like into separate compartments, detachable dividing or partition walls have hitherto been employed, which, provided with a packing of rubber or the like, were arranged transversely in the containers and pressed down by means of screws, eccentric levers and the like so that they fitted very tightly. The longitudinal lateral walls of the container run either perpendicularly or in an inclined manner to the bottom of the container, and in the latter case at an angle to the bottom of the container of slightly over a right angle.

This gave rise to a practical difficulty in that the rubber packing was pressed more against the plane bottom of the container than against the inclined walls, and on tightening up a partition wall a particularly unfavourable action was exercised upon the packing, since the rubber forming the packing was cramped together in the shape of a trapeze between the lateral wall of the container and the lower angular corner of the partition wall which was inserted and moved into the tightened position and simultaneously was brought into contact in the longitudinal direction.

The partition device is improved according to the present invention in that the partition and its seating in the container have the shape of a sector of a circle. In this way the pressure which the packing undergoes on tightening up the partition is much more nearly equalized, and moreover, further advantages are given by the complete device. The preparation and working up of the partition and the seating in the container is essentially simplified, since it can be performed in a lathe, whilst hitherto manual operation and grinding had to be employed. In the container a fixed and partition-like transverse wall, which has a sector of a circle cut away and corresponding to the shape of the partition itself is arranged as an abutment. This transverse wall gives a considerable stiffening of the container, which itself is desirable when the comparatively light construction of the latter is considered.

In the drawing a constructional example of the object of the invention is illustrated.

Fig. 1 shows a cross-section of the container with a view of the partition device.

Fig. 2 shows a horizontal section along the line x—x of Fig. 1.

At the dividing point in the container a a transverse wall b is inserted, the flanges b^1 of which lie along the bottom and the lateral walls of the container and is securely fastened to the latter by known means. The transverse wall b has a semi-circular sector cut out of it, and the partition c is provided with a corresponding semi-circular shape, at least in the lower portion which is engaged in the seating in the partition b. The rim of the detachable partition c is provided in a known manner with a groove, in which lies a packing strip of rubber d or the like, which is secured at its ends in a manner which is of no concern as regards the invention. For pressing down the partition into the working position, a transverse beam e, for example, which is connected with the partition c engages by means of a hook-shaped end e^1 under a transverse bolt f^1 which is mounted upon a band f fixed round the container, whilst the beam e is secured at its other end e^2 by a toggle lever f^2 mounted upon the band f. The toggle lever forms a particularly suitable means for inserting the partition with the required pressure, but it is not essential. Other suitable means, such as for example, screws, bolts and nuts could be employed for inserting and securing the partition in position.

Tests have proved that the semi-circular shape of the partition shown in the example illustrated in the drawing gives a very even pressure upon the packing means: it is of course possible to equalize the pressure upon the packing strip still further by choosing a smaller circular sector.

I claim:

1. Improved partition means for the division of fluid containers, particularly for dyeing machines and the like, comprising a fixed partition member rigidly secured to the container, said fixed partition member having a curved sector shaped recess formed therein, and a movable partition member having a curved sector portion adapted to fit within the recess of the fixed partition member, whereby application of pressure on the movable partition serves to force the latter into close engagement with the fixed par-

tition at all points on the sector shaped engaging surface.

2. Improved partition means for the division of fluid containers, particularly for dyeing machines and the like, comprising a fixed partition member rigidly secured to the container, said partition member having a hollowed-out curved sector portion formed therein, a movable partition member having a curved sector portion adapted to engage with the sector portion of the fixed partition, a packing interposed between said fixed and movable partition members, and toggle-lever mechanism for pressing said movable partition member into close engagement with said fixed partition member, substantially as described.

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