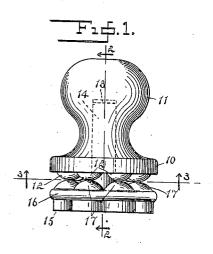
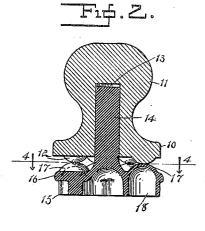
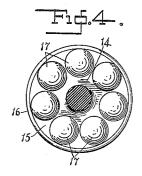
J. VANDERSLICE. MASSAGE DEVICE, APPLICATION FILED MAE. 21, 1908.

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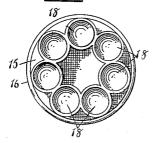
Patented Mar. 16, 1909.







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WITNESSES: Mathew J. Mark C. J: Basseto

John Vanderslice Tredenic Sujamin ATTY

## UNITED STATES PATENT OFFICE.

JOHN VANDERSLICE, OF MONTREAL ANNEX, CANADA.

## MASSAGE DEVICE.

No. 915,251.

Specification of Letters Patent. Patented March 16, 1909.

Application filed March 21, 1908. Serial No. 422,385.

To all whom it may concern:

Be it known that I, JOHN VANDERSLICE, citizen of the United States, residing at Montreal Annex, in the county of Hochelaga

- 5 and Dominion of Canada, have invented certain new and useful Improvements in Massage Devices, of which the following is a specification.
- My invention relates to therapeutic ap-10 pliances and has special reference to apparatus adapted to the application of manual or mechanical force to various portions of the human body, such application being commonly designated as massage, or movement 15 cure.
- The paramount objects of the improvements which form the subject matter of this application are; to provide a massaging device so constructed and arranged as to 20 produce an augmented therapeutic effect
- without materially increasing the force employed; to produce such supplemental effect by stimulating the circulatory system to a greater degree than the unassisted mechan-
- 25 ical force would initiate, and to accomplish said objects by supplying an apparatus of simple design whereby the manipulations required to furnish the desired hygienic massage movements will simultaneously
- 30 produce a cupping effect upon the tissues undergoing treatment thus causing an increased congestion of blood to the parts.

Further objects of my invention are to produce a combined massage and cupping 35 apparatus that will be simple in construction, that will not get out of order, and will therefore be durable; to provide a device for the purpose stated that can be used by an unskilled person and to supply an apparatus

- 40 that can be manufactured at a small cost. I accomplish the objects sought by means of the device illustrated in the accompanying drawing which forms a part of this application and in which:-
- 45 Figure 1 is a side elevation of the complete apparatus; Fig. 2 is a vertical longitudinal section on the line 2—2 of Fig. 1; Fig. 3 is a sectional view on the line 3—3 of Fig. 1; Fig. 4 is a sectional view on the line 4-4 of

50 Fig. 2, and Fig. 5 is a bottom plan view. Referring to the details of the drawing, the numeral 10 indicates a circular disk or plate formed integral with a handle 11, of con-venient size and shape so that it can be \$5 readily and firmly grasped by the hand of

said disk are a series of projections 12 hemispherical in form and made integral with the disk. These projections or bosses are solid in structure and may be arranged in any con- 60 figuration. I prefer, however, to group them in an annular ring, as shown in Fig. 3, and to place them close together in the circle. The combined disk and handle is provided with a bore or socket 13, concentric with the periph-65 ery of said disk and extending from the under surface of the disk to any suitable distance to afford a strong support for a stem 14 preferably formed integral with the walls of a cup member 15. The said cup member 70 is reinforced upon the periphery by a ridge or bead 16. The cup member is made up of a plurality of cylindrical cavities or cells 18, the walls forming the closed ends of the cells being concave internally and correspondingly 75 convex externally, thus producing hemispherical bosses or projections 17 which are arranged to correspond with the said bosses 12 projecting downward from the disk 10. The stem 14 is fitted tightly in the bore 13, 80 and is fastened permanently therein by any suitable cement. When assembled the stem 14 is inserted within its socket until the bosses 12 are in contact with the convex ends 17 of the cells 18. The celled cup 15 and its 85 stem 14 are formed of elastic material, and for this purpose I prefer rubber sufficiently vulcanized or otherwise treated to produce the proper resiliency so that the cells will regain their initial shape after being com- 90 pressed. The handle 11 and combined disk 10 may also be made of rubber highly vulcanized to give it the requisite hardness since it is necessary that this part should be rigid and practically unyielding in order to pro- 95 duce the desired compression of the cup cells as hereinafter explained. Although hard rubber is the preferred material for the handle, particularly for sanitary reasons, wood will answer the purpose almost equally as well 100 especially if enameled or japanned, and would have the advantage of economy in the manufacture.

The device as illustrated is portable, light and handy to manipulate and may be applied 105 in many cases by the patient himself. The method of using the appliance may be somewhat varied, but in general is as follows: Grasping the handle firmly, the flat face of the cup is applied directly to the integu- 110 readily and firmly grasped by the hand of ment, as many cells being brought into con-the operator. Upon the under surface of the tact with the part as possible. Pressure is

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being applied in an axial direction, so that the solid projections 12 will depress the comparatively thin cell walls and the convex ends 17 5 will thus become invaginated within the cells. 18 driving out some of the contained air. Pressure upon the handle is then relaxed sufficiently to permit the inherent resiliency of the cup walls to cause the cells to resume 10 their original shape thus producing a rarefaction of the air contained in said cells, care being taken to maintain a proper seal between the lips of the cells and the cuticle. This maneuver is repeated with sufficient 15 rapidity to produce the desired diminution of air pressure within the cells, the partial vacuum thus formed causing an increase in the blood supply to the part, which, being supplemental to the effect of the mechanical 20 massage, will thus augment to a marked degree the stimulating effect which is the

object sought. Having thus described my invention what I claim as new, is:-

 $\mathbf{25}$ 1. A massaging device comprising a member having a plurality of compressible cells, a second member having a plurality of compressing bosses arranged to register with said. cells, and having a grasping portion.

30 2. A massaging device comprising a handle having a recess therein and a plurality of bosses, and a second member having a stem fitting said recess, and having a plurality of compressible cells, open at one end, the closed ends of said cells registering with said bosses. 3. In a therapeutic device, the combina-

tion of a handle, a cup member composed of elastic material, connected partitions dividing the said member into a plurality of cells closed at one end, means for attaching the  $_{40}$ handle to the elastic member, and projections on the handle adapted to engage the closed ends of the cells when said handle is operated.

4. In a combined massage and cupping de- 45 vice, the combination of a handle, an elastic cup, connected partitions dividing the cup into a plurality of cells closed at one end, a socket formed in said handle, a stem attached to said cup and engaging said socket, and 50 projections upon said handle adapted to engage the closed ends of said cells when the handle is operated.

5. In a massaging device, a cup-member formed of elastic material and divided into a 55 plurality of cells having their inner end walls concavo-convex, and their outer walls stiffened by a rib, and means for depressing said end walls.

6. In a massaging device, cup-member 60 formed of suitable material and divided into a plurality of cells having their inner end walls compressible and means for compressing said walls said means comprising a plurality of projections or bosses arranged to 65 register with said cells, and a suitable handle.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN VANDERSLICE.

Witnesses:

LOUIS ENGELHORN. J. RAYMOND BEAUDRY.