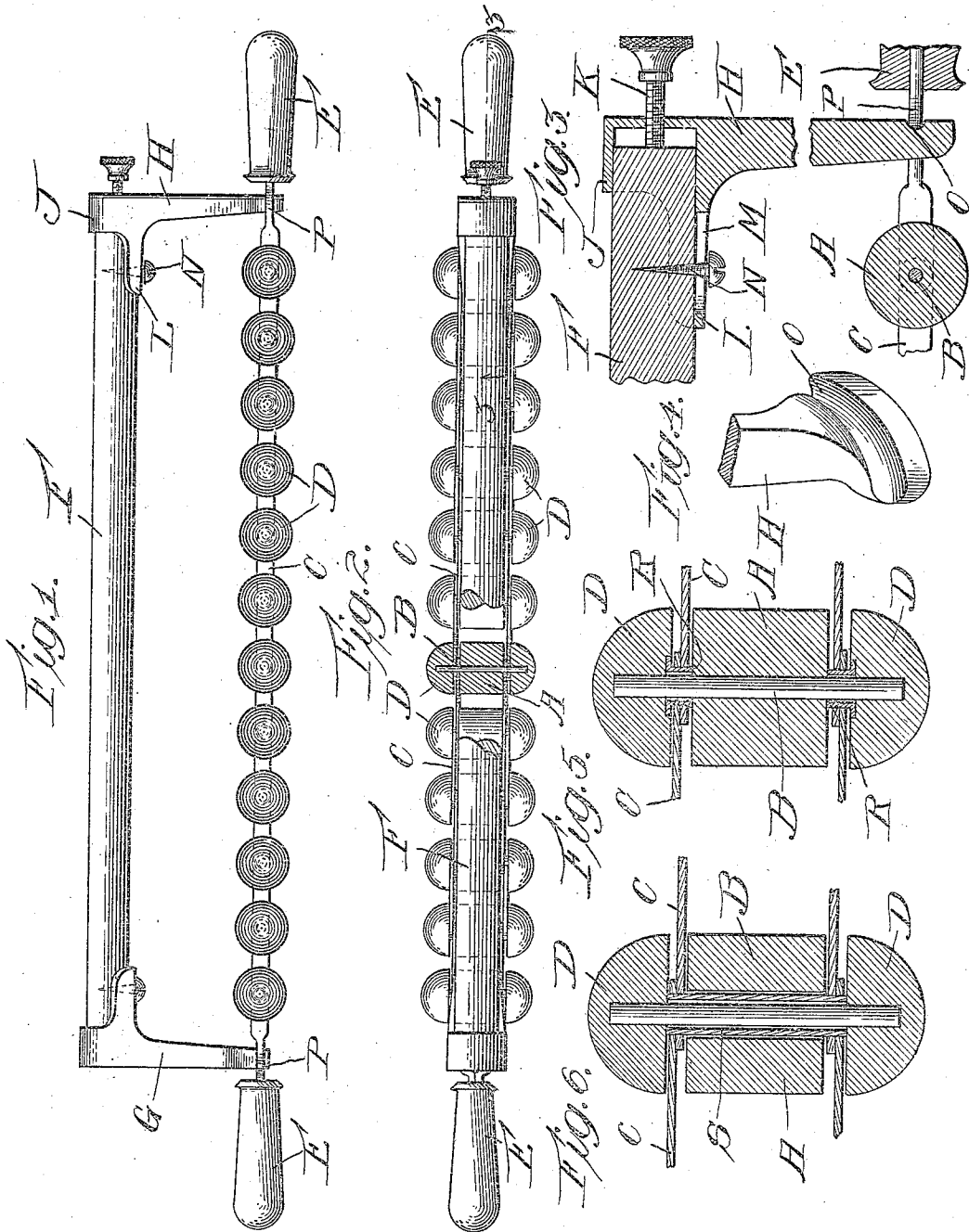


S. F. BOWSER.
 MASSAGE DEVICE.

APPLICATION FILED AUG. 31, 1904.

961,479.

Patented June 14, 1910.



Witnesses:
 E. V. Domarus.

Robert H. Weir

Inventor:
 Sylvanus F. Bowser
 by: Mowatt & Barb
 Attorneys.

UNITED STATES PATENT OFFICE.

SYLVANUS F. BOWSER, OF FORT WAYNE, INDIANA.

MESSAGE DEVICE.

961,479.

Specification of Letters Patent. Patented June 14, 1910.

Application filed August 31, 1904. Serial No. 222,784.

To all whom it may concern:

Be it known that I, SYLVANUS F. BOWSER, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful Improvement in Massage Devices, of which the following is a specification.

This invention relates to massage devices.

The object of the invention is to provide a massage device which is simple, inexpensive, and efficient, and which can be applied to any portion of the surface of the body with facility.

A further object of the invention is to provide a massage device with a detachable handle.

A further object is to provide a combined flexible and hand device of the nature referred to, and wherein are employed rollers arranged to form a roller rubbing surface, and wherein provision is made for preventing the rollers from binding when the flexible device is employed with a handle.

Other objects of the invention will appear more fully hereinafter.

The invention consists substantially in the construction, combination, location and arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawing, and finally pointed out in the appended claims.

Referring to the accompanying drawing, and to the various views and reference signs appearing thereon,—Figure 1 is a view in side elevation of a massage device showing the application of a detachable handle thereto in accordance with the principles of my invention. Fig. 2 is a top plan view of the same, parts broken out and parts in section. Fig. 3 is a broken detail view in section on the line 3, 3, Fig. 2, looking in the direction of the arrows. Fig. 4 is an enlarged broken detail view in perspective of an engaging arm of the detachable handle. Fig. 5 is a broken detail view in section showing one form of means for preventing the rollers from binding when the device is put under tension by the application of the detachable handle. Fig. 6 is a view similar to Fig. 5, showing a modified form for accomplishing the same result.

The same part is designated by the same reference sign wherever it occurs throughout the several views.

In companion applications, executed of

even date herewith, I have shown, described and claimed various forms and constructions of massage apparatus in which are employed inelastic devices arranged in juxtaposition to form a rubbing surface, and a support for such devices, and in one of said applications I have shown and described a flexible massage device wherein the rubbing surface is composed of parts flexibly connected together.

The present invention relates more particularly to a massage device of this nature, and one special object in view is the provision of a detachable handle for a flexible massage device of the character referred to, whereby such device may be used either with or without the handle. In attaining this object, I employ a massage device composed of a plurality of inelastic or non-yielding rubbing devices A arranged in juxtaposition to form a rubbing surface, and which in the form shown (but to which my invention is not to be limited or restricted) comprise rollers mounted for axial rotation, upon pintles or gudgeons B, the ends of which project beyond the ends of rollers A, and are pivotally connected together by links C, thereby securing the characteristic of flexibility. On the projecting ends of the pintles or gudgeons B, are carried end pieces D. A series of rollers, constructed and connected together as described, forms a flexible roller rubbing surface capable of being applied to the surface of any desired portion of the body. To facilitate the application of the device, hand-pieces E may be provided at the ends thereof. To adapt the device to be operated by one hand, I propose to apply thereto a single detachable handle. This may be accomplished in many specifically different ways. While, therefore, I have shown and will describe one arrangement for accomplishing this object, I do not desire to be limited or restricted to the form shown and now to be described.

F designates a hand-bar, carrying at its ends angle-arms G H arranged to engage the ends of the flexible device. In practice, I propose to make one of the angle-arms, as H, for instance, movable longitudinally with respect to the hand-bar F. To this end, the angle-arm H is provided with a socket-piece J to receive the end of hand-bar F. A screw K is tapped through and bears against the end of the hand-bar F. A flange L on

the angle-arm H, slotted as at M, through which projects a screw N, affords means for guiding the angle-arm H in the adjusting movements thereof. The angle-arms G H are formed with a groove O in the free ends thereof, arranged to engage a convenient part of the massage device, as, for instance, the yoke P of the hand-pieces E. By inserting the angle-arms G H into engaging relation with respect to the yokes P of the hand-pieces E the handle will be disposed in a plane parallel with the plane of the device and by turning up on screw K, an endwise tension is imposed on the massage device sufficient to hold the hand-bar F thereon, thus forming a detachable handle for operating the device, the manner of application of the device with the hand-bar or handle being similar to the manner of using a shoe brush. By detaching and removing the handle, the device may be used and applied through the hand-pieces E.

Where rollers are employed to form the rubbing surface, the tension imposed upon the device by the application of the hand-bar F thereto in the manner above described, causes a binding effect of the links C upon the pintles or gudgeons B, thereby preventing free rotation of the rollers A. This objection may be avoided in several different ways. In Fig. 5 I have shown a simple arrangement wherein I provide thimbles R to form journal bearings through which the ends of the pintles or gudgeons B extend, and in which said pintles or gudgeons freely rotate, and the links C are connected over the thimbles R. By this construction, any binding effect upon the links, due to the stretching endwise of the device in the application of the hand-bar thereto, is imposed upon the thimbles and not upon the bearings of the pintles or gudgeons B, thereby leaving said pintles or gudgeons, and with them the rollers A, to freely rotate. In Fig. 6 I have shown another arrangement for accomplishing the same result, wherein the pintles or gudgeons B are arranged to project or extend longitudinally through a sleeve S, the rollers A being sleeved to loosely revolve upon the sleeves S, and the link connections C are mounted upon the projecting ends of the sleeves S. In this manner the journal bearings upon which the rollers rotate are not cramped by the binding action of the links or link connections C when the hand-bar F is applied to the device. It is obvious that many other arrangements for accomplishing the same result may be readily devised without departure from the spirit or scope of my invention.

From the foregoing description it will be seen that I provide an exceedingly simple, inexpensive and efficient massage device adapted to be applied with facility to any portion of the surface of the body, and

wherein a detachable handle may be applied to the device, enabling such device to be used either with or without a handle, and wherein a roller rubbing surface is produced, and the device may be converted from a flexible to a hand device without impairing the rotatability of the rollers.

Many variations in the details of construction and arrangement would readily occur to persons skilled in the art, and still fall within the spirit and scope of my invention. I do not desire, therefore, to be limited or restricted to the exact details of construction and arrangement shown and described. But

Having now set forth the object and nature of my invention, and a construction embodying the principles thereof, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent, is:

1. A massage device including a series of rollers suitably journaled and arranged to form a roller rubbing surface, flexible connections between said rollers, permanent hand-pieces formed at the ends of said device, and a detachable handle connected to said device at the ends thereof.

2. In a massage device, a plurality of rollers arranged in parallel relation, and flexible connections between said rollers, in combination with a hand-bar having angle-arms arranged to engage said device at the ends thereof, one of said angle-arms being adjustable.

3. In a massage device, a plurality of rollers arranged in parallel relation to form a roller rubbing surface, and link connections between said rollers to secure flexibility of the device, hand-pieces having yokes, suitably connected to the end rollers of the series, a hand-bar having angle-arms, said arms arranged to engage the yokes of said hand-pieces, one of said angle-arms being adjustable, whereby said hand-piece is detachable.

4. In a massage device, a series of rollers arranged in parallel relation, supporting pins therefor, sleeves in which said pins are journaled to freely rotate, links pivotally connecting the sleeves of adjacent rollers, and a hand-bar having detachable devices for connection with the end rollers of the series.

5. A massage apparatus comprising a series of rubbing devices, flexible connections for said rubbing devices, and a detachable handle operatively related to the connections for maintaining a tension thereon, said handle being spaced from the rubbing devices and located in a plane parallel thereto.

6. A massage apparatus comprising a series of rotatable rubbing devices, flexible connections for said rubbing devices, and a detachable handle operatively related to the connections for maintaining a tension there-

on, said handle being spaced from the rubbing devices and located in a plane parallel thereto.

7. A massage apparatus comprising a flexible body having spaced projecting portions, and a detachable handle operatively related to the body, and means for adjusting the handle to create a tension on said body.

8. A massage apparatus comprising a flexible body having spaced projecting portions and provided with terminal handles, and a detachable handle separate from the terminal handles and operatively related to and spaced from the body.

9. A massage apparatus comprising a flexible body having spaced projecting portions and provided with terminal handles, and a detachable adjustable handle operatively related to the body and separate from the terminal handles.

10. In a massage apparatus comprising a flexible body having spaced projecting portions said body being provided with terminal handles, a detachable handle spaced from the body and engaging said body intermediate its ends, means for securing said detachable handle in position, and means for creating a tension on the said body.

11. A massage apparatus comprising in-

dependent rubbing devices, links interposed between said rubbing devices, terminal handles, a detachable handle operatively related to and spaced from the links, and means for adjusting said detachable handle longitudinally with respect to the said body to create a tension thereon.

12. A massage apparatus comprising independent rubbing devices, links interposed between said rubbing devices, terminal handles, and a detachable adjustable handle separate from the first said handles operatively related to and spaced from the links.

13. A massage apparatus comprising spaced rollers, arranged in juxtaposition to form a rubbing surface, said rollers being provided with journals, bearings loosely engaging the journals, links, the extremities of which overlap to form supports for and pivotally connect said bearings, terminal handles, and a detachable handle operatively related to and spaced from the links.

In witness whereof, I have hereunto set my hand this 26th day of August, 1904, in the presence of the subscribing witnesses.

SYLVANUS F. BOWSER.

Witnesses:

E. C. SEMPLE,
S. E. DARBY.