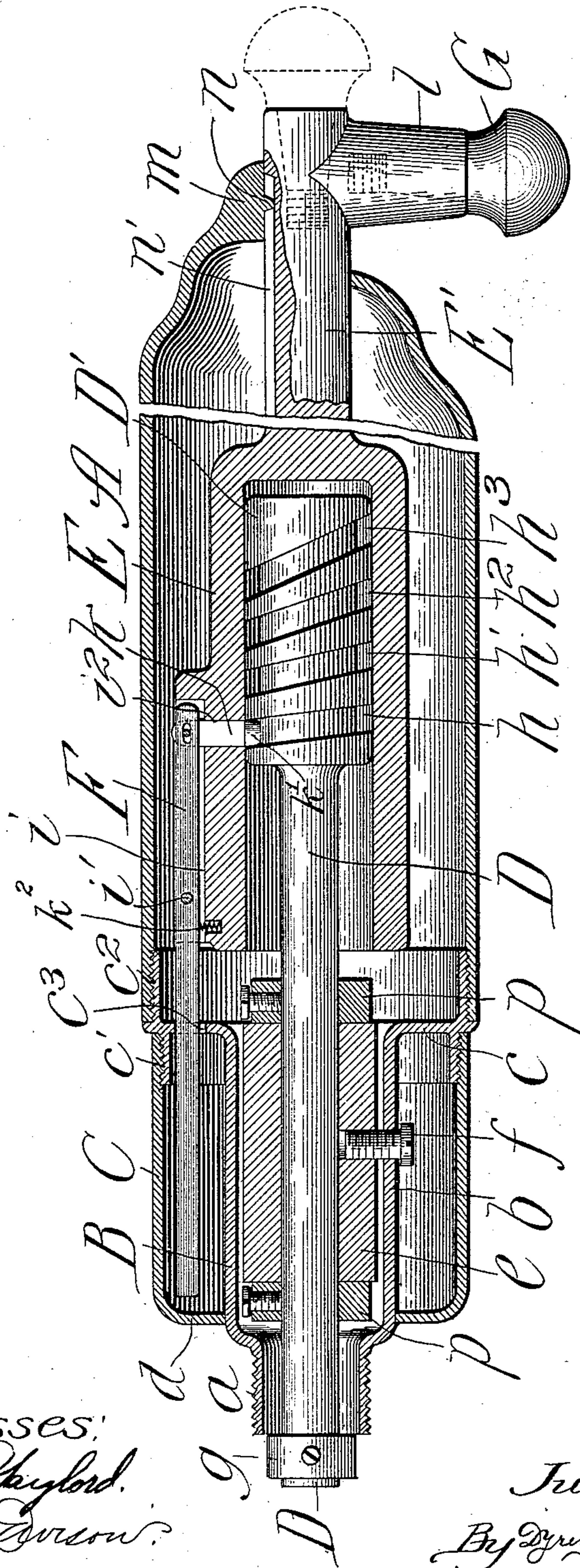


No. 751,031.

PATENTED FEB. 2, 1904.

J. B. WANTZ.
MASSAGING IMPLEMENT.
APPLICATION FILED OCT. 15, 1903.

NO MODEL.



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UNITED STATES PATENT OFFICE.

JULIUS B. WANTZ, OF CHICAGO, ILLINOIS, ASSIGNOR TO VICTOR ELECTRIC COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MASSAGING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 751,031, dated February 2, 1904.

Application filed October 15, 1903. Serial No. 177,136. (No model.)

To all whom it may concern:

Be it known that I, JULIUS B. WANTZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Massaging Implements, of which the following is a specification.

My invention relates to improvements in massaging implements of the type in which a shell adapted to be held in the hand of the operator has an internal rotary shaft and a projecting vibrator actuated by the shaft.

My object is to provide improved means for readily and conveniently changing the sweep of the vibrator at will and also to provide a particularly compact, durable, and desirable implement for this purpose.

The drawing shows a longitudinal section of my improved implement.

The shell or casing of the device is formed, preferably, of the three cylindrical members A, B, and C. The member B has a reduced and threaded end portion *a* for attachment to the casing of a flexible shaft, (not shown,) an intermediate part *b*, and an enlarged part *c*, formed with the rearward-extending threaded flange *c'* and the forward-extending threaded flange *c''*. The member A is screwed upon the flange *c''*, and the member C is screwed upon the flange *c'*, it having a reduced open-end portion *d*, fitting closely over the part *b*, as shown. The member A forms the handle proper of the implement and in practice is of a diameter to be held conveniently in the hand of the operator. In the member B is a stationary sleeve-bearing *e*, held in place by means of one or more screws *f*, passing through threaded openings in the wall of the said member.

D is a shaft passing through and journaled in the sleeve *e*. The shaft is provided at its outer end with a coupling *g* for attachment to the flexible driving-shaft. The inner end portion of the shaft D is an enlarged cylindrical head D' within the member A and formed in the present case with four annular grooves of varying pitch presenting cams *h*, *h'*, *h''*, and *h'''* of gradually-increasing angle to the center of rotation of the shaft. The head

D' rotates in a surrounding cylinder E, having a stem E' reciprocating through a bearing-opening in the end of the member A. On the outer side of the cylinder E is a longitudinally-extending groove *i*, in which a lever F is fulcrumed at *i'*. Connected with the inner end of the lever F is a key comprising a pin *k*, fitting closely, but movable through an opening *i''* in the cylinder and having an anti-friction-roller *k'* on its end to engage the cams. The lever passes through a slot *c'''* in the part *c* of the member B and is pressed by a spring *k''*, as shown. The stem E' has an opening in its end for the attachment thereto of a removable massaging attachment G, which may be of any desired shape. On the stem near its free end is a laterally-projecting lug *l*, also adapted to receive a massaging attachment. The member A is provided at its free end with an enlargement or projection *m*. At the side of the stem E' opposite the lug *l* the part *m* presents a projecting bearing for the stem to receive the pressure when a massaging attachment in the lug *l* is pressed against the surface to be massaged.

The roller *k'* is adapted to enter any one of the cam-grooves in the head D'.

In operation rotation of the shaft D and consequent rotation of the head D' causes the cam in its engagement with the roller *k'* of the pin *k* to reciprocate the cylinder E, stem E', and massaging attachment carried thereby. When the massaging attachment is in the end of the stem, it effects a pounding movement against the surface operated upon, and when it is in the lug *l* it effects a rubbing movement upon said surface. To change the sweep of the vibrator E E', the casing member C is unscrewed from the flange *c'*, and the lever *f* is then pressed against the resistance of the spring *k''* to disengage the key from the cam. The vibrator may then be shifted longitudinally until the key registers with the desired cam, after which release of the lever causes its roller portion *k'* to engage the said cam, thus effecting the particular sweep of the vibrator desired.

The lever F reciprocates with the vibrator and operates to hold the same against turning

without interfering with its reciprocation. If desired, additional means, such as a key *n* on the part *m* entering a longitudinally-extending keyway *n'* in the vibrator, may be provided as an additional safeguard against axial turning of the vibrator. To prevent longitudinal movement of the shaft D, I provide collars *p p* thereon at opposite ends of the sleeve *e*.

The shell member C operates merely to house the projecting end of the lever F and prevent its striking the hand or clothes of the operator.

In practice it is usually desirable to cause the vibrator to have but little sweep when the massaging attachment is used as a pounder and greater sweep when it is employed as a chafer. The present construction permits the attachment to be used in either way and to effect the desired extent of thrust or sweep of the attachment in either case.

It is to be understood that any suitable number of variable cams or their equivalents may be provided for changing the sweep of the vibrator as desired, and the construction shown may be variously modified without departing from the spirit of the invention as expressed in the claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a massaging implement, the combina-

tion of a rotatable shaft, a vibrator for holding the massaging attachment, a plurality of variable shaft-actuated cams for actuating said vibrator, and means for bringing the cams into operation one at a time.

2. In a massaging implement, the combination of a rotatable shaft, a vibrator for holding the massaging attachment, a plurality of variable cams upon the shaft, and cam-engaging means on the vibrator adjustable to engage the cams one at a time.

3. In a massaging implement, the combination of a rotatable shaft, a vibrator for holding the massaging attachment, a plurality of variable cams upon the shaft, a movable key upon the vibrator for engaging the cams one at a time, and an operating-lever for the key.

4. In a massaging implement, the combination of a rotatable shaft provided with a head formed with a plurality of annular cams of different pitch, and a longitudinally-adjustable vibrator comprising a cylinder surrounding said head provided with a movable key for engaging said cams one at a time, and a projecting massaging-attachment holder.

JULIUS B. WANTZ.

In presence of—

WALTER N. WINBERG,
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