

No. 731,543.

PATENTED JUNE 23, 1903.

J. H. & C. CARPENTER.
MASSAGE INSTRUMENT.
APPLICATION FILED AUG. 15, 1902.

NO MODEL.

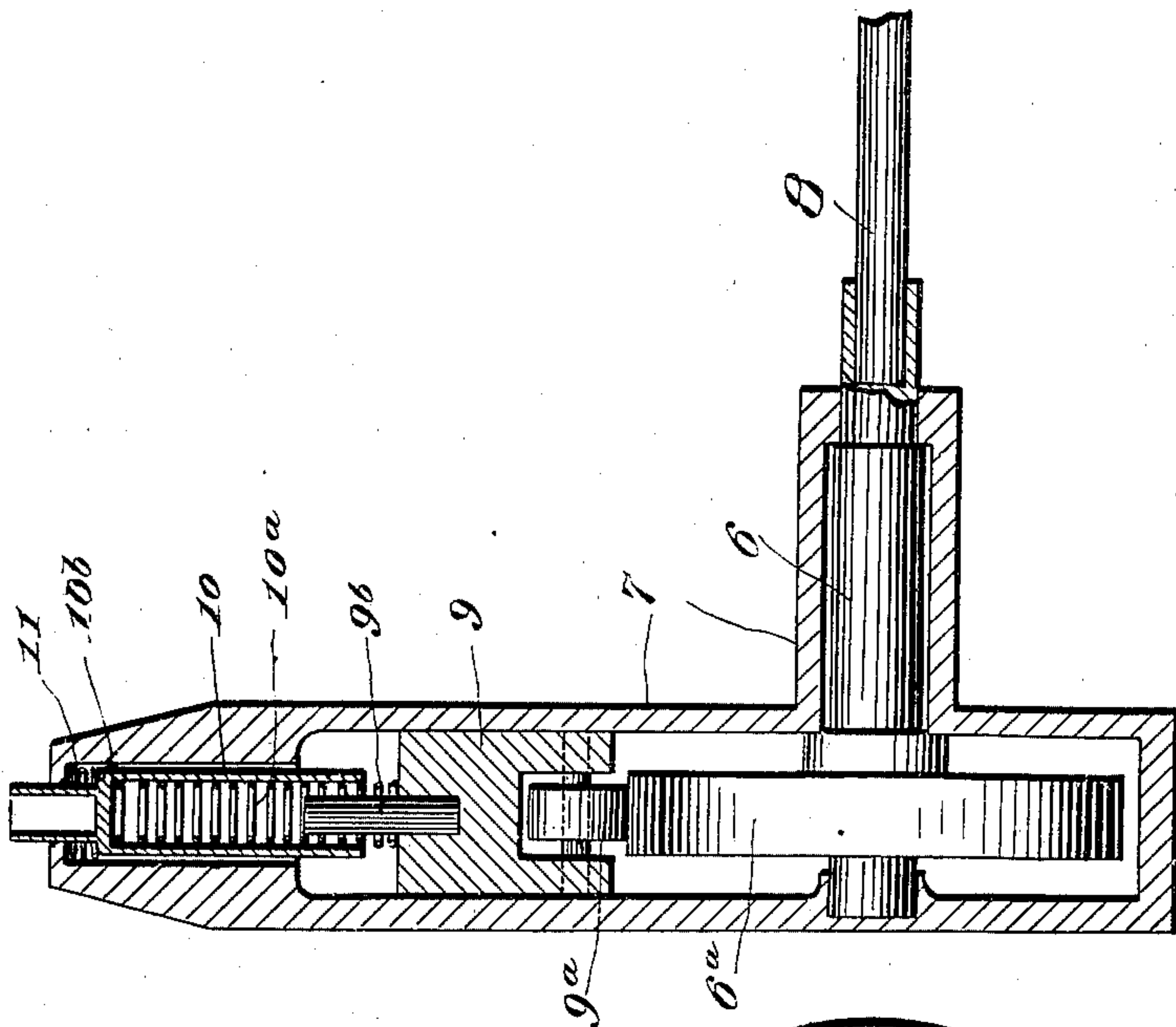


Fig. 2.

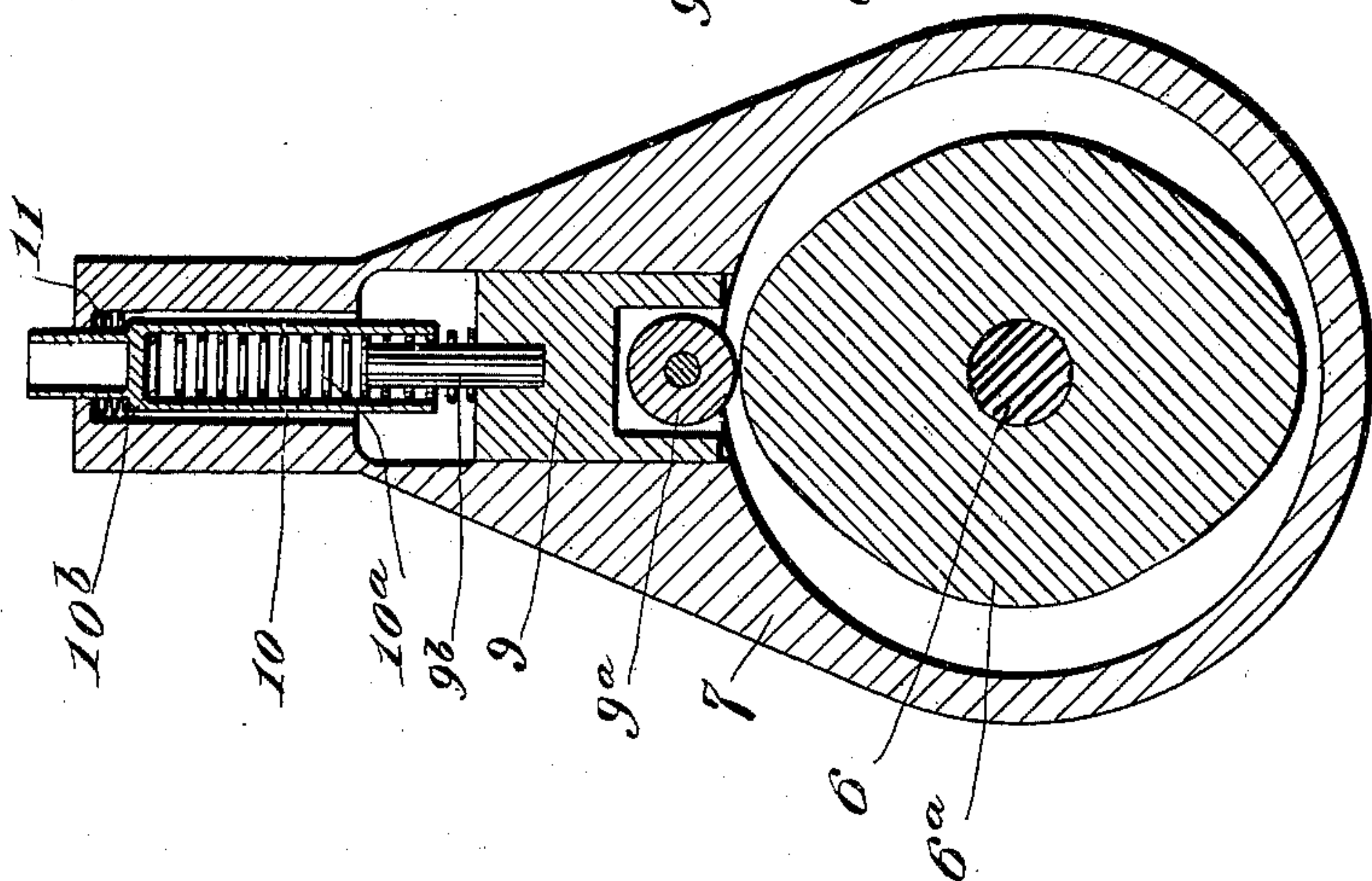


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. CARPENTER AND CHARLES CARPENTER, OF CHICAGO, ILLINOIS.

MASSAGE INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 731,543, dated June 23, 1903.

Application filed August 15, 1902. Serial No. 119,780. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. CARPENTER and CHARLES CARPENTER, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Massage Instruments; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a massage instrument by means of which rapidly successive shocks are imparted to the desired parts of the human body. In devices of this kind it is desirable that the shocks be cushioned or varied according to the nature of the parts being operated on and according to the strength or quality of the strokes desired to be given. Our apparatus is so constructed that the stroke may be varied by the amount of pressure applied to the instrument. Also the vibrating pitman which gives the stroke will yield upon contact with bony or hard structures of the body, avoiding bruising, which might otherwise result.

In the accompanying drawings, Figure 1 is a longitudinal section of the device. Fig. 2 is a cross-section thereof.

A shaft 6 is mounted in a casing 7, which casing forms a handle for the device, and the shaft is driven at high speed by connection with a flexible shafting 8, which may be operated by any suitable motor. The shaft imparts reciprocatory motion to a pitman head or block 9 by means of a cam 6^a, mounted on the shaft, the block 9 carrying a roller 9^a in contact with the cam to lessen friction. The reciprocating pitman 10 is hollow and is connected to the head 9 by a spring 10^a, which is coiled and seated in the hollow of the pitman and projects therefrom into contact with the head, where it is retained and guided by a pin 9^b. The outer end of the pitman-tube is reduced and projects through the casing, where the pad or massaging-body may be attached. The reduction of the pitman forms

a shoulder 10^b, between which and the end of the casing is a spring 11 in compression. The cam gives the outward movement or stroke to the pitman, and the spring 11 serves to give the return stroke and to retain the friction-wheel 9^a in contact with the face of the cam. The spring 10^a is stronger than the spring 11.

By the arrangement shown the pitman is not rigid, but is compressible. Normally the spring 10^a is inactive and the pitman takes the full stroke by compression of the spring 11; but if a hard or bony structure in the body be encountered the spring 10^a will cushion the stroke of the pitman. Also the quality or pressure of the stroke may be varied by varying the pressure of the instrument on the body. When the instrument is pressed so hard against the body that the spring 10^a is compressed as much as possible—that is, until the tube 10 contacts with the head 9—a rigid or unyielding stroke will be given; but if the pressure on the instrument be so light that said parts are not in contact the force of the stroke will be varied and cushioned by the spring 10^a, and the extent of this variation is according to the pressure on the instrument, since as the pressure is increased the spring will become more tense and a more rigid stroke will be given. The quality of the stroke can thereby be varied with great nicety by the operator to suit the patient or the parts being operated on.

What we claim as new is—

In a massage apparatus, in combination, a portable handle-casing, a reciprocatory pitman therein made in two parts, the outer of which is adapted to be connected to a massaging instrument, a spring between said parts, to cushion the pitman, means to give the outward stroke to the pitman, and a spring in the casing to return it, the latter spring being weaker than the former.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN H. CARPENTER.
CHARLES CARPENTER.

Witnesses:

NELLIE FELTSKOG,
H. G. BATCHELOR.