July 4, 1939. G. J. KADAVY 2,164,711

INSTRUMENT FOR DRAWING BLOOD

Filed Jan. 30, 1939

Fig. 2.

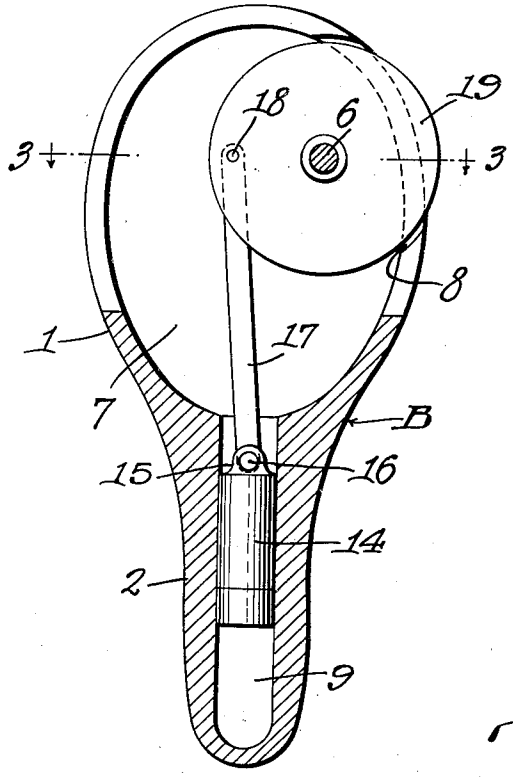


Fig. 1.

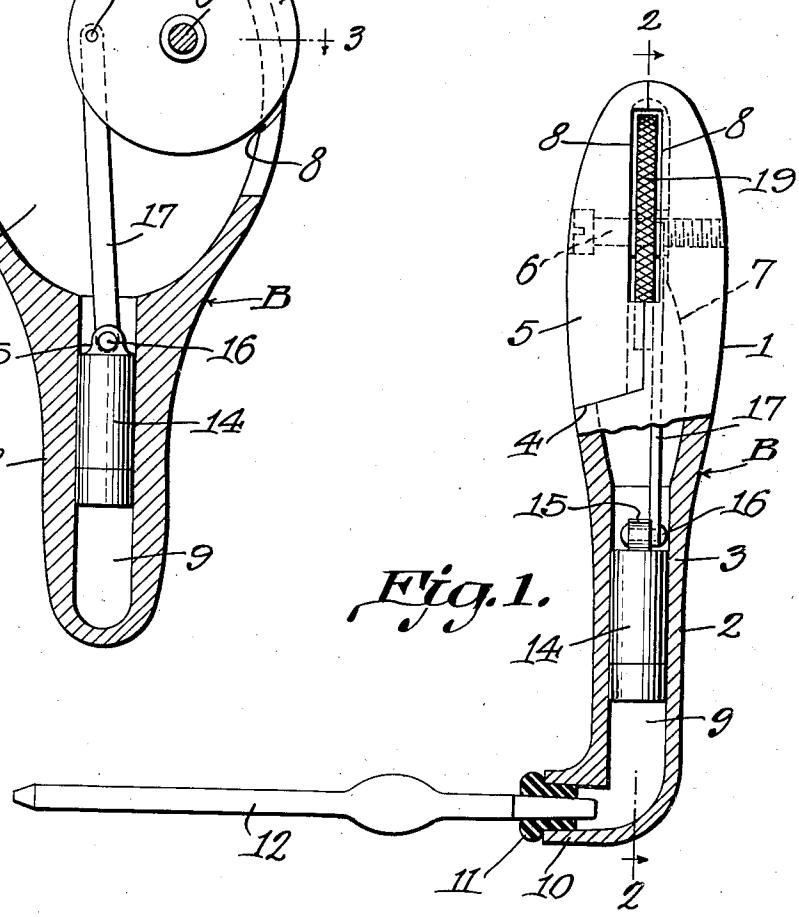
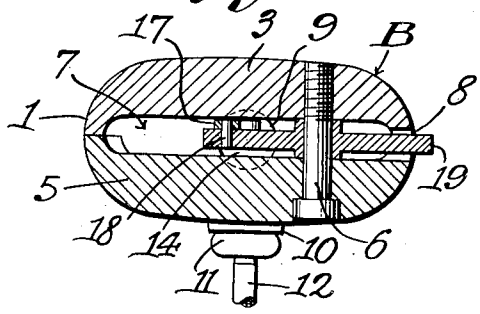


Fig. 3.



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INSTRUMENT FOR DRAWING BLOOD

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Application January 30, 1939, Serial No. 253,689

1 Claim. (Cl. 128—214)

In drawing human blood for a blood test, resorting to an established custom, a piece of rubber tubing is attached to a blood pipette, and mouth suction is applied to the rubber tubing, a custom having obvious disadvantages. This invention aims to provide a simple means for supplying mechanically produced suction, to draw blood, a novel mechanism being furnished for operating the pumping or suction means, said mechanism being capable of being actuated by the hand wherein the device is held.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawing:

Fig. 1 shows in side elevation, a device constructed in accordance with the invention, parts being broken away;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a section on the line 3—3 of Fig. 2.

In carrying out the invention, there is provided a body B, which is pear-shaped, as shown in Fig. 2. The body B is reduced in thickness, somewhat, as disclosed in Fig. 1, so that it can be held readily in the hand of an operator. As to shape, the body B includes a head 1 having a reduced neck 2. As to structure, the body B includes a main member 3, having a recess 4, adapted to receive a closure 5, the closure being held in place by a combined shaft and securing element 6, such as a screw. A chamber 7 is formed in the main member 3 and in the closure 5. There is, in the edge of the head 1, a slot 8, communicating with the chamber 7, and disposed partly in the closure 5 and partly in the main member 3. A cylinder 9 is formed in the neck 2. The neck 2 has a lateral extension 10, adapted to receive a rubber stopper 11, constituting means for holding a blood nozzle 12 in communication with the cylinder 9, the blood nozzle being the ordinary pipette.

A piston 14 is mounted for reciprocation in the cylinder 9, and is supplied at one end with a reduced fin 15, to one side of which is pivoted at 16, a pitman 17, the pitman being pivoted at 18 to a wheel 19 mounted to turn on the shaft or screw 6. The wheel 19 is located, for the most part, in the chamber 7, but a small portion of the wheel projects outwardly through the slot 8, the wheel 19 having a milled periphery.

The operator takes the instrument in one hand, and that hand may be used to turn the wheel 19, motion being transmitted to the piston 14 by way of the pitman 17, and blood being drawn into and ejected from the cylinder 9, by way of the pipette 12.

The instrument is very simple in construction and in operation but is thoroughly effective for the ends in view. It is unnecessary to apply suction to the pipette 12 from the operator's mouth. Since the instrument is both held and operated by one hand, the other hand of the surgeon is left free.

What is claimed is:

A device adapted to be used in such operations as drawing and delivering blood for tests, comprising a body shaped to be held in one hand, the body comprising suction and ejection means, and mechanism for actuating the suction and ejection means, said mechanism embodying a wheel mounted to rotate on the body and constituting the element to which operating force is applied initially, the wheel being of such diameter that it can be housed partially within the body, the diameter of the wheel being such, considered relatively to the width of the body, that the wheel will be exposed outwardly of the body for actuation by the hand in which the body is held, and whilst said hand retains its hold upon the body.

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