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PUMPING APPARATUS FOR MEDICAL TREATMENTS

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Fig. 1.

Fig. 2.

Fig. 3.

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PUMPING APPARATUS FOR MEDICAL TREATMENTS


The present invention relates to a pumping apparatus capable of various uses in medical treatments or operations.

An object of the invention is to provide a pumping apparatus to be used for an injection-syringe, whereby injections can be constantly injected.

Another object resides in a new sucking pump which particularly fits for hydrothorax, hydrocoelia, tumour in abdomen, etc.

Another object resides in a new apparatus for transfusion of blood whereby blood can be directly transfused from a man or animal to another.

Other objects and advantages will be seen when taken in connection with the accompanying description and drawing in which Fig. 1 is a side elevation of an embodiment of the invention (metallic strips and rubber tube are shown in section); Fig. 2 shows the plan; Fig. 3 is the end elevation in section along A—A.

In the drawing 1 indicates a rotatable cylinder provided with a male screw 2 around it.

If the axis 3 is rotated in the direction as shown in Fig. 1, the male screw 2 presses down some of the ends of the strips 4 penetrated by a rod 10 at their other ends in order from left to right, the constricted point 7 of the rubber tube 5 under the strips pressed down on the plate 6 moving from left to right.

Fluid in the rubber tube 5, either liquid or gas, is pressed by positive pressure occurring at the portion 8 before the constricted point and sucked by negative pressure occurring at the portion 9 behind the constricted point, thus being pumped constantly at a definite pressure as desired.

I claim:

1. A pumping apparatus for medical treatments, comprising a revolving cylinder provided with a male screw thereon, a file of metallic or like strips which are pressed down in order by the said screw and a conduit consisting of elastic material, preferably a rubber tube, which is always pressed by the metallic strips at least at one portion thereof to close the said conduit.

In testimony whereof I affix my signature.

YOSHINOBU WADA.