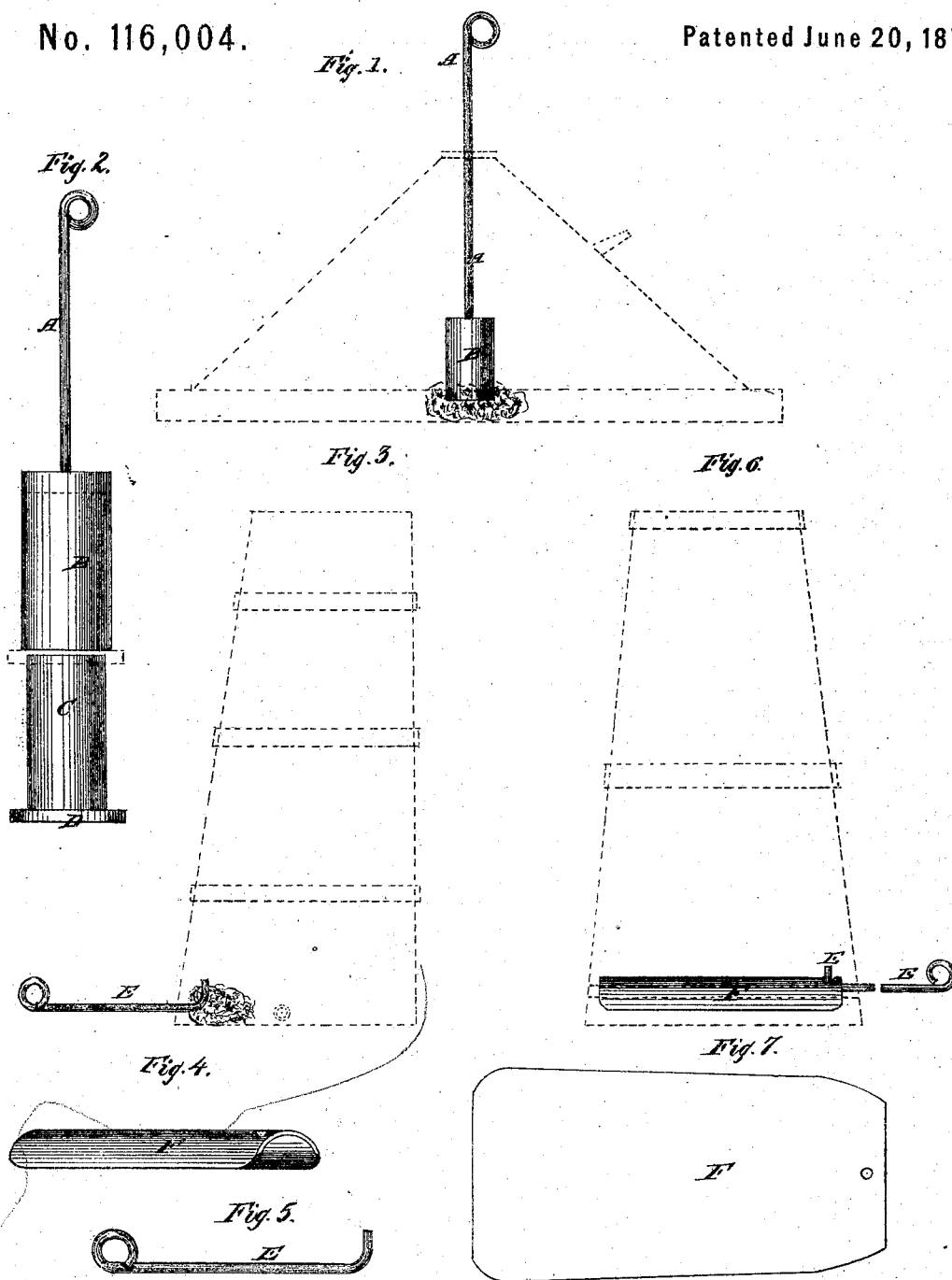


WILLIAM AMER.

Attachments for Vacuum Cups.

No. 116,004.

Patented June 20, 1871.



Witnesses:

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Inventor:

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PER

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UNITED STATES PATENT OFFICE.

WILLIAM AMER, OF JANESVILLE, WISCONSIN.

IMPROVEMENT IN ATTACHMENTS FOR VACUUM-CUPS.

Specification forming part of Letters Patent No. 116,004, dated June 20, 1871.

To all whom it may concern:

Be it known that I, WILLIAM AMER, of Janesville, in the county of Rock and State of Wisconsin, have invented a new and useful Improvement in Electro-Magnetic or Galvanic Attachment for Vacuum-Cups and Receivers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents my improved conductor as attached to one of Dr. Hadfield's cups. Fig. 2 represents my improved cup-conductor in connection with its regulating-tube and electrode cap. Fig. 3 represents one of my conductors as connected with one of Dr. Hadfield's receivers. Fig. 4 represents a metallic electrode designed for use with one of Dr. Hadfield's arm-receivers. Fig. 5 represents one of my improved conductors detached. Fig. 6 represents a metallic electrode and a conductor as attached to one of Dr. Hadfield's receivers. Fig. 7 represents one of my improved metallic electrodes designed for use with one of Dr. Hadfield's leg-receivers.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an electro-magnetic or galvanic attachment for Dr. Hadfield's vacuum-cups and receivers, patented January 1 and October 22, 1867, by the use of which an electric, galvanic, or magnetic action is exerted upon the selected nerves, and conveyed to any desired part of the nervous system at the same time that an influence is exerted upon the arteries, veins, and lymphatics, when a vacuum is produced in said cups or receivers; and it consists in the construction of the conductors and electrodes to adapt them for this use, as hereinafter more fully described.

A B is the conductor designed for use with Dr. Hadfield's cups. The upper part A consists of a copper-wire or other suitable conductor, the outer end of which is curved to receive and hold the attachment upon the end of the insulated cord that makes the connection with the battery. The conductor A passes through the top of Dr. Hadfield's cup, and to its inner end is attached a cup or tube, B, which forms the inner part of the conductor, and which is designed to receive and hold a

sponge saturated with a solution of the medical agent required. C is a tube fitting into or upon the cup B, and having a copper or other metallic electrode, D, attached to its lower end, the tube C enabling the electrode to be adjusted as required. The tube C also enables the electrode to be removed or exchanged, when desired, or when an electrode of a different character may be required. E represents my conductor designed for use with Dr. Hadfield's leg and arm receivers, and which is made of copper wires or other suitable electro-conductor. The outer end or part of the conductor is made similar to the outer end of the part A of the conductor A B. The inner end of the conductor E is bent up, as shown in Figs. 3, 5, and 6, to receive a sponge or other desired electrode. The conductor E is designed to be passed through a hole in one of Dr. Hadfield's arm or leg receivers, as shown in Figs. 3 and 6. F are metallic electrodes, which are designed to be placed in the arm or leg receiver, and is connected with the conductor E, as shown in Fig. 6. The metallic electrodes F are made of such a form as to fit upon the hand-rest of Dr. Hadfield's arm-receiver, or upon any desired part of the hand, arm, or leg.

By this attachment to Dr. Hadfield's cups and receivers an action is obtained upon the four most important systems at the same time.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The conductor A B, constructed, substantially as herein shown and described, to adapt it for use with Dr. Hadfield's vacuum-cups, as and for the purpose set forth.

2. The adjustable cap electrode C D, in combination with the conductor A B, substantially as herein shown and described, and for the purpose set forth.

3. The conductor E, constructed, substantially as herein shown and described, to adapt it for use with Dr. Hadfield's receivers, as and for the purpose set forth.

4. The metallic electrodes F, constructed, substantially as herein shown and described, to adapt them, in connection with the conductor E, to be used with Dr. Hadfield's receivers, as and for the purpose set forth.

Witnesses:

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