

H. M. MAGILL.
EMERGENCY WOUND CLOSER.
APPLICATION FILED AUG. 7, 1917.

1,251,258.

Patented Dec. 25, 1917.

FIG. 1.

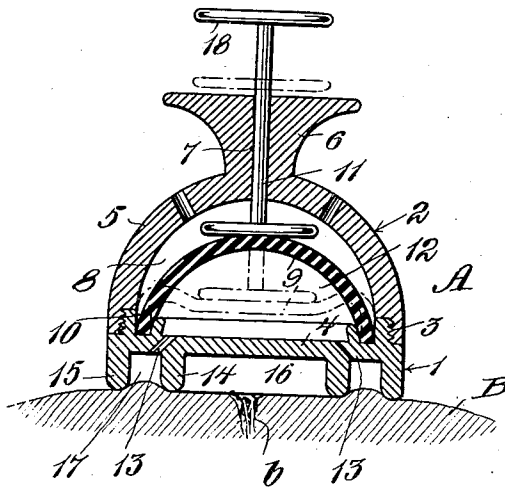
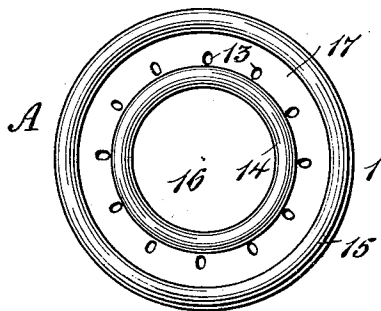


FIG. 2.



WITNESSES

Chas. H. Leibman
C. Bradway

INVENTOR

H.M. Magill
BY *Wm. C. Munn*
ATTORNEYS

UNITED STATES PATENT OFFICE.

HARRISON M. MAGILL, OF TULSA, OKLAHOMA.

EMERGENCY WOUND-CLOSER.

1,251,258.

Specification of Letters Patent.

Patented Dec. 25, 1917.

Application filed August 7, 1917. Serial No. 184,849.

To all whom it may concern:

Be it known that I, HARRISON M. MAGILL, a citizen of the United States, and a resident of Tulsa, in the county of Tulsa and State of Oklahoma, have invented a new and Improved Emergency Wound-Closer, of which the following is a full, clear, and exact description.

This invention relates to an emergency surgical appliance to prevent excessive bleeding in a small wound when a blood vessel has been punctured, and is adapted to be used until proper medical treatment can be obtained.

The invention has for its general objects to provide a device of comparatively simple and inexpensive construction, so designed as to take up very little space, so that it can be conveniently carried as a part of a first-aid kit and at the same time the device can be easily self-applied, whereby it is of inestimable value to soldiers in the case of bullet wounds, to prevent excessive bleeding until the wound can be properly treated.

A more specific object of the invention is the provision of a novel form of cup device which creates a suction on the skin in an annular or elliptical line surrounding and spaced from the wound, whereby the device is firmly held in place while the inner chamber or cup of the device over the wound seals the latter and holds the blood which coagulates, the device being provided with a chamber which is exhausted of air before the device is applied to the skin, and then a vacuum is produced in the chamber to produce the suction that holds the device in place, as described.

With such objects in view, and others which will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention and wherein similar characters of reference indicate corresponding parts in both the views,

Figure 1 is a central vertical section of the device applied to a wound; and
Fig. 2 is a bottom plan view.

Referring to the drawing, the emergency wound closing device A is shown applied to a wounded part B, which is punctured at b.

The device A comprises a bottom section 1 and an upper section 2, both of which are preferably made of hard rubber and removably connected together by a screw thread 3. The bottom section embodies a plate 4, while the upper section is a dome-like body 5 having a knob extension 6 in which is a central passage 7. The two sections cooperate to form a chamber 8 in which is an approximately hemispherical bulb 9 of soft rubber which has its bottom edge confined in a channel 10 in the top surface of the lower section 1. A plunger 11 is slidable in the passage 7 and engages the bulb to depress the same, as shown by broken lines, whereby air is expelled from the suction chamber 12 through a plurality of openings 13 in the section 1. The bottom of the section 1 is provided with concentric flanges 14 and 15, whereby the space within the flange 14 constitutes a wound-closing chamber or cup 16, and the annular space 17 between the flanges constitutes a suction channel with which the apertures 13 connect.

In the use of the device the pushbutton 18 of the plunger is pressed inwardly so as to deflate the bulb 9, this being done before the device is applied to the wound. While the bulb is held deflated the device is applied to the wound as shown in Fig. 1, with the wound b surrounded by the flange 14. The pressure on the pushbutton 18 is now relieved, so that a suction is produced by the expanding of the bulb 9, whereby the skin is sucked upwardly into the channel 17, so that the device is firmly anchored on the wounded part. The blood that flows out of the wound soon fills the chamber 16 and coagulates therein, so that excessive bleeding is thereby avoided. Obviously the channel 17 may be of any desired shape according to the nature of the wound to be surrounded.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains, and while I have described the principle of operation, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as fall within the scope of the appended claims.

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

1. A wound closing device comprising a
5 body having its bottom formed with a chamber adapted to be applied over the wound, and a channel surrounding and non-communicating with the said chamber, said channel having ports, a bulb arranged in
10 the body and having its interior communicating through the ports with the said channel, and a movable plunger guided in the body and engaged with the bulb for deflating the same.
- 15 2. A wound closing device comprising a body formed with a chamber, a bulb in the said chamber, the body being formed with a knob, a plunger slidable through the knob and having a button on its outer end where-

by the thumb can press the button while the 20 knob is held between the fingers of the same hand, the bottom of the body being formed with a chamber adapted to be applied over the wound, a channel surrounding the last-mentioned chamber, and ports connecting 25 the channel with the said bulb.

3. A wound closing device comprising a body formed of an upper and lower part, the upper part being provided with a knob, a bulb disposed between the said parts, a 30 plunger guided in the knob and adapted to deflate the bulb, the lower part being provided with a chamber adapted to be placed over the wound and also provided with a channel surrounding the chamber, and ports 35 in the lower part connecting the channel with the interior of the bulb.

HARRISON M. MAGILL.