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S. M. WADE

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THERAPEUTIC AGENT

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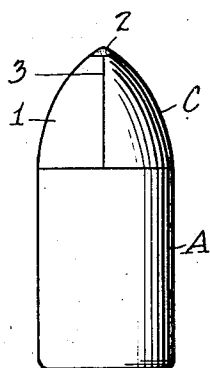


Fig. 1

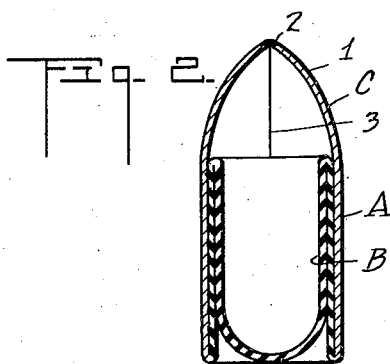


Fig. 2

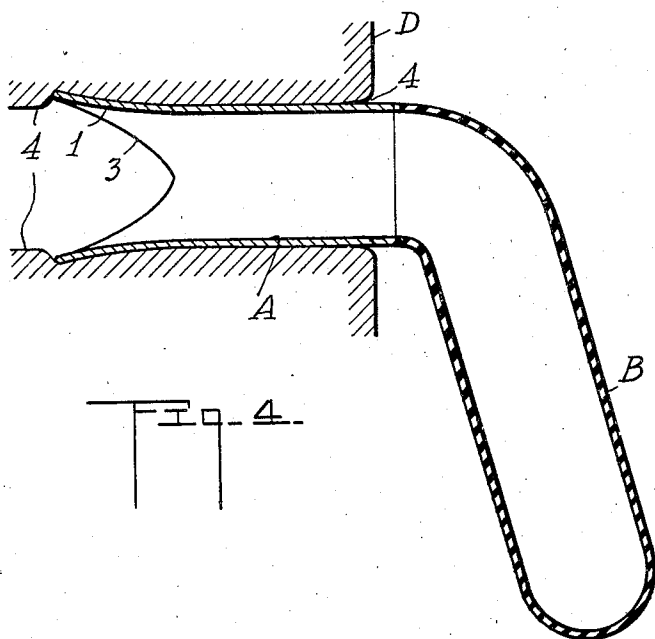


Fig. 4

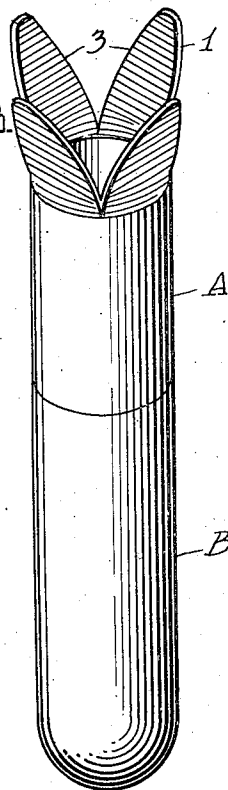


Fig. 3

INVENTOR.  
STANLEY M. WADE

BY  
*Munn, Riddy & Glaccum*  
ATTORNEYS.

## UNITED STATES PATENT OFFICE

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## THERAPEUTIC AGENT

Stanley M. Wade, Benicia, Calif., assignor of one-half to John R. Wiederrich, Lodi, Calif.

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2 Claims. (Cl. 128—350)

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An object of my invention is to provide a therapeutic agent that may be placed in an incision or other opening in the body without the necessity of using any instrument or tool and which will provide means for retaining itself in the body and for holding any liquid that may drain from the incision or other body opening. The device may be removed and a new one substituted at will.

A further object of my invention is to provide a device of the type described which is simple in construction and automatic in operation. The heat and moisture of the body causes the device to free body gripping means for holding the device in the opening, the same means performing the additional function of guiding the body drainage into the device where it is retained. The device is sanitary in that its interior is sealed until the device is placed in the body.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming a part of this application, in which:

Figure 1 is a side elevation of the device shown in closed and compact position;

Figure 2 is a vertical section through the device;

Figure 3 shows the device open and the receptacle distended; and

Figure 4 shows the device placed in an incision in a body.

While I have shown only the preferred form of my invention, it should be understood that various changes or modifications may be made within the scope of the appended claims without departing from the spirit and scope of the invention.

In carrying out my invention, I provide a tube which has its upper one-third, shown at A, made of a heavier material than the lower two-thirds, indicated generally at B. In actual practice the upper one-third may be made from a hard rubber or other similar material, and the lower two-thirds may be made of a soft rubber or synthetic material. At the top of the upper one-third of the tube, I provide a plurality of wings indicated generally at 1. When the tube is formed the wings are arranged so as to assume the position shown in Figure 3. The wings may be forced together to provide a conical end as shown at C in Figures 1 and 2. The tube is alated by this arrangement so that when the wings are freed they will open up into four wing-like appendages as illustrated in Figure 3.

Figure 1 shows the wings 1 held in closed posi-

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tion by a drop of adhesive, indicated generally at 2. The adhesive is preferably placed at the juncture of the tips of the four wings and if desired the adhesive may extend down along the arcuate edges 3 of the wings so as to hermetically seal the top of the tube A. When the wings are closed they will form the smooth conical head C and this head can be inserted into an incision 4 of the human body D, see Figure 4. The incision or orifice receives the portion A of the tube. As soon as the tube A enters the incision, the body heat and/or moisture will rapidly dissolve the adhesive 2, permitting the four wing-like appendages to open and to endeavor to assume their normal outwardly inclined shape. The wings are made of a material that has elasticity and therefore the wings will yieldingly bear against the wall of the incision or orifice 4 and will hold the tube A against accidental removal. The wings 1 will also guide any fluid from the incision or opening into the tube portion A.

The lower portion B of the tube is normally folded into the portion A in any manner desired, one particular way being shown in Figure 2. The device when folded is compact in size. When the tube is inserted into the orifice 4, the closed end B will still be disposed within the portion A. Any drainage from the incision or orifice 4 will pass into the tube A and will force the tube portion B into a distended position as shown in Figure 4. The closed end B will act as a retainer for holding the fluid draining from the body.

The size and scale of the wings 1 will depend upon the size of the tube A and the size of the tube in turn will depend upon the size of the incision or orifice that is to receive the tube. When the closed tube end B or sack becomes filled with fluid, the device may be withdrawn from the incision and a new one substituted.

I claim:

1. A device of the type described comprising a tubular member having resilient wing-like portions adapted to be closed and form a conical top, an adhesive for holding the wings in closed position and being meltable at human body heat and/or moisture to free the wings, a sack-like member depending from the tubular member and being of the same diameter, the sack-like member being normally folded within the tubular member, the wings when closed and forming the conical top aiding the insertion of the tubular member into a body opening, the wings when freed, yieldingly engaging with the wall of the opening for preventing the accidental removal of the device.

2. A device of the type described comprising a tubular member adapted to enter an opening of the human body, the top of the member having wings adapted to flare outwardly when freed, an adhesive for holding the wings in closed position, the wings when in this position forming a closed conical top for the member that will aid the member in being moved into the opening, the adhesive being meltable at body heat and/or moisture, said tube being closed at its other end, this end being made of a soft flexible material that will permit its being initially folded into the upper portion of the tubular member, thereby making the device more compact.

STANLEY M. WADE.

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## REFERENCES CITED

The following references are of record in the file of this patent:

## UNITED STATES PATENTS

| Number    | Name       | Date          |
|-----------|------------|---------------|
| 1,687,717 | Epstein    | Oct. 16, 1928 |
| 2,063,202 | Spicer     | Dec. 8, 1936  |
| 2,176,559 | Meckstroth | Oct. 17, 1939 |

## FOREIGN PATENTS

| Number  | Country | Date          |
|---------|---------|---------------|
| 406,507 | Germany | Nov. 24, 1924 |