Dec. 8, 1964 P. J. RAYHART 3,160,158

SUPPORT FOR CATHETER AND THE LIKE

Filed Oct. 4, 1963

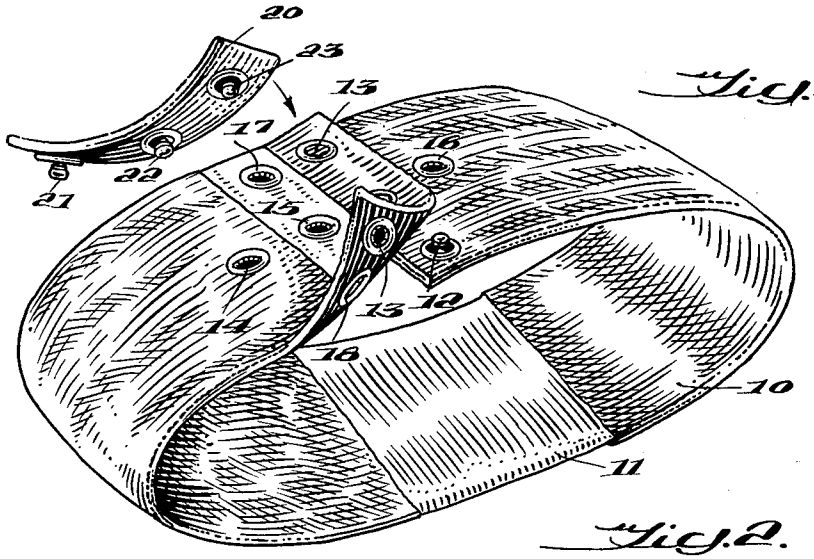


Fig. 1.

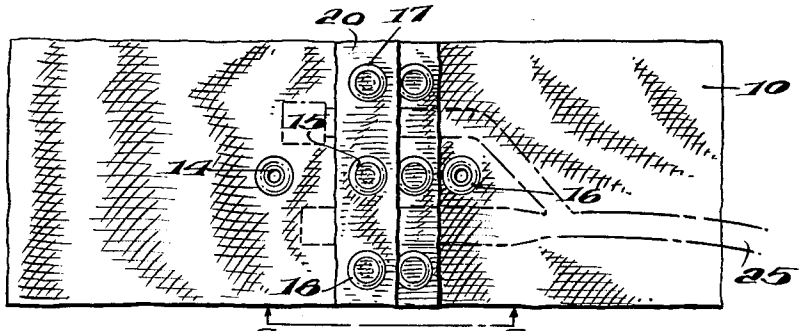


Fig. 2.

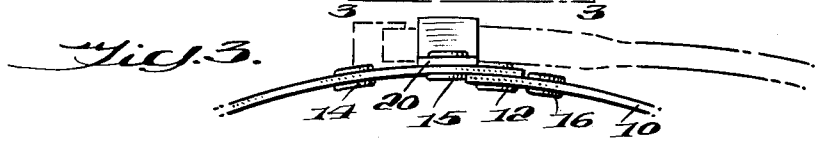
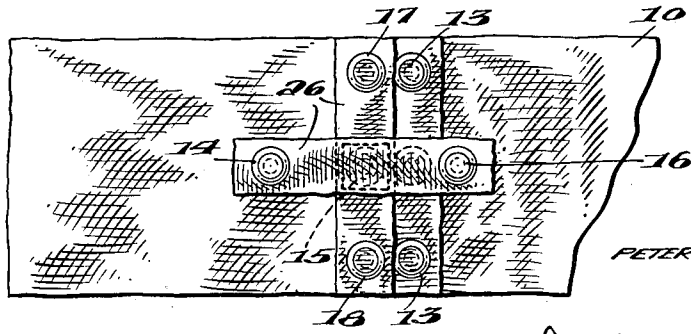


Fig. 3.

Fig. 4.



INVENTOR
PETER J. RAYHART,

BY Dan J. Hatfield

ATTORNEY

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SUPPORT FOR CATHETER AND THE LIKE

Peter J. Rayhart, 2636 Quinton St., Shreveport, La.

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This invention relates to a surgical device and more particularly, to a support for immobilizing a tube having a needle or other surgical appliance attached thereto, such as a catheter or the like.

It is well known that certain types of intravenous medication requires considerable time and it is the customary practice to hold the tube to the patient's body by means of adhesive tape. Further, in certain types of diseases it is necessary to siphon off supernatant fluids. For instance, in certain diseases of the bladder, prostate gland, and the like it is frequently necessary to use a catheter to continuously drain the bladder. Many devices have been improvised to hold the tubular member to the patient's body but such devices have not met with any particular commercial success as they have either been too expensive, uncomfortable to the patient, or they cannot hold the tubing at the appropriate angle commensurate with the angle of insertion of the surgical device.

It is, therefore, the principal object of this invention to provide a support for a tubular member having a surgical device secured thereto which will retain the tubular member at the appropriate angle commensurate with the angle of insertion of the surgical device.

Another main object of the invention is to retain the tubular member in its proper position without any discomfort to the patient.

Still another object of the invention is to provide a support for a tubular member which is simple in construction, efficient in operation and which may be economically manufactured.

Other objects of the invention will be apparent to those skilled in the art from the following specification when read in conjunction with the drawings.

In the drawings:

FIGURE 1 is an exploded perspective view of the support;

FIGURE 2 is a top plane view of the support illustrating one manner of holding a bifurcated tube;

FIGURE 3 is a partial view in side elevation of FIGURE 2; while,

FIGURE 4 is a top plane view of a modification of the invention.

In the drawings, reference character **10** indicates an elongated strap made of soft, stockingette material. The length of the strap **10** will vary in accordance to the portion of the anatomy which it is intended to embrace. The strap **10** may embrace a patient's extremity such as an arm or a leg, or it may be enlarged sufficiently to embrace the patient's torso. The strap **10** may have a portion thereof formed of elastic material, such as indicated at **11**. One end of the strap **10** is provided with a plurality of stud portions of snap fasteners **12** while the other end of the strap is provided with a plurality of complementary socket portions of snap fasteners **13**, which portions **13** and **12** provide means for securing the ends of the strap **10** together.

One end of the strap **10** is also provided with a pair of socket portions of snap fasteners **14** and **15** while the other end of the strap is provided with a socket portion of a snap fastener **16**, the socket portions **14**, **15** and **16** forming an aligned row of spaced socket portions which extend longitudinally of the strap **10**. In addition, socket portions of snap fasteners **17** and **18** are aligned with the central socket portion **15** to provide a row of spaced aligned socket portions of snap fasteners which extend

transversely to the strap **10**. It will be seen that the socket portions **14–18** thus provide an array of spaced socket portions in the form of a cross.

A strip of flexible fabric material **20** has a plurality of spaced stud portions of snap fasteners **21**, **22** and **23** secured thereto. As shown in FIGURE 2 of the drawings, the strip **20** may be secured to the strap **10** transversely thereof through the cooperation of sockets **17**, **15** and **18** with studs **21**, **22** and **23**, respectively.

When it is desired to secure a tubular member such as indicated by reference **25** which has a bifurcated portion in a position to be longitudinally aligned with the strap **10**, the tubular member may be placed on either side of the central socket **15**, after which the strip **20** may be snap fastened through the cooperation of sockets **17**, **15** and **18** and studs **21**, **22** and **23**, respectively, to securely hold the tubular member **25** in the position illustrated in FIGURE 2. Should it be desired to hold the tubular member **25** in a position transverse to the strap **10**, the bifurcated portion of the tubular member **25** should be arranged at right angles to that shown in FIGURE 2 and, again, on either side of the central socket **15** after which the strip **20** is secured to the strap **10** through the cooperation of sockets **14**, **15** and **16** and studs **21**, **22** and **23**, respectively.

If a single tube is to be secured to the strap **10**, it will be understood that such tube may be positioned on either side of the central socket **15** and the strip **20** may be secured to the strap **10** over the tubular member in either longitudinal alignment or transversely thereof.

In the modification as shown in FIGURE 4, the same arrangement of socket members are provided as that shown in FIGURES 1 and 2. However, the strip **26** is in the form of a cross and is provided with stud portions of snap fasteners to cooperate with each of the sockets **14–18**. In this form of the invention, it will be appreciated that a single tube may assume any one of eight different positions, but in each instance, the tube would be positioned between the central socket and any one of the four other sockets. Thus, the tubular member may be secured to the strap **10** at almost any desired angle relative thereto.

It will be understood that the spacing between the fasteners will be such as to frictionally secure the tubing in its proper position but will be sufficient to prevent compression of the tubing.

What is claimed is:

1. A device for securing a tubular member having a surgical instrument such as a cannula, catheter and the like connected thereto adjacent a portion of an animal in fixed relation comprising a strap of flexible material adapted to surround a portion of the body of the animal and having means thereon adjacent the ends thereof detachably securing the ends of the strap together, and a strip of flexible material detachably connected thereto, said strip and strap each having a plurality of cooperating parts secured thereto forming a plurality of spaced snap fasteners thereon, said cooperating parts of snap fasteners on said strip being aligned in a row, the cooperating parts of snap fasteners secured to said strap including five in number and being aligned in a pair of rows, said rows of cooperating parts of snap fasteners on said strap crossing each other and one cooperating part being in each row with the other cooperating parts extending above, below and on each side of said one cooperating part, whereby said strip may be secured to said strap in either of said rows so that a tubular member may be secured between the strip and strap and positioned between said one cooperating part on said strap and any of the other four cooperating parts on said strap.

2. A device for securing a tubular member having a

surgical instrument such as a cannula, catheter and the like connected thereto adjacent a portion of an animal in fixed relation comprising a strap of flexible material adapted to surround a portion of the body of the animal and having means thereon adjacent the ends thereof detachably securing the ends of the strap together, and a strip of flexible material detachably connected thereto, said strip and strap each having a plurality of cooperating parts secured thereto forming a plurality of spaced snap fasteners thereon, said strip being in the form of a cross and the cooperating parts of snap fasteners on said cross being aligned in a pair of rows and including five in number and with one cooperating part being in each row and the other cooperating parts extending above, below and on each side of said one cooperating part, the cooperating parts of snap fasteners secured to said strap including five in number and being aligned in a pair of rows, said rows of cooperating parts of snap fasteners

on said strap crossing each other and one cooperating part being in each row with the other cooperating parts extending above, below and on each side of said one cooperating part, whereby when said strip is secured to said strap, a tubular member may be secured between the strip and strap and positioned between the said one cooperating part in each row and any of the other four cooperating parts.

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RICHARD A. GAUDET, *Primary Examiner.*