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A. H. BRAECKLEIN

SURGICAL DEVICE Filed May 1, 1923







A.H.Braecklein INVENTOR BY Vietor J. Enange ATTORNEY

R.a. Thomas

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WITNESSFS

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UNITED STATES PATENT OFFICE.

ALFRED H. BRAECKLEIN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO MARGUERITE A. BRAECKLEIN, OF BALTIMORE, MARYLAND.

SURGICAL DEVICE.

Application filed May 1, 1923. Serial No. 636,012.

To all whom it may concern: Be it known that I, ALFRED H. BRAECK-LEIN, a citizen of the United States, resid-ing at Baltimore, in the county of Balti-5 more City and State of Maryland, have invented new and useful Improvements in

- Surgical Devices, of which the following is a specification.
- This invention relates to improvement in 10 tourniquets.
 - An object of the present invention is to provide a tourniquet which is especially adapted for use in intravenous treatments in that it may be easily and instantly re-
- 15 leased without interference with the operation or danger of the needle being acci-dentally withdrawn from the vein.

Another object of the invention is the provision of a tourniquet whereby an even

20 'pull may be made in adjusting the loop, so that an even pressure all around is exerted and folding or pinching of the flesh pre-vented, provision being made for taking member 10 so as to resist enlargement of care of such flesh as might be gathered, the loop but will permit free relative move-25 without inconvenience to the patient.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, 30 illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings:-

- Figure 1 is a plan view of the invention. Figure 2 is a central longitudinal sec-
- 35 tional view of the same.
 - Figure 3 is a detail perspective view of

the clamping member. Referring in detail to the drawings wherein like characters of reference denote

corresponding parts, the reference charac-ter 10 indicates a flexible member which 40may be formed of rubber or other suitable material. This member is arranged to pro-vide a loop 11 and for this purpose there is 45 utilized a clamp 12 through which the ends

of the loop 11 pass.

The clamp 12 is of tubular construction being preferably rectangular in cross section, being of sufficient transverse area to

permit of the free passage of the ends of Having de the loop. The side walls of one end of the claimed is:-50 tubular member are outwardly flared as indicated at 13 and this end of the said mem- member arranged in loop formation, a ber is also provided with oppositely ex- clamp mounted thereon, said clamp com-

which provide transversely aligned faces 15. The construction at this end of the tubular member permits of the formation of a sub-stantially round loop without abruptly bending the flexible member 10, the faces 15 60 forming a portion of this loop as will be readily seen by reference to the dotted loop shown in Figure 1 of the drawings. Also, by this arrangement any tendency of the patient's flesh to gather will be taken care 65 of at this portion of the loop. It is to be observed however that this tendency is practically entirely eliminated by reason of the fact that both ends of the loop may be si-multaneously drawn through the tubular 70 member so that an even pull and an even pressure is provided all around.

The side walls of the tubular member are provided with oppositely located inclined slots 16 and extending through these slots is 75 a bar 17 which, as shown in Figure 2, is ment of the flexible member and clamp for 80 the purpose of reducing the size of the loop.

To provide sufficient length for the slots 16, the tubular member is formed with an offset 18 while the bar 17 at each end is provided with a knob or head 19. These knobs 85 or heads act to hold the bar in place and provide means whereby the bar may be readily moved to released position and permit of free movement of the flexible member in either direction.

It will be apparent from the foregoing description and accompanying drawings that the invention provides a tourniquet which may be used for any and all purposes for which such a device is adapted. It is 95 especially adapted however for intravenous treatments in that it is capable of being easily and instantly released.

The invention is susceptible of various changes in its form, proportions and minor 100 details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having described the invention what is 105

1. A tourniquet comprising a flexible 55 tending right angularly disposed flanges 14 prising a tubular member adapted to receive 110

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both ends of the loop, a flared mouth at one member extending from said mouth, outend of said tubular member for the passage of the flexible member, spaced flanges extending upon opposite sides of the mouth, 5 means carried by the tubular member and engaging the flexible member to permit movement of the latter through the tubular member in one direction, but holding the flexible member against movement in an op-10 posite direction and means whereby the holding means may be instantly released.

2. A tourniquet comprising an elongated tubular member having an outwardly flared mouth at one end thereof, a looped flexible member extending through the tubular member with the looped end of said flexible

wardly disposed curved flanges extending longitudinally upon opposite sides of the mouth and cooperating with the flexible 20 member to provide a substantially annular encircling loop and means carried by the tubular member and engaging the flexible member to permit movement of the latter through the tubular member in one direc- 25 tion but holding said flexible member against movement in an opposite direction and means whereby the holding means may be released.

In testimony whereof I affix my signature.

ALFRED H. BRAECKLEIN.