A. BITTERLICH.

SURGICAL APPLIANCE.

APPLICATION FILED APR. 29, 1911.

1,013,924. Patented Jan. 9, 1912.

Fig: 1

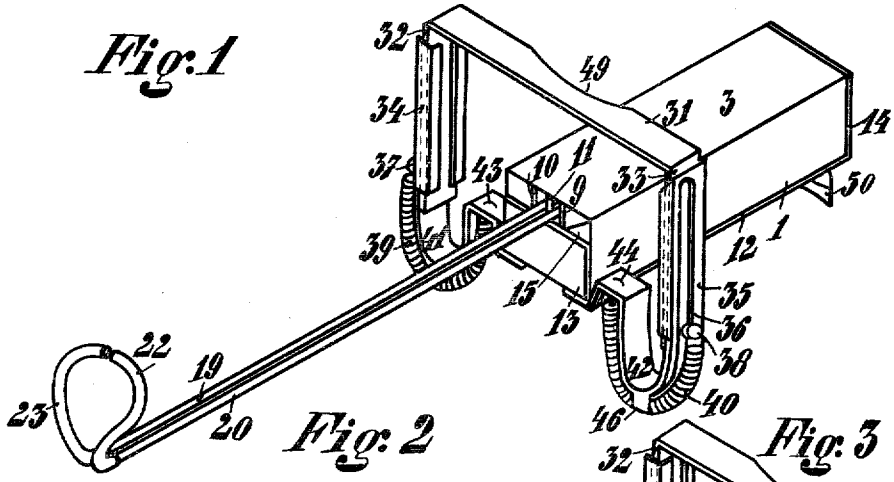


Fig: 2

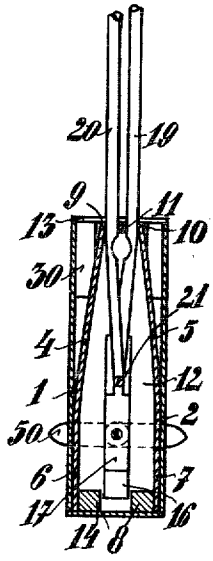


Fig: 3

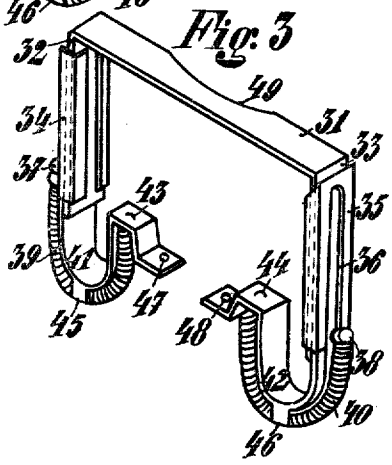


Fig: 4

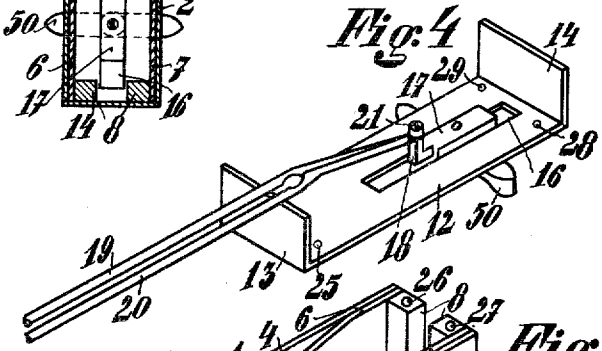
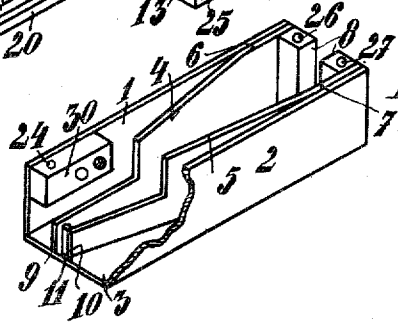


Fig: 5



Witnesses:

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UNITED STATES PATENT OFFICE.

1,013,924. SURGICAL APPLIANCE. ALBERT BITTERLICH, Cassel, Germany. Filed Apr. 29, 1911. Serial No. 624,051.

To all whom it may concern:

Be it known that I, ALBERT BITTERLICH, a citizen of the Empire of Germany, residing at Cassel, in the Empire of Germany, have invented a new and useful Surgical Appliance, of which the following is a specification.

My invention relates to improvements in surgical appliances adapted to assist feeble or crooked male generative organs in the natural performance of their function in coition.

The objects of my improvement are to render the appliance not only adjustable but also positively fixable in the longitudinal direction, further elastic, exchangeable and easy of cleaning in all its parts. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of the whole surgical appliance, Fig. 2 is a horizontal section through the casing in the plane of the two supporting wires, parts of which latter are broken away, Fig. 3 is a separate perspective view of the elastic frame, Fig. 4 is a perspective view of the shutter of the casing and the two supporting wires, parts of which latter are broken away, and Fig. 5 is a perspective view of the casing.

Similar characters of reference refer to similar parts throughout the several views.

The casing shown at Fig. 5 comprises two opposite side walls 1 and 2 and a bottom 3, which parts are in any known manner rigidly connected together. In this casing 1, 2, 3 two opposite leaf springs 4 and 5 are in any known manner fastened with their rear ends to the two side walls 1 and 2 by means of two opposite blocks 8 (Figs. 2 and 5), while two opposite blocks 30 are fastened to the two side walls 1, 2 at their upper front corners on the inside. The two leaf springs 4, 5 are at their front end cut out, so as to be able to severally engage beneath the two blocks 30. A pin 11 is fastened in the middle of the bottom 3 close to the front edge and the two leaf springs 4, 5 are made to normally lean with their free ends against this pin 11. The two blocks 8 are in their top faces provided with two screw-threaded holes 26 and 27, while the two blocks 30 are similarly provided with two screw-threaded holes 24.

The shutter of the casing shown at Fig. 4 comprises a plate 12 and two end plates 13 and 14, which parts in any known manner are rigidly connected together. The plate 12 has in the corners four holes 25, 28, 29 adapted to register with the above mentioned four holes 24, 26, 27 in the casing 1, 2, 3. The plate 12 has moreover a longitudinal slot 16, in which a slide 17 can be longitudinally adjusted, while it can be secured in any position by means of a screw and a winged nut 50. The slide 17 is made in one with a stud 18 provided in its upper end face with a screw-threaded hole, in which a screw 21 with a slotted head can engage. This screw 21 has close to its head a smooth portion, on which the superposed ends of two supporting wires 19 and 20 are made to rock. The front plate 13 is made somewhat lower than the rear plate 14, so that on putting together the casing 1, 2, 3 and the shutter 12, 13, 14 a slot 15 (Fig. 1) will be left between the bottom 3 and the edge of the front plate 13. In this slot 15 the two supporting wires 19 and 20 can move horizontally. As is clearly shown at Fig. 2, the two leaf springs 4, 5 are adapted to press with their free ends the two supporting wires 19, 20 from opposite sides against the pin 11, so that in this normal position the portions of the wires 19, 20 projecting from the casing are parallel to one another. The two wires 19, 20 are at their ends bent, upwardly extended, laterally curved and rearwardly inclined adjacent to the bends, so that a somewhat circular opening is formed, through which the penis can pass. Preferably tubes 22 and 23 of india rubber are put over the bent ends of the wires, so as to protect the corona glandis from chafing.

The elastic frame shown at Fig. 3 consists of a U-shaped bow 31, 32, 33 and two separate guides 34, 35 made in one with two bent parts 41, 42 of the shape shown. The two arms 32, 33 of the bow 31, 32, 33 are guided in the two guides 34, 35 and have two pins 37, 38, which project through slots 36 provided in the guides. The pins 37, 38 are connected with helical springs 39, 40, which pass over the bent parts 41, 42 and are connected at their other end with these parts at 43 and 44 respectively. In order to protect the two helical springs 39, 40 from slipping off the bent parts 41, 42, the latter are provided with two pairs of opposite lugs 45, 46, between which the springs pass. The two strained helical springs 39, 40 tend to press by means of the two pins 37, 38 the bow 31, 32, 33 downward in Fig. 3. The inner ends of the two bent parts 41, 42 have holes 47 and 48, which are adapted to register with the two holes 25 in the plate 12. As is clearly shown at Fig. 1, the inner ends of the two bent parts 41, 42 are applied from below to the plate 12 of the shutter 12, 13, 14, after which two screws with slotted heads are passed through the holes 47, 48 of the parts 41, 42 and through the holes 25 of the plate 12 and are screwed into the holes 24 of the two blocks 30, while two other screws with slotted heads are passed through the holes 28, 29 of the plate 12 and are screwed into the holes 26, 27 of the two blocks 8. In this manner the whole appli-

ance is put together. It is evident, that the appliance can easily be taken to pieces for cleaning its several parts.

It is to be noted, that the horizontal part 31 of the bow 31, 32, 33 is preferably cut out at 49, so as to position the appliance on the human body, the horizontal part 31 serving to compress the dorsal vein of a male generative organ, upon which it is placed immediately adjacent to the abdominal wall.

In applying the instrument first the winged nut 50 is loosened, then the frame shown at Fig. 3 is vertically extended by hand while overcoming the strain of the two helical springs 39, 40 and the organ to be extended is passed under the upper part 31 of the same forward, after which the two supporting wires 19, 20 are spread by hand and the organ is introduced between their bent ends while slightly stretching it, so that the jacketed ends 22, 23 engage just behind the corona glandis. After so adjusting the appliance, the two supporting wires 19, 20 are secured in their position by screwing home the winged nut 50.

The surgical appliance described can be varied in many respects without departing from the spirit of my invention. For example the bent parts 22, 23 may be made separately and wholly from hardened rubber and be put on the ends of the supporting wires proper 19, 20. Where so preferred, the extensible frame in Fig. 3 may be covered with india rubber.

I claim:

1. A surgical appliance of the character described comprising a spring-pressed extensible frame, a guide connected with said frame at right angles thereto, a slide guided in said guide, means for securing said slide, two supporting wires mounted to rock at one end on said slide in a plane parallel to said guide and being at the other end upwardly extended, laterally curved and rearwardly inclined, and means for yieldingly pressing together said two supporting wires.

2. A surgical appliance of the character described comprising a spring-pressed extensible frame, a casing connected with said frame, a slide guided in said casing, means for securing said slide, two supporting wires mounted to rock at one end on said slide in a plane at right angles to said frame and being at the other end upwardly extended, laterally curved and rearwardly inclined, and two leaf springs in said casing for pressing together said two supporting wires.

3. A surgical appliance of the character described comprising a spring-pressed extensible frame, a casing connected with said frame and open below and at opposite ends parallel to said frame, a shutter adapted to close said casing below and at the ends while leaving a slit at the front end and having a longitudinal slot, a slide guided in the slot of said shutter and having a screw projecting outward through the slot, a winged nut on said screw, two supporting wires mounted to rock at one end on said slide and passing through the slit between said casing and said shutter and being at the other end upwardly extended, laterally curved and rearwardly inclined, and two leaf springs in said casing adapted to press together said two supporting wires.

4. A surgical appliance of the character described comprising a casing open below and at two opposite ends, a shutter adapted to close said casing below and at the ends while leaving a slit at the front end and having a longitudinal slot, a slide guided in the slot of said shutter and having a screw projecting outward through the slot, a winged nut on said screw, two supporting wires mounted to rock at one end on said slide and passing through the slit between said casing and said shutter and being at the other end upwardly extended, laterally curved and rearwardly inclined, two leaf springs in said casing adapted to press together said two supporting wires, two guides at the front end of said casing, a bow vertically guided in said two guides, and springs connecting said bow with said two guides.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT BITTERLICH.

Witnesses:

ERNST MEIER,

ERIKA VON VORDECK.