P. NICK.

DILATOR COMBINATION.

APPLICATION FILED JUNE 10, 1920.

1,428,653. Patented Sept. 12, 1922.

Fig. 1.

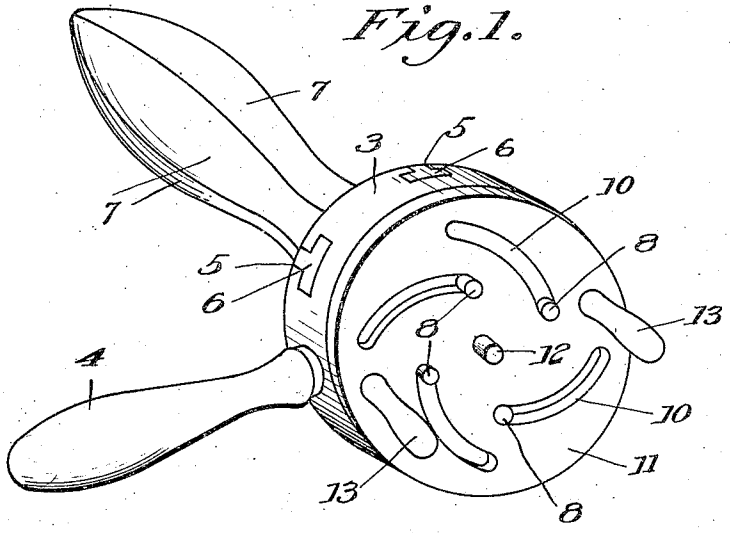


Fig. 2.

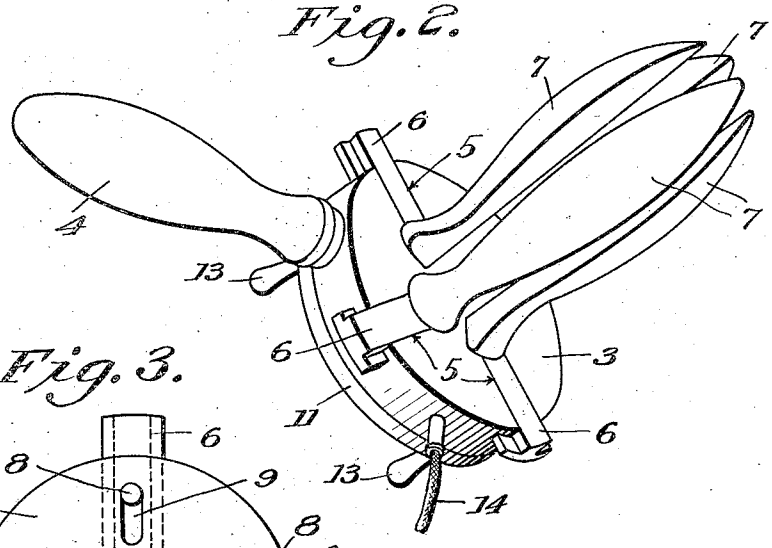
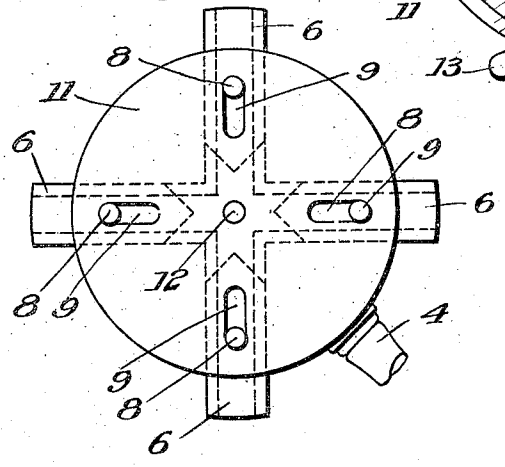


Fig. 3.



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UNITED STATES PATENT OFFICE.

PETER NICK, OF LOS ANGELES, CALIFORNIA.

DILATOR COMBINATION.

Application filed June 10, 1920. Serial No. 387,822.

To all whom it may concern:

Be it known that I, PETER NICK, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Dilator Combination, of which the following is a specification.

My invention is an improved dilating instrument for surgical purposes.

My invention is illustrated in the annexed drawing forming a part of this specification, in which:

Figure 1 is a perspective view of my instrument taken from the rear thereof.

Figure 2 is a perspective view of my instrument taken from the front thereof.

Figure 3 is a rear view of the instrument with the cam disk removed.

The part marked 3 is a circular block to the side of which is secured a handle 4 extending radially therefrom. Said block is provided in its upper face with radial dove-tail grooves 5, four of said grooves being herein shown, which respectively receive slides 6, to each of which slides is secured a dilating member 7 projecting forwardly therefrom. Pins 8 project rearwardly from the slides 6 through radial slots 9 in the block 3 and through cam slots 10 in a cam-operating disk 11 pivoted to the rear face of the block 3 by a pivot pin 12, on which disk are handles 13 projecting rearwardly therefrom.

In the operation of the device the disk 11 is turned in one direction to cause the cam slots 10 through pins 8 to force the slides 6 outwardly to spread the dilating member 7, as shown in Figure 2 and in the other direction to cause the cam slots 10 through pins 8 to force the slides 6 inwardly to close the dilating members as shown in Figure 1.

As a means for enabling the employment of an electric current in connection with the expansible action of the dilator, the block 3 may be connected to an electrical conductor 14 leading from any suitable source of electrical supply. An electric current is applied through the conductor 14 and the dilator blade to the body of the patient, as is common in electrical therapeutics.

I claim:

1. A dilating instrument including a block provided with radial dove-tailed grooves in its forward face, slides mounted in said grooves, dilating members extending forwardly from said slides, said blocks being provided with slots extending through the rear thereof from said grooves, pins projecting from said slides through said slots, a disk pivoted on the rear of said blocks, said disk being provided with cam slots into which said pins extend whereby said dilating members are spread or closed when said disk is turned in one direction or the other.

2. A dilating instrument including a block provided with radial dove-tailed grooves in its forward face, slides mounted in said grooves, dilating members extending forwardly from said slides, said blocks being provided with slots extending through the rear thereof from said grooves, pins projecting from said slides through said slots, a disk pivoted on the rear of said blocks, said disk being provided with cam slots into which said pins extend whereby said dilating members are spread or closed when said disk is turned in one direction or the other, and an electrical conductor connected to the pivot of said disk.

PETER NICK.