(No Model.)

P. HORST.

ELECTRO MEDICAL APPARATUS.

No. 382,811. Patented May 15, 1888.

Fig: 1.

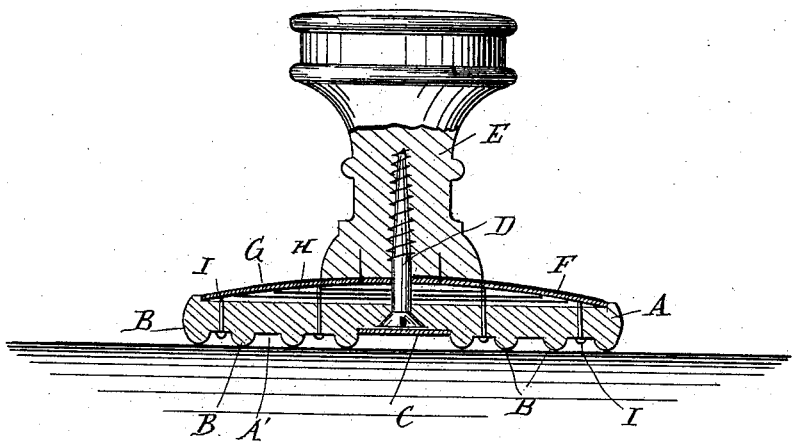
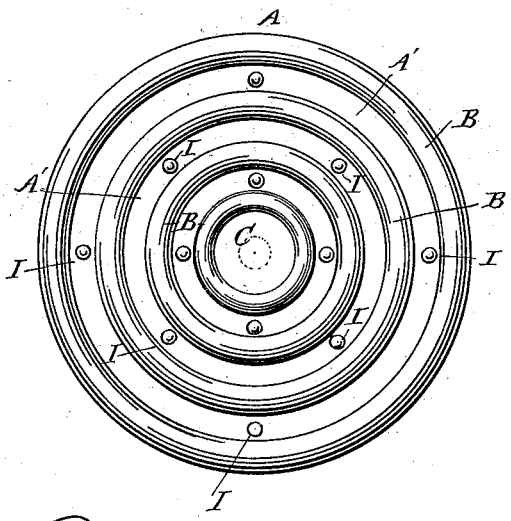


Fig: 2.



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PETER HORST, OF SIOUX CITY, IOWA.

ELECTRO-MEDICAL APPARATUS.

SPECIFICATION forming part of Letters Patent No. 382,811, dated May 15, 1888.

Application filed October 5, 1887. Serial No. 251,514. (No model.)

To all whom it may concern:

Be it known that I, PETER HORST, of Sioux City, in the county of Woodbury and the State of Iowa, have invented a new and Improved Medical Apparatus, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved medical apparatus specially adapted for relieving persons suffering from rheumatism and kindred diseases from pain.

The invention consists of a hard-rubber grooved disk carrying a small metallic plate on its under side and a large metallic plate on its upper side, of conductors held in said rubber disk and connecting the under side of the latter with said metallic disk on top of the rubber disk, and of a collector for frictional electricity, held between the said top disk and the hard-rubber disk.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a sectional side elevation of my improvement, and Fig. 2 is a bottom view of the same.

The hard-rubber disk A, of suitable size, is provided on its under side with a number of annular grooves, A′, forming the annular ridges or projections B, of which the innermost incloses a metallic disk, C, against which rests the head of a screw, D, passing through the center of the rubber disk A and into a handle, E, the inner end of which rests against a larged curved metallic disk, F, held on top of the rubber disk A, and forming a space, G, between the inside of said curved disk F and the top of the rubber disk A. In this space G is placed a collector, preferably formed of a sheet of tin-foil, of any approved construction.

The inside of the disk F is connected by the pins I with the under side of the rubber disk A, as the said pins I are placed in the annular grooves A′ of the rubber disk A, so that their heads extend to the outside, while their shanks reach to the inside of the disk F, as illustrated in Fig. 1.

The operation is as follows: The part of the human body affected with rheumatism is treated with my apparatus by applying the under side of the rubber disk over the respective place by moving the entire apparatus forward and backward, rubbing the annular projections B on the affected part, so that the frictional contact of the projections with the skin warms the latter and opens the pores, and at the same time the rubber disk A is warmed, and on account of being of hard rubber produces electricity, which is transmitted by the pins I to the disk F, which again connects with the collecting-sheet H and fills the same with electricity. The collecting-sheet H again discharges itself by the screw D, the disk C, and the pins I, thus transmitting a powerful current of electricity to the part of the body rubbed. The blood of the person is thus again brought to the normal circulation, and at the same time the person is relieved of pain.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a medical apparatus, the combination, with a grooved hard-rubber disk, of a small metallic disk held centrally on the bottom of said rubber disk, a screw screwing in said rubber disk and resting with its head against said small metallic disk, a handle held on said screw, a large metallic disk held on the top of said rubber disk, and against which also rests the inner end of said handle, and metallic pins held in said rubber disk, their inner ends contacting with the inside of said large metallic disk, substantially as shown and described.

2. In a medical apparatus, the combination, with a grooved hard-rubber disk, of a small metallic disk held centrally on the bottom of said rubber disk, a screw screwing in said rubber disk and resting with its head against said small metallic disk, a handle held on said screw, a large metallic disk held on the top of said rubber disk, and against which also rests the inner end of said handle, metallic pins held in said rubber disk, their inner ends contacting with the inside of said large metallic disk, and a collector for frictional electricity held between said large metallic disk and the top of said rubber disk, substantially as shown and described.

PETER HORST.

Witnesses:
C. RANKE,
ADOLPH HERMANN.