Nov. 28, 1950

S. G. GOLUB ET AL
NEUROLOGICAL HAMMER WITH BRUSH
AND NEEDLE HIDDEN IN HANDLE
Filed Nov. 13, 1948

2,532,093

Fig. 1.

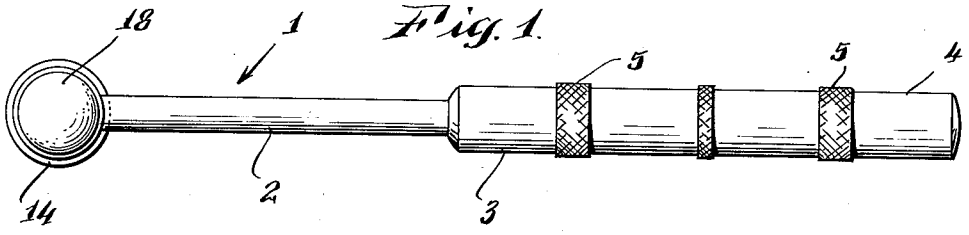



Fig. 2.

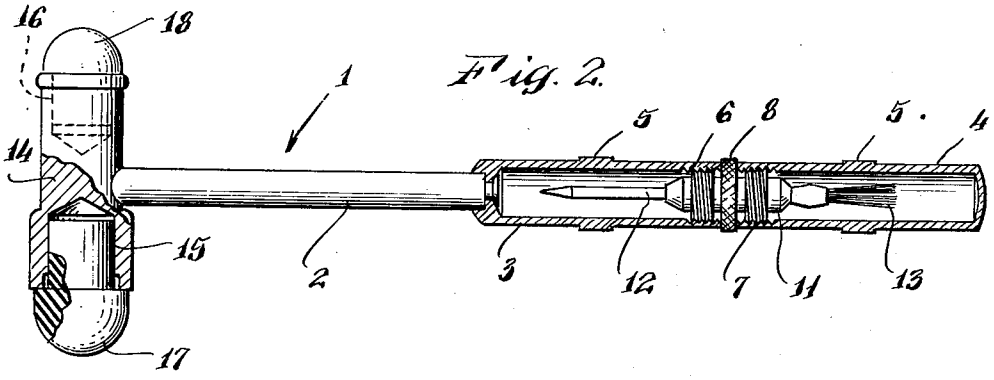



Fig. 3.

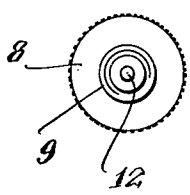
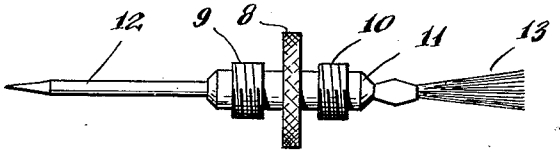



Fig. 4.




INVENTOR.
Samuel G. Golub
Philip G. Field
BY Henry H. R. Metzler
Atty.

Patented Nov. 28, 1950 2,532,093

# UNITED STATES PATENT OFFICE

2,532,093

## NEUROLOGICAL HAMMER WITH BRUSH AND NEEDLE HIDDEN IN HANDLE

Samuel G. Golub and Philip G. Field,
New York, N. Y.

Application November 13, 1948, Serial No. 59,842

1 Claim. (Cl. 128—2)

1

The present invention relates to improvements in surgical instruments and, more specifically, to a new and improved neurological hammer with brush and needle hidden in the handle.

One object of the present invention is the provision of a neurological hammer of the character described which is adapted for testing reflexes, and which has detachably attached and normally hidden in its handle a brush and a needle which are used for sensibility tests. The main improvement of our hammer is the fact that the brush and needle are one unit hidden in the handle which is a decided improvement over the separate brush and needle as many of the doctors lose the needle and brush. Also, when the needle and brush are hidden in the handle it eliminates ungainly protuberances.

Another object of the present invention is the provision of a neurological hammer of the character described which is perfectly balanced, of a pleasing appearance, simple and inexpensive in construction, but which is also sturdy, durable, and well adapted for the purpose for which it is intended.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:

Figure 1 is a top view of a preferred embodiment of our invention;

Fig. 2 is a side view of the same, partially in longitudinal section;

Fig. 3 is a detailed end view of a plug which holds a brush and a needle; and

Fig. 4 is a detailed side view of said plug.

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

In the drawing the numeral 1 denotes a handle to which is crosswise fixed the head 14. The handle 1 preferably consists of a solid portion 2 and a hollow portion. The latter comprises a pair of cylinders 3 and 4 which preferably are of the same diameter and length, and which are provided with knurled collar portions 5 and with internal threads 6 and 7. The collar portions 5 are larger in outer diameter than the main portions of the cylinders 3 and 4. The cylinders normally are joined lengthwise to one another end to end by means of a plug 11 which has a disk-shaped center portion 8 and external threads 9 and 10 at its reduced end portions. The threads 9 and 10 are adapted to be screwed into the internal threads 6 and 7 of the cylinders 3 and 4,

2

and the disk-shaped portion 8 preferably is knurled and of a slightly larger diameter than the main portions of the cylinders 3 and 4. Preferably the disk-shaped portion 8 is of the same outer diameter as are the collar portions 5. A needle 12 and a brush 13 are attached to the respective opposite end portions of the plug 11, and extend into the cylinders 3 and 4 if the plug 11 is interposed therebetween as shown in Figs. 1 and 2, so that the needle 12 and the brush 13 cannot be seen. The parts 11, 12 and 13 can be removed from the handle 1 easily by unscrewing the plug 11 from the cylinders 3 and 4.

The head 14 has bores 15 and 16 in its end portions, and portions of resilient members 17 and 18 of rubber or the like are inserted into said bores as cushioning means, which protrude beyond the ends of the head 14.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent in the United States is:

A neurological hammer comprising a head having cushioned ends, a rod to which said head is crosswise fixed, a first cylinder having an internally threaded open end and a closed end from which said rod is axially extended and being provided with a knurled collar portion whose outer diameter is larger than the outer diameter of the rest of said first cylinder, a plug having a disk-shaped center portion and externally threaded end portions one of which is secured into the open end of said first cylinder, a second internally threaded cylinder of the same diameter as said first cylinder having a knurled collar portion of the same diameter as the collar portion of said first cylinder and being screwed upon the other end portion of said plug, a needle being attached to one end portion of said plug, and a brush being attached to the other end portion of said plug, the diameter of the disk-shaped portion of the latter being the same as the outer diameter of said knurled collar portions.

SAMUEL G. GOLUB.
PHILIP G. FIELD.

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