

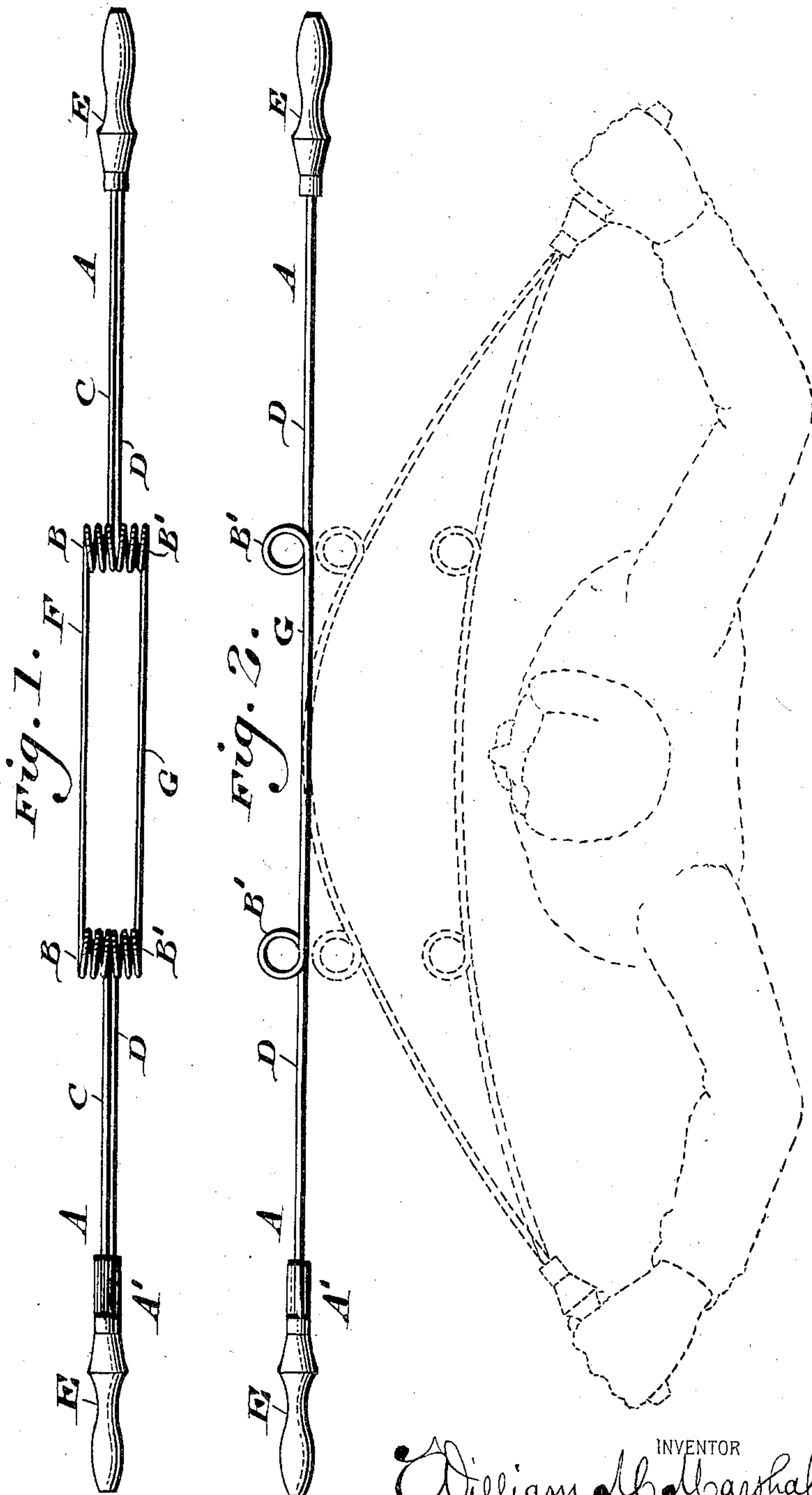
No. 610,716.

Patented Sept. 13, 1898.

W. M. MARSHALL.
EXERCISING DEVICE.

(Application filed Feb. 3, 1898.)

(No Model.)



WITNESSES.

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EXERCISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 610,716, dated September 13, 1898.

Application filed February 3, 1898. Serial No. 668,939. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. MARSHALL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Exercising Devices, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an exercising apparatus formed of a rod of resilient material comprising side and central portions formed of parallel members and coils of reversed convolutions joining said portions, so that the apparatus has different resiliences due to the elastic members and said coils, thus rendering the apparatus highly elastic, while also requiring greater power to be exerted at the handles to bow or deflect the rod.

Figure 1 represents a side elevation of an exercising apparatus embodying my invention. Fig. 2 represents a top view thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the end or side portions of the apparatus, and B B' designate coils between said portions. The end portions consist of two lengths C C and D D of elastic metal or material, preferably steel rod, which are placed side by side close together and provided with the handles E.

On the inner ends of the lengths C are the coils B, and on the inner ends of the lengths D are the coils B', said coils B B' being placed end to end, forming pairs and having their convolutions in reverse direction.

Joining the coils B is the length F, and joining the coils B' is the length G, said lengths being parallel and separated or spread and occupying the center of the apparatus, said arms and coils being continuous of each other and of the end portions A and formed of the same material. It will be seen that the arms of the one exercising are stretched and the handles grasped. The end portions A are then drawn backward, whereby they turn on

the coils, and are also bent rearward. The central portions F and G bend outwardly or forwardly, all as shown in dotted lines, after which the parts are released of the pressure thereon, whereby they spring back into their normal condition, as shown in full lines, Figs. 1 and 2. The bending or deflecting is repeated, thus continuing the exercising, it being seen that there is the continued advantage of a longitudinally-resilient rod and that of coils intermediate of the ends of said rod. Greater power will be required to deflect the central portions F and G when the coils B B' face inwardly, the reverse of that shown in Fig. 2. As the members F and G are separated or spread I am enabled to increase the length of the coils B B', whereby greater power is required for bending the apparatus at said coils.

The end portions of the rod are incased in the sleeves A', of soft rubber or other elastic material, which are also elastic and serve to prevent the hands from contacting with the metal of which the end portions are formed, one of said sleeves being broken off in the figures.

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

1. An exercising apparatus consisting of parallel end portions, pairs of coils continuous thereof at the inner ends of said portions, central portions joining said coils, and handles on the outer ends of said end portions.

2. In an exercising apparatus, parallel end portions, pairs of coils continuous thereof at the inner ends of said portions, parallel central portions joining said coils, and handles at the outer ends of said end portions, said coils having their convolutions in reverse order.

WILLIAM M. MARSHALL.

Witnesses:

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