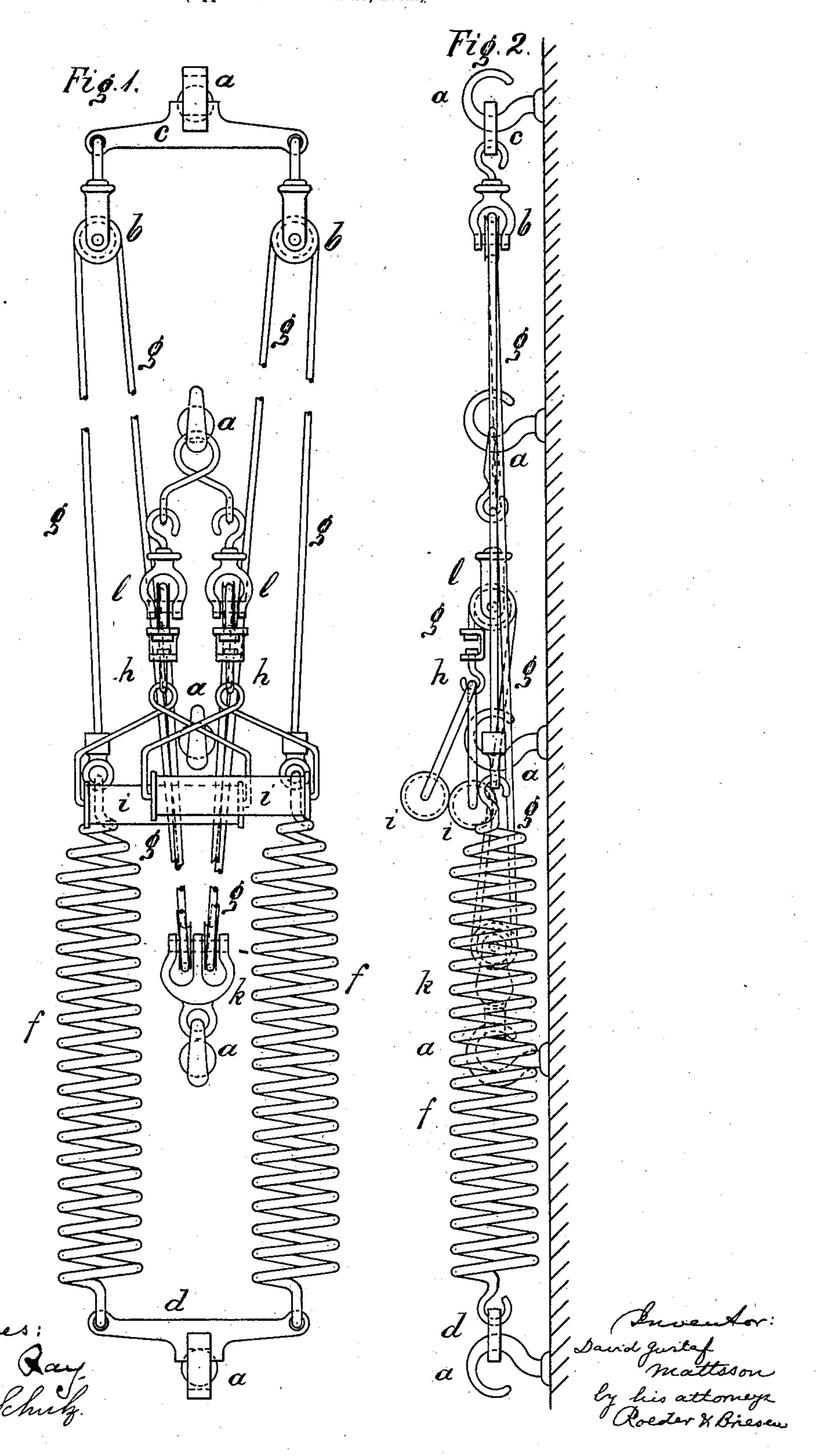
D. G. MATTSSON. GYMNASTIC APPARATUS.

(Application filed Feb. 25, 1902.)

(No Model.)



United States Patent Office.

DAVID GUSTAF MATTSSON, OF ALTONA, GERMANY.

GYMNASIIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 705,266, dated July 22, 1902.

Application filed February 25, 1902. Serial No. 95,619. (No model.)

To all whom it may concern:

Be it known that I, DAVID GUSTAF MATTSson, a subject of the King of Sweden and Norway, residing at Altona, Germany, have in-5 vented certain new and useful Improvements in or Relating to Gymnastic Apparatus, of which the following is a specification.

In hitherto-known gymnastic apparatus used for executing pulling exercises it is pos-10 sible only to pull downward or, after suitably changing the points of attachment of the cords, to pull upward; but the before-mentioned two pulling movements can never be effected in immediate succession, although 15 this alteration is indispensible in many gymnastic exercises. Now in gymnastic apparatus according to this invention this disadvantage is obviated.

Figures 1 and 2 of the accompanying draw-20 ings are respectively a front elevation and a side elevation of one example of such apparatus, the example selected being fitted with non-elastic cords having spiral springs at one end; but the invention can also be applied to 25 gymnastic apparatus with elastic cords, in

which case the springs are omitted.

A number of hooks α are fixed at suitable distances apart to a wall, door-posts, or any other suitable part. The top hook supports 30 a yoke c, to which are attached two pulleys b, and the bottom hook serves for the attachment of another yoke d, to the ends of which two spiral springs f are secured. Two nonelastic cords g, which pass around the pul-35 leys b, are connected to the springs f, and

handles i are attached to the free ends of these cords by means of swivel-hooks h. The cords g also pass from the pulleys b first over a pair of lower pulleys k and thence over a pair of upper pulleys l, which can be attached 40 to any hook a, as desired, or according to the requirements of the exercise being practiced. It will be obvious that with this arrangement it is possible without changing the apparatus in any way to practice downward and upward 45 pulling exercises in immediate succession, since in the first case the pulleys l and in the second case the pulleys k resist the action of the cords.

I claim—

1. A gymnastic apparatus composed of a pair of upper pulleys, two pair of lower pulleys arranged above one another, and a pair of cords that pass from the upper pulleys around the lowermost pulleys and thence 55 around the intermediate pulleys, substantially as specified.

2. A gymnastic apparatus composed of a bail having pulleys, a pair of springs, a pair of upper pulleys, a pair of lower pulleys, and 60 a pair of cords that pass from the springs first over the bail-pulleys, then over the lower pulleys and then over the upper pulleys, substantially as specified.

Signed at Hamburg, Germany, this 6th day 65 of February, A. D. 1902.

DAVID GUSTAF MATTSSON.

Witnesses:

MAX FOUQUETZ, FRANZ STEFFENS.