(No Model.)

G. WORTHINGTON.

EXERCISING APPARATUS.

No. 277,399. Patented May 8, 1883.

Fig. 1.

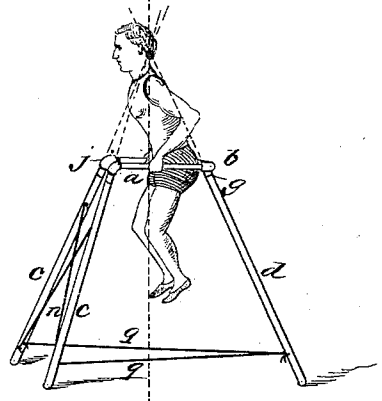


Fig. 2.

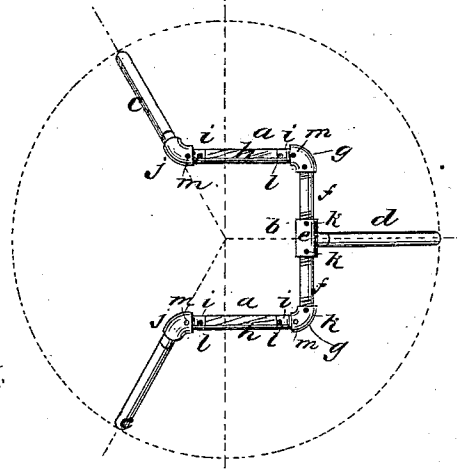


Fig. 4

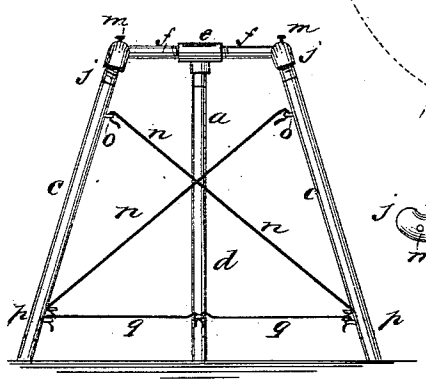


Fig. 3

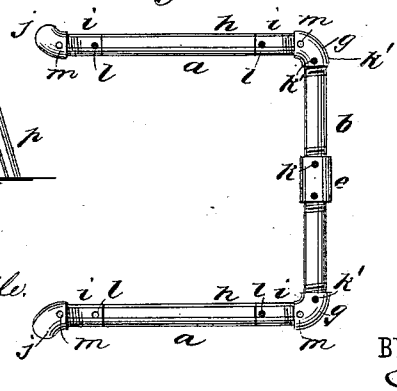
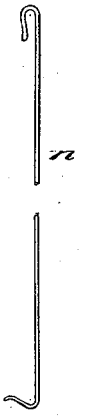


Fig. 5



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UNITED STATES PATENT OFFICE.

GEORGE WORTHINGTON, OF HOWARD COUNTY, MARYLAND.

EXERCISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 277,399, dated May 8, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WORTHINGTON, of Howard county and State of Maryland, have invented a new and Improved Exercising Apparatus, of which the following is a full, clear, and exact description.

My improved exercising apparatus consists, essentially, of a pair of horizontal parallel bars connected at one end by a third bar, and the three together supported by three legs suitably inclined and braced, one of them being under the center of the third or connecting bar and the others at the unconnected end of the parallel bars, said bars and legs being contrived to be easily taken apart and put together, and when taken apart are quite portable, light, and pack away in small space. The apparatus is specially designed to afford the means in any room at one's home for the exercise (a most beneficial one) known as "dipping," as practiced in the ordinary gymnasium, as hereinafter fully described.

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

Figure 1 is a perspective side view of my improved apparatus and the figure of a person exercising thereon. Fig. 2 is a plan view of the apparatus. Fig. 3 is a plan of the parallel bars and connecting-bar on an enlarged scale. Fig. 4 is a front elevation of the apparatus. Fig. 5 is a side elevation of one of the braces for staying the legs.

a represents the horizontal parallel bars; *b*, the third bar connecting the parallel bars together at one end; *c*, the front legs of the unconnected ends of the parallel bars, and *d* the hind leg connecting with bar *b*.

I prefer to make the bar *b* to consist of a gas-T, *e*, at the center, in the outlet of which the leg *d* screws, and with a nipple, *f*, in each end, screwing into the right-angle elbows *g*, respectively, into which the side bars also screw.

I prefer to make the side bars, *a*, to consist of wood sections *h*, fitting into ferrules, *i*, of gas-pipe, which screw into elbows *g*, connecting with bar *b* at one end and with elbows *j* at the other end, into which the front legs, *c*, are screwed.

I prefer to use elbows *j* of one hundred degrees, more or less, instead of the common right-angled elbow, in order that the legs may be so inclined, whereby, together with the adjustment of said elbows on the arms *a* and the adjustment of the T *e* in connecting-bar *b*, the legs may have an inclination toward a common center situated in the neighborhood of the line of the center of gravity of the person using the apparatus. From this common center the center line of legs will radiate, measured on a horizontal plane, at an angle of one hundred and twenty degrees to each other. This gives greater steadiness to the apparatus and less strain on the joints. I propose to rivet the T *e* and nipples *f* together at *k* and the elbows and nipples *f* together at *k'*, also to rivet the ferrules *i* onto the ends of the wood bars *h* at *l* and connect the parallel arms *a* with the elbows *g* and *j*, by removable pins *m*, in fastening the joints together, to make the ends of all the wood bars accessible for wedging should the ferrules become loose at any time.

The legs will be made of wood, with a ferrule of iron tubing on the upper ends to screw into the elbows and T, to be taken out when required for packing the apparatus away. The front legs, *c*, will have stays, consisting of the inclined rods *n*, hooking into eye-studs *o* near the upper end, for connection to the legs thereat, and detachably hooking also into other eye-studs at *p*, near the lower ends, for disconnecting them when required, and the front legs, *c*, and hind leg, *d*, will be connected by other stay-rods, *q*, adapted to readily unhook at both ends.

The dipping exercise shown by Fig. 1 consists in supporting the body upon the hands, which grasp the parallel bars, lowering the body by bending the arms until the chin is on a level with the hands, then raising the body by straightening the arms. This is repeated several times. This exercise develops the pectoral and triceps muscles very rapidly, and at the same time broadens and deepens the chest and throws back the shoulders, and has been highly recommended by authorities on physical culture; and for the want of suitable apparatus two chairs have been recommended, the chairs being placed back to back a short dis-

tance apart; but such device is so unsatisfactory that the exercise is generally neglected. My apparatus obviously overcomes all difficulties, and affords entirely satisfactory means for practicing the exercise. An excellent exercise for the biceps and abdominal muscles may be obtained by grasping the bars from the under side and letting the body down toward the floor until the arms are straight, the legs astride the back leg of the apparatus, forming a right angle with the body, and the knees kept straight, then raising the body by bending the arms until the shoulders are on a level with the bars, lowering again, and repeating several times. The exercise of dipping cannot be had from rowing-machines, health-lifts, or chest-weights. The nearest approach to it is found in the chest-weight; but they have to be permanently fixed in the room where they are used, while this apparatus, which is specially adapted for the exercise, may be set up for use when required and be readily taken down and put away when the exercise is over.

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

1. An exercising-machine consisting of two horizontal parallel bars, *a*, connected at one end by a bar, *b*, having a supporting-leg, *d*, and provided with legs *c* at the other end, substantially as described.

2. The leg *d*, T *e*, and nipples *f*, in combination with elbows *g*, bars *h*, elbows *j*, and the legs *c*, substantially as described.

3. The wood arms *h* and metal ferrules *i*, in combination with legs *c*, elbows *g*, bar *b*, and leg *d*, substantially as described.

4. The T *e*, nipples *f*, and elbows *g*, screwed and riveted together, in combination with the bars *a*, screwed and pinned to the elbows *g*, substantially as described.

5. The wood arms *h*, screwed and riveted to the ferrules *i* and pinned to the elbows *g* and *j*, substantially as described.

6. The combination of the detachable stay-rods *n* and *q* with the legs *c d* and connecting-bar *b*, substantially as described.

7. The combination, with an exercising apparatus, of parallel bars *a* and connecting-bar *b*, with supporting-legs *c d*, having an inclination toward a common center situated in the neighborhood of the line of the center of gravity of the body of the person using the apparatus, substantially as described.

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