Oct. 7, 1958 M. A. KINNE 2,855,202

NECK EXERCISING DEVICE

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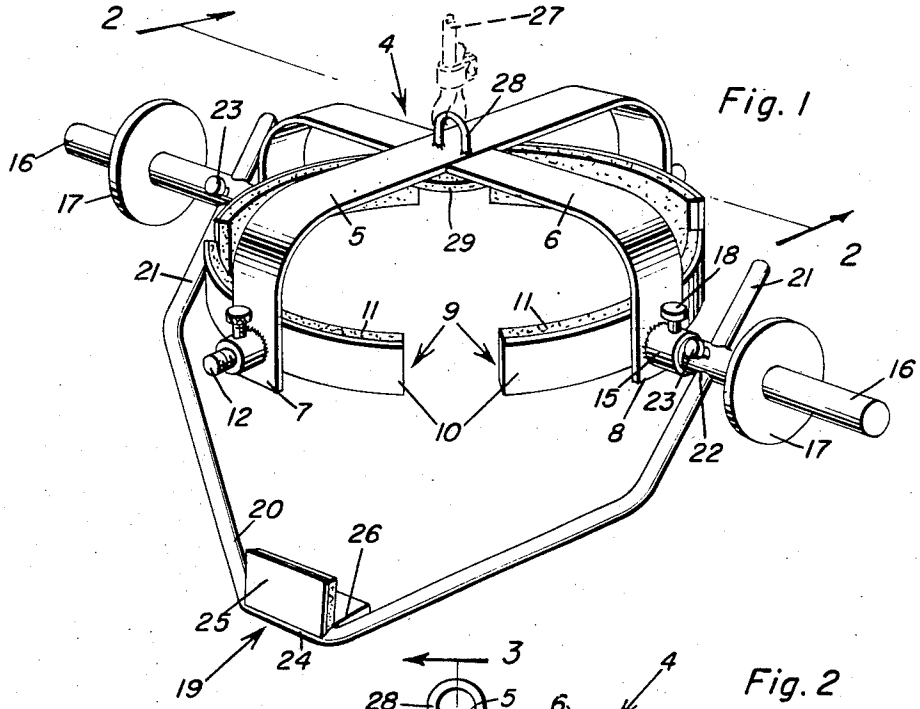


Fig. 1

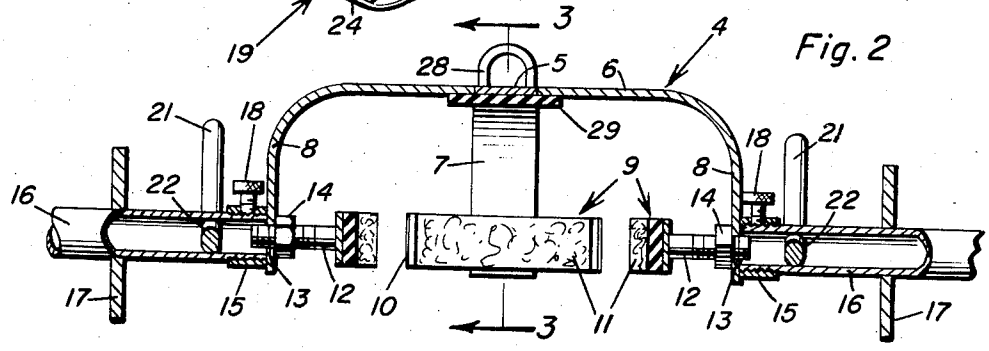


Fig. 2

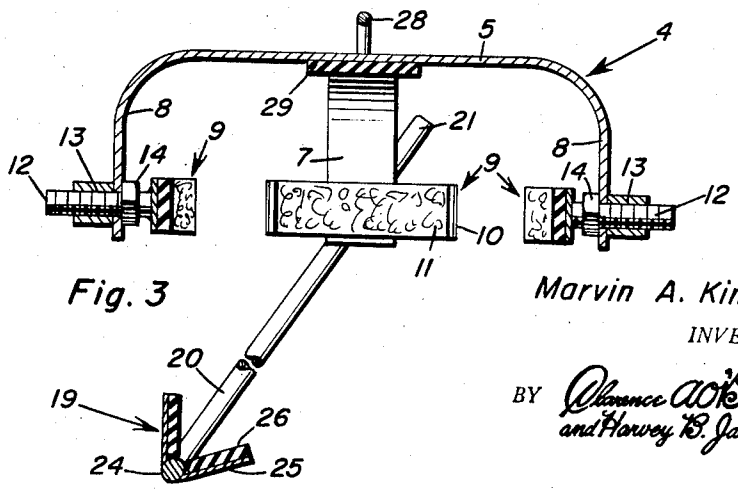


Fig. 3

Marvin A. Kinne

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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NECK EXERCISING DEVICE

Marvin A. Kinne, La Salle, Mich.

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5 Claims. (Cl. 272—80)

The present invention relates to new and useful improvements in neck exercisers or developers of the type comprising a head gear and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character comprising a novel construction and arrangement of parts whereby the head may be freely moved in any direction.

Another very important object of the invention is to provide a neck exercising device of the character described which may be readily adjusted to fit heads of various sizes.

Other objects of the invention are to provide a neck exercising device of the aforementioned character which will be comparatively simple in construction, strong, durable, compact, comfortable and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a neck exercising device constructed in accordance with the present invention;

Figure 2 is a view in transverse section through the device, taken substantially on the line 2—2 of Figure 1; and

Figure 3 is a longitudinal sectional view, taken substantially on the line 3—3 of Figure 2.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a frame of suitable dimensions and material which is designated generally by reference character 4. The frame 4 includes fixedly connected longitudinal and transverse bars 5 and 6 respectively, which terminate in downturned end portions 7 and 8, respectively. Mounted centrally in the frame 4 is a pad 29.

Mounted on the end portions 7 and 8 of the bars 5 and 6 are adjustable head clamps 9. The clamps 9 include arcuate jaws 10 provided with suitable pads 11 which contact the head. Fixed at intermediate points on the arcuate jaws 10 are stems 12 which are threadedly mounted for adjustment in openings 13 provided therefor in the end portions of the bars 5 and 6. Lock nuts 14 secure the stems 12 in adjusted position.

Fixed on the end portions 8 of the transverse bars 6 of the frame 4 are couplings or sleeves 15 which are aligned with the openings 13. Tubular arms 16 are threadedly mounted in the sleeves 15. Any suitable number of weights 17 may be mounted on the arms 16. The weights 17, it will be observed, are in the form of disks having central openings therein slidably accommodating the arms 16. Setscrews 18 releasably secure the arms 16 against turning in the sleeves 15.

Also mounted on the arms 16 is a chin clamp 19. The chin clamp 19 comprises a substantially U-shaped metallic yoke 20 the legs 21 of which extend slidably

through openings 22 provided therefor in the inner portions of the arms 16. Setscrews 23 secure the legs 21 in adjusted position in the arms 16. Mounted on the bight portion 24 of the yoke 20 is a substantially V-shaped trough structure 25 for the reception of the chin, said trough structure including pads 26.

It is thought that the use of the device will be readily apparent from a consideration of the foregoing. Briefly, to adjust the head clamps 9, the lock nuts 14 are loosened to permit the stems 12 to be screwed inwardly or outwardly through the openings 13 in the members 5 and 6. Of course, when the desired adjustments have been made, the lock nuts 14 are again tightened. To mount the frame 4 on the head, the setscrews 18 are loosened to permit the arms 16 to turn in the sleeves 15 and the setscrews 23 are loosened to free the yoke 20 in said arms 16. The frame 4 is then slipped on the head and the clamp 19 is fitted to the chin, after which the setscrews 18 and 22 are again tightened for rigidifying the device. The user may now begin his or her exercises. The weights 17, being mounted directly on the device, permit the head to be moved in any direction. If, however, the user prefers pulleys to weights, the usual cable, as indicated at 27, may be connected to a loop 28 which is provided for this purpose on the central portion of the frame 4. The weights 17 may be retained on the arms 16 in any suitable manner.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A neck exercising device comprising: a frame for mounting on the head, said frame including crossed bars terminating in downturned end portions, a plurality of separate head clamps mounted for independent adjustment on said downturned end portions of said bars, arms projecting laterally from the downturned end portions of one of the bars, weights mounted on said arms, and a chain clamp mounted on the arms.

2. A neck exercising device comprising: a frame for mounting on the head, said frame including crossed bars terminating in downturned end portions, a plurality of separate head clamps mounted for independent adjustment on said downturned end portions of said bars, arms projecting laterally from the downturned end portions of one of the bars, weights mounted on said arms, and a chin clamp mounted on the arms, said chin clamp including a yoke comprising legs secured to the arms, and a trough on the bight portion of the yoke for the reception of the chin.

3. A neck exercising device comprising: a head frame including a plurality of cross, fixedly connected bars terminating in downturned end portions having threaded openings therein, head clamps adjustably mounted on the bars and including arcuate jaws engageable with the head, said clamps further including shanks fixed on the jaws and threadedly engaged for adjustment in the openings, arms projecting laterally from the head frame, weights mounted on said arms, and a chin clamp mounted on the arms.

4. A neck exercising device comprising: a head frame, head engaging clamps mounted on said frame, arms threadedly mounted on the frame, means for releasably securing the arms against turning on the frame, weights mounted on said arms, and a chin clamp adjustably mounted on the arms.

5. A neck exercising device comprising: a head frame,

head engaging clamps mounted on said frame, arms threadedly mounted on the frame, means for releasably securing the arms against turning on the frame, weights mounted on said arms, and a chin clamp adjustably mounted on the arms, said chin clamp including a yoke comprising legs extending slidably through the arms, and setscrews threadedly mounted in the arms and engaged with the legs for securing said legs in fixed position in said arms.

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