49874/85

AUSTRALIA

Patents Act 1952

Form 1.
Regulation 9

APPLICATION FOR A STANDARD PATENT

598448

I, ~~We~~ JOHN BURGESS ROGERS

SECTION 34(4)(a) DIRECTION SEE FOLIO 3

NAME DIRECTED BILL GVOICH
of 281 Rainbow Drive, Hamilton, Ontario,
Canada, L8K 4G3

of Nova Scotia, B0T 1G0, Canada

AUSTRALIAN
Sec 34(4)
PATENT OFFICE

LODGED AT SUB-OFFICE
13 NOV 1985
Melbourne

hereby apply for the grant of a Standard Patent ~~Patent of Addition~~ for an invention entitled

CHEST EXERCISE DEVICE

which is described in the accompanying ~~provisional~~ complete specification.

For a Convention application - details of basic application(s) -

NUMBER	COUNTRY	DATE OF APPLICATION
480662	Canada	2 May 1985
	APPLICATION ACCEPTED AND AMENDMENTS ALLOWED	11-4-90

Our/~~My~~ address for service is C/- SANDERCOCK, SMITH & BEADLE
203 Riversdale Road, (P.O. Box 410) Hawthorn. Victoria 3122.

Dated this 13th day of November, 19 85

JOHN BURGESS ROGERS

(Signature)

BY: SANDERCOCK, SMITH & BEADLE

To:

THE COMMISSIONER OF PATENTS

This form must be accompanied by either a provisional specification (Form 9 and true copy) or by a complete specification (Form 10 and true copy).

FORM 7 & 8

AUSTRALIA
PATENTS ACT 1952

PATENT DECLARATION FORM
(CONVENTION OR NON-CONVENTION)

DECLARATION IN SUPPORT OF APPLICATION FOR A PATENT

Insert name of applicant.

Insert title of invention.

Insert full name(s) and address(es) of person(s) making declaration. If applicant a company person must be authorised to make declaration.

* Delete alternatives which do not apply

Insert name(s) and address(es) of actual inventor(s).

Insert details of entitlement to apply, e.g. Applicant is assignee of inventor(s)

Delete 3 and 4 if application non-convention. Otherwise insert details of basic application(s).

Place and date of Signature.

In support of the application made by JOHN BURGESS ROGERS

for a patent for an invention entitled: Chest Exercise Device

I/~~We~~ John Burgess Rogers
RR#1, Hunts Point, Queens County,
Nova Scotia, B0T 1G0, Canada

do solemnly and sincerely declare as follows:

* 1. (a) I am/~~We are~~ the applicant~~(s)~~ for the patent.

* OR (b) ~~I am authorized by the abovementioned applicant to make this declaration on its behalf.~~

* 2. (a) I am/~~We are~~ the actual inventor~~(s)~~ of the invention.

* OR (b) _____

is/are the actual inventor(s) of the invention and the facts upon which the applicant(s) is/are entitled to make the application are as follows:—

3. The basic application~~(s)~~ as defined by Section 141 of the Act was/~~were~~ made in the following country or countries on the following date~~(s)~~ by the following applicant~~(s)~~

in Canada on 2 May 19 85
by John Burgess Rogers
in _____ on _____ 19____
by _____
in _____ on _____ 19____
by _____
in _____ on _____ 19____
by _____

4. The basic application~~(s)~~ referred to in paragraph 3 of this Declaration was/~~were~~ the first application~~(s)~~ made in a Convention country in respect of the invention the subject of the application.

Declared at Liverpool this 5 day of October 19 85

NO ATTESTATION
OR SEAL

Signature(s) of declarant(s).

To: The Commissioner of Patents,
Australia

SANDERCOCK, SMITH & BEADLE,

P.O. Box 410, Hawthorn, 3122, Australia
cables: Sandpat Melbourne
telex: 34491, Sandpat

(12) PATENT ABRIDGMENT (11) Document No. AU-B-49874/85
(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 598448

(54) Title
CHEST EXERCISE DEVICE

International Patent Classification(s)
(51)[4] **A63B 023/02** **A63B 021/32**

(21) Application No. : **49874/85** (22) Application Date : **13.11.85**

(30) Priority Data

(31) Number	(32) Date	(33) Country
480662	**02.05.85**	**CA CANADA**

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(44) Publication Date of Accepted Application : **28.06.90**

(71) Applicant(s)
BILL GVOICH

(72) Inventor(s)
JOHN BURGESS ROGERS

(74) Attorney or Agent
SMITH SHELSTON BEADLE MELBOURNE

(56) Prior Art Documents
AU 470539 59426/73 53.2
US 2356260

(57) Claim

1. A portable exercise device which in use is supported and stabilized by a user of said device, said device comprising:

a symmetrically disposed left lever and a right lever interconnected with one another, each having a free end for gripping by the hand, the free end of each being deflectable relative to the other so as to permit a user gripping the free ends to bring the free ends together and push them part, the levers being interconnected at their ends remote from their free ends;

means associated with each free end to receive a selected weight;

biasing means for applying a force between the levers against which a user may exert a countervailing muscular force; and

. . . /2

an assembly attached to each lever, said assembly being adapted to stabilize, in use, the exercise device by contacting the wrist or forearm of said user.

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Form 10

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COMPLETE SPECIFICATION

(ORIGINAL)

FOR OFFICE USE

Short Title:

Int. Cl:

Application Number: 49874/85
Lodged:

This document contains the amendments made under Section 49 and is correct for printing.

Complete Specification—Lodged:
Accepted:
Lapsed:
Published:

Priority:

Related Art:

TO BE COMPLETED BY APPLICANT

Name of Applicant: BILL GVOICH
~~JOHN BURGESS ROGERS~~

AUSTRALIAN PATENT OFFICE Sec 34(4)

Address of Applicant: ~~RR#1, Hunts Point, Queens County, Nova Scotia, B0T 1G0, Canada~~ 281 Rainbow Drive, Hamilton, Ontario, Canada, L8K 4G3

Actual Inventor: JOHN BURGESS ROGERS

Address for Service: C/- SANDERCOCK, SMITH & BEADLE
203 Riversdale Road, (P.O. Box 410),
HAWTHORN. VIC. 3122.

Complete Specification for the invention entitled:

CHEST EXERCISE DEVICE

The following statement is a full description of this invention, including the best method of performing it known to me:—*

* Note: The description is to be typed in double spacing, pica type face, in an area not exceeding 250 mm in depth and 160 mm in width, on tough white paper of good quality and it is to be inserted inside this form.

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This invention relates to a novel exercise device for use in exercising the muscles of the chest.

The chest muscles (pectorals) are the muscles which bring the arms together in front of the body. Ideally, a full chest muscle exercise should involve full movement of the arms from a position as far as possible in back of the body to a position straight out in front of the body with the hands together, while providing resistance to this movement throughout its entire range. Most devices at present available for exercising the chest muscles do not permit a fully effective and efficient chest exercise to be performed. Those which do are very elaborate and expensive.

One common chest muscle exercise is the barbell bench press. To perform it, the person lies on his back, usually on a narrow bench, and pushes a barbell upward from his chest to the full extension of his arms. The exercise is inefficient because of the limited arm movement permitted. The barbell can only be lowered until it touches the chest, preventing the arms from moving any further in the posterior direction. When the barbell is fully raised, the hands and therefore the arms cannot be brought together because a fixed grip must be maintained on the barbell.

The dumbell bench press is another common chest exercise. It permits the arms to be lowered farther than the barbell bench press does and permits the hands to be brought almost together when the arms are fully extended in front of the body. However, once the arms are extended over the chest, there is no resistance to bringing the hands together, since gravity provides no resistance to the horizontal movement.

The limitations of the barbell bench press and dumbell bench press can be largely overcome by devices in which weights are raised and lowered by means of cables which are passed over pulleys affixed to a wall or stationary object. In some of these devices, the operator pulls directly on the ends of the cables by means of handgrips. In others, the cables are pulled by wheels which rotate as

the operator moves his upper arms. All these devices are very elaborate and costly, and either require large amounts of floor space to operate or permanently occupy floor space.

The invention provides a portable exercise device which in use is supported and stabilized by a user of said device, said device comprising:

a symmetrically disposed left lever and a right lever interconnected with one another, each having a free end for gripping by the hand, the free end of each being deflectable relative to the other so as to permit a user gripping the free ends to bring the free ends together and push them part, the levers being interconnected at their ends remote from their free ends;

means associated with each free end to receive a selected weight;

biasing means for applying a force between the levers against which a user may exert a countervailing muscular force; and

an assembly attached to each lever, said assembly being adapted to stabilize, in use, the exercise device by contacting the wrist or forearm of said user.

In the preferred embodiment, the two levers are interconnected at their ends remote from their free ends and the biasing means comprises a torsional spring which is affixed to the device at the point of interconnection of the levers and which provides resistance to bringing the levers together. A cylindrical shaft is attached to the free end of each lever to receive standard barbell weight plates. To use the device, the user lies on his back on a narrow

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bench with his hands gripping each lever near its free end. The levers are so shaped that they do not rest on the user's chest when the device is in its lowered position, enabling him to lower the device as far as permitted by the natural range of movement of his arms. The user then pushes the device upwards over his chest and brings his hands together. Torsional spring provides resistance to this bringing together of the hands, making the exercise more effective than the dumbell bench press.

The novel U-shaped frame is also of use in other standard exercises such as squatting movements, calf raises, bent over bows, and shrugs.

An embodiment of the invention will be described in detail hereinafter, with reference to the accompanying drawings in which:-

Figure 1 is a top elevation view of the exercise device;

Figure 2 is a view in the direction of arrow "A" in Figure 1 of the right portion of the exercise device; and

Figure 3 is a perspective view of the forearm stabilizer assembly.

As shown in Figure 1, which illustrates a top elevation view of the exercise device, the levers 1 are pivotally connected to each other at one end by a hinge mechanism 2. The hinge mechanism 2, which can be seen in detail in Figure 2, consists of a hinge housing 3 which pivots on a bolt 4 which is secured by a nut 5. A torsional spring 6 is anchored around the bolt 4 and exerts torsional force on

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the hinge housing 3 and therefore on the levers 1. By removing the nut 5 and bolt 4, the torsional spring 6 can be replaced by one of a different force, to suit the needs of the user.

At the free end of the each lever 1, there is a handgrip 7 which may be padded for the user's comfort and to permit a better grip. A mounting bracket 8 is affixed to the free end of each lever, on which a weightholder 9 and forearm stabilizer assembly 10 are mounted, as shown in Figure 1. These assemblies help the user to maintain the device in a stable position when using it.

Figure 3 illustrates a forearm stabilizer assembly. A stabilizer pivot 11 is mounted on a pivot pin 12 which is affixed to the mounting bracket 8. A rod 13 connects the stabilizer pivot 11 to a forearm stabilizer cup 14. The stabilizer cup 14 contacts the user's forearm when he grips the handgrip 7. An extension coil spring 15, connecting bracket 16 to stabilizer pivot 11 maintains the forearm stabilizer cup 14 firmly against the user's forearm when the exercise device is being used. The stabilizer cup 14 may be lined with a pad 17 for the comfort of the user.

In other embodiments of the invention, the biasing means may comprise a hydraulic cylinder or a coil spring suitably affixed between the levers. The invention also includes embodiments in which the levers are connected to each other by means of an interconnecting rod on which each lever may pivot. The end of each lever remote from the end with the handgrip may extend past the point of connection to the interconnecting rod. The biasing means, such as a coil spring or hydraulic cylinder is connected between these extended ends.

The claims form part of the disclosure of this specification.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A portable exercise device which in use is supported and stabilized by a user of said device, said device comprising:

a symmetrically disposed left lever and a right lever interconnected with one another, each having a free end for gripping by the hand, the free end of each being deflectable relative to the other so as to permit a user gripping the free ends to bring the free ends together and push them part, the levers being interconnected at their ends remote from their free ends;

means associated with each free end to receive a selected weight;

biasing means for applying a force between the levers against which a user may exert a countervailing muscular force; and

an assembly attached to each lever, said assembly being adapted to stabilize, in use, the exercise device by contacting the wrist or forearm of said user.

2. An exercise device according to claim 1, wherein the levers are configured so that their extending portions are generally parallel to one another when the hands draw the free ends of the levers to the sides of the body.

3. An exercise device according to claim 1 or claim 2, wherein the biasing means comprises a torsional spring.

4. An exercise device according to any preceding claim, wherein said means associated with each free end comprises a cylindrical member fastened to the free end of each lever for attaching standard barbell weight plates.

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5. An exercise device according to any preceding claim, wherein said assembly attached to each lever for stabilizing the exercise device by contacting the wrist or forearm of the user using the device comprises:

(a) a member pivotally affixed to the lever of the exercise device;

(b) a cup which fits against a user's forearm suitably connected to the said pivoting member; and

(c) a coil spring affixed between the pivoting member and the lever for urging the said cup against the forearm of the user.

6. An exercise device substantially as herein described with reference to the accompanying drawings.

DATED THIS 2nd January, 1990
SMITH SHELSTON BEADLE
Fellows Institute of Patent
Attorneys of Australia.
Patent Attorneys for the Applicant
BILL GVOICH

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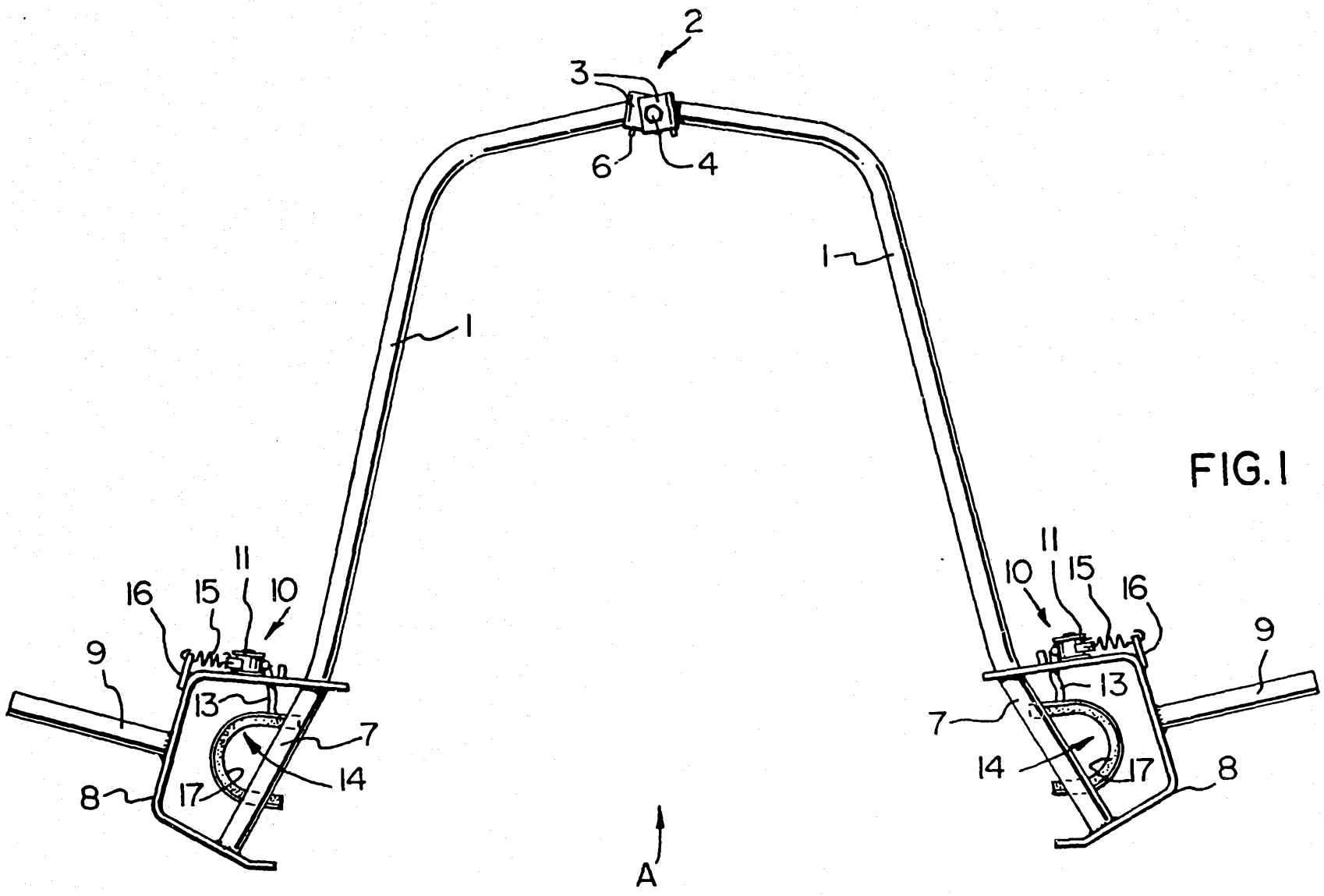

FIG.1

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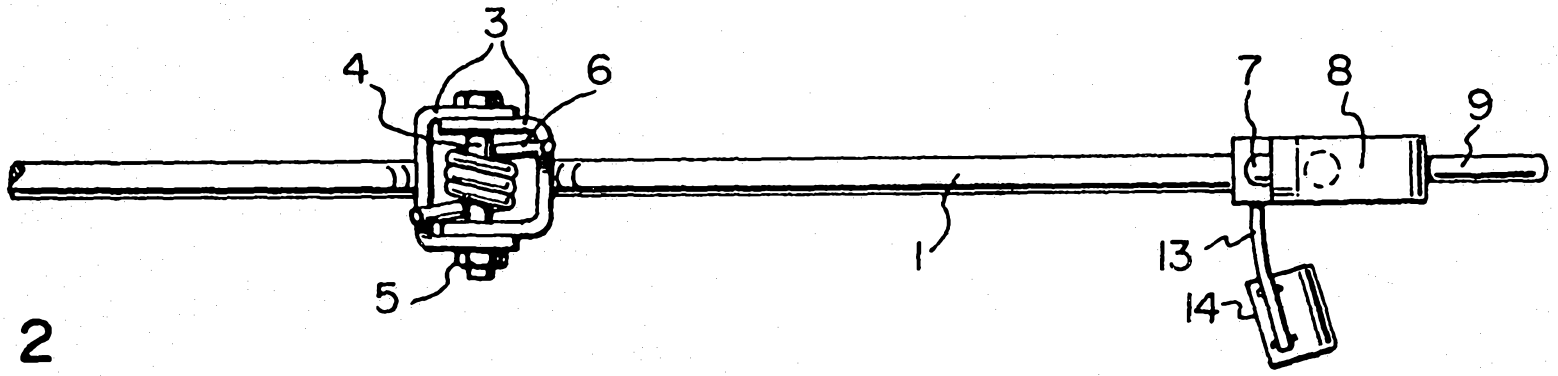

FIG. 2

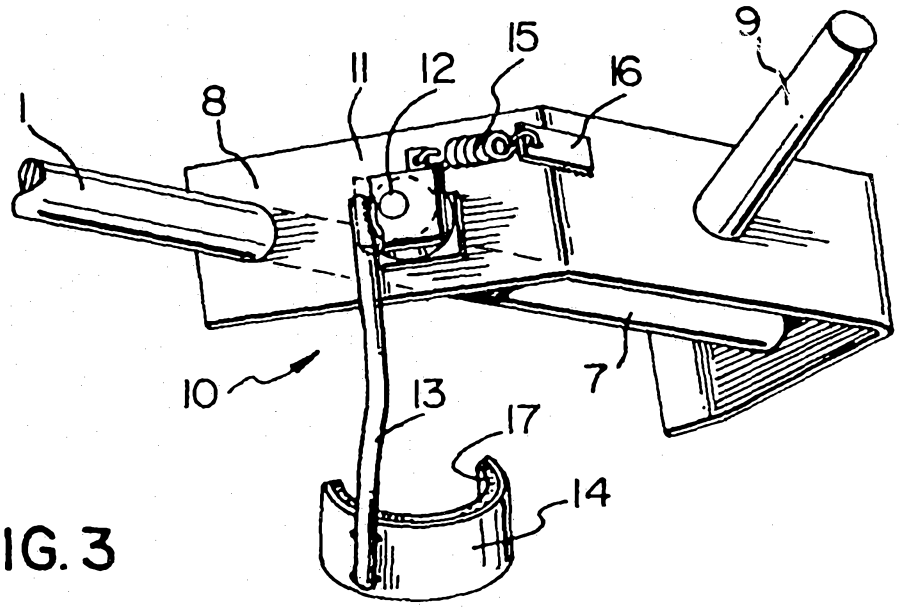

FIG. 3