Nov. 29, 1949 A. J. SCHRADER 2,489,438

HORSE EXERCISING DEVICE

Filed Jan. 8, 1946 3 Sheets-Sheet 1

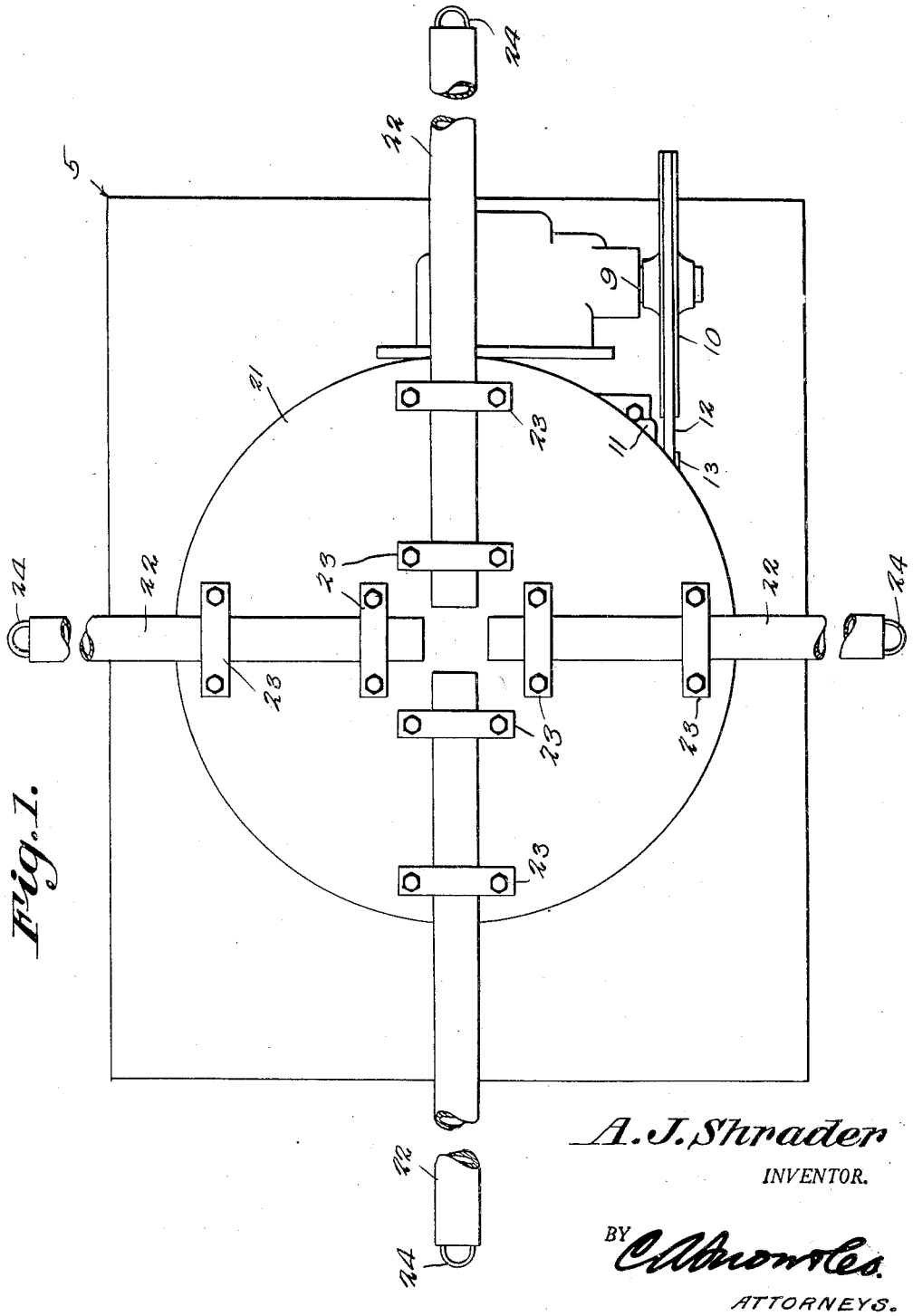


Fig. 1.

A. J. Shrader
INVENTOR.

BY Albright & Co.
ATTORNEYS.

Nov. 29, 1949 A. J. SCHRADER 2,489,438

HORSE EXERCISING DEVICE

Filed Jan. 8, 1946 3 Sheets-Sheet 2

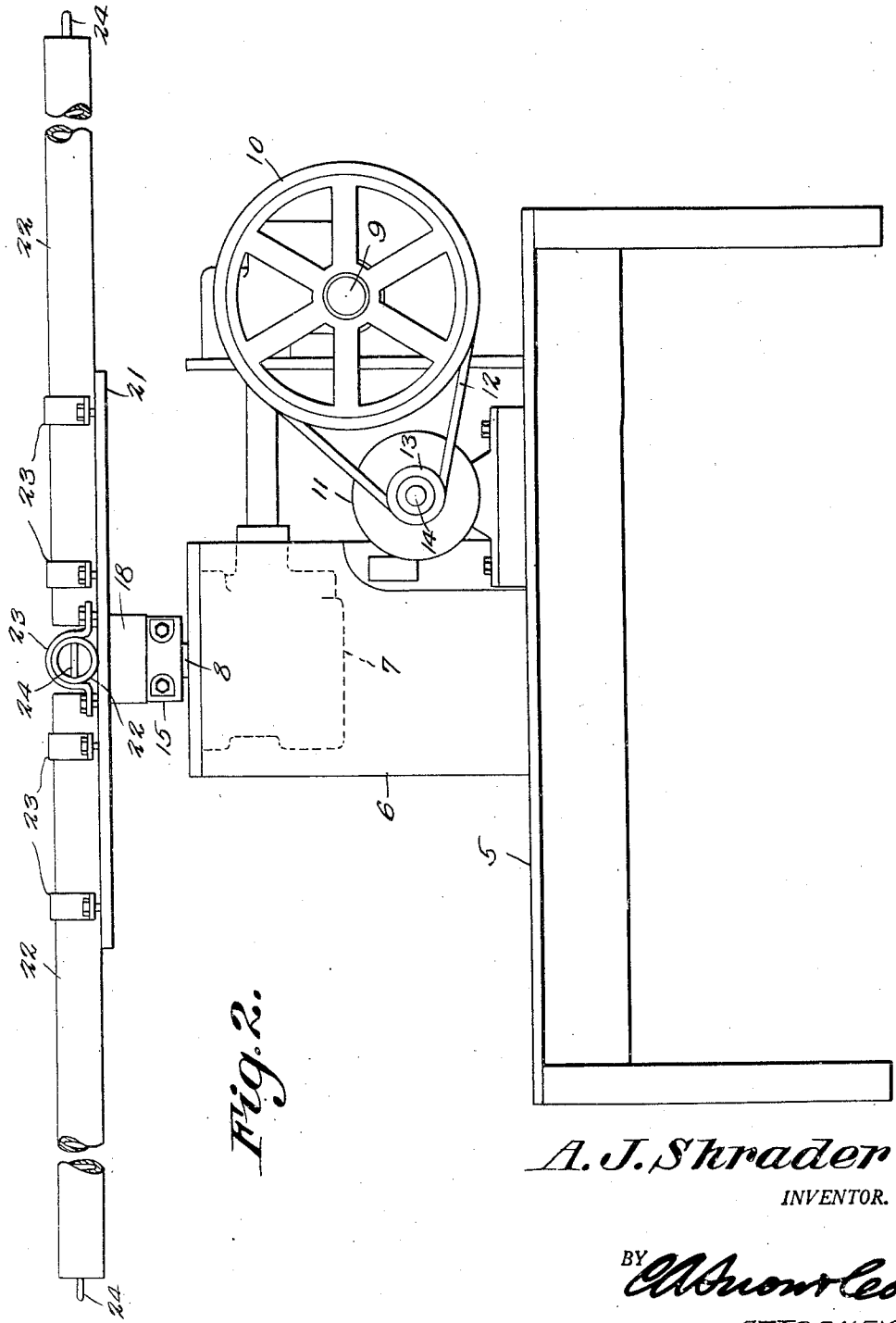


Fig. 2.

A. J. Shrader
INVENTOR.

BY Albright Co.
ATTORNEYS.

Nov. 29, 1949 A. J. SCHRADER 2,489,438

HORSE EXERCISING DEVICE

Filed Jan. 8, 1946 3 Sheets-Sheet 3

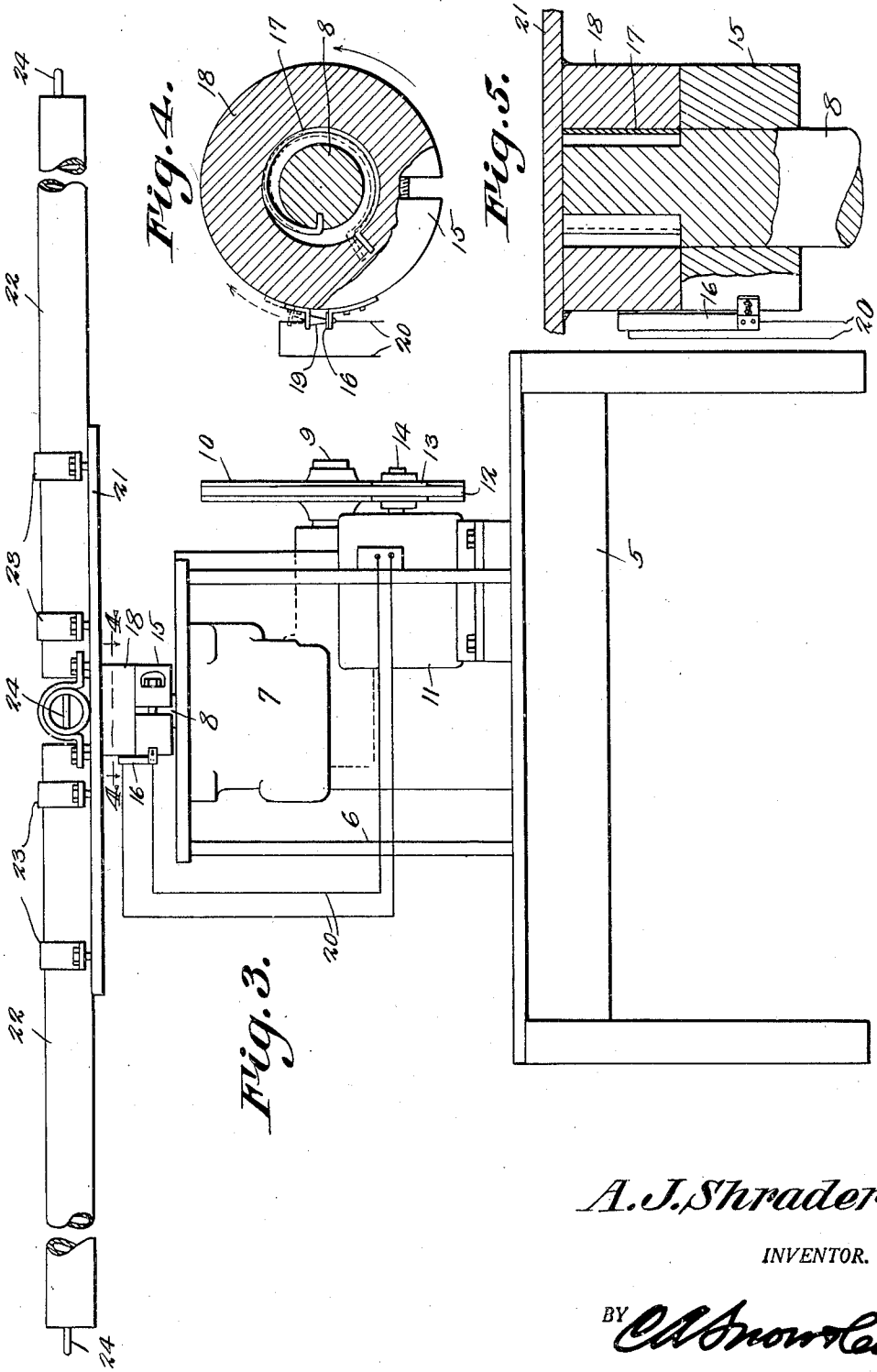


Fig. 3.

Fig. 4.

Fig. 5.

A. J. Shrader

INVENTOR.

BY C. A. Snow & Co.

ATTORNEYS.

Patented Nov. 29, 1949 2,489,438

UNITED STATES PATENT OFFICE

2,489,438

HORSE EXERCISING DEVICE

Albert J. Schrader, Scranton, Pa., assignor of one-half to Ralph M. Griffiths, Pottsville, Pa.

Application January 8, 1946, Serial No. 639,726

2 Claims. (Cl. 119—29)

1

This invention relates to an exercising device designed primarily for use in exercising race horses during the cooling off period after a race.

An important object of the invention is to provide a motor operated device of this character wherein a number of horses may be exercised simultaneously, eliminating the necessity of manually leading the horses, during the cooling off period.

Another object of the invention is to provide a device of this character which will automatically cut off if an unusual condition occurs, such as a horse falling or a horse balking, to retard the movement of the device, thereby guarding against injury to the fallen horse or horses hitched to the arms of the device.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawings:

Figure 1 is a plan view of a device constructed in accordance with the invention.

Figure 2 is a side elevational view thereof.

Figure 3 is an elevational view of the device taken at right angles to Figure 2.

Figure 4 is a sectional view taken on line 4—4 of Figure 3 parts of the device being shown in elevation.

Figure 5 is a vertical longitudinal sectional view through the upper portion of the main shaft of the device parts thereof being shown in elevation.

Referring to the drawings in detail, the device comprises a table or base 5 on which the stand 6 is mounted, the stand 6 providing a support for the gear housing 7 into which the vertical shaft 8 extends, the shaft 8 being operated by means of the shaft 9 on which the pulley 10 is mounted. This pulley 10 receives motion from the motor 11 through the medium of the belt 12 and pulley 13 mounted on the motor shaft 14.

Secured to the vertical shaft 8 is a collar 15 to which is secured the contact member 16, the upper end of the shaft 8 above the collar 15 being cut away providing a clearance for the spring 17, which has one of its ends secured to the collar 18, the opposite end thereof being secured to the shaft 8, as clearly shown by Figure 4 of the drawings.

2

The contact member 19 is secured to the collar 18 and is adapted to normally engage the contact member 16, completing a circuit to the motor 11 through the wires 20. Thus it will be seen that due to this construction, the circuit to the motor will be completed during the normal operation of the machine but when the collar 18 ceases to rotate, the contact member 16 will be moved away from the contact member 19, breaking the circuit, causing the motor to stop.

Mounted on the collar 18 is a turn-table 21 on which the horizontal arms 22 are secured as by means of straps 23, the arms 22 radiating from the center of the turn-table so that horses hitched thereto, will walk in the path of a circle.

At the ends of the arms 22 are eyes 24 to which tethers may be connected in hitching animals to the arms.

In the operation of the device, the animals to be exercised are hitched to the eyes 24 in a manner as described. The motor is now set into motion and the turn-table, together with the arms 22, are rotated.

Should an animal hitched to an arm stumble and fall, the turn-table 21 will cease rotating, whereupon the collar 15 will move to disengage the contact member 16 from the contact member 19, breaking the circuit to the motor, stopping the machine to prevent the animal from being injured by dragging the animal until the machine is manually stopped.

With this device, animals such as race horses may be exercised during the cooling off period after a race, eliminating the necessity of an attendant walking the animal, as is usual under present conditions.

What is claimed is:

1. A device of the class described, comprising a stand, a power shaft extending through the stand, a turn-table secured to the upper end of the power shaft, horizontal hitching arms secured to the turntable, an electric motor including an electric circuit operating the power shaft, a lower collar secured to the shaft above the stand, a contacting member secured to the collar, an upper collar secured to the turntable, having a contact member, normally engaging the contact member of the lower collar, completing a circuit to the motor, the upper collar being loosely mounted on the shafts above the first mentioned collar, a yieldable member connecting the collars whereby the collars move simultaneously under normal conditions and said collars adapted to move independently of each other breaking the circuit to the motor, stopping the

motor when the upper collar ceases to rotate, stopping rotation of the turntable and hitching arm.

2. A device of the class described, comprising a stand, a power shaft extending through the stand, an electric motor including an electric circuit, driving the power shaft, a lower collar secured to the shaft, a contact member secured to the collar, a turntable mounted on the upper end of the power shaft, hitch arms secured to the turntable on the upper collar having a contact member normally engaging the contact member of the lower collar completing the circuit to the motor, secured to the lower surface of the turntable, the latter collar being loosely mounted on the shaft above the first mentioned collar and having an internal annular groove, a spring fitted in the groove and being curved around the shaft, one end of the spring being secured to the shafts, the opposite end of the spring being secured to the upper collar, normally urging the upper collar in an anti-clockwise direction, a turntable secured to the upper collar rotating therewith, and said lower collar adapted to move with respect to the upper collar disengaging the contact members, breaking the circuit to the motor, stopping the power shaft when the upper collar is held against rotation of the shafts.

ALBERT J. SCHRADER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,062,495	Olin	May 20, 1913
1,699,308	Postings	Jan. 15, 1929
1,764,936	Dean	June 17, 1930
2,317,490	Simpson	Apr. 27, 1943
2,387,047	Weiss	Oct. 16, 1945