A treadmill belt, the belt having a flat inner surface and a cobblestone-shaped or brick-shaped outer surface, is disclosed. A treadmill including the novel belt is useful for improving circulation and balance.
FIG. 1
FIG. 4
TREADMILL BELT ARTICLE, APPARATUS, AND METHOD

BACKGROUND OF THE INVENTION

0001. The present invention relates to the field of exercise treadmills and particularly to the endless loop belt component used in treadmills.

0002. Almost all exercise treadmills comprise an endless loop rubber belt which is driven by rollers at each end, the rollers in turn being driven by an electric motor and controlled by a controller which enables the user to select speed, duration, and other features. The top of the belt loop is usually supported by strong support surface which allows the belt to travel smoothly over it and is strong enough to support the weight of a heavy, running user.

0003. There have been some suggestions in the art to include massaging knobs on the support surface (see U.S. Pat. No. 6,918,858 to Yeh, for example) or a plurality of beads on the belt itself as shown in U.S. Pat. No. 5,527,241, to Peng, which shows magnetic beads distributed on a belt surface. U.S. Pat. No. 6,663,540 to Huang discloses a massaging body suitable for massaging the soles of the user’s feet and mounted on a base plate between a tread frame, with a wear resistant film between the walking belt and the massaging body. Although the idea of massaging the soles of a treadmill user’s feet during walking or running exercise is very good in concept, due to various complications in manufacturing or ineffectiveness in designs, none of the prior art massaging treadmills has achieved commercial success as far as known to the present inventor.

0004. It has been reported recently (Philadelphia Inquirer, Jul. 12, 2005) that when people over 60 walk on cobblestones roads or sidewalks, their blood pressure was significantly lowered and their balance was improved. Although many people with health problems would benefit from walking on cobblestone streets, such streets are not widely available. It is an object of the present invention to provide an article, apparatus, and method so that people can benefit from walking on a cobblestone shaped surface.

SUMMARY OF THE INVENTION

0005. This object, and others which will become apparent from the following disclosure, are achieved by the present invention which in one aspect comprises a treadmill belt, the belt having a flat inner surface and a cobblestone-shaped outer surface. Preferably, the cobblestone-shaped outer surface is formed of molded rubber.

0006. The treadmill can have a support frame having a first end and a second end, a first roller supported on a first shaft at the first end and a second roller supported on the second shaft at the second end, the cobblestone-surfaced treadmill belt encircling the first roller and the second roller, and a motor having a shaft operable connected to the first roller and/or the second roller.

0007. Conventional treadmill motor controller, switching, metering, speed adjustment, and the like can be provided. The treadmill of the invention differs from conventional treadmills primarily in the belt surface feature. Other variations from conventional treadmills may be necessary to accommodate the increased thickness of the cobblestone shaped belt versus conventional flat belts.

0008. An optional, novel feature of the invention is a system for generating the sound of a person walking on real cobblestones while the treadmill is running.

0009. The using the treadmill of the invention can be used to improve circulation and/or balance at home or a gym and is especially useful when real cobblestone paths or streets are unavailable or inconvenient to use.

BRIEF DESCRIPTION OF THE DRAWINGS

0010. FIG. 1 shows a perspective view of a first embodiment of a treadmill according to the invention, illustrating a first embodiment of a belt according to the invention.

0011. FIG. 2 shows a cross-sectional view through 2-2 of FIG. 1.

0012. FIG. 3 shows a perspective view of a second embodiment of a treadmill according to the invention, illustrating a second embodiment of a belt according to the invention.

0013. FIG. 4 shows a cross-sectional view through 2-2 of FIG. 3.

DETAILED DESCRIPTION

0014. Referring first to FIG. 1, an example of a treadmill machine 1 of the invention comprising a base 11, belt support rollers 2, lower rollers 21, motor 5 which drives at least one roller 2, control panel 13, handles 12, belt 3, with novel cobblestone pattern 4. The cobblestone-shaped surface of this first embodiment provides the special benefit of the invention versus the traditional and typical flat surfaced belts used on prior treadmills.

0015. Although eight rollers 2 are illustrated, any number of rollers or alternative support systems such as a flat support can be used. Preferably rollers 2 mounted respectively at two longitudinal ends of the support frame 11. The belt 3 runs on the rollers 2 which are driven by the motor 5.

0016. Referring now to FIG. 2, the belt 3 with cobblestone pattern 4 forms a loop around the upper rollers 2 and the loop is supported below by rollers 21. The handle 12 and control panel 13 are illustrated in this view.

0017. When operating according to the method of the invention, a person desiring to improve his or her circulation walks or runs on the cobblestone 4 surfaced-treadmill belt 3 of the invention in an otherwise-normal fashion as those skilled in this art are familiar with. The special surface on the belt of the invention provides an uneven walking surface which is superior to prior ball surfaces, flat surfaces, and other variegated surfaces for the circulation and balance improvement features of the invention.

0018. Referring now to FIG. 3, a second embodiment is illustrated wherein the belt 3 has a brick 4 pattern, the brick pattern designed to simulate walking on a brick path and with the intended effect of increasing circulation in the legs of the walker.

0019. FIG. 4 illustrates the brick 4 pattern on belt 3 in an otherwise similar treadmill design.

0020. The embodiments of the present invention described above are to be regarded in all respects as being illustrative and nonrestrictive. Accordingly, the present
invention may be embodied in other specific forms without departing from the spirit and scope of the invention.

What is claimed is:

1. A treadmill belt, the belt having a flat inner surface and a cobblestone-shaped or brick-shaped outer surface.

2. The article of claim 1 wherein the cobblestone-shaped outer surface is formed of molded rubber.

3. A treadmill having a support frame having a first end and a second end, a first roller supported on a first shaft at the first end and a second roller supported on the second shaft at the second end, the treadmill belt of claim 1 encircling around the first roller and the second roller, and a motor having a shaft operable connected to the first roller and/or the second roller.

4. The machine of claim 3 further including a motor controller for controlling the motor speed and/or duration of operation.

5. The treadmill of claim 3 further including a system for generating a sound simulating walking on stone cobblestones or bricks.

6. A method of improving circulation and/or balance comprising providing a treadmill according to claim 3 and walking or running on the cobblestone-shaped or brick-shaped surface while the belt is being driven by the motor.

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