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Crafton

(54) ERGONOMIC WORKSTATION

(76) Inventor: **Joshua P. Crafton**, (US)

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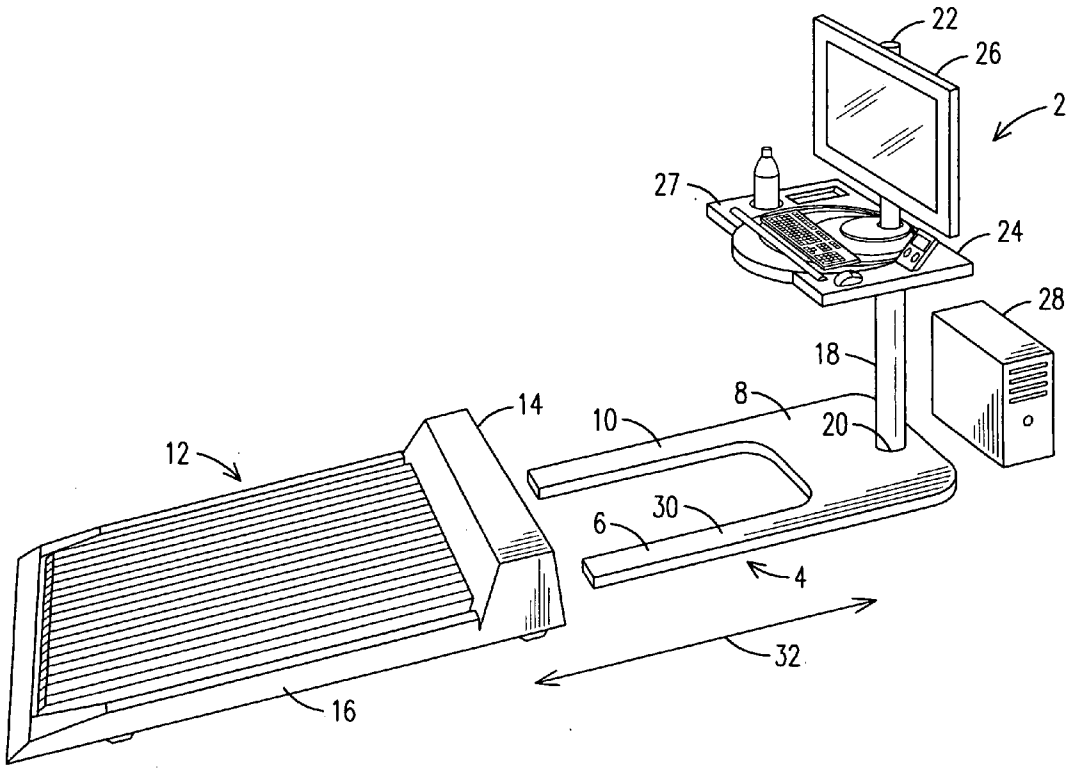
(57) **ABSTRACT**

An ergonomic workstation with a reduced or minimal footprint comprises a modified treadmill component and a workstation component. In one embodiment, a substantial portion of the workstation's support structure fits under the treadmill component so that the overall footprint of the treadmill workstation is minimized. Additional lateral stability of the workstation component is ensured by its proximal location under the heavy treadmill component. A vertical support extends from the base of the workstation component and supports a vertically oriented desk and monitor. In another embodiment, a single vertical workstation support enables adjustability at more than one point. Because both the screen and the desk are connected to the single vertical support, a user may quickly adjust both the desk surface and the viewing monitor to appropriate, individually tailored heights with minimum effort. Once these adjustments are accomplished, the user may simultaneously type on a keyboard at a customized desk height, view a screen at customized eye level, and walk on the treadmill and reduce stress to the user's body.



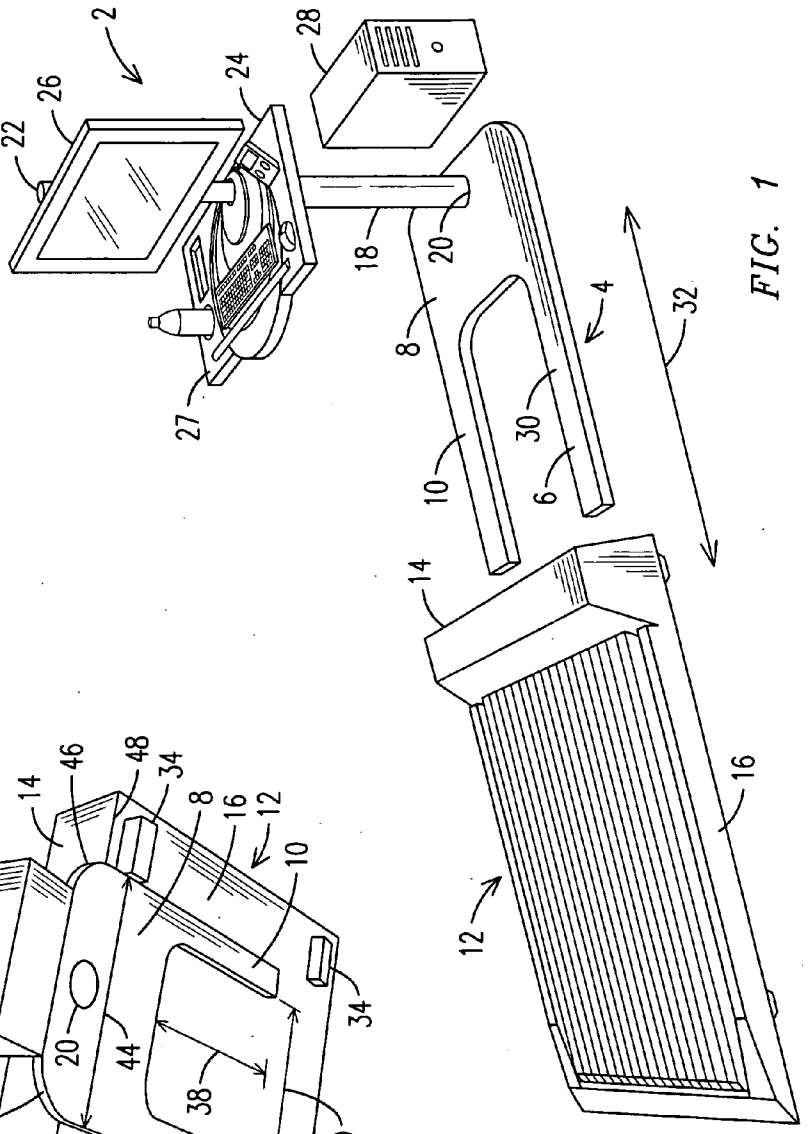

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FIG. 1

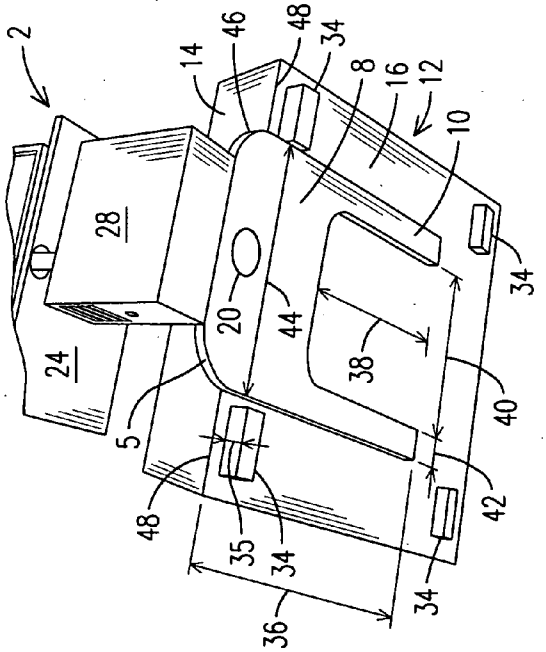
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FIG. 2A

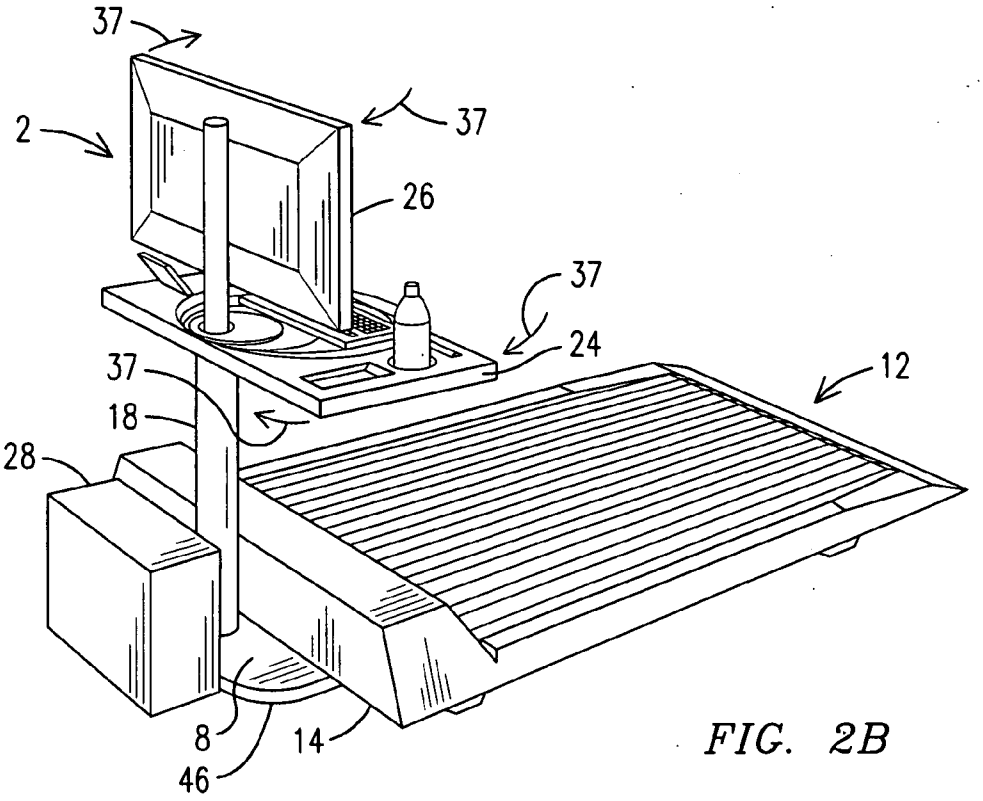

FIG. 2B

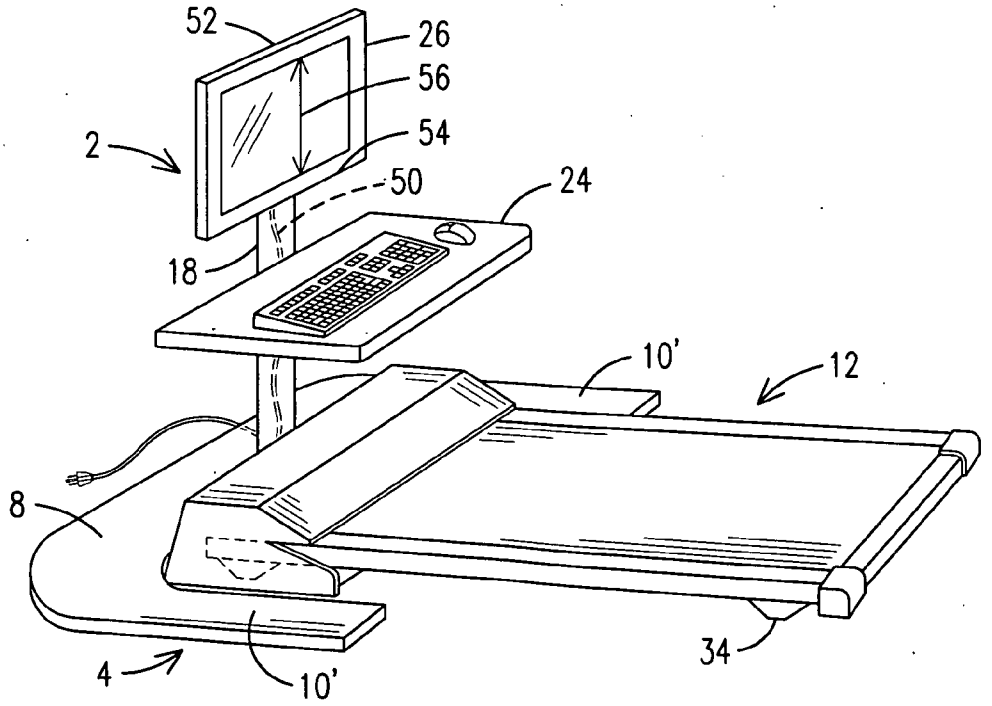

FIG. 3

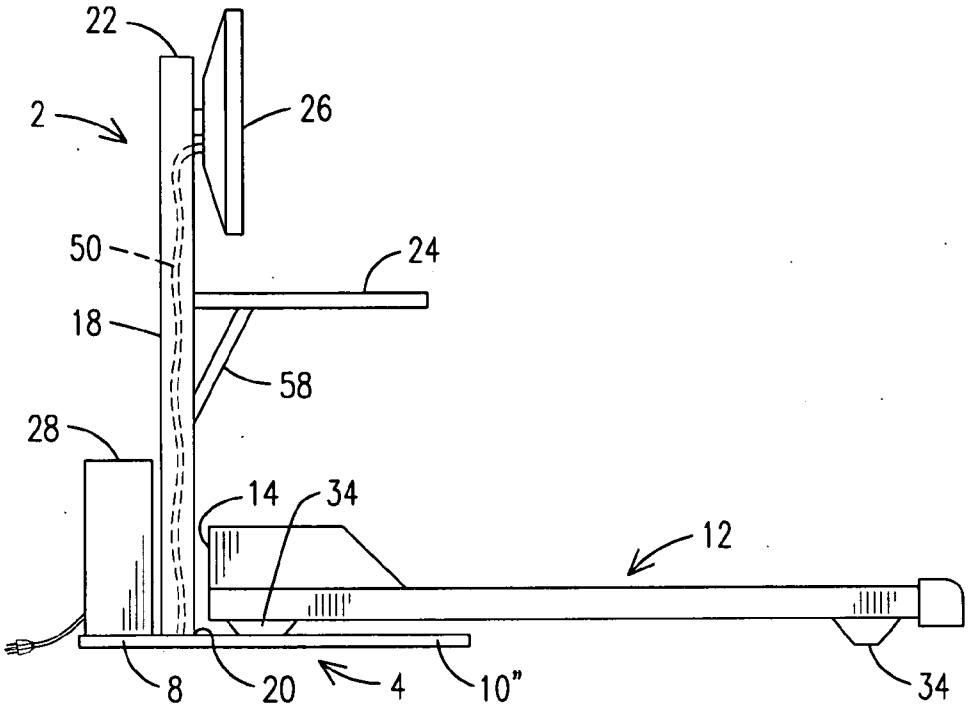
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FIG. 4

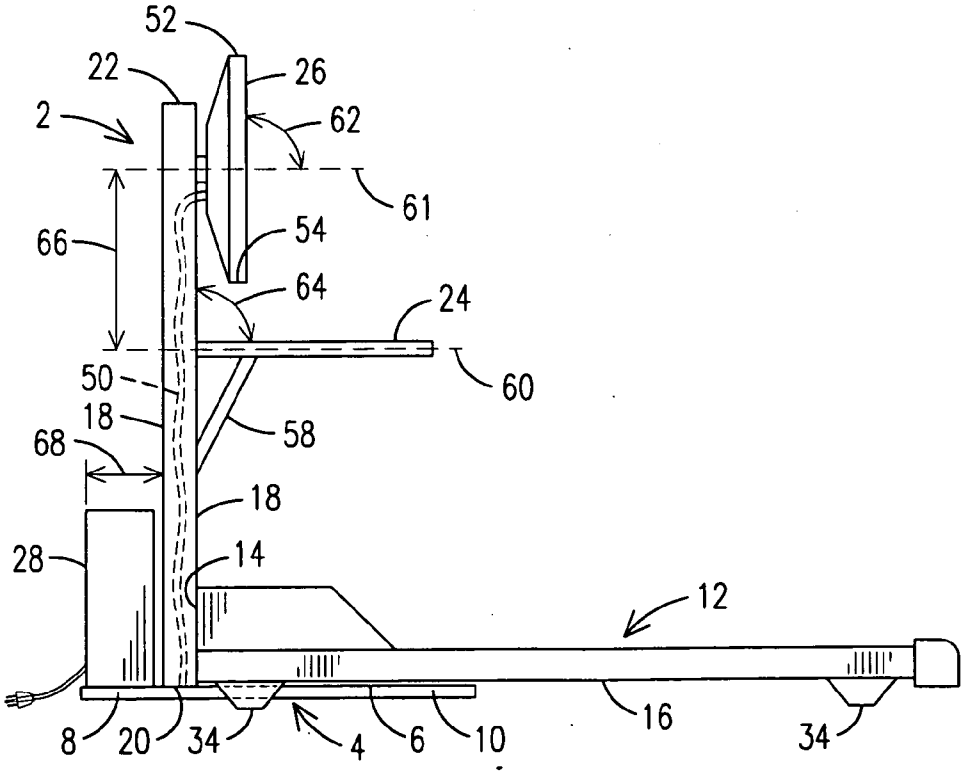
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FIG. 5

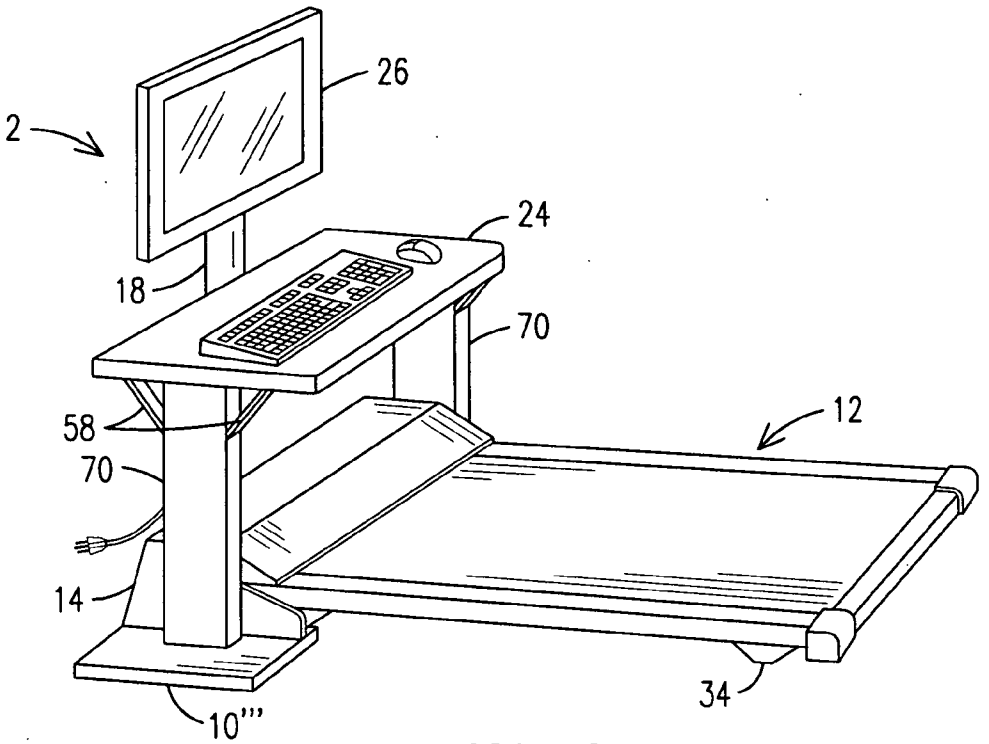

FIG. 6

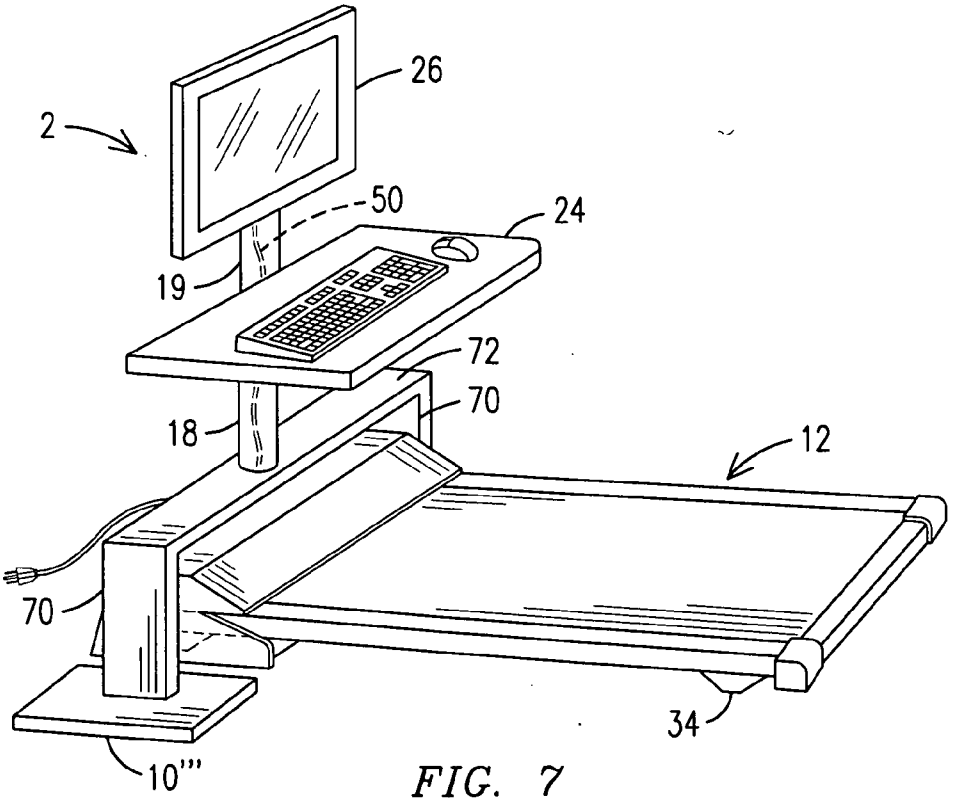

FIG. 7

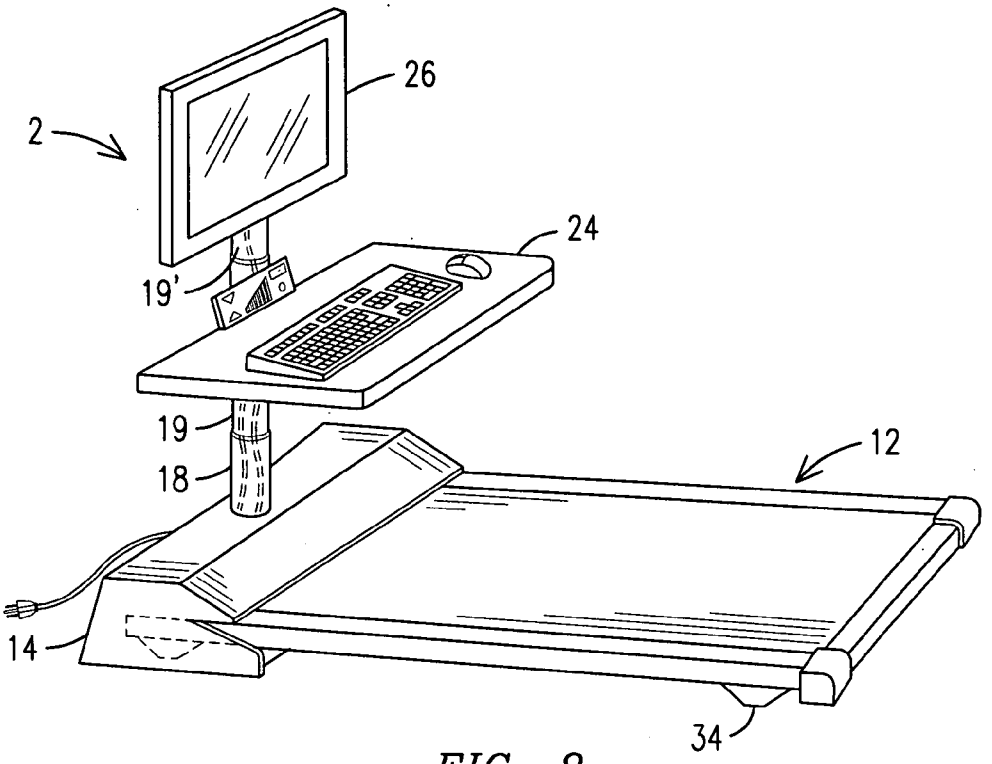

FIG. 8

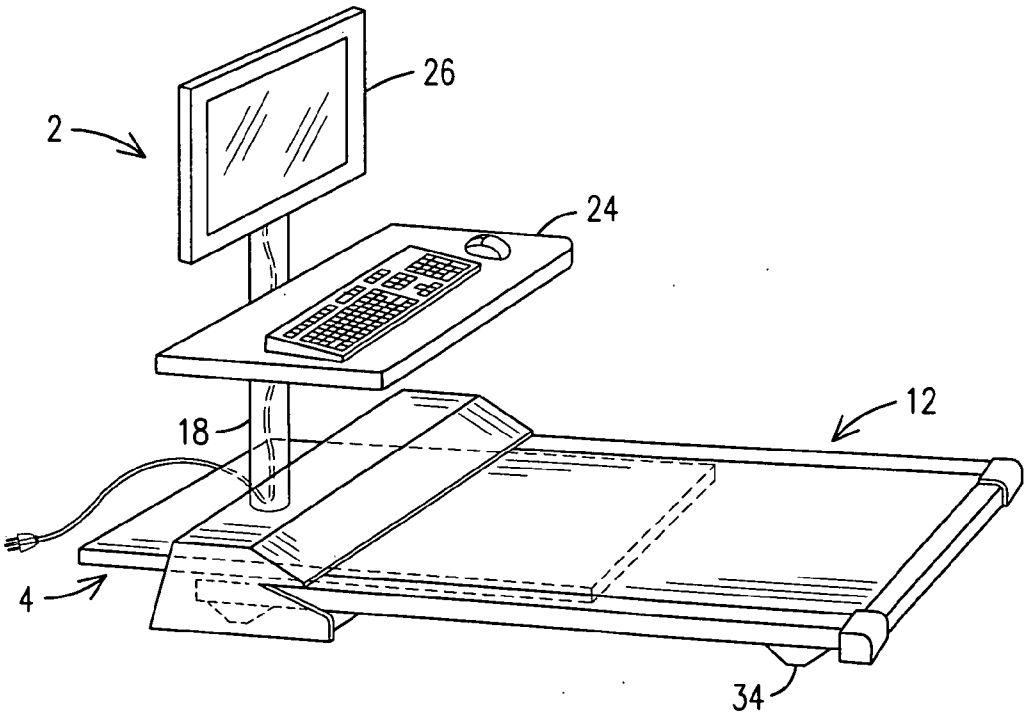

FIG. 9

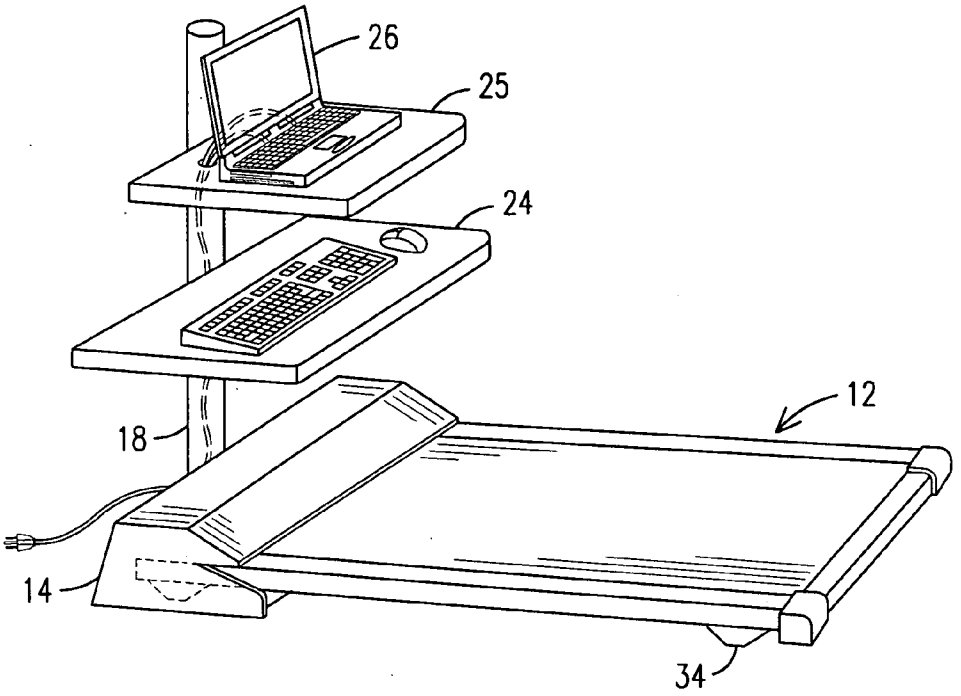

FIG. 10

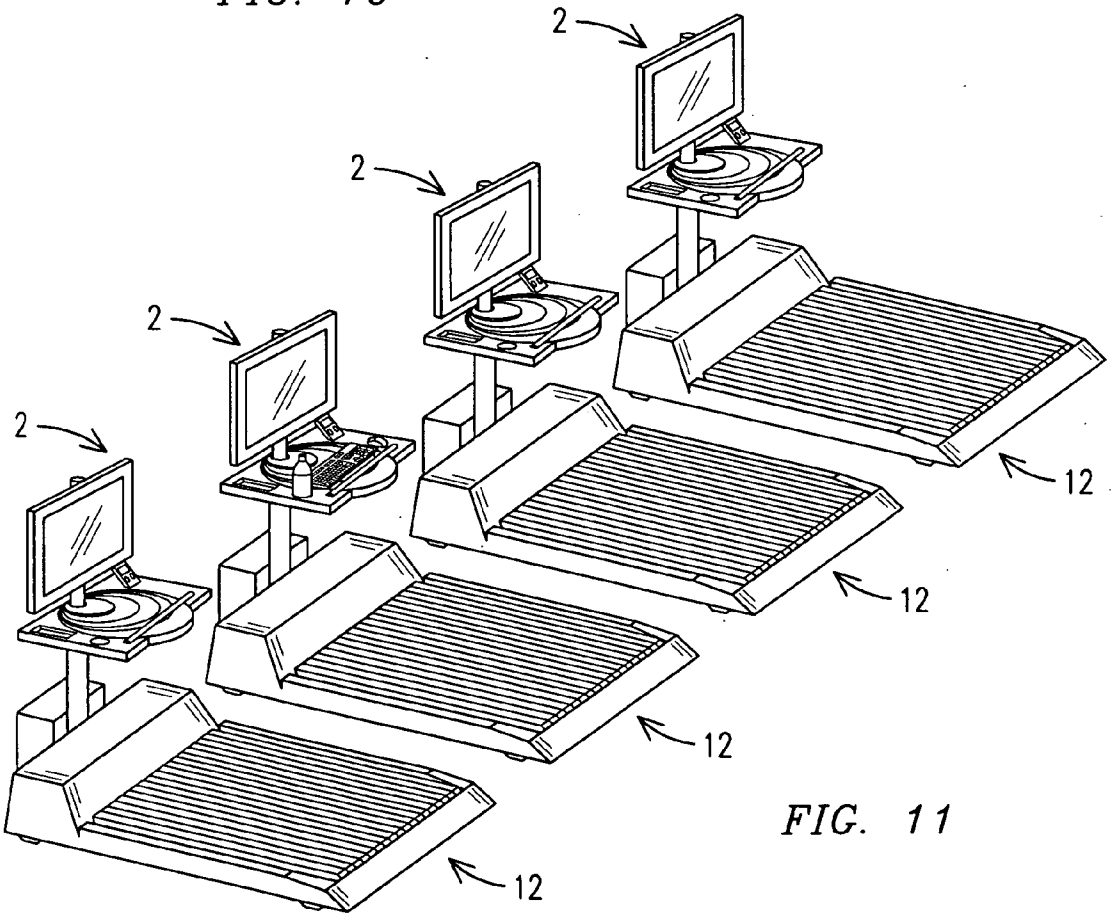

FIG. 11

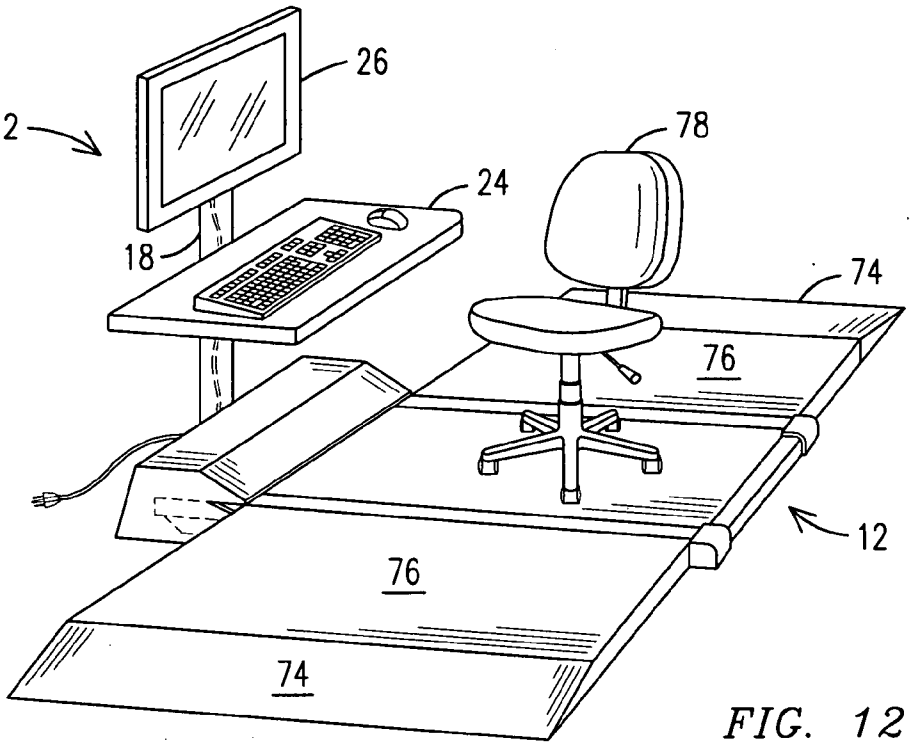

FIG. 12

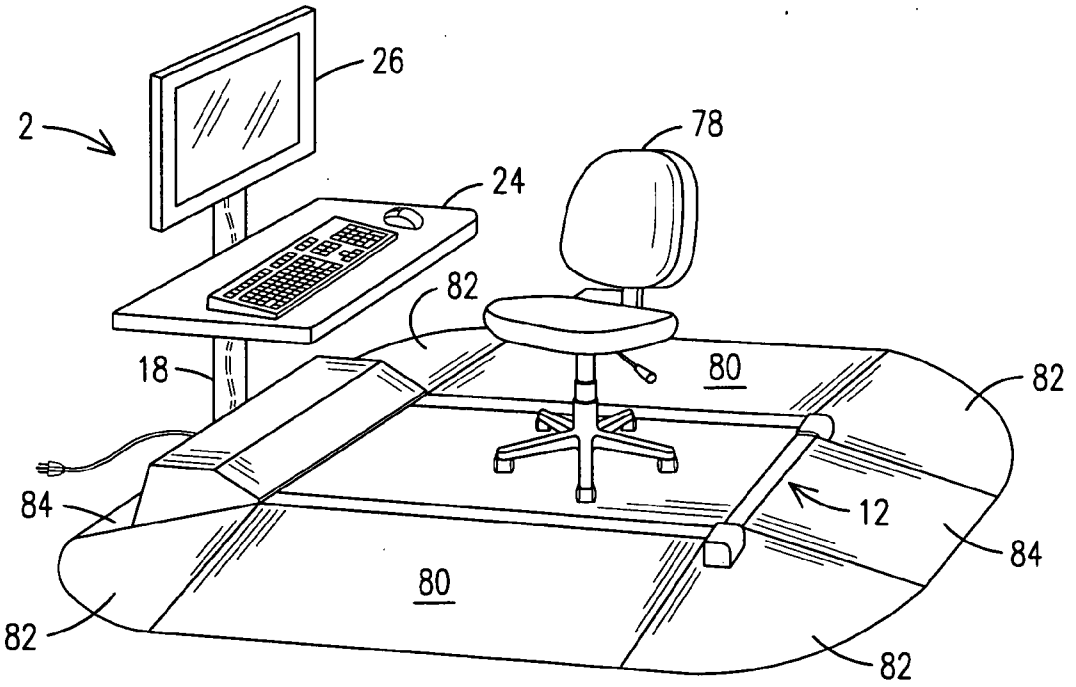

FIG. 13

ERGONOMIC WORKSTATION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of the filing date of U.S. Provisional Application No. 61/366,968, filed Jul. 23, 2010. The entire disclosure of U.S. Provisional Application No. 61/366,968, filed Jul. 23, 2010, is incorporated herein by reference as if set forth in its entirety.

FIELD OF THE DISCLOSURE

[0002] The present disclosure generally relates to office furniture, and more specifically, to office furniture with ergonomic adjustability that also functions as exercise equipment and a workstation.

BACKGROUND OF THE DISCLOSURE

[0003] A traditional office environment, which is one where the employee spends a large portion of a typical workday seated working behind a desk, has produced a largely sedentary workforce. This suggests that the office environment may be harmful and that a lack of exercise could actually cause chronic, costly, and debilitating diseases.

[0004] Moderate exercise each day could improve and increase employee productivity, while reducing the risk of chronic and debilitating diseases. To burn calories and stay fit is a tough challenge for the modern office worker. Most people whose work does not entail considerable physical exertion are fully aware that they would enjoy better health if they exercised more. But with the five-day work week, oftentimes only the weekends provide the free time for this.

[0005] Office cardio exercise can be a solution for many employers who desire to cut costs and improve workplace productivity and employees interested in improving their overall health and work related performance and effectiveness. Furthermore, employee exercise could boost endorphin levels, relieving stress and providing a boost to their self-confidence, which could benefit job performance. As a result, office employees may benefit greatly from an in-office exercise program.

SUMMARY OF THE DISCLOSURE

[0006] Briefly described herein are a plurality of embodiments of an ergonomic workstation (i.e. an article of furniture) for incorporating performance of work related activities while at the same allowing the user to exercise. The workstation may be considered a single structure that may interface with an exercise element or the ergonomic workstation may be considered the combination of the single structure workstation in combination with the exercise element (i.e. an exercise platform). The exercise element may be a treadmill, a stationary cycle, an elliptical stepping machine, or any substantially similar stationary exercise device. The workstation, or article of furniture, further comprises a substantially flat base having a first portion sized and configured to engage with a lower surface of the exercise platform, wherein the base further comprises a receiving area for a central processing unit. The article of furniture also comprises a support structure extending from a second portion of the base and arranged toward a first end of an exercise element, the support structure having a proximal end and a distal end, wherein the distal end is attached to the base and the support structure is able to telescope in a vertical direction. A work platform is attached to the support structure and a viewing monitor is attached to the support structure. The viewing monitor is generally located at about the proximal end but the monitor may be adjustable between the proximal end and the work platform.

[0007] In another embodiment. a workstation comprises a support base in operative communication with an exercise device, the support base comprising an elongate tongue to engage with a base of the exercise element, wherein the elongate tongue may have an adjustable length and width to secure the base to the exercise element. A generally vertical hollow telescoping support structure extends from the base upward and has a first end attached to the base and a second end opposite the first end. A work platform, which is adjustable or movable is attached to the support structure and a viewing monitor, which is adjustable or movable is attached to the support structure at about the second end, wherein the monitor is vertically adjustable between the second end and the work platform. A plurality of electrical connections extending from at least the viewing monitor through the hollow support structure to a central processing unit supported on the base.

[0008] Additional features and advantages will be set forth in the detailed description that follows. These additional features and advantages will in part be readily apparent to those skilled in the art from the detailed description, or recognized by practicing the embodiments as described herein, including the detailed description and aspects of the disclosure that follows, as well as the appended drawings.

[0009] It is to be understood that both the foregoing summary and the following detailed description are merely exemplary of preferred embodiments, and are intended to provide an overview or framework to understanding the nature and character of the claims. The accompanying drawings are included to provide a further understanding, and are incorporated in and constitute a part of this specification. The drawings illustrate the exemplary embodiments, and together with the description serve to explain principles and operation of the various embodiments.

BRIEF DESCRIPTION OF THE FIGURES

[0010] The components of the following figures are illustrated to emphasize the general principles of the present disclosure and are not necessarily drawn to scale. Reference characters designating corresponding components are repeated as necessary throughout the figures for the sake of consistency and clarity.

[0011] FIG. **1** is an isometric view of an ergonomic workstation according to a first embodiment of the disclosure.

[0012] FIG. **2**A is another isometric view of the ergonomic workstation of FIG. **1** illustrating an interface between a workstation and an exercise element.

[0013] FIG. **2**B is another isometric view of the ergonomic workstation of FIG. **1** illustrating an arrangement between the workstation, the exercise element and a central processing unit.

[0014] FIG. **3** is an isometric view of an ergonomic workstation according to a second embodiment of the disclosure.

[0015] FIG. **4** is a side view of an ergonomic workstation according to a third embodiment of the disclosure.

[0016] FIG. **5** is a side view of an ergonomic workstation according to a fourth embodiment of the disclosure.

[0017] FIG. **6** is an isometric view of an ergonomic workstation according to a fifth embodiment of the disclosure.

[0018] FIG. **7** is an isometric view of an ergonomic workstation according to a sixth embodiment of the disclosure.

[0019] FIG. **8** is an isometric view of an ergonomic workstation according to a seventh embodiment of the disclosure.

[0020] FIG. **9** is an isometric view of an ergonomic workstation according to an eighth embodiment of the disclosure.

[0021] FIG. **10** is an isometric view of an ergonomic workstation according to a ninth embodiment of the disclosure.

[0022] FIG. **11** is an isometric view of a plurality of ergonomic workstations according to any embodiment as disclosed herein.

[0023] FIG. **12** is an isometric view of an ergonomic workstation according to a tenth embodiment of the disclosure.

[0024] FIG. **13** is an isometric view of an ergonomic workstation according to a eleventh embodiment of the disclosure.

DETAILED DESCRIPTION OF THE DISCLOSURE

General Discussion of an Ergonomic Workstation

[0025] An ergonomic workstation design is disclosed having a treadmill component or exercise element in combination with a working area where the two cooperatively interface but with have no significant physical connection between the exercise element and the working area. As is disclosed, it will be understood by the skilled artisan that the term "treadmill component" may also mean stationary bicycle, stationary rowing machine, stationary elliptical stepping machine or any stationary exercise component wherein the user may exercise and accomplish a non-exercise related activity (i.e. tasks related to employment or work) concurrently. The term "working area" used throughout this disclosure is understood to mean a location where one performs work, such as a desk or workspace. The low profile of the workstation optimizes the use of space by minimizing the workstation's footprint and by eliminating any unnecessary supports surrounding the treadmill component. The term "low profile" used throughout this disclosure is understood to mean that the profile of the workstation (i.e. the workstation size, workstation aspect ratio, workstation weight and workstation footprint) have been reduced. The workstation design further conceals and secures components and wires or connections, and the workstation provides multiple daily users with quick and efficient means of adjusting both the height of the work area relative to the treadmill component and the height of a viewing screen relative to at least the height of the work area. Thus allowing each user to work and exercise at their respective optimum mobile-working posture. The ergonomic workstation allows a user to exercise while performing non-exercise related tasks.

[0026] Depending on the type of work the user is performing, the user is often required to adjust their head, shoulder, and arm positions while working at the workstation. The present ergonomic workstation affords the user the flexibility to ergonomically adjust the workstation's viewing monitor to his standing eye level, as well as the work area to his appropriate and comfortable typing level, may eliminate straining the back or neck. Further, by using the present ergonomically adjustable workstation design, the user may experience better posture, health, and enjoy the benefits of daily exercise while at work.

[0027] Employers providing ergonomically adjustable workstations and employees using with ergonomically adjustable treadmill workstations will reap rewards in decreased healthcare cost and realize improvement in morale and health. A single, easily and quickly adjustable workstation is cost effective because it can rapidly adjusted to accommodate a wide variety of unique users in a given day as well as a wide variety of body types in a given day. Common computer networks, wifi networks and wireless technologies may allow many users to access their respective workloads from the same computer throughout the day. As an example, an employer may only need to provide one adjustable workstation for every five employees. This is in stark contrast to prior workstation designs, which are bulky and take up excessive space. The present design presents a minimized footprint without loosing functionality. This workstation may be unobtrusively featured in the common areas of offices, in gyms, or in a variety of other facilities where space must be conserved.

[0028] The benefits of working at an ergonomic treadmill workstation are superior to the traditional sedentary workstyle that most employees struggle with today. Record numbers of chronic back pain sufferers, a dramatic rise in the prevalence of obesity among office workers, and the rising cost of corporate healthcare, all suggest that the sedentary method of office work is harmful. The human body is designed to spend the majority of its time upright and in motion.

[0029] The present workstation disclosed herein allows quick and efficient adjustment of the viewing monitor to standing eye level, and adjustment of the work area to an optimum level for typing while walking. The workstation is space saving and more stable than previous designs. The present invention allows a user to maintain a healthier mobile posture than any previous workstation design.

[0030] Designs for both treadmill workstations and space saving standalone vertically oriented computer stations are now common in the field of office furniture. The desire to save space brought about many designs for vertically oriented computer workstations. For example, as discussed in U.S. Pat. 6,298,794 to Brown, a vertically adjustable computer workstation with a single telescoping support is disclosed. However, single support workstations have failed to be significantly implemented into the real world because of a significant drawback, i.e. all single support computer workstation designs suffer from a high center of gravity and fail to provide a workstation that is safe and laterally stable enough for day to day use in the workplace.

[0031] The common single support workstation that can accommodate standing users typically supports the work area and viewing monitor with a base that occupies an excessive amount of space. The large base, which is required to sufficiently stabilize a single support workstation, poses a tripping hazard to users and can substantially negate the space saving benefits of the workstation itself.

[0032] In the present disclosure, a treadmill workstation design that integrates a treadmill with a single support computer workstation solves both problems associated with standard vertically oriented workstations. In this design, the large space that was previously required for stabilization of the workstation is substantially transformed into a useful exercise component. In addition, sufficient stability of the single support workstation is ensured by its integration with a heavy, stable treadmill.

[0033] Many of the prior art workstations are not practical for use in a public or semi public place such as a workout facility or a common area in an office complex. Previous designs fail to present an effective way for a user to adjust

both the screen height of his monitor and the height of his desk to his preferences in a quick manner that will not take excessive time from his workout. Rapid adjustability of the viewing monitor and work area is a desired feature in a situation where several people use the same workstation throughout the day. Also, neither present an ability to conceal component connections (i.e. electrical wires) or secure the computer and monitor portion of the workstation. Thus, components of previous designs are significantly susceptible to tampering or theft.

[0034] Additionally, previous designs are unsuited for public, or semi-public spaces because of their excessive footprint. Excessive clutter proximate the sides of the treadmill from the support structure presents additional danger to the user of the workstation. For example, a user may need to dismount a moving treadmill workstation quickly to avoid injury. As another example, a user may impact or contact unnecessary lateral supports (i.e. during dismount) and suffer serious injury. Thus, a traditional desk with sides or a desk with any type of support that occupy a footprint on either side of the treadmill, poses additional and undesirable risk.

[0035] Some prior art workstations feature a treadmill workstation design wherein the treadmill component and the workstation component are significantly structurally connected. Practically speaking, a significant connection between the two components causes an undesirable transfer of motion from the feet of a user, into the treadmill, and then into the workstation component. This transfer can cause undesirable shaking or vibration of a monitor screen or a keyboard that is supported by the workstation. The transfer of motion throughout a traditional treadmill workstation significantly impairs a user's ability to concentrate on their work.

DETAILED DESCRIPTION

[0036] The present disclosure is directed to a workstation for use in an office environment or exercise facility environment. Another aspect of the present disclosure is the use of a workspace in a private or semi-private environment. Yet another aspect of the present disclosure is directed to office furniture that incorporates aspects of exercise equipment. Although disclosed primarily within the context of a workstation for use in an office environment, the skilled artisan will recognize that the principles of the present disclosure are not limited to a workstation for use in an office environment, but extend to a workstation used in combination with a stationary exercise element, such as a treadmill, a stationary bicycle or elliptical stepping machine, wherein the user may perform specified non-exercise related tasks while exercising, in a variety of environments.

[0037] The workstation is an ergonomic workstation and is therefore concerned with the "fit" between people and their technological tools and environments. The workstation takes account of the user's capabilities and limitations in seeking to ensure that tasks, equipment, information and the environment suit each user by offering components that are easily and quickly adjustable to best match the user's particular preferences. Further, the workstation functions to be used in concert with a stationary exercise element so a user (i.e. an employee) may be able to continue performing non-exercise related activities while at the same time exercising. It is anticipated that the workstation will be sufficiently "universal" in connectivity with the exercise element such that the workstation will be compatible and usable with a wide variety of exercise elements manufactured by a wide variety of manufacturers.

[0038] It is understood that the ergonomic workstation as disclosed in this document may mean a stand alone structure (see FIG. **1**, workstation **2**) or the stand alone structure in combination with an exercise element (see FIG. **1**, exercise element **12**). For example, the ergonomic workstation is considered to be the combination of the workstation **2** with the exercise element **12** when the user is exercising while performing non-exercise related activities.

[0039] FIG. **1** is an isometric view of a workstation **2** having a flat base **4**, a support structure **18**, a workspace **24** and a viewing monitor **26**. The flat base **4** comprises a flat base first portion **6** and a flat base receiving portion **8**. The flat base first portion **6** may further comprise at least one support feature **10**. As illustrated, the support feature **10** is a pair of support features **10** that engage with, cooperate with and/or interface with an exercise element first end **14** of an exercise element **12**. As illustrated, the exercise element **12** is a treadmill exercise element **12**. In some embodiments, the support features **10** engage with an exercise element base **16** and secure (i.e. maintain contact between or secure in a substantially fixed position) the workstation **2** and exercise element **12** together. The flat base receiving portion **8** is arranged toward one end of the flat base **4** and may provide a support location for a computer central processing unit (CPU) **28**.

[0040] The support structure **18** has a first end **20** and a second end **22**. And as illustrated, may be a generally vertical support structure **18**, although it is not required that the support structure **18** be generally vertical. The support structure **18** may be generally cylindrical in cross section; however, other cross sectional shapes may be suitable and may depend on the particular application. The first end **22** is arranged proximate the flat base **4** and is attached to the flat base **4**. The manner of attachment of the first end **20** to the flat base **4** may be by any means that provides a secure and robust connection between the two elements. For example, the attachment means may be a mechanical attachment means such as a welded joint, a brazed joint, or a bolted joint. In some embodiments, the attachment means may be by interference fit between the first end **20** and the flat base **4**. In other embodiments, the attachment means may be an attachment means that permits relative motion, such as, for example, rotation or pivoting, between the first end **20** and the flat base **4**. In yet other embodiments, the support structure **18** and the flat base **4** may be fabricated or cast as a single element.

[0041] Disposed along the support structure **18**, between the first and **20** and the second end **22** are a work platform **24** and a viewing monitor **26**. The work platform **24** may be a substantially flat work platform **24** that has a substantially horizontal work surface **27**. The work surface **27** is the location where a user may perform non-exercise related activities, such as, for example, work activities associated with the user's employment. The viewing monitor **26** is arranged to be substantially vertical and may be arranged closer to the second end **22** than the work platform **24**. The work platform **24** and the viewing monitor **26** may be attached to the support structure **18** by any appropriate means, including rigid and non-rigid, or flexible means of attachment. Also, the work platform **24** and the viewing monitor **26** may be attached to the support structure **18** by any suitable adjustable means such as adjustable clips, adjustable flanges, quick release and locking devices, or any attachment mechanism that satisfies requirements of the environment. Ideally, the viewing monitor will be adjustable to a height that is convenient for the user

to view and the work platform may also be adjustable to a height that is convenient for the user to perform non-exercise related work or activities.

[0042] In use, the workstation **2** and exercise element **12** are brought together by moving the workstation **2** toward the exercise element **12** in a direction **32** until the support structure **18** of the workstation is proximate the first end **14** of the exercise element **12**. The workstation **2** may attach or connect to the exercise element **12** to secure the components **2**, **12** together. The support features **10** of the workstation **2** may engage with the exercise element **12** by, for example, bolting to the exercise element **12**; or the weight of the exercise element **12** may secure the workstation **2** in a proper position, which is understood to be a position having sufficient clearance in direction **32** between the workstation **2** and exercise element **12** and sufficient support for the workstation **2** to remain stationary and not susceptible to excessive interaction, such as, for example, vibration, impulse, or shock with the exercise element **12** during use. A damping material **30** may be placed between an upper surface of the support features **10** and the exercise element base **16**. It is anticipated that vibration, oscillatory loads, and/or impulsive loads may be transferred from the exercise element **12** to the workstation and the damping material may reduce or minimize some of the load. A damping system may be used in addition to or instead of a damping material. The damping system may include shock absorbing elements to dissipate the load applied to the workstation **2** by the exercise element **12**.

[0043] After properly adjusting the workstation (i.e. adjusting the viewing monitor height and the work platform height) the user may engage with the exercise element **12** and begin exercising. While exercising, the user may begin performing non-exercise related work on the work platform **24**. The workstation **2** is designed to provide the user with the ability to work comfortable as well as simultaneously exercise.

[0044] FIG. **2**A is an isometric view of the workstation **2** of FIG. **1** illustrating an interface between the workstation **2** and an exercise element **12**. The exercise element **12** may have a plurality of support pads **34** that support the exercise element **12** above a floor. The support pads **34** are spaced apart and the support features **10** of the flat base **2** may be sized to fit between the support pads **34**, within the base acceptance zone. The base acceptance zone may be defined by other features, including, for example, elongated support pads **34'** attached to the underside of the exercise element **12** or a recess **34"** found directly in the underside of the exercise element **12**. The receiving portion **8** of the flat base **4** has a receiving portion width **44** and the flat base **4** has a engaged length **36** that engages with the exercise element **12** to maintain the position of the workstation **2** relative the exercise element **12**. The support features **10** may have a support feature width **42** and support feature length **38**. A width **40** between the support features **10** is such that that workstation **2** is stable. In fact the engaged length **36**, the support feature width **42**, the width **40** between support features **10** and the receiving portion width **44** are determined so each component of the flat base **4** (i.e. the support features **10**, the receiving portion **8** and the flat base first portion **6**) function together to adequately support the work platform **24** and the viewing monitor **26** of the workstation **2** so the user may safely, effectively and efficiently perform non-exercise related tasks while using the workstation **2**. The flat base **4** further comprises rounds **46** or chamfers **46** arranged near an end of the receiving portion **8** of the flat base **4**. In addition to being an aesthetic feature, the rounds **46** may at least function to reduce the footprint of the workstation **2**. The rounds **46** may be sized to accommodate a support location for the CPU **28** (see FIGS. **4**, **5** and **9**). A exercise element clearance **48** is a distance between the receiving portion width **44** and an overall width of the exercise element **12**.

[0045] The first end **20** of the support structure **18** is seen in the flat base **4**. The first end **20** may or may not extend completely through the receiving portion **8** of the flat base **4** and the extent to which the first end **20** does extend through the flat base may depend upon the type of attachment means used to affix the first end **20** to the flat base **4**.

[0046] As illustrated, the exercise element supports **34** will raise the exercise element base **16** off a surface the workstation **2** and workstation are resting upon. In some embodiments, a support height **35** may be almost the same as a flat base height **5**, with the flat base height being sufficiently greater than the support height **35**, thereby assuring that the weight of the exercise element **12** may partially secure the workstation **2** in the proper position. Additional connections or attachments may be used to workstation **2** to the exercise element **12**. A partial list of connections or connection elements may at least include clamps, bolts, pins, welded connections, screws, chemical bonds or adhesives, and combinations thereof. It will be understood by the skilled artisan that the connection should be sufficient to secure the workstation **2** and exercise element **12** in place relative to each other, but should be not such a rigid connection that any motion or load generated while using the exercise element **12** is transferred to the workstation **2**. Furthermore, the weight of the exercise element **12** alone may be sufficient to secure the workstation **2** and exercise element **12** in place relative to each other.

[0047] FIG. **2**B is an isometric view of the ergonomic workstation of FIG. **1**. A back of the workstation **2** is illustrated and shows more clearly the relation between the support structure **18** and the first end **14** of the exercise element **12**. The work platform **24** is attached to the support structure **18** through a passage in the work platform **24**. The passage may be arranged anywhere on the work platform **24** as necessary. The viewing monitor **26** is also attached to the support structure **18**. As illustrated, an upper portion of the support structure **18** that the viewing monitor **26** is attached to is smaller in diameter that a lower portion of the support structure **18**. In some embodiments, the support structure may be telescopic to allow for easy and rapid adjustment (see FIG. **8**). The CPU **28** is shown adjacent the receiving portion **8** of the flat base **4**. In some embodiments, the receiving portion **8** will extend to support the CPU **28** (see FIG. **4**). It is anticipated that the work platform **24** and the viewing monitor **26** will be able to swivel **37** about the support structure **18**.

[0048] FIG. **3** an isometric view of an ergonomic workstation according to a second embodiment of the disclosure. The workstation **2** comprises a substantially flay base **4** having a receiving portion **8** and support features **10'**. The receiving portion **8** is intended to support a CPU (not shown) and provide some of the stability for the workstation **2**. The support features **10'** extend at least partly along an outer perimeter of an exercise element **12** and also provide stability for the workstation **2**. A generally vertical support structure **18** extends from the substantially flat base **4** to a specified height, which may depend on the particular application. The generally vertical support structure **18** may be cylindrical in cross section, though it is not required to be cylindrical in cross section. For this particular embodiment, and for any embodi-

ment disclosed herein, the support structure **18** may be hollow. Electrical connections **50** may extend through the support structure **18** from a viewing monitor **26** or peripheral equipment (i.e. a keyboard, an electrical power surge protector, USB connections, and the like) supported by a work platform **24**. Furthermore, the support structure **18** may have at least one power plug arranged on an exterior surface for the user to plug their own equipment in to charge or use). A plurality of USB connections that connect with the CPU may also be located on the exterior surface of the support structure **18**. This may facilitate connecting other types of peripheral equipment to the workstation for use, for example, such as personal digital assistants (PDA), MP3 players and cellular phones The electrical connections **50** may exit the support structure **18** toward the flat base **4** for easy connection or accessibility to a CPU or external power supply, such as a standard electrical outlet. It is convenient and desired to enclose the electrical connections **50** within the support structure **18** for safety (i.e. un-cluttering the workstation environment) and may reduce the likelihood of theft.

[0049] The viewing monitor **26** has a viewing monitor upper surface **52** and a viewing monitor lower surface **54**, the distance between the two establishing a viewing monitor height **56**. The viewing monitor **26** is sufficiently adjustable so a center of the viewing monitor height **56** is properly positioned to allow the user to work comfortable and efficiently, i.e. ergonomically. The viewing monitor may be adjusted using any means that provides the required range of motion and ease of use. For example, the viewing monitor may be adjusted using a rack and pinion gear system, a locking telescopic mechanism, a swage lock mechanism, a clamping mechanism, a quick release mechanism, an adjustable locking sleeve, and the like.

[0050] FIG. **4** is a side view of an ergonomic workstation according to a third embodiment of the disclosure. The workstation **2** has a substantially flat base **4** that comprises a receiving portion **8** and a support feature **10"**. A support pad **34** of an exercise element **12** is arranged on top of the support feature **10** and secures the position of the workstation **2** relative the exercise element **12**. The workstation **2** further comprises a support structure **18** having a first end **20** and a second end **22**. The first end **20** extends from the flat base **4** and is affixed to the flat base **4**. A work platform **24** is disposed along the support structure **18** and comprises at least one support strut **58**. The support strut functions to provide additional support and stability to the work platform **24**. A viewing monitor **26** is also disposed along the support structure **18** and is arranged toward the second end **22** of the support structure **18**. The support structure **18** may be hollow and provide a conduit for a plurality of electrical connections **50** extending from one end of the support structure **18** to the other. A CPU **28** may be placed on the receiving portion **8** of the flat base **4**. This offers the advantage of proper placement of the CPU **28** relative to the workstation **2** and exercise element **12**. An exterior surface of the support structure **18** is arranged proximate a first end **14** of the exercise element **12** and spaced sufficiently from the first end **14** of the exercise element **12** so the exterior surface and the first end **14** do not contact each other during use. In some embodiments, it may be desirable for the exterior surface of the support structure **18** to be in direct contact with the first end **14** of the exercise element **12** to provide necessary structural support and stability.

[0051] FIG. **5** is a side view of a workstation according to a fourth embodiment of the disclosure. The workstation **2** has a substantially flat base **4** that comprises a receiving portion **8** and a support feature **10**. At least one of the receiving portion **8**, or the support features **10**, may engage with an exercise element base **16** to provide connection between the workstation **2** and the exercise element **12**. A support pad **34** of the exercise element **12** is arranged adjacent the support feature **10**. The workstation **2** further comprises a support structure **18** having a first end **20** and a second end **22**. The first end **20** extends from the flat base **4** and is affixed to the flat base **4**. A work platform **24** is disposed along the support structure **18** and comprises at least one support strut **58**. The support strut functions to provide additional support and stability to the work platform **24**. A viewing monitor **26** is also disposed along the support structure **18** and is arranged toward the second end **22** of the support structure **18**. The support structure **18** may be hollow and provide a conduit for a plurality of electrical connections **50** extending from one end of the support structure **18** to the other. A CPU **28** may be placed on the receiving portion **8** of the flat base **4** a specified distance **68** from an exterior surface of the support structure **18**.

[0052] The work platform **24** has a horizontal reference line **60** and the viewing monitor has a horizontal reference line **61**. The work platform may be angularly adjusted in plane to a work platform angle **64** and the viewing monitor may be adjusted in plane to a viewing monitor angle **62**. The work platform angle **64** and the viewing monitor angle **62** may be adjusted to a convenient position by the user to achieve a comfortable working position and a comfortable exercise position. These positions will vary depending on the user's own body dimensions. The distance between the viewing monitor horizontal line **61** and the work platform horizontal line **60** establishes a vertical spacing **66** between the 2 elements. The viewing monitor **26** may be moved independently of the work platform **24**, or they may be moved together by a fixed ratio, or they may be moved together by a variable ratio. In some embodiments, the vertical spacing **66** may be optimized to a single setting, thereby accommodating a wide variety of users. Some exemplary fixed ratios may be 1:1, 2:1, 3:1, 4:1, 2.5:1, 3.5:1, 4.5:1, where the first or second number of the ratio may be either the work platform **24** or the viewing monitor **26**.

[0053] Furthermore, the viewing monitor **26** and the work platform may be rotated out of plane about an axis parallel with the support structure **18**.

[0054] FIG. **6** is an isometric view of an ergonomic workstation according to a fifth embodiment of the disclosure. The workstation **2** comprises a pair of support features **10'"** and a pair of support legs **70**, each support leg extending from the support feature **10'"**. An exercise element **12** having an exercise element support **34** may rest on the support feature **10** to at least stabilize and secure the workstation **2** to a floor and preserve a spatial relationship between the workstation and the exercise element **12**. The weight of the exercise element **12** will at least secure the workstation **2** to the floor and may prevent unwanted vibration or shaking of the workstation **2** while in use. A work platform **24** is attached to an end of each support leg **70** and provides a substantially horizontal work space. A support structure **18** extends vertically from the work platform **24** and a viewing monitor **26** is disposed toward a distal end of the support structure **18**. Support struts **58** provide further support between the work platform **24** and the support legs **70**.

[0055] FIG. **7** is an isometric view of an ergonomic workstation according to a sixth embodiment of the disclosure.

The workstation **2** comprises a pair of support features **10'''** and a pair of support legs **70**, each support leg **70** extending from the support feature **10"**. The support features **10'''** as illustrated are arranged adjacent an end of an exercise element **12** and the support features **10'''** are sized and configured to adequately support the workstation **2**.

[0056] A horizontal member **72** extends between support legs **70** and a substantially vertical support structure **18** extends from the horizontal member. The support structure **18** is arranged proximate a center of the horizontal member **72**, and the support structure **18** is generally cylindrical in cross section. The support structure **18** may be a telescoping support structure **18** having a telescoping member **19** that is in a telescoping relation with the support structure **18**. The structural support **18** and the telescoping member **19** function to allow a variety of different height adjustments in a vertical direction. The support structure **18** and telescoping member **19** may be hollow and function as a conduit to contain and direct a plurality of electrical connections **50** extending through telescoping element **19**

[0057] A work platform **24** may be disposed along the structural support **18** and may be secured or attached to either the structural support **18** or the telescoping member **19** using any of the means discussed herein. A viewing monitor may be disposed along the telescoping member **19** and may be secured or attached to the telescoping member **19** using any of the means discussed herein. The telescoping operability of the support structure **18** and telescoping member **19** may provide quick and easy vertical adjustment of the work platform **24** and the viewing element **26**.

[0058] FIG. **8** is an isometric view of a workstation according to a seventh embodiment of the disclosure. The workstation **2** comprises a generally vertical telescoping support structure **18** having telescoping members **19** and **19'**. The support structure **18** extends from a first end **14** of an exercise element **12** and the support structure **18** and telescoping members **19**, **19'** may be hollow and circular in cross section. A circular cross section may allow relative rotation of the support structure **18** and telescoping members **19**, **19'**. The support structure **18** may be attached or in communication with the exercise element **12** via any suitable method discussed herein, such as, for example, an interference fit, a welded joint, a bolted or pinned joint, or a chemical bond or adhesive. A work platform **24** may be disposed along the structural support **18** and may be secured or attached to either the structural support **18** or the telescoping members **19**, **19'** using any of the means discussed herein. A viewing monitor may be disposed along the telescoping member **19**, **19'** and may be secured or attached to the telescoping member **19**, **19'** using any of the means discussed herein. The telescoping operability of the support structure **18** and telescoping member **19**, **19'** may provide quick and easy vertical adjustment of the work platform **24** and the viewing element **26**.

[0059] FIG. **9** is an isometric view of an ergonomic workstation according to an eighth embodiment of the disclosure. The workstation **2** comprises a generally flat base **4**, a support structure **18** extending from the flat base **4**, a work platform **24** disposed along the support structure and a viewing monitor **26** attached toward a distal end of the support structure **18**. The flat base **4** may be generally rectangular and is sized and configured to interface or engage with an exercise element **12** such that the workstation **2** will remain securely positioned relative the exercise element **12**. The flat base **4** may engage with or be connected to the exercise element by any of the methods disclosed herein.

[0060] FIG. **10** is an isometric view of an ergonomic workstation according to an ninth embodiment of the disclosure. The workstation **2** comprises a support structure **18** extending from a first end **14** of an exercise element **12**. A work platform **24** and a second work platform **25** are disposed along the support structure **18**. A separate viewing monitor **26** may be supported by either the work platform **24** or the second work platform **25**. The support structure **18** may be hollow and generally circular in cross section. Both of the work platforms **24**, **25** may be attached or connected with the structural support **18** via any means disclosed herein.

[0061] FIG. **11** is an isometric view of a plurality of ergonomic workstations according to any embodiment as disclosed herein. The ergonomic workstations (the combination of the workstations **2** with the exercise elements **12**) may be located at a work facility, an exercise facility, or any location where the user desires to perform non-exercise related functions while simultaneously exercising. Each workstation **2** is arranged proximate its respective exercise element **12** so the user may work and exercise simultaneously.

[0062] FIG. **12** is an isometric view of an ergonomic workstation (i.e. a combined workstation **2** and exercise element **12**) according to a tenth embodiment of the disclosure. The workstation **2** comprises a support structure **18** affixed to, cooperating with and/or interfacing with and extending from an exercise element **12**. A work platform **24** and viewing monitor **26** are disposed along the support structure **18**. The workstation **2** as illustrated may be a workstation of many of the embodiments disclosed herein. A first ramp **74** is arranged adjacent the exercise element **12** and a second ramp **76** is arranged adjacent the first ramp **74**. The first ramp **74** and second ramp **76** may be used by user to easily roll a chair **78** onto or off of the exercise element **12**. For example, the user may be performing non-exercise related work at the work platform **24** while seated on the exercise element **12**. If the user desires to continue performing non-exercise related work while exercising on the exercise element **12**, the user may roll the chair **78** down the first ramp **74** and the second ramp **76**, make the necessary height adjustments to the work platform **24** and viewing monitor **26** and begin exercising. When the user has completed exercising, the user may return the work platform **24** and viewing monitor **26** of the workstation **2** to a preferential height setting for performing non-exercise related work, return the chair to the exercise element **12** via the first and second ramps **74**, **76**, and continue with the non-exercise related work. Alternatively, a removable hard surface cover may be placed over the exercise element **12** to facilitate use of the chair **78**.

[0063] FIG. **13** is an isometric view of an ergonomic workstation (i.e. a combined workstation **2** and exercise element **12**) according to a eleventh embodiment of the disclosure. The workstation **2** comprises a support structure **12** affixed to and extending from an exercise element **12**. A work platform **24** and viewing monitor **26** are disposed along the support structure **18**. The workstation **2** as illustrated may be a workstation of many of the embodiments disclosed herein. First ramp elements **80**, second ramp elements **82** and third ramp elements **84** are arranged adjacent the exercise element **12** and may completely surround the exercise element **12**. The ramp elements **80**, **82**, **84** may be used by user to easily roll a chair **78** onto or off of the exercise element **12**. For example, the user may be performing non-exercise related work at the work platform **24** while seated on the exercise element **12**. If the user desires to continue performing non-exercise related work while exercising on the exercise element **12**, the user may roll the chair **78** down the ramp elements **80**, **82**, **84** and off the exercise element **12**, make the necessary height adjustments to the work platform **24** and viewing monitor **26** and begin exercising. When the user has completed exercising,

the user may return the work platform **24** and viewing monitor **26** of the workstation **2** to a preferential height setting for performing non-exercise related work, return the chair to the exercise element **12** via the ramp elements **80**, **82**, **84**, and continue with the non-exercise related work. Alternatively, a removable hard surface cover may be placed over the exercise element **12** to facilitate use of the chair **78**.

[0064] In many of the aforementioned embodiments, the work platform **24** and the viewing monitor **26** may be rotatably disposed on the support structure **18** so a user no longer wanting to exercise while performing non-exercise related activities may rotate both the work platform **24** and the viewing monitor **26** an angular amount ranging from about 30 degrees to about 180 degrees.

[0065] It will be apparent to those skilled in the art that various other modifications and variations can be made without departing from the spirit or scope of the present disclosure.

1. An article of furniture, comprising:

an exercise element;

a substantially flat base having a first portion sized and configured to engage with a lower surface of the exercise platform;

a support structure extending from a second portion of the base and arranged toward a first end of an exercise element, the support structure having a proximal end and a distal end, wherein the distal end is attached to the base;

a work platform attached to the support structure, wherein the work platform is adjustable relative to the support structure; and

a viewing monitor attached to the support structure at about the proximal end, wherein the monitor location is adjustable relative to the support structure.

2. An ergonomic workstation, comprising:

a workstation having a support base in communication with an exercise device, the support base comprising an elongate tongue to engage with a base of the exercise device, wherein the elongate tongue has an adjustable length and width to secure the base to the exercise device;

a generally vertical hollow telescoping support structure extending from the base upward having a first end attached to the base and a second end opposite the first end;

an adjustable work platform attached to the support structure;

an adjustable viewing monitor attached to the support structure at about the second end, wherein the monitor location is vertically adjustable between the second end and the work platform; and

a plurality of electrical connections extending from at least the viewing monitor through the hollow support structure to a central processing unit supported on the base.

3. An article of furniture, comprising:

an exercise platform;

a support structure extending from an upper surface of a first end of the exercise platform, the support structure having a proximal end and a distal end, wherein the distal end telescopes in a vertical direction;

a work platform attached to the support structure; and

a viewing monitor attached to the support structure at about the proximal end, wherein the monitor location is adjustable between the proximal end and the work platform.

4. An article of furniture according to claim **3**, wherein any significant contact between the work platform and the exercise platform is significantly buffered by material that substantially prevents transfer of motion, transfer of vibration, and transfer of impulse between the two platforms.

5. An article of furniture according to claim **3**, wherein the substantially vertical support is located on the bilateral axis of symmetry of the exercise platform.

6. An article of furniture according to claim **3**, wherein the manipulation of the platform's exercise functions can be accomplished through the work platform.

7. An article of furniture according to claim **3**, wherein the viewing monitor and the work platform may be independently adjusted.

8. An article of furniture according to claim **3**, wherein the support structure comprises a single vertical support member, and wherein electrical connections related to the function of at least one of the viewing monitor, the computer, and the exercise platform, are substantially housed interior to the single vertical support.

9. An article of furniture according to claim **3**, where the viewing monitor and the work platform may be vertically adjusted at a constant ratio.

10. An article of furniture according to claim **3**, where a computer enclosure to prevent access is attached to the work platform.

11. An article of furniture according to claim **3**, where the operation of the work platform is exclusively maintained and adjusted by computer software that has been installed onto the operating system of a computer which is attached to any other component on the workstation.

12. An article of furniture according to claim **11**, where a single power cable supplies power to both the work platform and exercise platform.

13. An article of furniture according to claim **11**, including tamper proof means of securing the viewing monitor and computer's processing unit.

14. An article of furniture according to claim **3**, where a desk surface or work surface associated with the work platform is tilt adjustable in relation to the support structure.

15. An article of furniture according to claim **3**, where the viewing monitor may be a laptop computer that has been provided by an individual user and connected with any of the work additional components.

16. An article of furniture according to claim **3**, where the work platform features a laptop docking station that allows a user to connect his or her laptop to other components of the work platform.

17. An article of furniture according to claim **3**, where the viewing monitor is tilt adjustable.

18. An article of furniture according to claim **3**, where adjustment of the work platform is accomplished by at least one vertically oriented screw that is attached to at least one bevel gear.

19. An article of furniture according to claim **3**, wherein adjustment of the work platform and monitor are accomplished by at least one pneumatic cylinder.

20. An article of furniture according to claim **3**, wherein said adjustment is accomplished by at least one vertically oriented screw that is powered by an electric motor.

21. An article of furniture according to claim **3**, wherein one or more substantially horizontal desk surfaces are attached to any of the supports disclosed herein.

22. An article of furniture according to claim **3**, wherein one or more computer displays are attached to either a second vertical support or the third vertical support.

23. An article of furniture according to claim **3**, further comprising a treadmill associated with the exercise platform and treadmill struts or stabilizers operably connected to the treadmill that dissipate undesired transferred movement by a user of treadmill.

24. An article of furniture according to claim **3**, wherein the support structure includes at least one vertical support member, and wherein struts or stabilizers or deployable struts or stabilizers are connected to any vertical support member.

25. An article of furniture according to claim **24**, wherein the means of connection to or between any of the vertical support members employ any material known to absorb an impulsive force, vibratory motion, or oscillatory motion.

26. An article of furniture according to claim **3**, wherein a shroud is employed to obscure at least one side of the user's lower body.

27. An article of furniture according to claim **3**, including a treadmill associated with the exercise platform and wherein the treadmill features a padded or otherwise modified track that is designed to dampen the noise of foot impact thereon as the treadmill is used.

28. An article of furniture according to claim **3**, wherein the exercise platform comprises a treadmill and supports that benefit the stabilization of the work platform more than they benefit the stabilization of the treadmill itself; where said treadmill features structures or supports that are exclusively intended to stabilize a part of the work platform or its vertical support.

29. An article of furniture according to claim **3**, wherein the work platform includes a desk surface that is foldable approximately 90 degrees from a substantially horizontal position to a substantially vertical position.

30. An article of furniture according to claim **3**, including a fixed on pad or cushion located on the desk surface that is useful for both absorbing accidental user collision against desk edges and increasing stability of a users arms and or wrists by absorbing transferred motion.

31. An article of furniture according to claim **3**, including one or more ramps that allow a user to easily roll a chair onto a deck of a treadmill.

32. An ergonomic, space-saving treadmill workstation comprising: a base, at least one hollow member extending as a vertical support from said base, which hollow member can substantially conceal wire that may be related or unrelated to the treadmill's functions; and one or more substantially horizontal desk surfaces supported by at least one of the said vertical supports.

33. An article of furniture according to claim **32**, wherein the weight of the second support may also include a third support that is connected to the second vertical support through connection means permitting vertical adjustment of the third vertical support relative to the first and the second vertical supports.

34. An article of furniture according to claim **1**, wherein:

the work platform is attached to the support structure by means of an adjustable arm; and

the viewing monitor is attached to the support structure by means of an adjustable arm.

* * * * *