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(54) **SHORING SYSTEM APPARATUS AND METHOD FOR SHORING**

(76) Inventor: **Richard Lanka**, Twinsburg, OH (US)

Correspondence Address:
FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP
Seventh Floor
1100 Superior Avenue
Cleveland, OH 44114-2518 (US)

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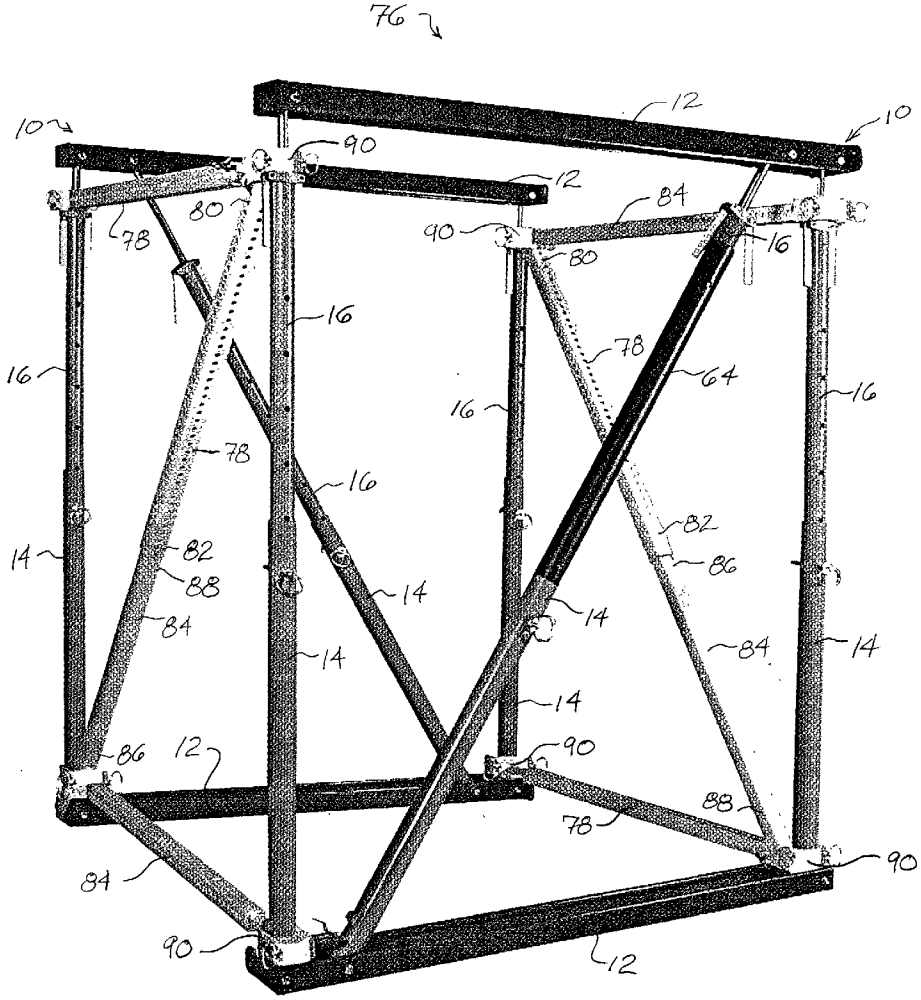
(57) **ABSTRACT**

A shoring system to selectively support from below an elevated, relatively horizontal surface is provided. The shoring system includes a first vertical support member, a first vertical length adjuster disposed in the first support member, a second vertical support member spaced apart from and parallel to the first support member, a second vertical length adjuster disposed in the second support member and two horizontal structural members spaced apart from and parallel to each other. The first vertical support member, first vertical length adjuster, second vertical support member and second vertical length adjuster each connect to the two horizontal structural members so as to form a rectangular configuration. A method for shoring an elevated horizontal surface is also provided.



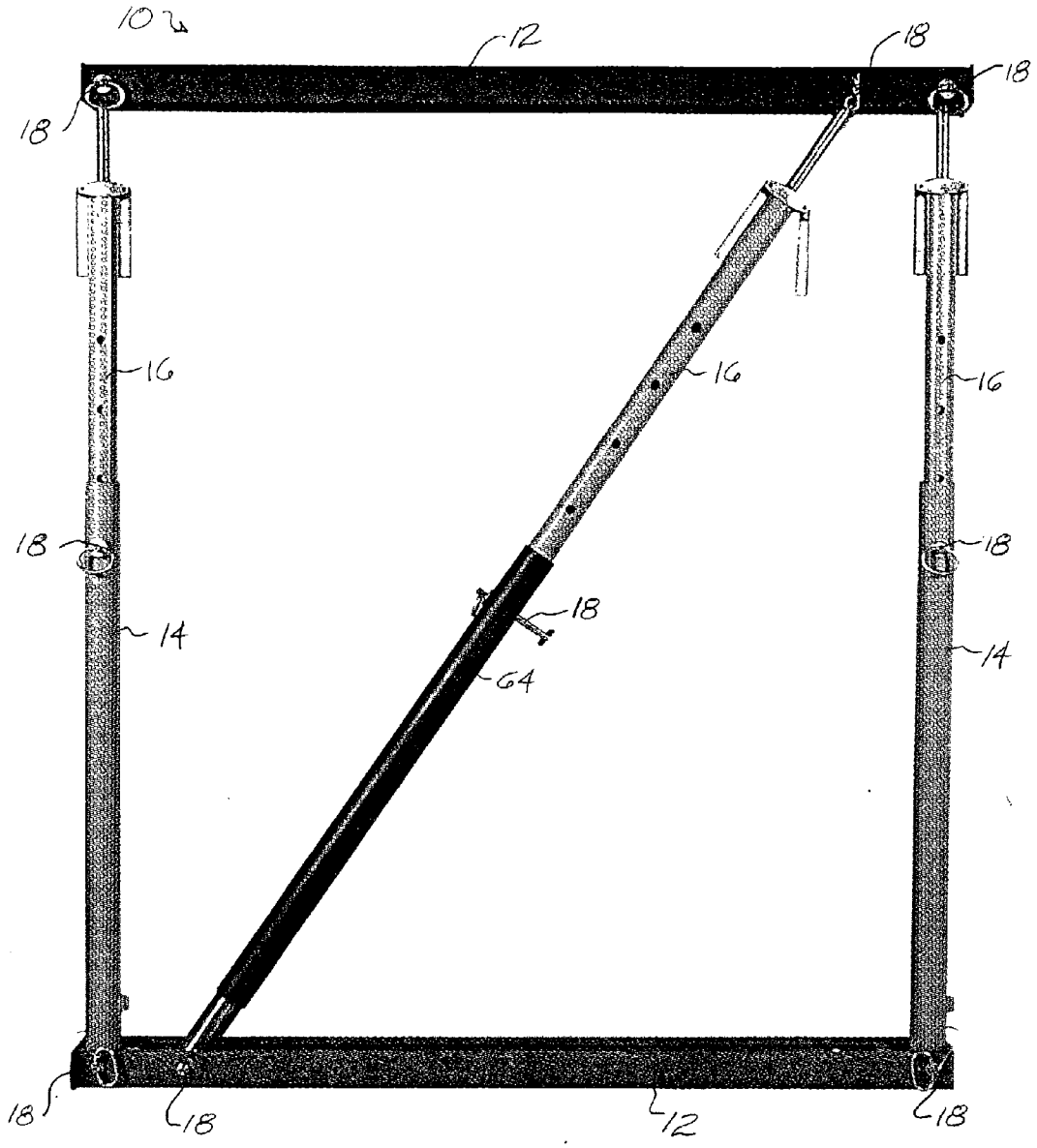


FIG. 1

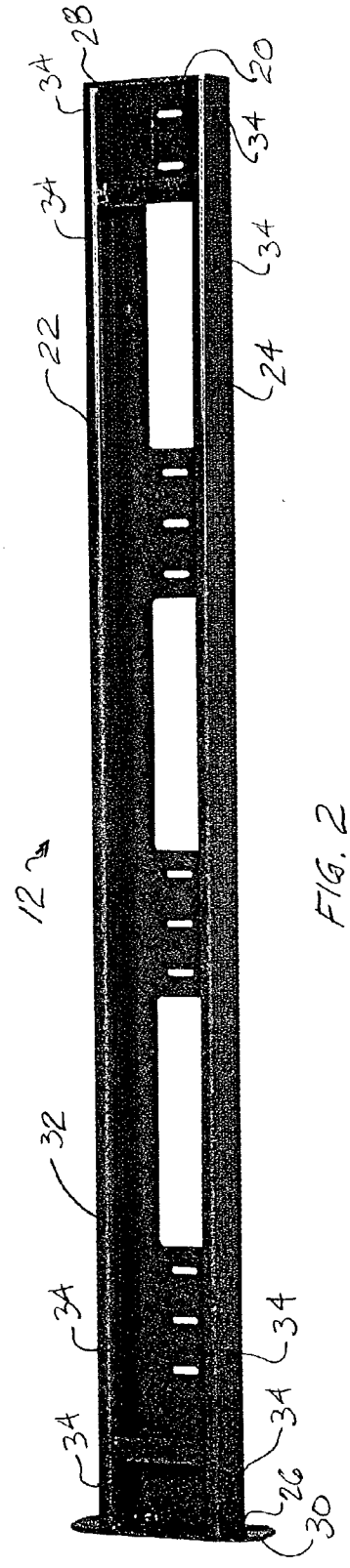

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FIG. 2

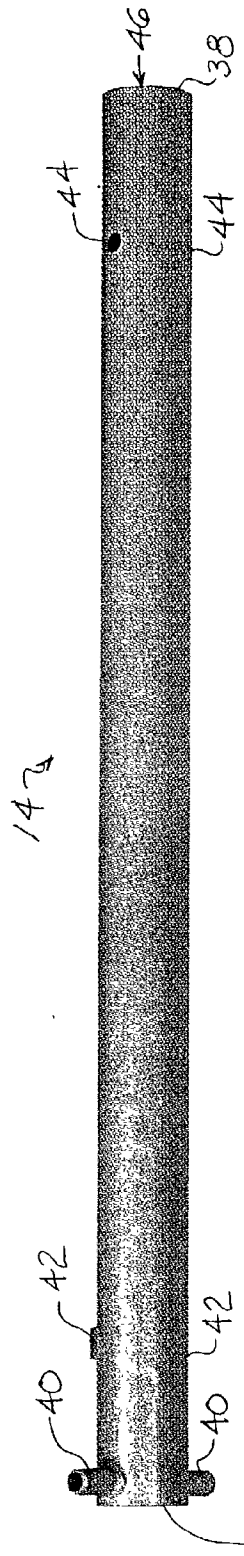
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FIG. 3

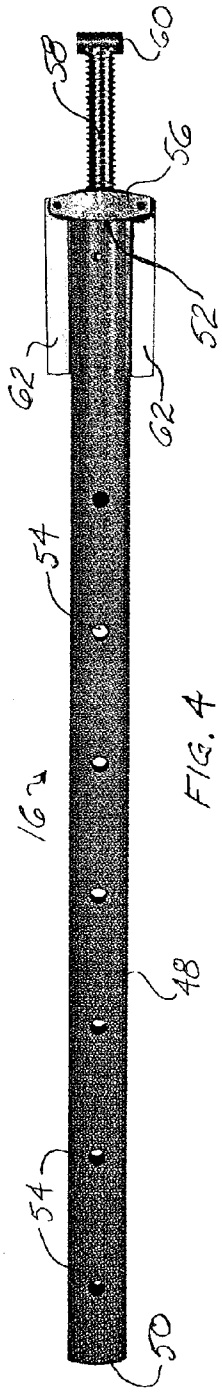

FIG. 4

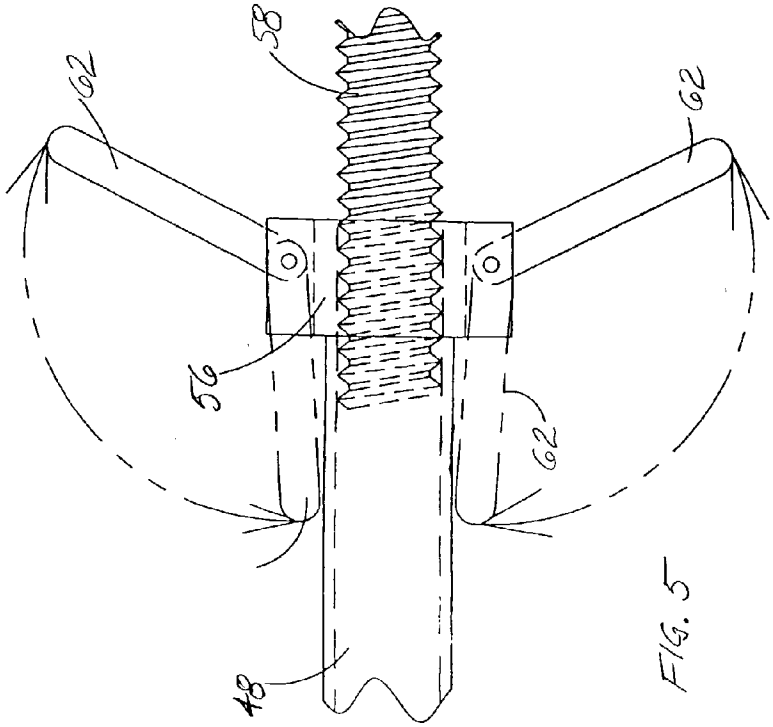

FIG. 5

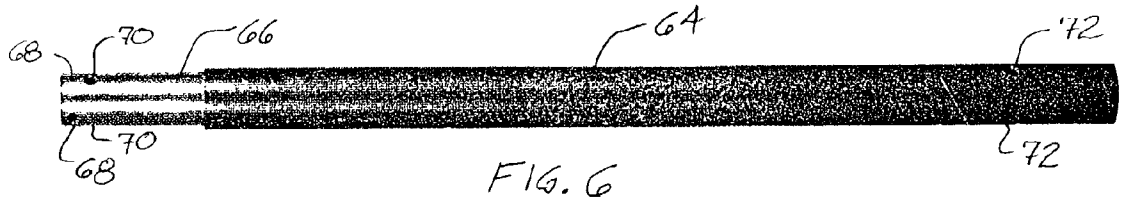

FIG. 6

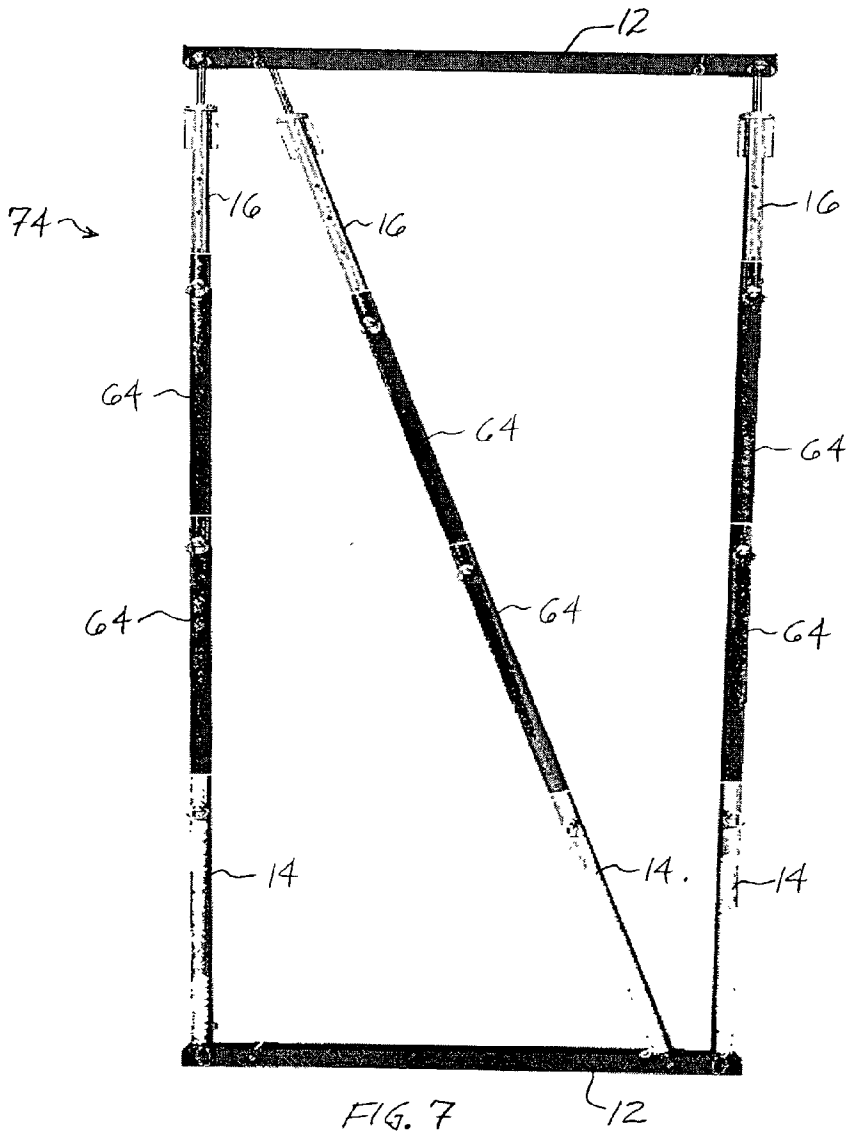

FIG. 7

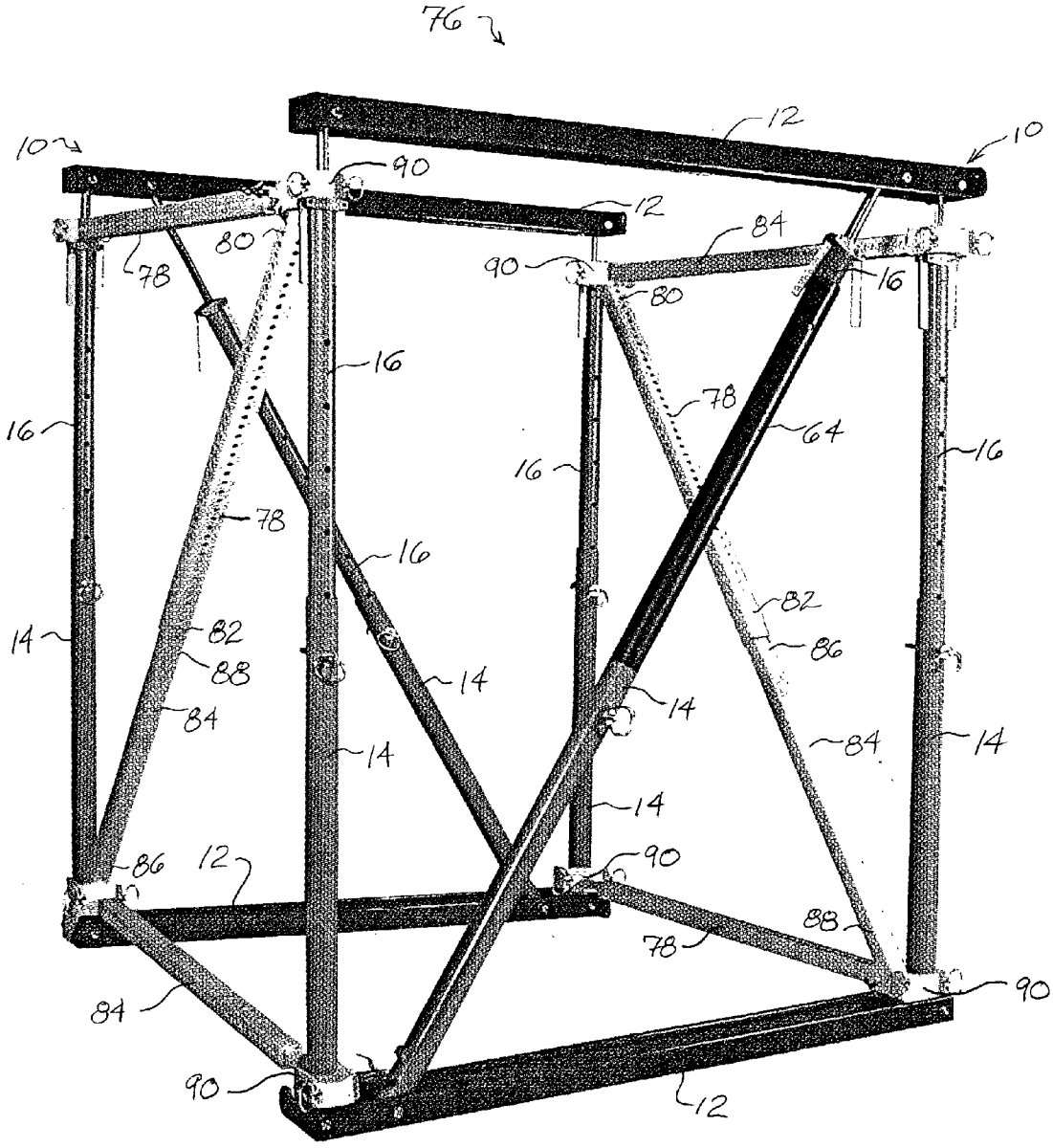
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FIG. 8

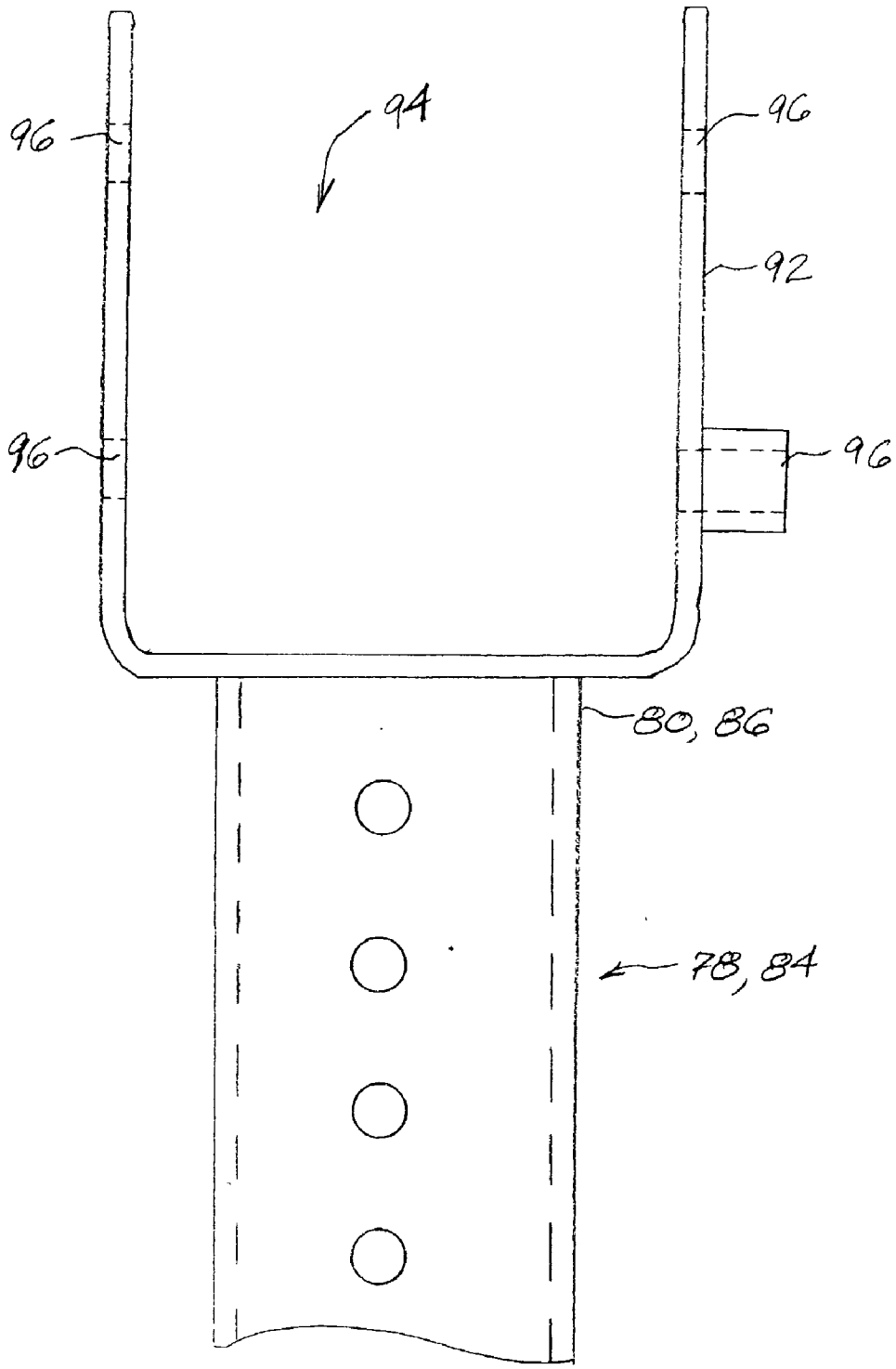

FIG. 9

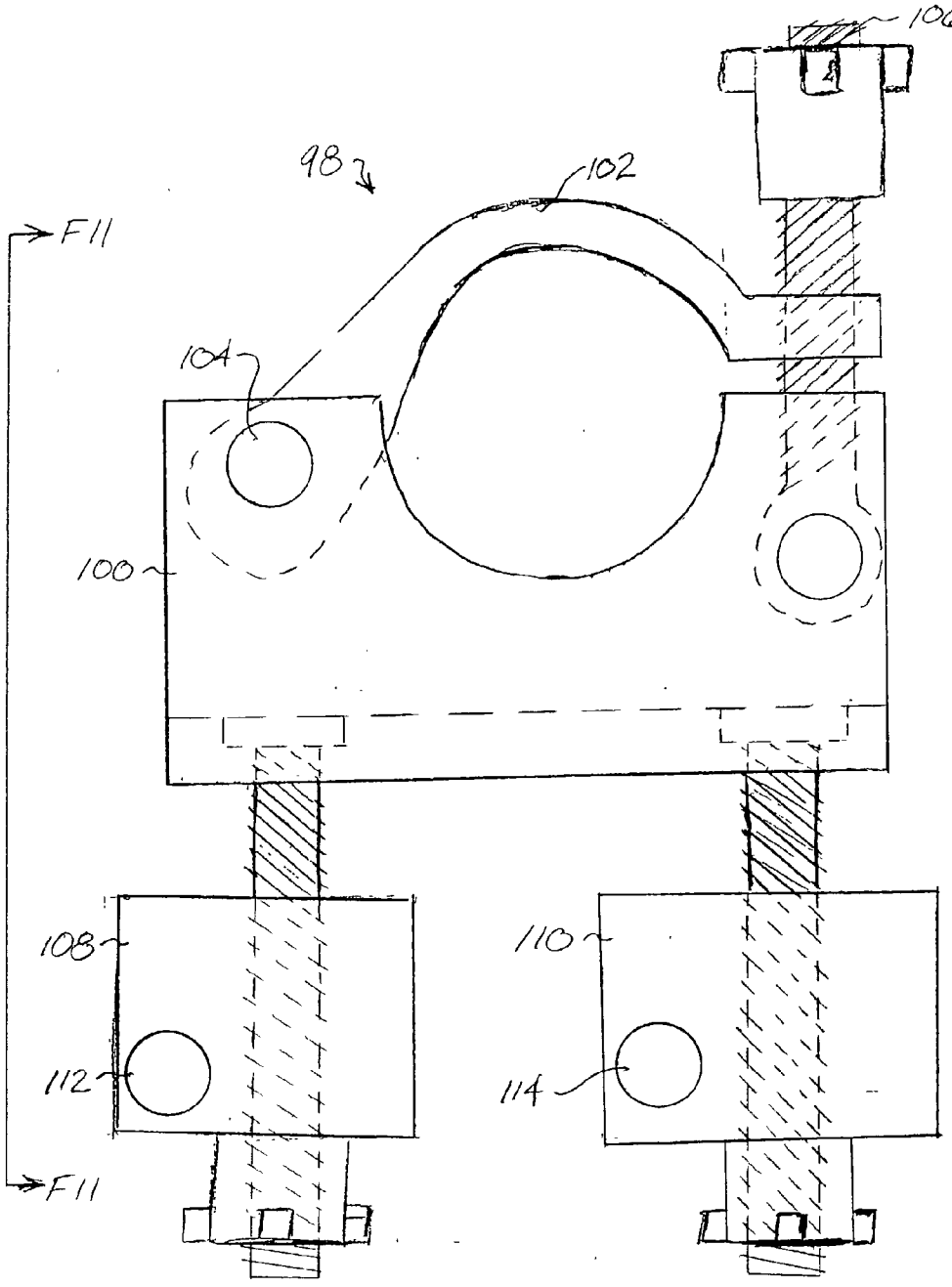

FIG. 10

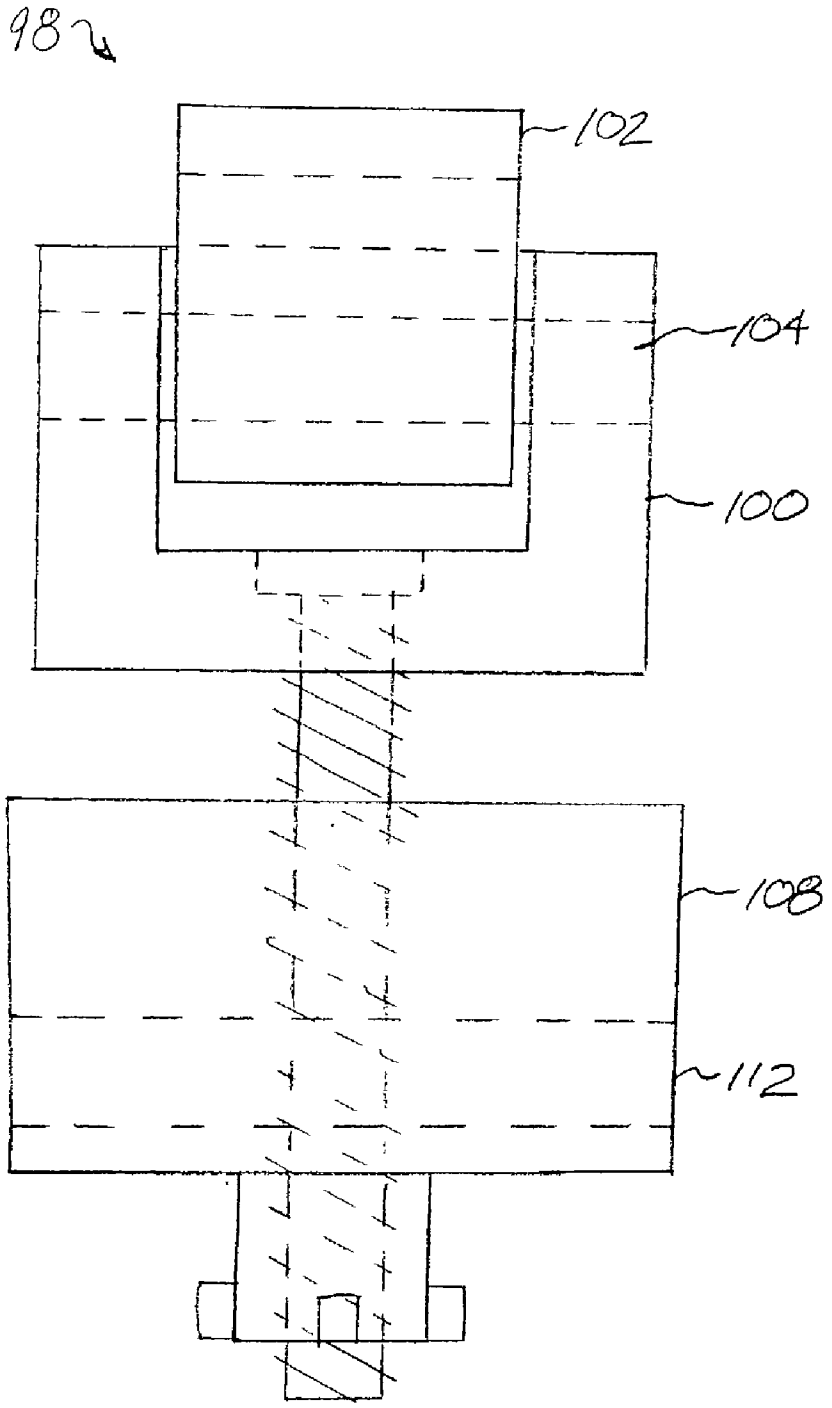

FIG. 11

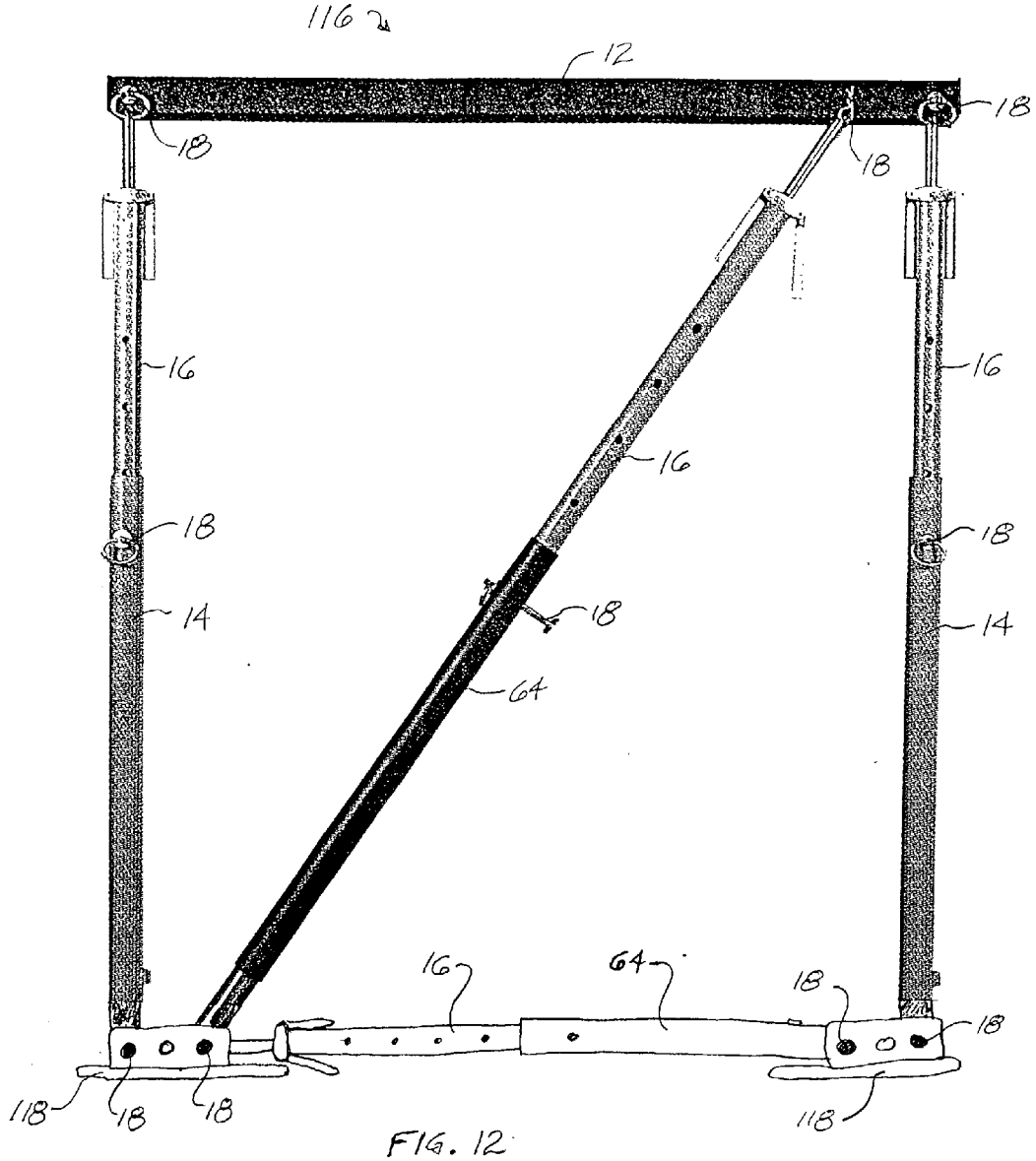

FIG. 12

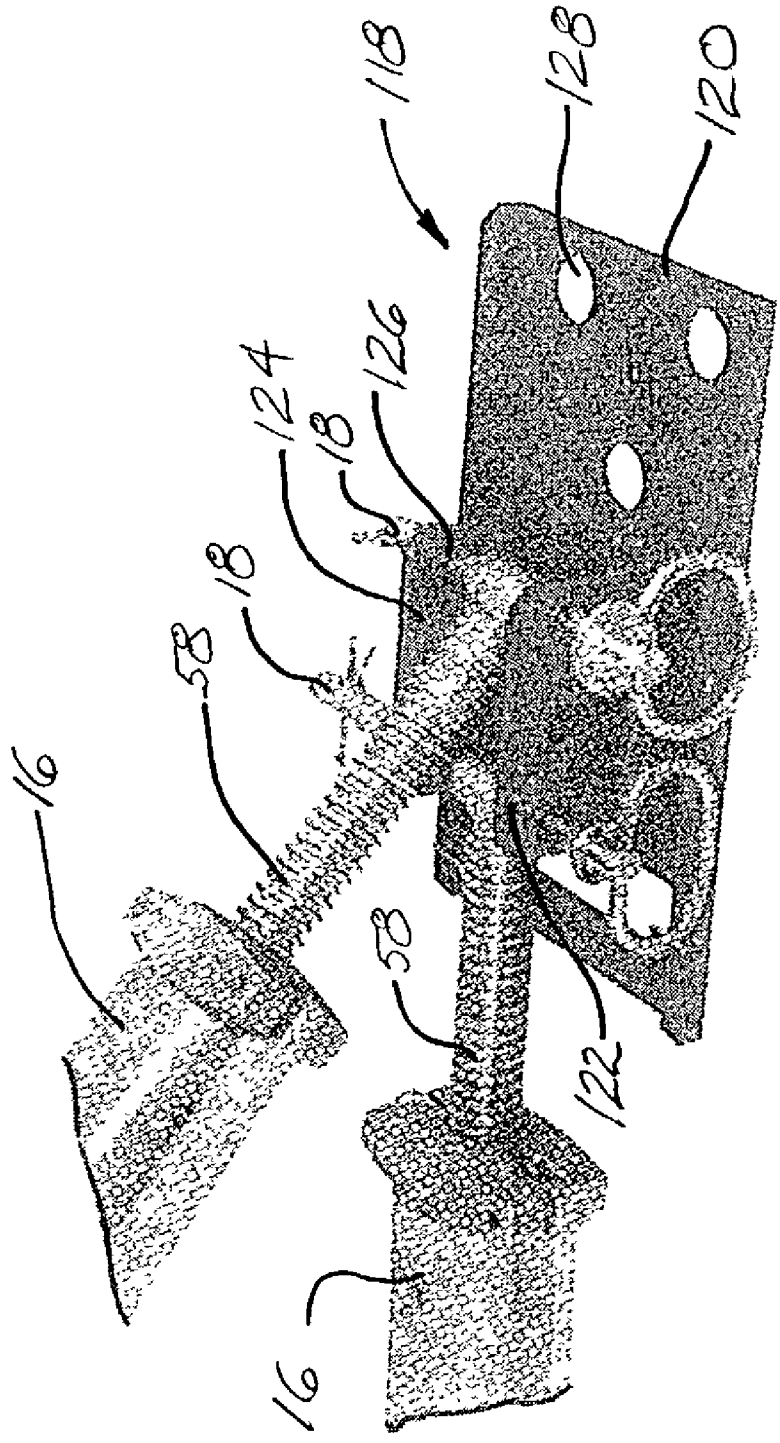

FIG. 13

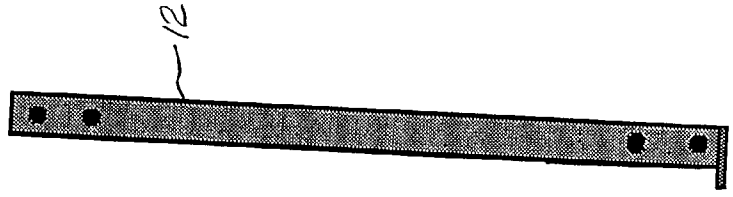

FIG. 15

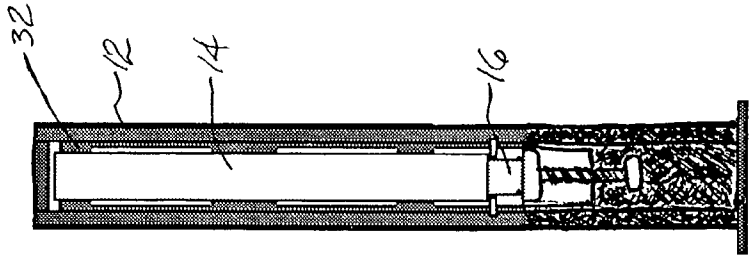

FIG. 14

SHORING SYSTEM APPARATUS AND METHOD FOR SHORING

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional application Serial No. 60/373,307, filed on Apr. 8, 2002.

FIELD OF THE INVENTION

[0002] The present invention relates to the art of shoring systems that are used to stabilize structures. More particularly, the present invention relates to a shoring system for use in stabilizing a relatively horizontal surface of a structure from below.

BACKGROUND OF THE INVENTION

[0003] When a catastrophic event, accident or force of nature, such as an earthquake, tornado, hurricane, flood, fire, or snow load occurs, building structures are often weakened. Such weakened structures may suddenly shift or collapse, endangering rescue workers, inspectors or other people in the vicinity. In addition, a shift or collapse may affect other structures that are nearby, either by hitting and directly damaging them or by weakening a common or adjacent foundation.

[0004] As a result, it is often necessary to support a weakened structure, commonly termed "shoring," quickly, yet securely. In addition, shoring is a task that is often performed by rescue personnel, who may be engaged in multiple tasks simultaneously, such as extinguishing a fire, attending to victims and shoring a structure. Thus, a shoring system must be capable of being assembled quickly and easily.

[0005] It is also necessary for a shoring system to be transported easily, so that the rescue workers can bring the system in an emergency vehicle as close to the accident scene as possible and then hand-carry it to the exact location where it will be assembled. Although a shoring system that is light is easily transported, the system must still be strong to support the heavy load of a building structure for a fairly long period of time (often up to a few weeks or longer).

[0006] Because the shoring system will be used to support a variety of relatively horizontal structures such as floors, ceilings, porches, roofs, decks and garage openings, the system must also be adjustable. The adjustment must be easy and quick to perform, as a relatively precise fit between a stable surface and the surface to be supported is necessary to hold the shoring system in place, thereby allowing it to function properly.

[0007] A shoring system must also be dependable, as it may be used repeatedly throughout its lifetime. As a result, it is often desirable to have the shoring system include components that rely on mechanical force, rather than on electronic, pneumatic or hydraulic components.

[0008] Shoring systems of the prior art often include wood, such as two-by-four (2×4) or four-by-four (4×4) beams and pieces of plywood, that are nailed or wedged together in between a stable surface and the surface to be supported. These systems lack adjustability and are not durable, often being discarded after one shoring use.

[0009] It is therefore desirable to develop a shoring system that is strong, durable, adjustable and reusable, yet easy to set up and to transport.

BRIEF SUMMARY OF THE INVENTION

[0010] In an exemplary embodiment of the present invention, a shoring system to selectively support from below an elevated, relatively horizontal surface is provided. The shoring system includes a first vertical support member, a first vertical length adjuster disposed in the first support member, a second vertical support member spaced apart from and parallel to the first support member, a second vertical length adjuster disposed in the second support member and two horizontal structural members spaced apart from and parallel to each other. The first vertical support member, first vertical length adjuster, second vertical support member and second vertical length adjuster each connect to the two horizontal structural members so as to form a rectangular configuration.

[0011] In another exemplary embodiment of the present invention, a shoring system to selectively support from below an elevated surface is provided. The shoring system includes a first main frame with a first end and a second end and a second main frame with a first end and a second end. The first end of the second main frame is spaced apart from and aligned with the first end of the first main frame. The second end of the second main frame is spaced apart from and aligned with the second end of the first main frame. A first support leg is connected to the first end of the first main frame and a second support leg is connected to the second end of the first main frame. A first adjuster leg is disposed in the first support leg and connected to the first end of the second main frame and a second adjuster leg is disposed in the second support leg and connected to the second end of the second main frame. A cross member is connected to and extends from the first main frame to the second main frame.

[0012] In yet another exemplary embodiment of the present invention, a laced post shoring system to selectively support from below an elevated, relatively horizontal surface is provided. The laced post system includes a first shoring system, that includes a first support member, a first length adjuster disposed in the first support member, a second support member spaced apart from and parallel to the first support member, a second length adjuster disposed in the second support member, and two main frames spaced apart from and parallel to each other. The first support member, first length adjuster, second support member and second length adjuster each connect to the two main frames so as to form a rectangular configuration. The laced post system also includes a second shoring system spaced apart from and parallel to the first shoring system, including a first support member, a first length adjuster disposed in the first support member, a second support member spaced apart from and parallel to the first support member, a second length adjuster disposed in the second support member, and two main frames spaced apart from and parallel to each other. The first support member, first length adjuster, second support member and second length adjuster each connect to the two main frames so as to form a rectangular configuration. The laced post system also includes cross braces that

extend between the first shoring system and the second shoring system and securing means to connect the cross braces to each of the first shoring system and the second shoring system.

[0013] In still another exemplary embodiment of the present invention, a method for shoring an elevated, relatively horizontal surface from below is provided. The method includes the steps of placing a first main frame including a first end and a second end on a stable horizontal surface, connecting a first support leg to the first end of the first main frame, connecting a second support leg to the second end of the first main frame, inserting a first adjuster leg into the first support leg, securing the first adjuster leg in the first support leg, inserting a second adjuster leg into the second support leg, securing the second adjuster leg in the second support leg, providing a second main frame having a first end and a second end, connecting the first adjuster leg to the first end of the second main frame, connecting the second adjuster leg to the second end of the second main frame, adjusting the length of the first adjuster leg, and adjusting the length of the second adjuster leg.

[0014] There are other objects and features of the invention, which will be apparent from the following description and claims.

BRIEF DESCRIPTION OF THE FIGURES

[0015] The following is a brief description of the drawings, which are presented for the purpose of illustrating the invention and not for the purpose of limiting the same, and wherein:

[0016] **FIG. 1** is a front view of an assembled embodiment of the invention;

[0017] **FIG. 2** is a perspective view of a component of the embodiment of **FIG. 1**;

[0018] **FIG. 3** is a perspective view of another component of the embodiment of **FIG. 1**;

[0019] **FIG. 4** is a perspective view of yet another component of the embodiment of **FIG. 1**;

[0020] **FIG. 5** is a side view, partially in section, of a portion of the component shown in **FIG. 4**;

[0021] **FIG. 6** is a perspective view of still another component of the embodiment of **FIG. 1**;

[0022] **FIG. 7** is a front view of another assembled embodiment of the invention;

[0023] **FIG. 8** is a front view of yet another assembled embodiment of the invention;

[0024] **FIG. 9** is a front view of a possible component of the embodiment of **FIG. 8**;

[0025] **FIG. 10** is a front view of another possible component of the embodiment of **FIG. 8**;

[0026] **FIG. 11** is a side view along line F11-F11 of the possible component of **FIG. 10**;

[0027] **FIG. 12** is a front view of still another assembled embodiment of the invention;

[0028] **FIG. 13** is a perspective view of a component of the embodiment of **FIG. 12**;

[0029] **FIG. 14** is a front view of several components of the present invention folded for storage and/or transport; and

[0030] **FIG. 15** is a side view of the several components of **FIG. 14**.

DETAILED DESCRIPTION OF THE INVENTION

[0031] Referring now to the drawings, wherein the showings are for purposes of illustrating preferred embodiments of the invention and not for the purpose of particularly limiting the same, **FIG. 1** illustrates a shoring system **10** to support a relatively horizontal structure from below. At least one main frame **12** is connected to at least one support leg **14**. Each support leg **14** receives an adjuster leg **16** which may then connect to a separate main frame **12**. The connections may be removable and may be facilitated by pins **18** or other similar means, such as bolts. It is to be noted that the support leg **14** may be interchangeable with an extension **64** (see, for example, **FIGS. 6 and 7**), to be described below.

[0032] In the illustrated embodiment, two opposing main frames **12** extend in a parallel manner and cooperate with two support legs **14** and two adjuster legs **16** to form a square or rectangular structure. Because removable pins **18** (referring back to **FIG. 1**) may be used to connect the members, shifting or collapse of the configuration is prevented by another support leg **14** or other member (such as an extension **64**, which is shown and will be described in detail below) that receives an adjuster leg **16** and connects to the opposing main frames **12** in a diagonal manner.

[0033] Turning now to **FIG. 2**, the main frame **12** includes a planar surface **20** that is typically placed against a stable support surface, such as the ground, or against the structure to be supported. Extending from the planar surface **20** are parallel first **22** and second **24** sides and a first end **26** and second end **28**. At the first end **26**, flanges **30** may be present which allow multiple main frames **12** to be fastened together. The planar surface **20**, first side **22**, second side **24**, first end **26** and second end **28** cooperate to define a channel **32** where the support legs **14** and adjuster legs **16** may be received. The first **22** and second **24** sides define orifices **34** that may receive pins, bolts or other fasteners **18** (**FIG. 1**) to secure the support legs **14** and/or the adjuster legs **16** to the main frame **12**.

[0034] With reference to **FIG. 3**, the support leg **14** may include a cylindrical configuration having a first end **36** and a second end **38**. Shoulders **40** may be included near the first end **36** to allow the support leg **14** to fit relatively close between the sides **22** and **24** of the main frame **12** (**FIG. 2**), thereby reducing any tendency of the support leg **14** to shift along the length of a pin when fastened to the main frame **12**. The support leg **14** may define multiple sets of orifices **42** and **44** to allow pins or fasteners **18** (**FIG. 1**) to be inserted in order to secure the support tube **14** to the main frame **12**, or to secure other items to the support tube **12**, as will be shown below. The support tube **14** also defines an inner diameter **46** to receive the adjuster leg **16** (**FIG. 1**).

[0035] As illustrated in **FIGS. 4 and 5**, the adjuster leg **16** includes a body **48** having an outer diameter that is slightly less than the inner diameter **46** of the support leg **14** (**FIG. 3**), thereby allowing the adjuster leg **16** to slide inside of the support leg **14**. The adjuster leg **16** includes a first end **50**

and a second end **52**. The first end **50** is typically inserted into the support leg **14**, while a tapped end cap **54** at the second end **52** prevents the adjuster leg **16** from sliding completely within the support leg **14**.

[**0036**] The body **48** of the adjuster leg **16** defines multiple sets of orifices **56** that at least partially correspond to some of the orifices **44** that are defined in the support leg **14** to provide length adjustment. In this manner, a desired set of orifices **54** in the adjuster leg **16** may be aligned with a set of orifices **44** in the support leg **14** and a pin or other fastener **18** (**FIG. 1**) may be inserted through the aligned sets of orifices **44** and **54** to secure the adjuster leg **16** to the support leg **14** in a position that creates a desired overall length.

[**0037**] For fine adjustment of the length of the adjuster leg **16**, a screw **58** engages the tapped end cap **54**. The screw **58** terminates in a socket **60** that receives a pin or other fastener **18** (**FIG. 1**), thereby allowing the adjuster leg **16** to be removably secured to the main frame **12**. Handles **62** are pivotally connected to the tapped end cap **54** and allow the tapped end cap **54** to be rotated, causing the screw **58** to move in or out of the adjuster body **48**. Thus, once the adjuster leg **16** is connected to the support leg **14** at one end and near the main frame **12** at the other, the handles **62** may be turned to provide the fine adjustment necessary to allow the socket **60** to align with a desired orifice **34** in the main frame **12**.

[**0038**] Turning to **FIGS. 6 and 7**, an extension **64** may be used to increase the height of the shoring system **74** beyond a distance that the support legs **14** and the adjuster legs **16** alone may allow, as well as to provide an additional structural member for support and control of the system **10** (as shown in **FIG. 1**). The extension **64** is generally of an outer dimension approximate to that of the support leg **14**, but also includes a shoulder **66** that is of a dimension that allows the shoulder **66** to slide inside of the support leg **14**. A first set of orifices **68** may be defined in the shoulder **66** to allow a pin or other fastener **18** (**FIG. 1**) to secure the extension **64** to the main frame **12**, if desired (as shown in **FIG. 1**).

[**0039**] A second set of orifices **70** may be defined in the shoulder **66** and align with a set of orifices **44** in the support leg **14**, allowing a pin or other fastener **18** to secure the extension **64** to the support leg **14**. A third set of orifices **72** may be defined in the extension **64** that align with a desired set of orifices **54** in the adjuster leg **16**, allowing an adjustable connection between the extension **64** and the adjuster **16** that is substantially similar to that described above for the support leg **14** and the adjuster leg **16**. The locations of the orifices **68**, **70** and **72** may shift or change according to specific design requirements. For example, only one set of the first two sets of orifices **68** and **70** may be present for some applications, thereby shifting along the shoulder **66** as design considerations dictate.

[**0040**] In this manner, the extension **64** removably connects to the support leg **14** at one end and to the adjuster leg **16** at the other, providing an overall extension of height. The heightened shoring system **74** may include one or more successively connected extensions **64** to allow the system **74** to adapt to the height needed to support a weakened structure. It is to be noted that the extension **64** may be interchangeable with the support leg **14**.

[**0041**] The above-described shoring system **10** and **74** thus provides a strong, adjustable structure of modular components for easy storage and transport. Furthermore, the system **10** and **74** is easily assembled and adjusted. Accordingly, a method of supporting a weakened horizontal surface or structure with the shoring system **10** and **74** is disclosed by the above figures, whereby a first main frame **12** is placed on a substantially stable and generally horizontal surface.

[**0042**] The first end **36** of a first support leg **12** is placed into the channel **32** of the first main frame **12** and the shoulders **40** of the first support leg **12** are aligned with orifices **34** near the first end **26** of the first main frame **12** and secured with a pin or other fastener **18**. The first end **36** of a second support leg **12** is placed into the channel **32** of the first main frame **12** and the shoulders **40** of the second support leg **12** are aligned with orifices **34** near the second end **28** of the first main frame **12** and secured with a pin or other fastener **18**.

[**0043**] The first end **50** of a first adjuster leg **16** is placed in the second end **38** of the first support leg **14** and a set of orifices **54** in the first adjuster leg **16** is aligned with the orifices **44** in the first support leg **14** to create a desired overall length, whereupon a pin **18** is inserted through the orifices **44** and **54** to secure the first adjuster leg **16** to the first support leg **14**. The first end **50** of a second adjuster leg **16** is placed in the second end **38** of the second support leg **14** and a set of orifices **54** in the second adjuster leg **16** is aligned with the orifices **44** in the second support leg **14** to create a desired overall length, whereupon a pin **18** is inserted through the orifices **44** and **54** to secure the second adjuster leg **16** to the second support leg **14**.

[**0044**] A second main frame **12** is placed on the sockets **60** of the first adjuster leg **16** and the second adjuster leg **16**. The socket **60** of the first adjuster leg **16** is aligned with a set of orifices **34** near the first end **26** of the main frame **12** and a pin **18** is inserted through the aligned orifices **34** and socket **60**, securing the first adjuster leg **16** to the main frame **12**. The socket **60** of the second adjuster leg **16** is aligned with a set of orifices **34** near the second end **26** of the main frame **12** and a pin **18** is inserted through the aligned orifices **34** and socket **60**, securing the second adjuster leg **16** to the main frame **12**.

[**0045**] The height of the system **10** and **74** may be adjusted to the height needed to support the weakened horizontal structure by turning the handles **62** on the first and second adjuster legs **16** or realigning and re-pinning the orifices **54** in the adjuster legs **16** with the orifices **44** in the support legs **14**, or both.

[**0046**] Once the height of the system **10** and **74** is set, a third adjuster leg **16** may be inserted into an extension **66** and a desired set of orifices **54** in the third adjuster leg **16** aligned with third set of orifices **72** in the extension **66** and the third adjuster leg **16** pinned to the extension **64**. The first set of orifices **68** in the shoulder **66** of an extension **64** may be aligned with a set of orifices **34** near the first end **26** of the first main frame **12** and the extension **64** pinned to the first main frame **12**. The position of the socket **60** of the third adjuster leg **16** is adjusted by turning the handles **62** or re-pinning the leg **16** until the socket **60** aligns with a set of orifices **34** near the second end **28** of the second main frame **12**. The socket **60** is pinned in the channel **32** of the second main frame **12**, securing the system **10** and **74**.

[**0047**] The method includes the use of extensions **64** to provide for increased height of the system **10** and **74**. The

shoulder **66** of an extension **64** is inserted into the second end **38** of a corresponding support leg **14** and pinned, and a corresponding adjuster leg **16** is inserted into the extension **64** and aligned and pinned at the third set of orifices **72** in the extension **64**.

[**0048**] The steps of the method of using the shoring system **10** and **74** may be performed in alternate ways. For example, the adjuster leg **16** may be inserted into the support leg **14** and then the support leg **14** may be pinned to the main frame **12**. In addition, the components may be inverted, such as the first and second adjuster legs **16** may be connected to the first main frame **12**, while the first and second support legs **14** are connected to the second main frame **12**. It should also be noted that some components are interchangeable for some functions. For example, the extension **64** may be used in the place of a support leg **14**, as the cross brace in **FIG. 1** illustrates.

[**0049**] The components of the system **10** and **74** may also be color-coded for easy recognition. For example, the main frame **12** may be red, the support leg **14** gray and the extension **64** blue.

[**0050**] When an extremely long horizontal surface must be supported from below, multiple shoring systems **10** and **74** may be used. In some situations, it may be advantageous to connect multiple shoring systems **10** and **74** together or to connect a shoring system **10** and **74** to a wall or existing vertical surface. For such situations, the main frame **12** includes flanges **30**. The flanges **30** may define orifices that allow the main frame to be bolted or otherwise secured to a vertical surface or to the main frame **12** of another shoring system **10** and **74**.

[**0051**] Turning now to **FIG. 8, a** laced post shoring system **76** is shown. The laced post shoring system **76** includes two of the previously described shoring systems **10** placed parallel to one another and joined by connecting means as will be described below. The laced post shoring system **76** may be used when there is a need for more substantial support of a horizontal surface than the single above-described shoring system **10** might provide. The connecting means allow a substantially rectangular shape to be formed, increasing the strength and stability of the shoring system.

[**0052**] The connecting means to secure the parallel shoring systems **10** may include a large cross brace **78** having a first end **80** and a second end **82** and a small cross brace **84** having a first end **86** and a second end **88**. The second end **88** of the small cross brace **84** slides inside of the second end **82** of the large cross brace **78**, where orifices defined in the cross braces **78** and **84** allow the cross braces **78** and **84** to be pinned and secured at a desired overall length.

[**0053**] The first end **80** and **86** of each cross brace **78** and **84** connects to a securing means **90**. With reference to **FIG. 9**, the first end **80** and **86** of each cross brace **78** and **84** may terminate in a bracket **92**. The bracket **92** defines a channel **94** that may receive a support leg **14**, an adjuster leg **16** or an extension **64**. The bracket also defines orifices **96** that allow a pin or other fastener to secure the cross brace **78** and **84** to the support leg **14**, adjuster leg **16** or extension **64** to which it connects.

[**0054**] With reference to **FIGS. 10 and 11**, the securing means may also include a clamp **98** to which the bracket **92** of the cross brace **78** and **84** may connect, and which in turn releasably engages a support leg **14**, an adjuster leg **16** or an extension **64** without a pin. Such securing means may provide more flexibility as to the location and orientation of the connection of the cross braces **78** and **84**.

[**0055**] The clamp **98** includes a body **100** that is pivotally connected to a securing member **102** at a hinge point **104**. The securing member **102** is pivoted away from the body **100** to allow the clamp **98** to engage the desired support leg **14**, adjuster leg **16** or extension **64**. When the desired leg or extension **14**, **16** or **64** is engaged, the securing member **102** is closed about the leg or extension **14**, **16** or **64**, thereby causing the clamp **98** to substantially surround the leg or extension **14**, **16** or **64**. Fastening means, such as a threaded pin **106** and nut (not shown) secure the clamp **98** in a closed position.

[**0056**] A first pivotable connector **108** and a second pivotable connector **110** are connected to the body **100** and define respective orifices **112** and **114** to receive pins. The pivotable connectors **108** and **110** engage the channel **94** defined by the bracket **92** of the cross braces **78** and **84**. The orifices **112** and **114** defined in the pivotable connectors **108** and **110** align with orifices **96** defined in the bracket **92**, allowing a pin to secure the pivotable connectors **108** and **110** to a respective cross brace **78** and **84**.

[**0057**] Referring back to **FIG. 8**, the securing means **90** allow the diagonal cross braces **78** and **84** to connect to the support leg **14** of one shoring system **10** and to the adjuster leg **16** of the opposing shoring system **10**. The horizontal cross braces **78** and **84** may connect to the support legs **14** and the adjuster legs **16** in this same manner, or the second end **82** and **88** of a cross brace **78** and **84** may be pinned to a support or adjuster leg **14** and **16**, while the first end **80** and **86** is connected by the securing means as described above. In this manner, the strong structure of the laced post shoring system **76** is constructed, allowing substantial support of weakened horizontal surfaces.

[**0058**] As shown in **FIG. 12**, the shoring system **10** may involve an alternative to the use of the main frame **12**. In this embodiment, the shoring system **116** includes two base plates **18**, an extension **64** and an adjuster leg **16** that replace the main frame **12**. The base plates **18** provide the interface with the ground and facilitate the interconnection of the support legs **14**, adjuster leg **16** and the extensions **64**, while the additional extension **64** and adjuster leg **16** maintain a set, structural distance between the base plates **18**.

[**0059**] **FIG. 13** illustrates the components of the base plate **18**. A bottom plate **120** contacts the ground, while parallel flanges **122** and **124** extend in a direction normal to the bottom plate **120**. The flanges **122** and **124** are spaced apart and define orifices **126** that align with the previously described orifices in the support legs **14**, adjuster legs **16** and extensions **64**, allowing the support legs **14**, adjuster legs **16** and extensions **64** to be pinned to the base plate **118**. The bottom plate also defines orifices **128** that allow it to be secured to the ground or other stable horizontal surface.

[**0060**] Turning to **FIGS. 14 and 15**, the ability of the components of the system to be folded into compact units for transport and storage when the main frame **12** is used is shown. The adjuster leg **16** slides into the support leg **14**, which may be pivotally connected to the main frame **12**. The support leg **14** and adjuster leg **16** may be folded or placed

in the channel **32** defined by the main frame **12**, wherein the assembly is contained within the walls of the main frame **12**.

[**0061**] The invention has been described with reference to preferred embodiments. Obviously, modifications and alterations will occur to others upon reading and understanding the preceding detailed description. It is intended that the invention be construed as including all such modifications and alterations insofar as they come within the scope of the appended claims or the equivalents thereof.

What is claimed is:

1. A shoring system to selectively support from below an elevated surface, comprising:

a first vertical support member;

a first vertical length adjuster disposed in the first support member;

a second vertical support member spaced apart from and parallel to the first support member;

a second vertical length adjuster disposed in the second support member; and

two horizontal structural members spaced apart from and parallel to each other, wherein the first vertical support member, first vertical length adjuster, second vertical support member and second vertical length adjuster each connect to the two horizontal structural members so as to form a rectangular configuration.

2. The shoring system of claim 1, wherein at least one horizontal structural member includes:

a horizontal support member;

a horizontal length adjuster disposed in the first support member;

a base plate connected to one of the horizontal support member and the horizontal length adjuster.

3. The shoring system of claim 1, wherein at least one horizontal structural member includes a main frame.

4. A shoring system to selectively support from below an elevated horizontal surface, comprising:

a first support member;

a first length adjuster disposed in the first support member;

a second support member spaced apart from and parallel to the first support member;

a second length adjuster disposed in the second support member; and

two main frames spaced apart from and parallel to each other, wherein the first support member, first length adjuster, second support member and second length adjuster each connect to the two main frames so as to form a rectangular configuration.

5. The shoring system of claim 4, wherein at least one of the first and second support members comprises a support leg.

6. The shoring system of claim 4, wherein at least one of the first and second support members comprises an extension.

7. The shoring system of claim 4, further comprising a cross member disposed between the first support member and the second support member, extending in a diagonal manner and connecting to each main frame.

8. The shoring system of claim 4, wherein the two main frames include a first main frame and a second main frame, and the first and second support members connect to opposing ends of the first main frame.

9. The shoring system of claim 4, wherein the connections are removable.

10. The shoring system of claim 9, wherein the connections include pins.

11. A shoring system to selectively support from below an elevated surface, comprising:

a first main frame including a first end and a second end;

a second main frame including a first end and a second end, wherein the first end of the second main frame is spaced apart from and aligned with the first end of the first main frame, and the second end of the second main frame is spaced apart from and aligned with the second end of the first main frame;

a first support leg connected to the first end of the first main frame;

a second support leg connected to the second end of the first main frame;

a first adjuster leg disposed in the first support leg and connected to the first end of the second main frame;

a second adjuster leg disposed in the second support leg and connected to the second end of the second main frame; and

a cross member connected to and extending from the first main frame to the second main frame.

12. The shoring system of claim 11, wherein the cross member extends from the first end of the first main frame to the second end of the second main frame.

13. The shoring system of claim 11, wherein the cross member is an extension.

14. The shoring system of claim 11, wherein at least one of the first and second adjuster legs includes an adjustable screw.

15. A laced post shoring system to selectively support from below an elevated surface, comprising:

(a) a first shoring system, including:

a first support member;

a first length adjuster disposed in the first support member;

a second support member spaced apart from and parallel to the first support member;

a second length adjuster disposed in the second support member; and

two main frames spaced apart from and parallel to each other, wherein the first support member, first length adjuster, second support member and second length adjuster each connect to the two main frames so as to form a rectangular configuration;

(b) a second shoring system spaced apart from and parallel to the first shoring system, including:

a first support member;

a first length adjuster disposed in the first support member;

a second support member spaced apart from and parallel to the first support member;

a second length adjuster disposed in the second support member; and

two main frames spaced apart from and parallel to each other, wherein the first support member, first length adjuster, second support member and second length adjuster each connect to the two main frames so as to form a rectangular configuration;

(c) cross braces extending between the first shoring system and the second shoring system; and

(d) securing means to connect the cross braces to each of the first shoring system and the second shoring system.

16. The laced post shoring system of claim 15, wherein at least one of the first and second support members in at least one of the first or second shoring system comprises a support leg.

17. The laced post shoring system of claim 15, wherein at least one of the first and second support members in at least one of the first or second shoring system comprises an extension.

18. The laced post shoring system of claim 15, further comprising a cross member in each of the first and second shoring systems, wherein the cross member is disposed between the first support member and the second support member and extends in a diagonal manner and connecting to each main frame of the respective first or second shoring system.

19. The laced post shoring system of claim 15, wherein the securing means includes a bracket.

20. The laced post shoring system of claim 15, wherein the securing means includes a clamp.

21. A method for shoring an elevated horizontal surface from below, comprising the steps of:

placing a first main frame including a first end and a second end on a stable horizontal surface;

connecting a first support leg to the first end of the first main frame;

connecting a second support leg to the second end of the first main frame;

inserting a first adjuster leg into the first support leg;

securing the first adjuster leg in the first support leg;

inserting a second adjuster leg into the second support leg;

securing the second adjuster leg in the second support leg;

providing a second main frame having a first end and a second end;

connecting the first adjuster leg to the first end of the second main frame;

connecting the second adjuster leg to the second end of the second main frame;

adjusting the length of the first adjuster leg; and

adjusting the length of the second adjuster leg.

22. The method for shoring an elevated horizontal surface of claim 21, further comprising the steps of:

providing a diagonal support member;

inserting a third adjuster leg into the diagonal support member;

securing the third adjuster leg in the diagonal support member;

connecting the diagonal support member to the first main frame;

adjusting the length of the third adjuster; and

connecting the third adjuster to the second main frame.

23. The method for shoring an elevated horizontal surface of claim 22, wherein the diagonal support member is one of a support leg and an extension.

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