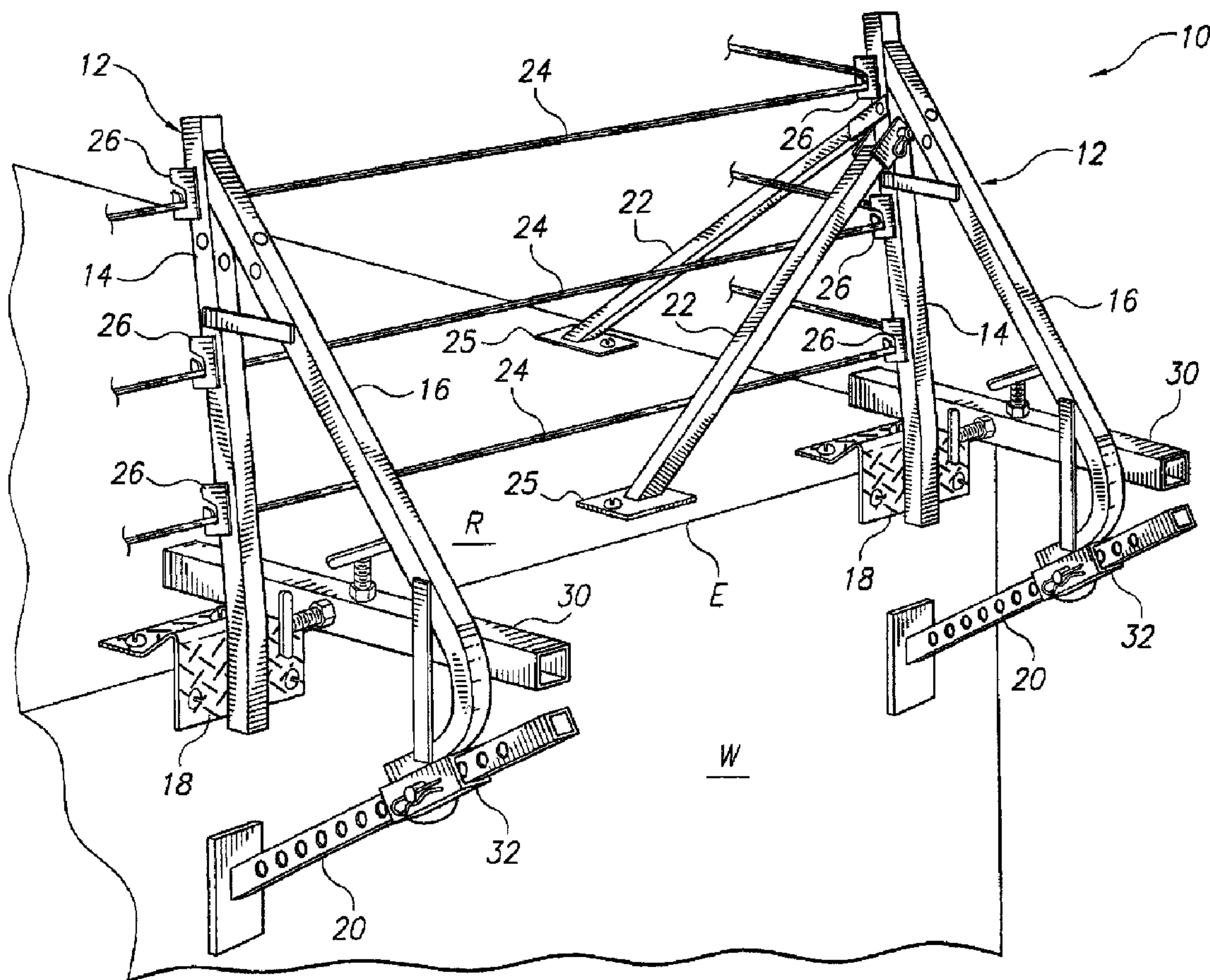




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(54) Titre : SYSTEME DE GARDE-CABLE DE CONTOUR DE TOIT
 (54) Title: ROOF PERIMETER CABLE GUARD SYSTEM



(57) Abrégé/Abstract:

A roof perimeter cable guard system has a main stanchion member supported at its lower end by an anchor bracket screwed to the roof perimeter. A main brace member extends outward and downward from the upper end portion of the main stanchion member

(57) **Abrégé(suite)/Abstract(continued):**

and curves around and under the perimeter feature. The main brace has a lower sleeve receiving an adjustable wall-engaging member to provide bracing against the wall of the structure. In one configuration the wall-engaging member has an additional supporting extender member, which allows the wall-engaging member to engage the soffit of an overhang. An inward extender member and parapet engagement bracket allow for position attachment to a parapet feature. Pairs of barrier cable engagement brackets having barrier cable receiving slots are spaced along the inner side of the stanchion vertical members for easy insertion or removal of an equal number of barrier cables, normally three.

ABSTRACT OF THE DISCLOSURE

A roof perimeter cable guard system has a main stanchion member supported at its lower end by an anchor bracket screwed to the roof perimeter. A main brace member extends outward and downward from the upper end portion of the main stanchion member and curves around and under the perimeter feature. The main brace has a lower sleeve receiving an adjustable wall-engaging member to provide bracing against the wall of the structure. In one configuration the wall-engaging member has an additional supporting extender member, which allows the wall-engaging member to engage the soffit of an overhang. An inward extender member and parapet engagement bracket allow for position attachment to a parapet feature. Pairs of barrier cable engagement brackets having barrier cable receiving slots are spaced along the inner side of the stanchion vertical members for easy insertion or removal of an equal number of barrier cables, normally three.

ROOF PERIMETER CABLE GUARD SYSTEM

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

The present invention relates to safety systems for construction. More particularly,
5 the present invention relates to a roof perimeter cable guard system that provides a safety
guard rail and line system for installation on roofs.

2. DESCRIPTION OF THE RELATED ART

The use of safety guardrail systems for installation around the perimeter of a roof
during construction and roof repair is widely practiced. Such a system protects workers from
10 accidental falls from a roof and the injuries thereby incurred. Most systems include a number
of posts or uprights affixed to the roof and configured to support railings of framing lumber
and the like, such as 1" x 4" or 2" x 4" lumber. The use of lumber results in a necessarily
heavy installation due to the inherent weight of the lumber, thereby exposing workers to risk
and substantial effort in installing and removing the lumber and supporting uprights. Of
15 course, metal or plastic rails could be substituted, but they would also suffer due to inherent
weight and difficulty in handling safety rails.

The use of uprights or stanchions to support wire rope or other cable as barrier lines in
place of lumber is known. However, stanchion designs are limited in adapting to various
forms of roof perimeters, such as parapet and overhang, and require a stanchion of substantial
20 strength and resulting weight to support the cables under tension. It would be desirable to
provide a stanchion system that provides for easy installation on a variety of roof perimeter
designs that is light in weight while providing adequate strength to support the cable barrier
lines under necessary tension.

Thus, a roof perimeter cable guard system solving the aforementioned problems is
25 desired.

SUMMARY OF THE INVENTION

The disclosure is directed to a stanchion for a roof perimeter cable guard system for
installation around a periphery of a roof. The stanchion includes a vertical member with an
upper end portion, and a lower portion. At least one pair of barrier cable engagement
30 brackets is mounted on the vertical member to releasably support at least one barrier cable.

The stanchion also includes an anchor bracket with an upper horizontal portion that is adapted for attachment to the periphery of the roof, and a vertical portion adapted for abutting a wall normal to the roof. The lower portion of the vertical member is attached to the vertical portion of the anchor bracket. The stanchion further includes a main brace member with a linear upper portion joined to the upper portion of the vertical member at an acute angle, and an arcuate lower portion that curves towards, and extends lower than, the lower portion of the vertical member. A main brace lower sleeve is attached to the lower portion of the main brace member. The stanchion also includes a wall-engaging member that has an elongate shank portion that is slidable within the main brace lower sleeve. A wall-engaging pad at an end of the shank portion is used for engaging the wall. A means for selectively fixing the shank is used to adjust the length of the wall-engaging member and thereby support the main brace member against the wall. The main brace member extends outwardly from the roof.

The disclosure is also directed to a roof perimeter cable guard system for installation around the periphery of a roof. The system includes a plurality of stanchions and at least one barrier cable supported by the stanchions. Each of the stanchions has a vertical member with an upper end portion, and a lower portion. At least one pair of barrier cable engagement brackets is mounted on the vertical member and releasably supports at least one barrier cable. Each of the stanchions also has an anchor bracket with an upper horizontal portion that is adapted for attachment to the periphery of the roof. A vertical portion is adapted for abutting a wall normal to the roof. The lower portion of the vertical member is attached to the vertical portion of the anchor bracket. Each stanchion also includes a main brace member with a linear upper portion joined to the upper portion of the vertical member at an acute angle, and an arcuate lower portion that curves towards, and extends lower than, the lower portion of the vertical member. The lower portion of the main brace member has a main brace lower sleeve attached thereto. Each stanchion further includes a wall-engaging member with an elongate shank portion that is slidable within the main brace lower sleeve. A wall-engaging pad at an end of the shank portion engages with the wall. A means for selectively fixing the shank is used to adjust the length of the wall-engaging member and thereby support the main brace member against the wall. The main brace member extends outwardly from the roof.

The disclosure is further directed to a stanchion for a roof perimeter cable guard system for installation around a periphery of a roof. The stanchion has a vertical member with an upper end portion, and a lower portion. At least one pair of barrier cable engagement brackets is mounted on the vertical member. The barrier cable engagement brackets releasably support at least one barrier cable. The stanchion also has an anchor bracket with

Similar reference characters denote corresponding features consistently throughout the attached drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The roof perimeter cable guard system of the present invention provides a substantially vertical stanchion member supported at its lower end by an anchor bracket screwed to the outer edge of the roof perimeter feature to which it attaches. A main brace member extends outward and downward from the upper end portion of the main stanchion member and curves around and under the roof perimeter feature. The lower portion of the main brace has a sleeve for receiving an adjustable wall-engaging member to provide bracing against the wall of the structure.

In one configuration the wall-engaging member has an additional supporting extender member, which allows the wall-engaging member to engage the soffit of an overhang. In another configuration, an inward extender member and parapet engagement bracket allow for position attachment to a parapet roof feature.

Pairs of barrier cable engagement brackets having barrier cable receiving slots are spaced along the inner side of the stanchion vertical members for easy insertion or removal of an equal number of barrier cables, normally three in number. A mid-span barrier cable support and a barrier cable engagement bracket attachment may also be provided. Referring to Figs. 1 and 2, there is shown an environmental perspective view and a side elevation view, respectively, of the roof perimeter cable guard system 10 of the present invention as mounted at the perimeter of roof **R** at wall **W**. Roof safety system 10 includes stanchions 12 made up, principally, of: an elongate stanchion vertical member 14 installed on the perimeter of roof **R** at wall **W**; a main brace member 16 extending outwardly and downward from the upper portion of vertical member 14, the main brace member 16 having a lower, inwardly curved portion; and a stanchion brace and receiver 30 extending between a lower portion of the vertical stanchion member 14 and the lower curved portion of the stanchion main brace member 16. Vertical member 14 is supported at the edge of the roof feature by anchor bracket 18 (also known as the "gravel stop"), which may be affixed to the roof **R** and wall **W** by screws, as shown, or by other fasteners.

Stanchion vertical members 14 and main brace members 16 may be made from square tubing, e.g., 1" square tubing, for light weight and strength. As shown in Fig. 2, vertical members 14 need not be straight or linear, but may be angled or canted at the lower end in

order to slope inward above the edge of the roof **R**. For example, when the distance between two parallel barrier cables extending through the lowermost and uppermost point on the vertical member **14** is fifty-two inches, the vertical member **14** may have an angle of about 83° formed therein about six inches from the bottom of vertical member **14**, so that the top end of the vertical member **14** extends about six inches inward over the roof **R**, as shown in Figs. 2-4. In this way, a worker falling against the barrier cables will not have the upper portion of his or her body directly at the edge of the roof **R**, but bent back inward towards the interior of the roof **R**, so that torque, inertia, and momentum do not cause the worker's body to continue rotation or falling towards, or over, the edge of the roof **R**.

The lower curved portion of the stanchion main brace member **16** extends below the lower or bottom end of the vertical member **14** and supports an adjustable wall-engaging member **20** by means of a sleeve **32**, providing additional support to the stanchion **12** to avoid collapse upon a worker falling against a stanchion **12** or barrier cable **24** supported thereby. Additional roof mount supports **22** may be provided at corner stanchions **12** and at selected stanchions **12** along a wall to provide additional support against the inward stress imparted by the cable or wire rope barrier cables **24** as strung around the roof **R**. Roof mount supports **22** have a lower plate **25** screwed to the roof **R** as shown and are pinned at their upper ends to the upper end of vertical member **14** as shown, or main brace member **16** (see open pin bores as shown).

Pairs of barrier cable engagement brackets **26** (a single pair is shown in more detail in Fig. 5) are spaced along vertical members **14** for removably supporting barrier cables **24**, three pairs of brackets **26** and three barrier cables **24** being shown in Figs. 1 and 2. The curved lower portion of the stanchion main brace member **16**, along with the wall engaging member **20**, allows the system to be applied over gutters and the like.

Referring more particularly to Fig. 2, main brace lower sleeve **32** is affixed on the curved lower portion **46** of main brace **16**, e.g., by welding, and adjustably receives the shank portion **50** of wall-engaging member **20** in order to provide support by means of wall engaging pad **52**. Sleeve pin **34** is selectively inserted through sleeve **32** and pin adjustment bores **54** spaced along tubular shank **50** to provide desired bracing of stanchion **12**. Vertical member **14** has an upper portion **40** to which upper portion **44** of main brace member **16** is attached. Vertical member **14** has a lower portion **42** attached by welding or the like to anchor bracket **18** along bracket vertical wall **58**, which is attached to wall **W** by mounting screws **62**. Anchor bracket **18** has a roof engaging portion **56** extending horizontally inward,

which is attached to roof **R** by mounting screws **62**. An upper bend **60** is provided in roof engaging portion **56** to space and support lower brace and receiver member **30** therefrom.

Lower brace and receiver member **30** has an inner portion **70** extending inward from vertical member **14**, an outer portion **72** extending outward from the lower portion **46** of main brace member **16**, and a center portion **74** between the lower portion **42** of vertical member **14** and the lower portion **46** of main brace member **16**. An upper horizontal brace **76** is attached between the respective upper portion of vertical member **14** and main brace member **16** to further strengthen the structure of stanchion **12**. A lower vertical brace **78** is placed across the arcuate lower portion of main brace member **16** to keep the arcuate lower portion rigid. Braces **76** and **78** may be made from any rigid material, e.g., a flat bar, a strap, a rod, etc.

Referring to Figs. 3 and 6, there is shown side elevation views of a stanchion **12** in another configuration in full view and detail view, respectively, specifically configured to fit an overhang peripheral roof feature. Roof **R** has a fascia **F** and a soffit **S** extending outward from wall **W**. Stanchions **12** are mounted at the periphery of roof **R** in the same manner as in that of Fig. 2 by means of anchor bracket **18**. An additional part, extender member **80**, is added to redirect the shank portion of wall engaging member **50** upward against soffit **S** at wall engaging pad **52**.

Extender member **80** has a shank **82** and an end sleeve **84**, shank **82** being adjustably received by sleeve **32** of stanchion main brace member **16** by a pin **34** extending through a selected adjustment bore **88**. The extender member **80** extends downward and inward from sleeve **32** and receives the shank of wall-engaging member **50** within extender member end sleeve **84** and is selectively fixed in place by setscrew **86**. Wall-engaging pad **52** is held against soffit **S** by the extension upward of the shank of wall-engaging member **50** through sleeve **84** providing, along with anchor bracket **18**, a clamping action over the overhang feature of roof **R**.

Referring to Figs. 4 and 7, there is shown a side elevation view and a detail perspective view, respectively, of stanchion **12** in another configuration for attachment to a parapet **P** peripheral feature of roof **R** and from which wall **W** descends. Stanchion **12** may be attached to the outer edge of the parapet **P** by mounting screws **62** through anchor bracket **18** in the manner of the mounting shown in Fig. 1. Alternatively, the anchor bracket **18** may be held in place by the clamping action of wall-engaging pad **52** and clamp screw **106**. In addition, a stanchion lower brace extender member **90** has a shank **92** slidably engaged within tubular stanchion lower brace and receiver **30** to be adjustably secured at a desired

extension by lower brace vertical setscrew **96** and lower brace horizontal setscrew **98**. Extender member **90** is horizontally disposed and has a vertical end sleeve **94** at its inner end relative to the roof **R** for receiving vertical shank **102** of parapet engagement bracket **100**.

Vertical shank **102** is adjustably secured in vertical end sleeve **94** by setscrew **110**.

5 Parapet engagement bracket **100** is vertically disposed and is formed in the shape of an inverted "T" (see Fig. 7). A horizontal clamp support member **104** is centrally secured to the lower end of vertical shank **102** at central "T" **112** and extends outward to clamp support member end portions **108**. Clamp screws **106** are mounted horizontally through clamp support member end portions **108** and are adjusted to bear against the inner side of parapet **P**.
 10 The clamping force exerted by the clamp screw **106** and the stanchion anchor bracket **18** provide for secure attachment and easy detachment of stanchion **12** from parapet **P**.

Referring to Fig. 5, there is shown a detail view from the perspective of the interior of the roof showing barrier cable **24** held in a pair of engagement brackets **26**. Engagement brackets **26** are attached to opposing vertical stanchion sidewalls **132**, as by welding, and are
 15 inverted relative to each other to secure barrier cable **24** along vertical stanchion inner side **130**. Engagement brackets **26** have receiving slots **120** angled into vertical retainment slots **122**. The barrier cable **24** is slackened for removal and mounting through adjacent receiving slots and tensioned to be securely held in retainment slots **122**.

Referring to Fig. 8, there is shown a perspective view of a mid-span support **13** for
 20 supporting barrier cable **24** at mid-span, i.e., between a pair of stanchions **12**. The mid-span support **13** is made up of a support post **15** having a horizontal base plate member **21** affixed to the bottom of post **15**, which includes holes **23** for receiving fasteners, such as screws or nails, for securing post **15** to roof **R**. Adjacent to the top end of support post **15** are a pair of
 25 barrier cable support brackets **27** for supporting the top barrier cable **24**. The support brackets **27** are a pair of plates affixed to the sidewall of the support post **15**. Each bracket **27** includes a barrier cable support slot **29** having a downwardly angled receiving slot **31** and a substantially vertical retainment slot **33**.

Mid-span supports **13** are placed as needed between stanchions **12** and are used to hold or prop up barrier cable **24**. This becomes necessary should the distance between
 30 adjacent stanchions **12** be too great due to particular roof structure characteristics, causing the barrier cable **24** to sag below an acceptable limit. Mid-span support **13** can then be put into place, thereby holding the barrier cable **24** at an acceptable height. As shown in Fig. 8, support post **15** may be woven between the three barrier cables **24** for greater stability of the mid-span support **13**.

Referring to Fig. 9, there is shown a barrier cable engagement bracket attachment **35** for attachment to a pair of barrier cable engagement brackets **26** in order to a support barrier cable **24** in a non-binding fashion. The attachment **35** has a forward base portion **37**, a pair of substantially vertical, rearwardly extending wall members **47** and an upstanding forward plate **39**. A rotatable bushing **41**, which includes a cylindrical body portion **43** and an outwardly extending circular flange **45** at the top of the cylindrical body portion **43**, rests on base portion **37**. The rotatable bushing **41** is rotatably secured to the base portion **37** by a bolt **51** extending through an aperture in the base portion **37** and through the bushing **41**. The bushing **41** is secured by nut **53**, which is tightened on the bolt **51** enough to secure bushing **41** on bolt **51**, but without precluding rotation of bushing **41** about bolt **51**.

The attachment **35** may be secured into the retainment slots **122** of any pair of barrier cable engagement brackets **26** by a fastener **49**, such as a bolt or pin, extending through holes in the rear portions of wall members **47**. Once attachment **35** is in place, barrier cable **24** is supported on base portion **37**, behind the cylindrical body portion **43** of rotatable bushing **41**. Circular flange **45** acts to prevent the barrier cable **24** from riding up and off of the rotatable bushing **41**. While attachment **35** may be mounted on any pair of barrier cable engagement brackets **26**, it is most useful on the brackets **26** of stanchions **12** where the barrier cable changes direction, for example, at the corner of a building roof, and where the barrier cable **24** would have a tendency to bind in the retainment slots **122** of brackets **26**. This allows for a more complete tightening of the barrier cables **24**.

The stanchion of the roof safety system as described above is preferably made from aluminum for ease of handling, the design being such as to allow the use of aluminum without bending or failure in use. However, the stanchion may also be made of steel or other suitable material.

It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

- 5 1. A stanchion for a roof perimeter cable guard system for installation around a periphery of a roof, the stanchion comprising:
- a vertical member having an upper end portion, and a lower portion;
- at least one pair of barrier cable engagement brackets mounted on the vertical member for releasably supporting at least one barrier cable;
- 10 an anchor bracket having an upper horizontal portion adapted for attachment to the periphery of the roof and a vertical portion adapted for abutting a wall normal to the roof, the lower portion of the vertical member being attached to the vertical portion of the anchor bracket;
- a main brace member having a linear upper portion joined to the upper portion of the vertical member at an acute angle and an arcuate lower portion curving towards, and extending
- 15 lower than, the lower portion of the vertical member, the lower portion of the main brace member having a main brace lower sleeve attached thereto; and
- a wall-engaging member having an elongate shank portion slidable within the main brace lower sleeve, a wall-engaging pad at an end of the shank portion for engagement with the wall, and means for selectively fixing the shank portion in order to adjust the length of the wall-
- 20 engaging member to support the main brace member against the wall with the main brace member extending outward from the roof.
2. The stanchion according to claim 1, further comprising:
- an extender member having an elongate shank and an end sleeve attached to an end of the shank normal thereto, the extender member shank being slidable within said main brace member
- 25 sleeve and said wall-engaging shank being slidable within the extender member end sleeve; and
- means for selectively fixing the shank of the extender member to the main brace sleeve in order to raise the wall-engaging pad of said wall-engaging member to engage a soffit under a roof overhang.

3. The stanchion according to claim 1, further comprising a lower brace and receiver member extending horizontally between the lower portions of said vertical member and the arcuate lower portion of said main brace member, the lower brace and receiver member being an elongate tubular member having an inner portion extending inwardly from said vertical member and an
5 outer portion extending outwardly from the lower portion of said main brace member.

4. The stanchion according to claim 3, further comprising:
a lower brace and receiver member extender slidable within said lower brace and receiver member; and
a parapet engagement bracket adjustably supported by the lower brace and receiver
10 member extender for mounting the stanchion on a roof with a peripheral parapet.

5. The perimeter cable guard system according to claim 4, wherein:
said lower brace and receiver member extender has a shank having a first end adjustably secured within the inner portion of said lower brace and receiver member, and an end sleeve mounted normal to an opposite second end of said shank; and
15 said parapet engagement bracket has an inverted T-shape formed by a shaft adjustably secured within the lower brace and receiver end sleeve and a crossbar clamp support member centrally secured to the lower end of the shaft; the system further comprising:
a pair of adjustable clamp screws extending through the crossbar clamp support member, the clamp support screws being adapted for bearing against an inner side of a parapet in order to
20 attach the stanchion to a roof having a parapet structure.

6. The stanchion according to claim 1, further comprising at least one additional roof mount support, the at least one additional roof mount support being an elongated, tubular member having a first end pivotally attached to said vertical member and an opposite end having a plate attached thereto adapted for attachment to the roof.

7. The stanchion according to claim 1, wherein said at least one pair of barrier cable engagement brackets includes three pairs of barrier cable engagement brackets, each of said engagement brackets being a plate member attached to a vertical stanchion sidewall, each plate
25

member having an angled barrier cable receiving slot and a substantially vertical barrier cable retainment slot extending from the receiving slot defined therein.

8. The stanchion according to claim 1, further comprising at least one barrier cable engagement bracket attachment, the bracket attachment having:

5 a planar base portion having a shaft extending normal thereto;

a pair of substantially vertical, rearwardly extending wall members extending normal to the base member; and

a rotatable bushing having a cylindrical body portion and an enlarged, outwardly extending circular flange at one end of the body portion, the bushing being rotatably mounted on the shaft; and

10 a fastener member attaching the wall members of the engagement bracket attachment to said at least one pair of barrier cable engagement brackets, whereby said at least one barrier cable may engage and be supported by said base portion and said rotatable bushing.

9. The stanchion according to claim 1, wherein said vertical member is bent at an angle so that the upper portion of said vertical member extending above said anchor bracket slopes
15 inward over the periphery of the roof, being adapted to set the barrier cables back from an edge of the roof.

10. A roof perimeter cable guard system for installation around the periphery of a roof, comprising a plurality of stanchions and at least one barrier cable supported thereby, each of the stanchions including:

20 a vertical member having an upper end portion, and a lower portion;

at least one pair of barrier cable engagement brackets mounted on the vertical member releasably supporting the at least one barrier cable;

an anchor bracket having an upper horizontal portion adapted for attachment to the periphery of the roof and a vertical portion adapted for abutting a wall normal to the roof, the
25 lower portion of the vertical member being attached to the vertical portion of the anchor bracket;

a main brace member having a linear upper portion joined to the upper portion of the vertical member at an acute angle and an arcuate lower portion curving towards, and extending

lower than, the lower portion of the vertical member, the lower portion of the main brace member having a main brace lower sleeve attached thereto; and

5 a wall-engaging member having an elongate shank portion slidable within the main brace lower sleeve, a wall-engaging pad at an end of the shank portion for engagement with the wall, and means for selectively fixing the shank portion in order to adjust the length of the wall-engaging member to support the main brace member against the wall with the main brace member extending outward from the roof.

11. The perimeter cable guard system according to claim 10, wherein each said stanchion further comprises:

10 an extender member having an elongate shank and an end sleeve attached to an end of the shank normal thereto, the extender member shank being slidable within said main brace member sleeve and said wall-engaging shank being slidable within the extender member end sleeve; and

15 means for selectively fixing the shank of the extender member to the main brace sleeve in order to raise the wall-engaging pad of said wall-engaging member to engage a soffit under a roof overhang.

12. The perimeter cable guard system according to claim 10, wherein each said stanchion further comprises a lower brace and receiver member extending horizontally between the lower portions of said vertical member and the arcuate lower portion of said main brace member, the lower brace and receiver member being an elongate tubular member having an inner portion extending inwardly from said vertical member and an outer portion extending outwardly from the lower portion of said main brace member.

20

13. The perimeter cable guard system according to claim 12, wherein each said stanchion further comprises:

25 a lower brace and receiver member extender slidable within said lower brace and receiver member; and

a parapet engagement bracket adjustably supported by the lower brace and receiver member extender for mounting the stanchion on a roof with a peripheral parapet.

14. The perimeter cable guard system according to claim 13, wherein:

said lower brace and receiver member extender has a shank having a first end adjustably secured within the inner portion of said lower brace and receiver member, and an end sleeve mounted normal to an opposite second end of said shank; and

5 said parapet engagement bracket has an inverted T-shape formed by a shaft adjustably secured within the lower brace and receiver end sleeve and a crossbar clamp support member centrally secured to the lower end of the shaft; the system further comprising:

10 a pair of adjustable clamp screws extending through the crossbar clamp support member, the clamp support screws being adapted for bearing against an inner side of a parapet in order to attach the stanchion to a roof having a parapet structure.

15 15. The perimeter cable guard system according to claim 10, wherein each said stanchion further comprises at least one additional roof mount support, the at least one additional roof mount support being an elongated, tubular member having a first end pivotally attached to said vertical member and an opposite end having a plate attached thereto adapted for attachment to the roof.

20 16. The perimeter cable guard system according to claim 10, wherein said at least one pair of barrier cable engagement brackets includes three pairs of barrier cable engagement brackets, each of said engagement brackets being a plate member attached to a vertical stanchion sidewall, each plate member having an angled barrier cable receiving slot and a substantially vertical barrier cable retainment slot extending from the receiving slot defined therein.

17. The perimeter cable guard system according to claim 10, further comprising at least one barrier cable engagement bracket attachment, the bracket attachment having:

a planar base portion having a shaft extending normal thereto;

25 a pair of substantially vertical, rearwardly extending wall members extending normal to the base member; and

a rotatable bushing having a cylindrical body portion and an enlarged, outwardly extending circular flange at one end of the body portion, the bushing being rotatably mounted on the shaft; and

a fastener member attaching the wall members of the engagement bracket attachment to said at least one pair of barrier cable engagement brackets, whereby said at least one barrier cable may engage and be supported by said base portion and said rotatable bushing.

18. The perimeter cable guard system according to claim 10, further comprising at
 5 least one mid-span support, the at least one mid-span support including a substantially vertical support post having a top end and a bottom end, a horizontal base plate member at the bottom end of the vertical support post, and at least one pair of mid-span barrier cable support brackets, each of the support brackets being a plate member attached to a sidewall of the vertical support post, each plate member having defined therein an angled receiving slot and a substantially
 10 vertical retainment slot extending from the receiving slot, the mid-span support being adapted for placement between stanchions of the perimeter cable guard system, said at least one barrier cable being engaged in and supported by the vertical retainment slots of the support brackets.

19. The perimeter cable guard system according to claim 10, wherein said vertical member is bent at an angle so that the upper portion of said vertical member extending above
 15 said anchor bracket slopes inward over the periphery of the roof in order to set the barrier cables back from an edge of the roof.

20. A stanchion for a roof perimeter cable guard system for installation around a periphery of a roof, the stanchion comprising:

a vertical member having an upper end portion, and a lower portion;

20 at least one pair of barrier cable engagement brackets mounted on the vertical member for releasably supporting at least one barrier cable;

an anchor bracket having an upper horizontal portion adapted for attachment to the periphery of the roof and a vertical portion adapted for abutting a wall normal to the roof, the lower portion of the vertical member being attached to the vertical portion of the anchor bracket;

25 a main brace member having a linear upper portion joined to the upper portion of the vertical member at an acute angle and a lower portion directed towards, and extending lower than, the lower portion of the vertical member, the lower portion of the main brace member having a main brace lower sleeve attached thereto; and

a wall-engaging member having an elongate shank portion slidable within the main brace lower sleeve, a wall-engaging pad at an end of the shank portion for engagement with the wall, and means for selectively fixing the shank portion in order to adjust the length of the wall-engaging member to support the main brace member against the wall with the main brace member extending outward from the roof.

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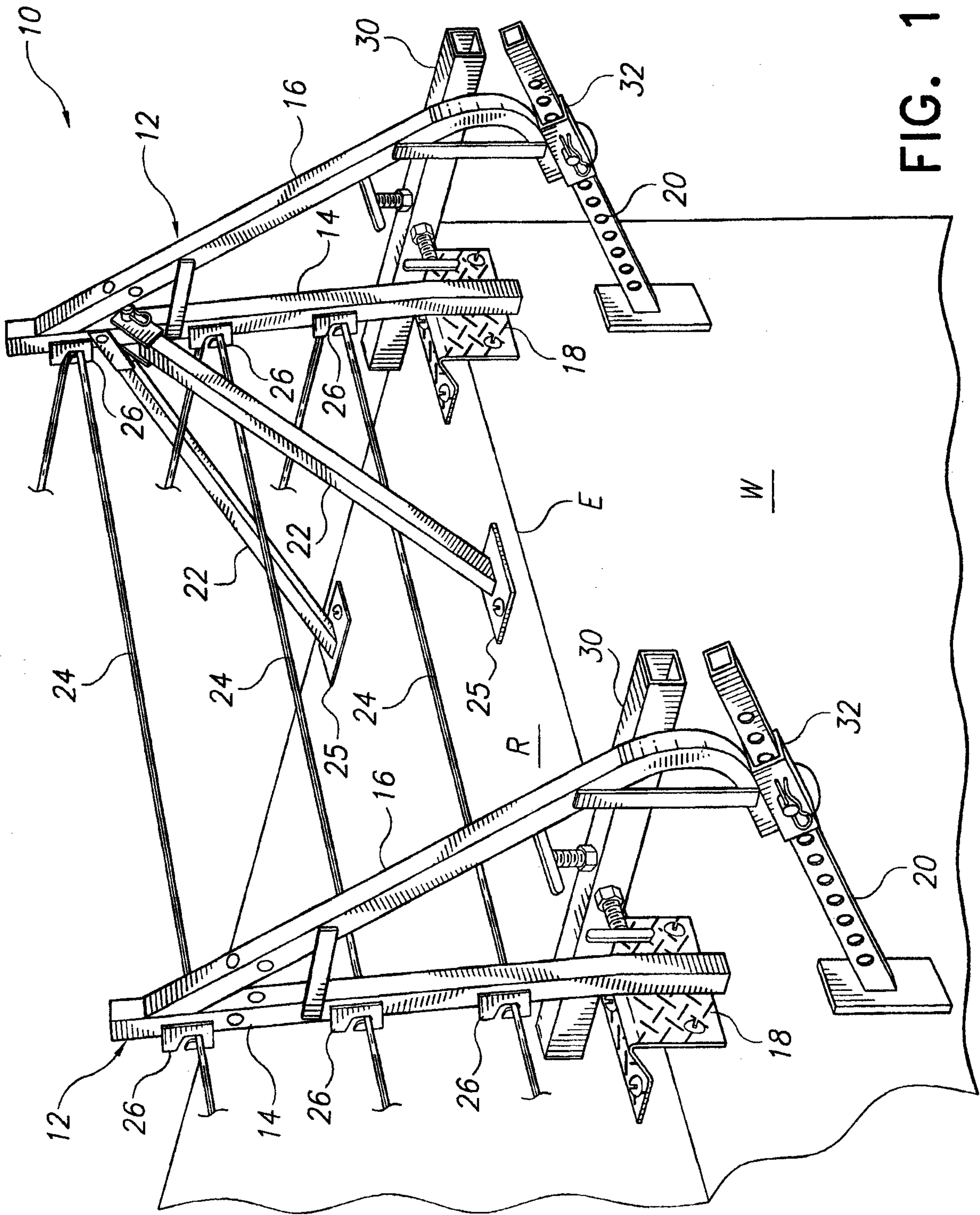


FIG. 1

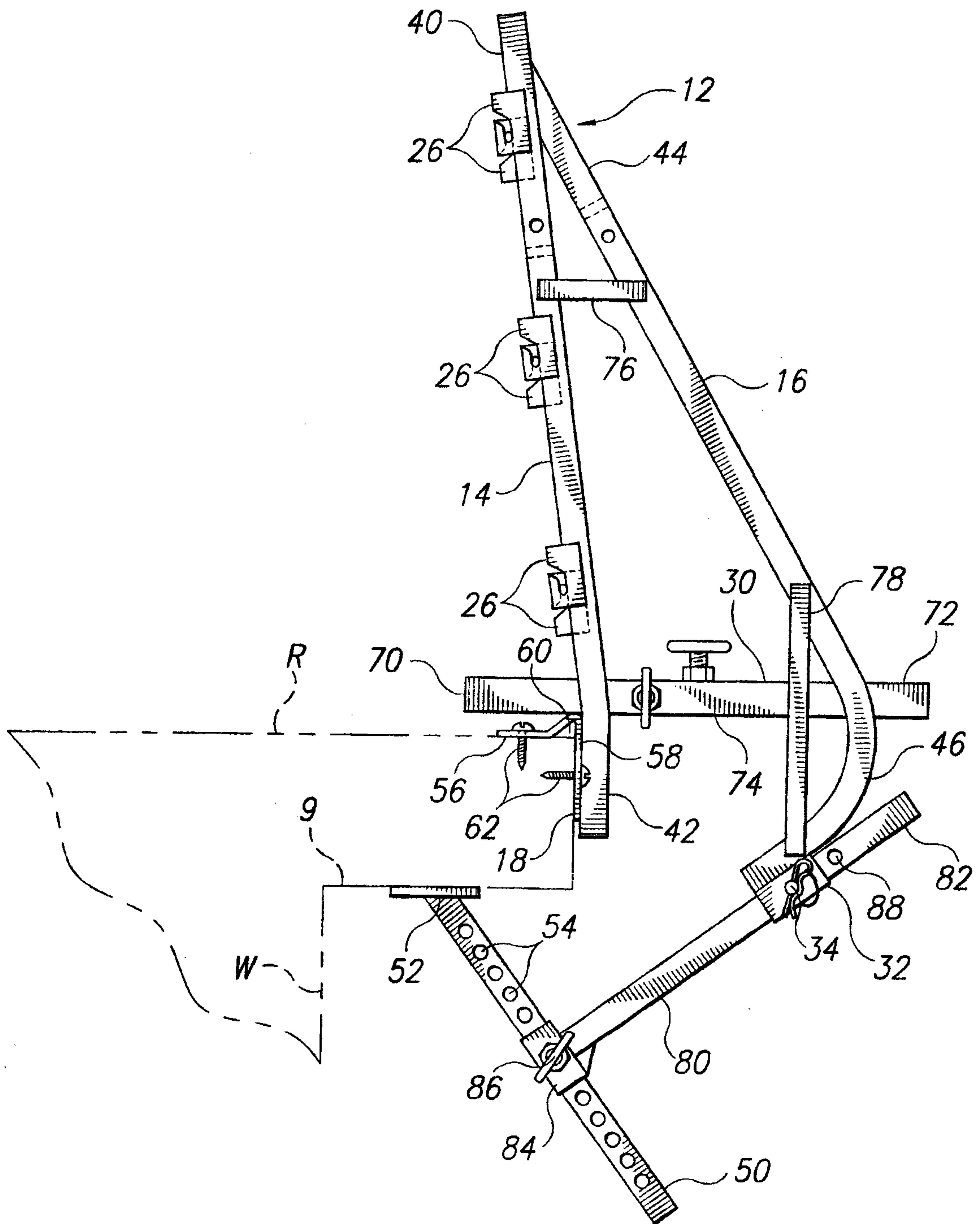


FIG. 3

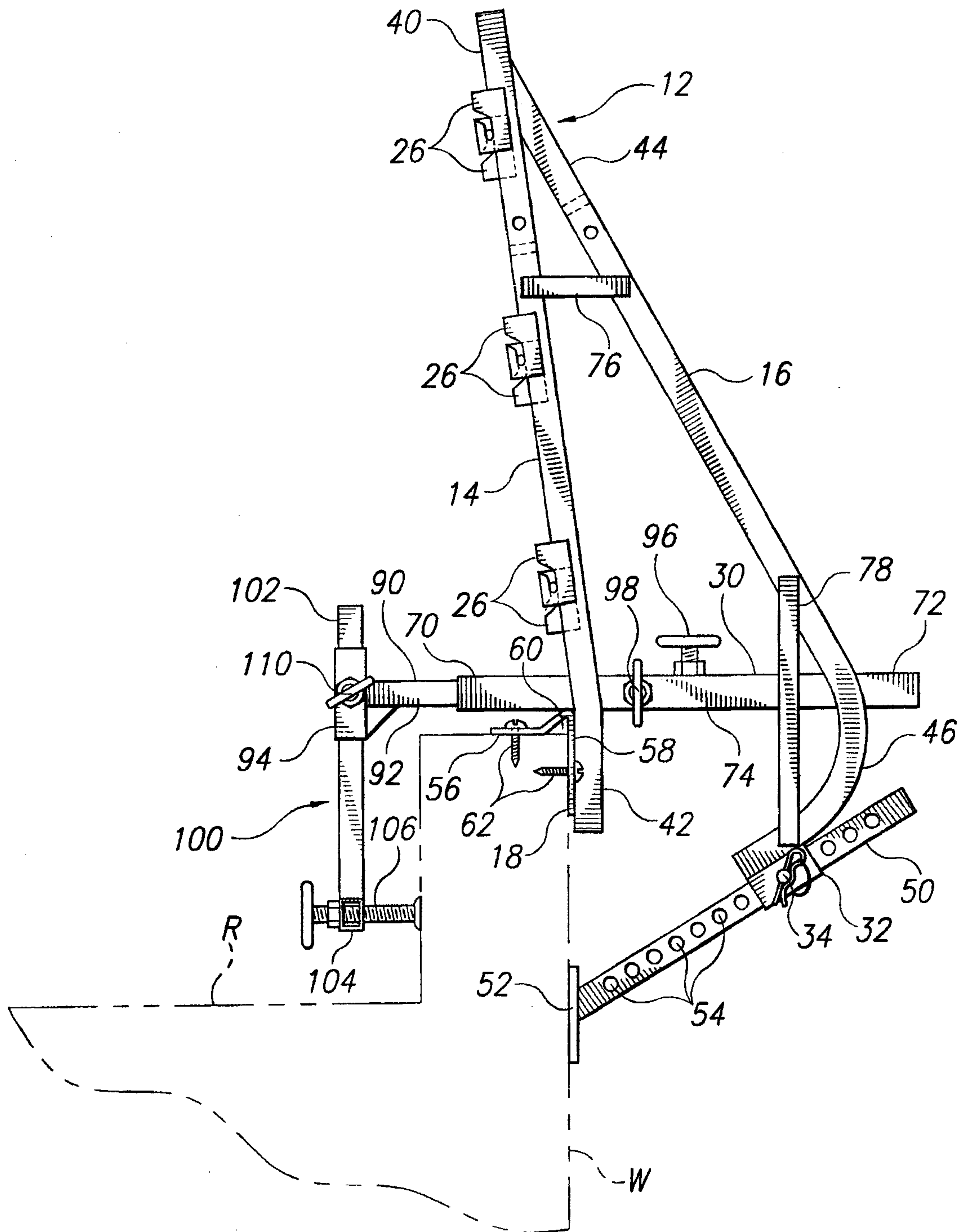


FIG. 4

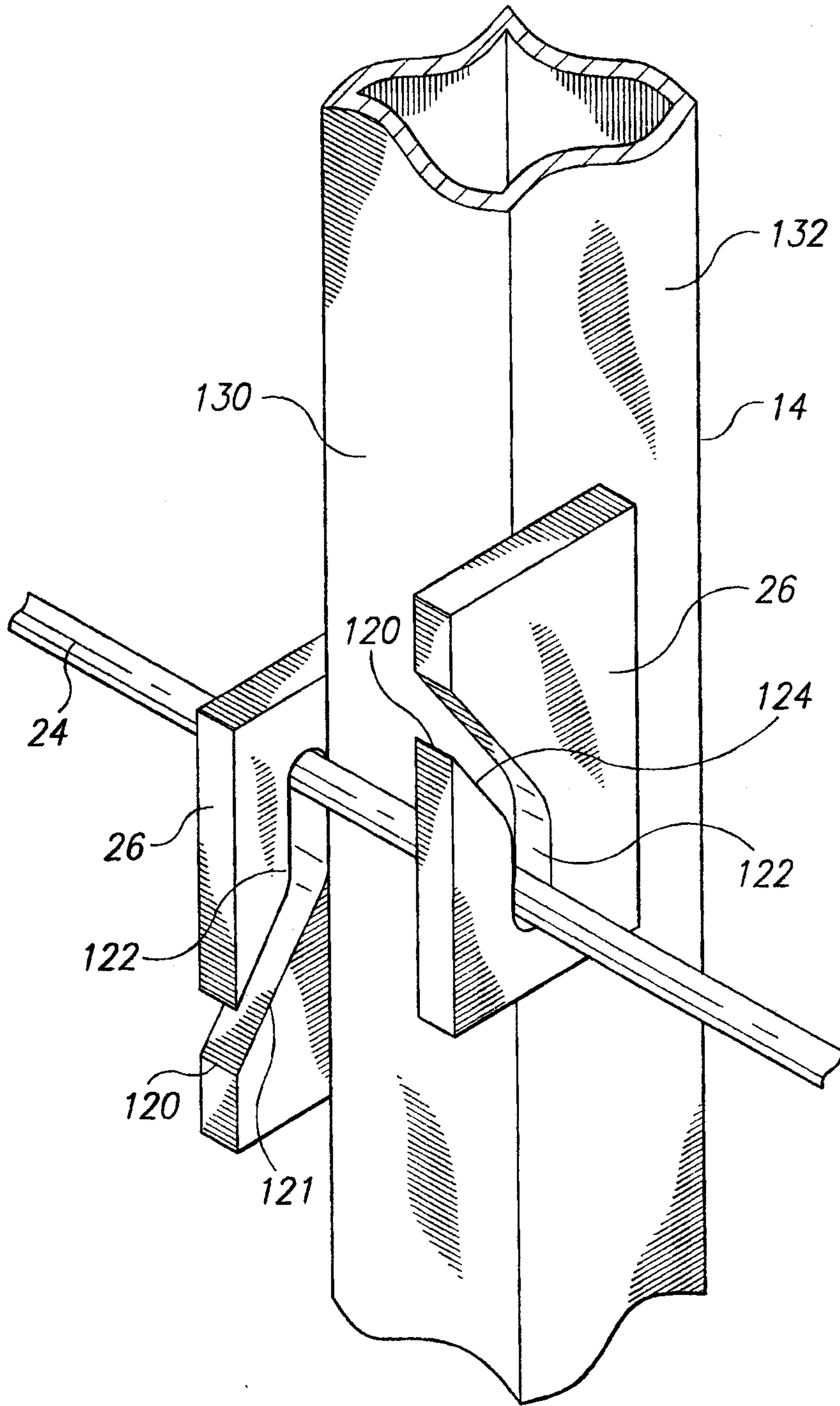


FIG. 5

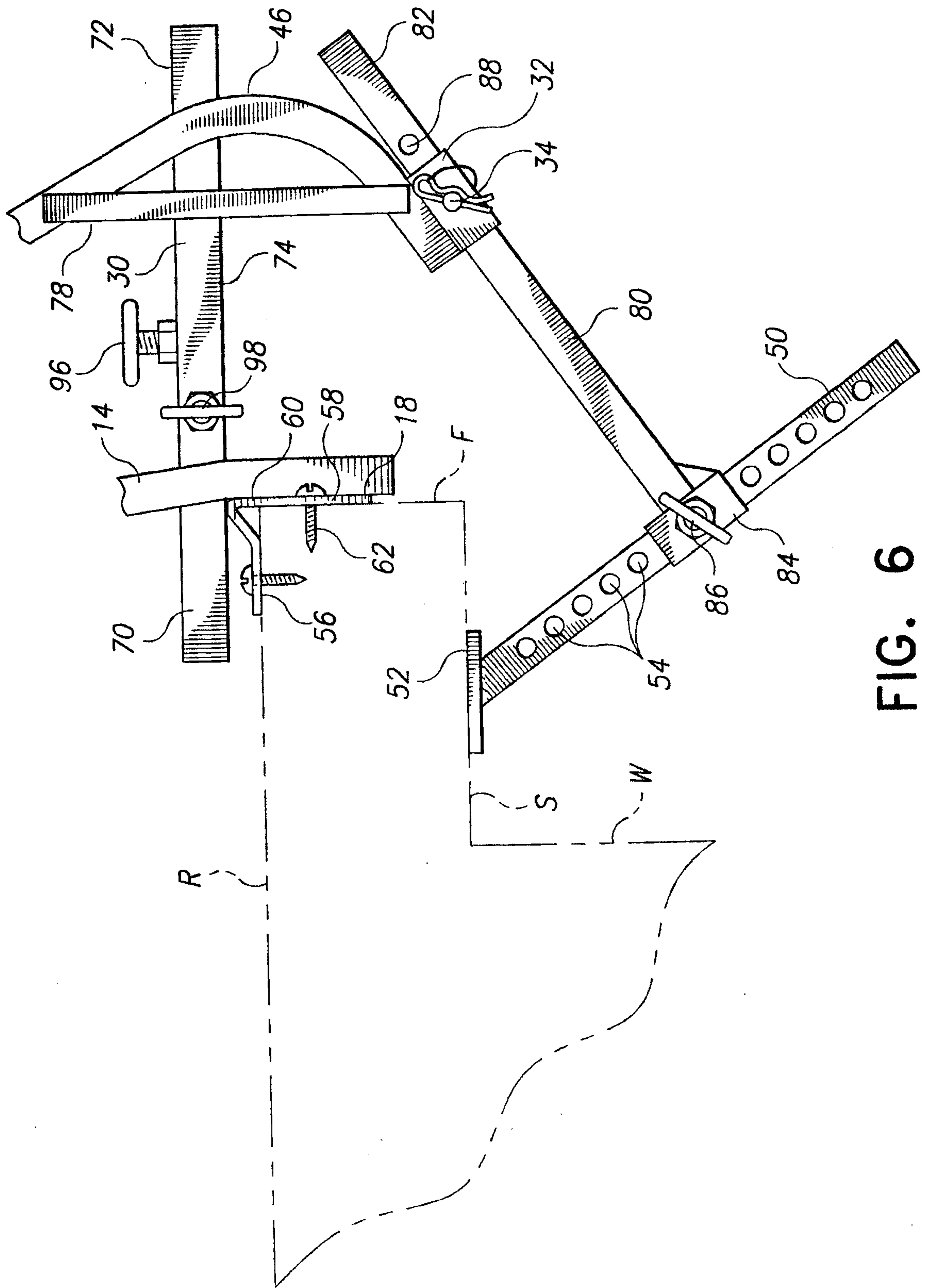


FIG. 6

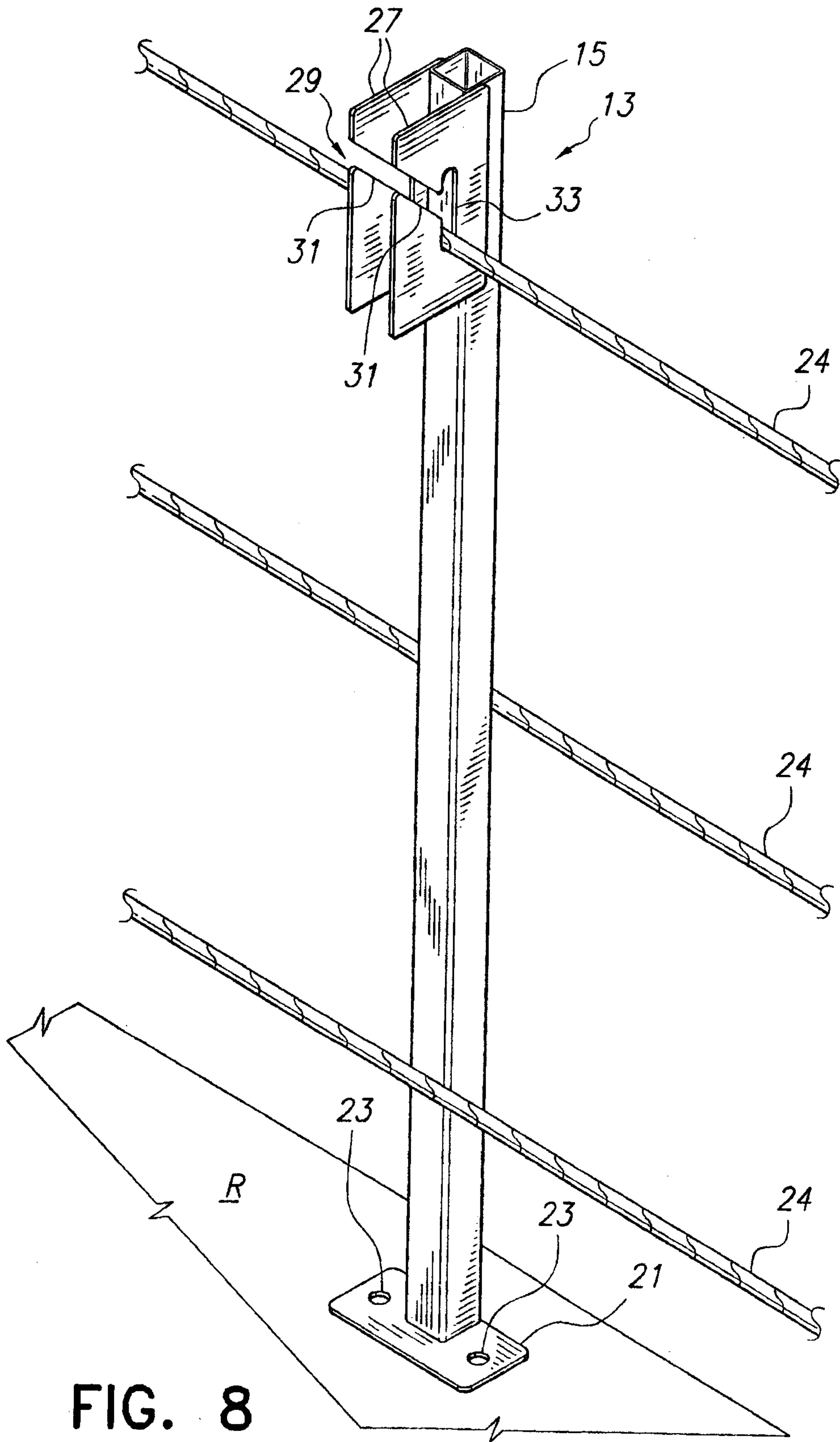


FIG. 8

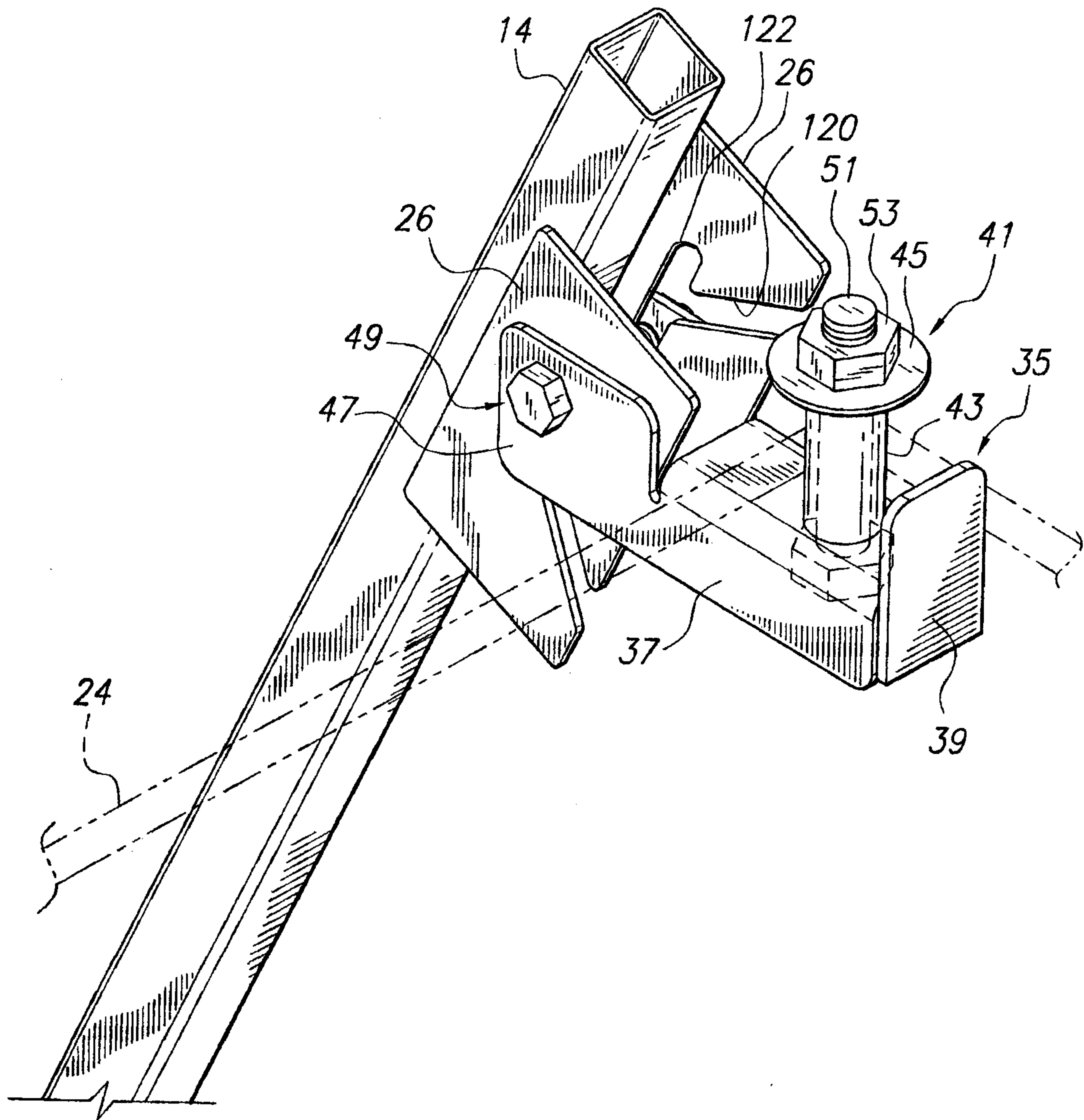


FIG. 9

