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(54) SADDLE CHAIR FOR HOLDING REBAR IN PLACE IN TILT-UP WALL CONSTRUCTION

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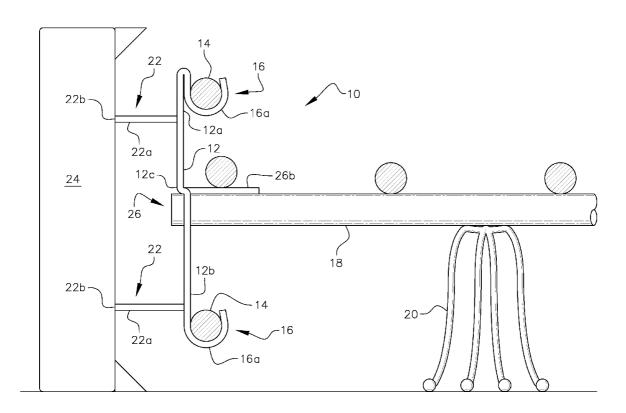
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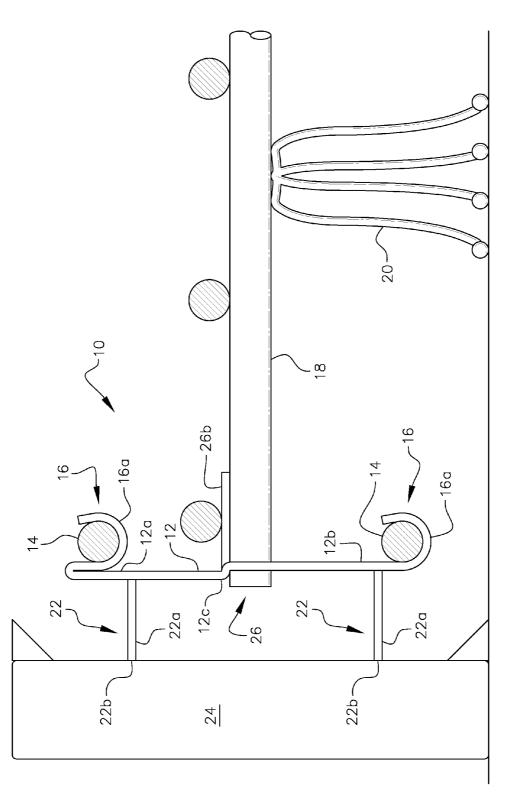
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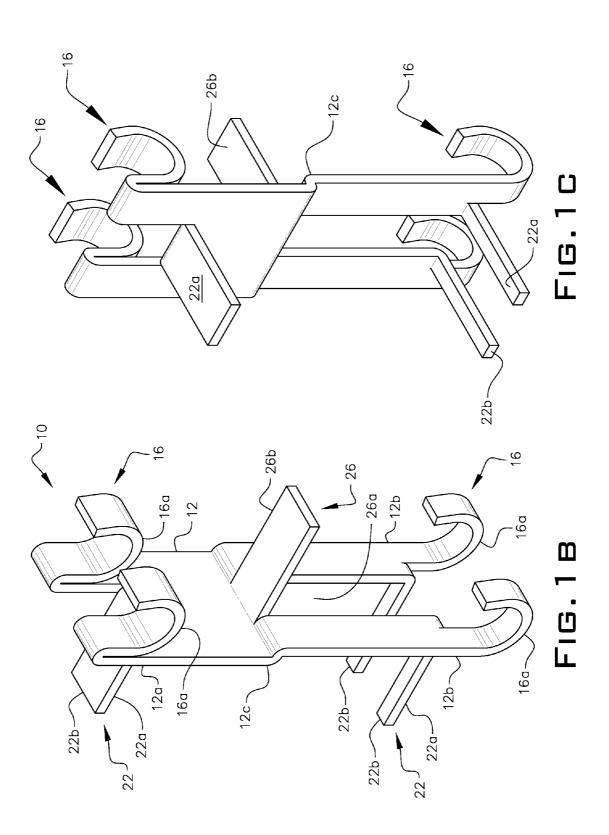
(57) **ABSTRACT**

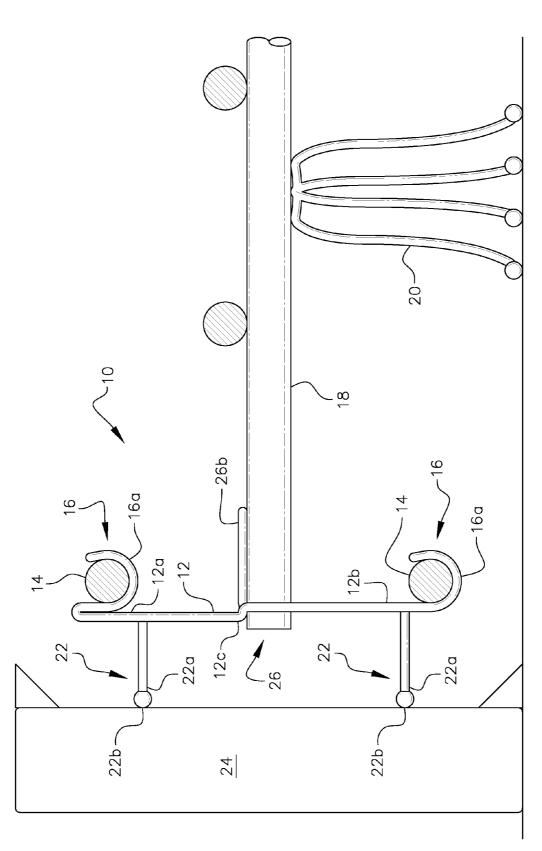
A rebar support bracket for use in forming concrete structures formed so as to be saddled over a supported rebar member. The bracket member is configured to be spaced a predetermined distance away from a form member and has an upper and lower generally C-shaped appendage to receive transverse running rebar members.

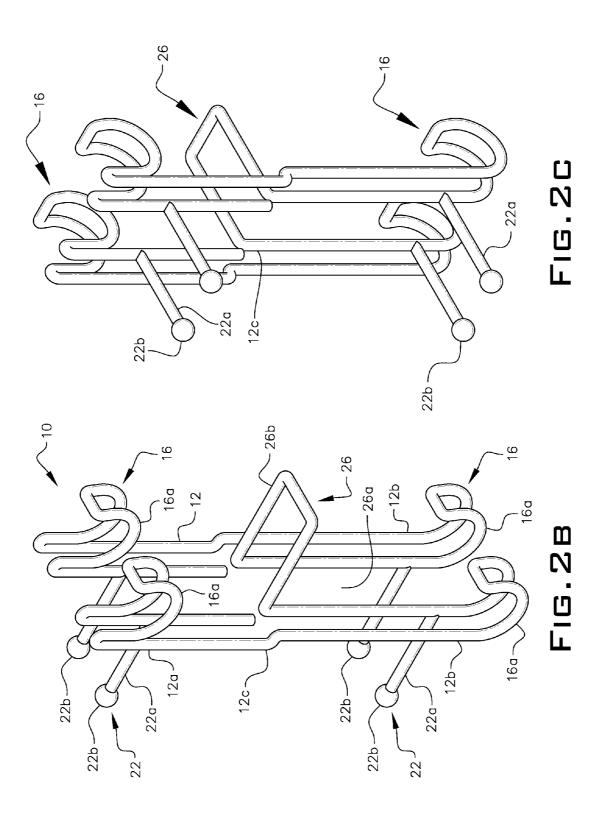












SADDLE CHAIR FOR HOLDING REBAR IN PLACE IN TILT-UP WALL CONSTRUCTION

RELATED APPLICATION

[0001] This application is a continuation-in-part of U.S. patent application Ser. No. 11/677,596 filed Feb. 22, 2007, which in turn claims the benefit of U.S. Provisional Patent Application Ser. No. 60/816,405 filed Jun. 26, 2006.

FIELD OF THE INVENTION

[0002] The invention relates to the field of tilt-up wall concrete construction and other concrete construction fields.

BACKGROUND OF THE INVENTION

[0003] The construction of tilt-up walls requires the placement of rebar within the forms, including common bulkhead forms. Rebar chairs with legs to support the placed rebar can leave spider looking images after the wall if lifted in place. Attempts to remove or patch these images can be costly, time consuming, affects the appearance of the finish wall, and can in many cases cause rust to bleed to the surface. In addition, these chairs are relatively expensive. The invention described in U.S. patent application Ser. No. 11/677,596 filed Feb. 22, 2007, which is herein incorporated by reference in its entirety, provides for a saddle chair that is supported by a top of a form, while the embodiments described in this disclosure provides for a saddle chair that straddles a rebar end and rest against the side of a form.

SUMMARY OF THE INVENTION

[0004] The invention described in this disclosure performs a similar function to that desired in the above aforementioned applications but is of a different design to be used as a saddle over an intermediate rebar directed to the saddle device.

[0005] The invention is accordingly a rebar support bracket for use in forming concrete structures comprising an elongate vertically oriented bracket member having means for securing a transverse running rebar member both near an upper end and near a lower end of said bracket member. The bracket member has at an intermediate location thereof, means for resting said bracket member on a supported rebar member directed toward said bracket member, and further has means for spacing said bracket a predetermined distance from a form member used to form a structure into which concrete is to be poured.

[0006] The means for spacing the bracket a predetermined distance from said form member comprises an appendage extending from the elongate bracket member near the upper and lower ends of the bracket member directed opposite from the means for securing said transverse running rebar member both near said upper end and near the lower end of said bracket member. A tip at the end of the appendage comes in contact with the form member when the bracket member is in use.

[0007] The means for securing the transverse running rebar member both near the upper end and near the lower end of the bracket member comprises a generally C-shaped rebar receiving portion is configured to allow for a snug fit so as to prevent the transverse rebar from floating in an upward direction as the concrete is being poured into the formed structure.

[0008] The means for resting the bracket member on the supported rebar member directed toward the bracket member is a slotted portion forming an inverted U-shape slot through which an end of the supported rebar member passes. The inverted U-shape slot is rested on the supported rebar member.

[0009] The rebar support bracket further comprises an appendage extending laterally from approximate the inverted U-shape slot. This appendage is directed in a direction opposite from the form so that the appendage also rests on the support rebar member.

[0010] The rebar support bracket as described above can be made and/or configured from a variety of materials, including metal plate, metal wire material, plastic or other polymeric based materials that will provide suitable support for the rebar members and endure the compression of the poured concrete.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] In the accompanying drawings:

[0012] FIG. 1A is an end conceptual view of one embodiment of the present invention;

[0013] FIG. 1B is a back view of the embodiment of FIG. 1A without the form present;

[0014] FIG. 1C is a perspective opposite side view of FIG. 1B:

[0015] FIG. 2A is an end conceptual view of another embodiment of the present invention using metal wire to configure the inventive bracket;

[0016] FIG. 2B is a back view of the embodiment of FIG. 2A without the form present; and

[0017] FIG. 2C is a perspective opposite side view of FIG. 2B.

DETAILED DESCRIPTION OF THE INVENTION

[0018] Referring now to the drawings, FIGS. 1A-1C and 2A-2C disclose various embodiments of the present invention, which is a rebar support bracket for use in forming concrete structures, depicted generally as 10.

[0019] Although the embodiments are similar, the main difference is that the same functional features are being provided by configuring the features using different materials such as metal material or plastic material (typically extruded) as depicted in FIGS. 1A-1B or configured using metal wire material such as that depicted conceptually in FIGS. 2A-2B.

[0020] Generally, the invention is a rebar support bracket 10 for use in forming concrete structures comprising an elongate vertically oriented bracket member 12 having means 16 for securing a transverse running rebar member 14 both near and upper end 12a and near a lower end 12b of the bracket member 12. The bracket member 12 has at an intermediate location 12c thereof, means 26 for resting said bracket member 12 on a supported rebar member 18 directed toward the bracket member 12. Rebar member 18 is typically supported by a metal wire chair commercially available such as chair 20 depicted in the drawings.

[0021] In addition, the bracket member 12 has means 22 for spacing the bracket 12 a predetermined distance from a form member 24 used to form a structure into which concrete is to be poured.

[0022] One method of providing the means 22 for spacing the bracket 12 a predetermined distance from the form member 24 is the incorporation of an appendage 22a extending from the elongate bracket member 12 near the upper and lower ends 12a, 12b of the bracket member 12 directed opposite from the means 16 for securing the transverse running rebar member 14 both near the upper end 12a and near the lower end 12b of the bracket member 12, wherein a tip 22b on the appendage 22a comes in contact with the form member 24 when the bracket member 12 is in use.

[0023] The means 16 for securing the transverse running rebar member 14 is typically a formed receptor preferably in the form of a generally C-shaped portion 16a, which can then serve as a rebar 14 receiving portion. The design should be to allow a relative snug fit or snap into type of fit so as to prevent the rebar from exiting the portion 16a by floating up as the concrete is being poured. Another method of providing such a rebar receptor is to provide an inward directed tip at the end of the C-shaped portion as described in the applications mentioned in the related application section.

[0024] The means 26 for resting the bracket member 12 on the supported rebar member 18, which is directed toward the bracket member 12 is a slotted or open portion 26a forming an inverted U-shape slot through which an end of the supported rebar member 18 passes. The inverted U-shape slot 26a is rested on the supported rebar member 18. An appendage 26b extending laterally from approximate the inverted U-shape slot 26a is directed in a direction opposite from the form 24 and rests on the supported rebar member 18

[0025] It should be understood that the preceding is merely a detailed description of one or more embodiments of this invention and that numerous changes to the disclosed embodiments can be made in accordance with the disclosure herein without departing from the spirit and scope of the invention. The preceding description, therefore, is not meant to limit the scope of the invention. Rather, the scope of the invention is to be determined only by the appended claims and their equivalents.

What is claimed is:

- 1. A rebar support bracket for use in forming concrete structures comprising:
 - an elongate vertically oriented bracket member having means for securing a transverse running rebar member both near an upper end and near a lower end of said bracket member;

- said bracket member having at an intermediate location thereof, means for resting said bracket member on a supported rebar member directed toward said bracket member; and
- said bracket member having means for spacing said bracket a predetermined distance from a form member used to form a structure into which concrete is to be poured.
- 2. The rebar support bracket according to claim 1, wherein the means for spacing said bracket a predetermined distance from said form member comprises:
 - an appendage extending from said elongate bracket member near said upper and lower ends of said bracket member directed opposite from said means for securing said transverse running rebar member both near said upper end and near said lower end of said bracket member, wherein a tip on said appendage comes in contact with said form member when said bracket member is in use.
- 3. The rebar support bracket according to claim 1, wherein said means for securing said transverse running rebar member both near said upper end and near said lower end of said bracket member comprises a generally C-shaped rebar receiving portion.
- **4**. The rebar support bracket according to claim **3**, wherein C-shaped rebar receiving portion is configured to allow for a snug fit so as to prevent said transverse rebar from floating an upward direction as the concrete is being poured into the formed structure.
- 5. The rebar support bracket according to claim 1, wherein the means for resting said bracket member on said supported rebar member directed toward said bracket member is a slotted portion forming an inverted U-shape slot through which an end of said supported rebar member passes, wherein said inverted U-shape slot is rested on said support rebar member.
- **6**. The rebar support bracket according to claim **5**, further comprising an appendage extending laterally from approximate said inverted U-shape slot, said appendage being directed in a direction opposite from said form, wherein said appendage further rest on said supported rebar member.
- 7. The rebar support bracket according to claim 1, wherein said bracket is configured from material comprising: metal, metal wire or polymeric material.

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