



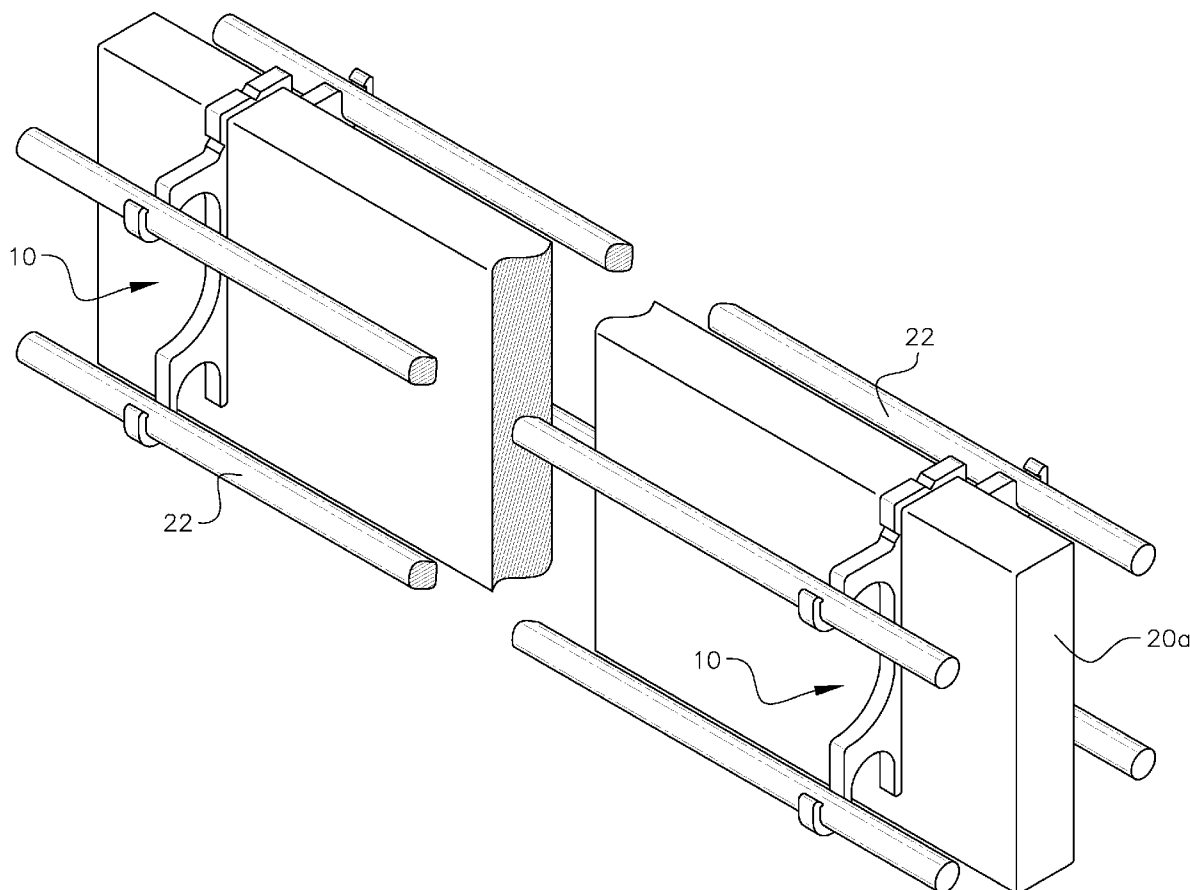
US 20070295872A1

(19) **United States**(12) **Patent Application Publication**
Schulze(10) **Pub. No.: US 2007/0295872 A1**(43) **Pub. Date: Dec. 27, 2007**(54) **SADDLE CHAIR FOR HOLDING REBAR IN
PLACE IN TILT-UP WALL CONSTRUCTION****Publication Classification**(76) Inventor: **Todd M. Schulze**, Mooresville,
NC (US)(51) **Int. Cl.**
E04B 1/35 (2006.01)
E04B 1/41 (2006.01)
(52) **U.S. Cl.** **248/215**; 248/228.5; 29/897Correspondence Address:
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TARPON SPRINGS, FL 34688-1294**ABSTRACT**

A rebar support bracket for use in forming concrete structures formed as a generally U-shaped bracket member having two legs and an intermediate segment therebetween. The bracket member is configured to slide over a form member used to form a structure into which concrete is to be poured, with its legs depending along the form member a predetermined distance. Each leg of the bracket member has two spaced-apart J-shaped members aligned vertically with each other, and each J-shaped member is configured to support a rebar member to be used in forming the structure. A retention nipple or appendage is preferably included at the end of the J-shaped members. Notches or scored grooved are located to remove the intermediate segment. The bracket can also be made as a half bracket for use on end forms.

(21) Appl. No.: **11/677,596**(22) Filed: **Feb. 22, 2007****Related U.S. Application Data**

(60) Provisional application No. 60/816,405, filed on Jun. 26, 2006.



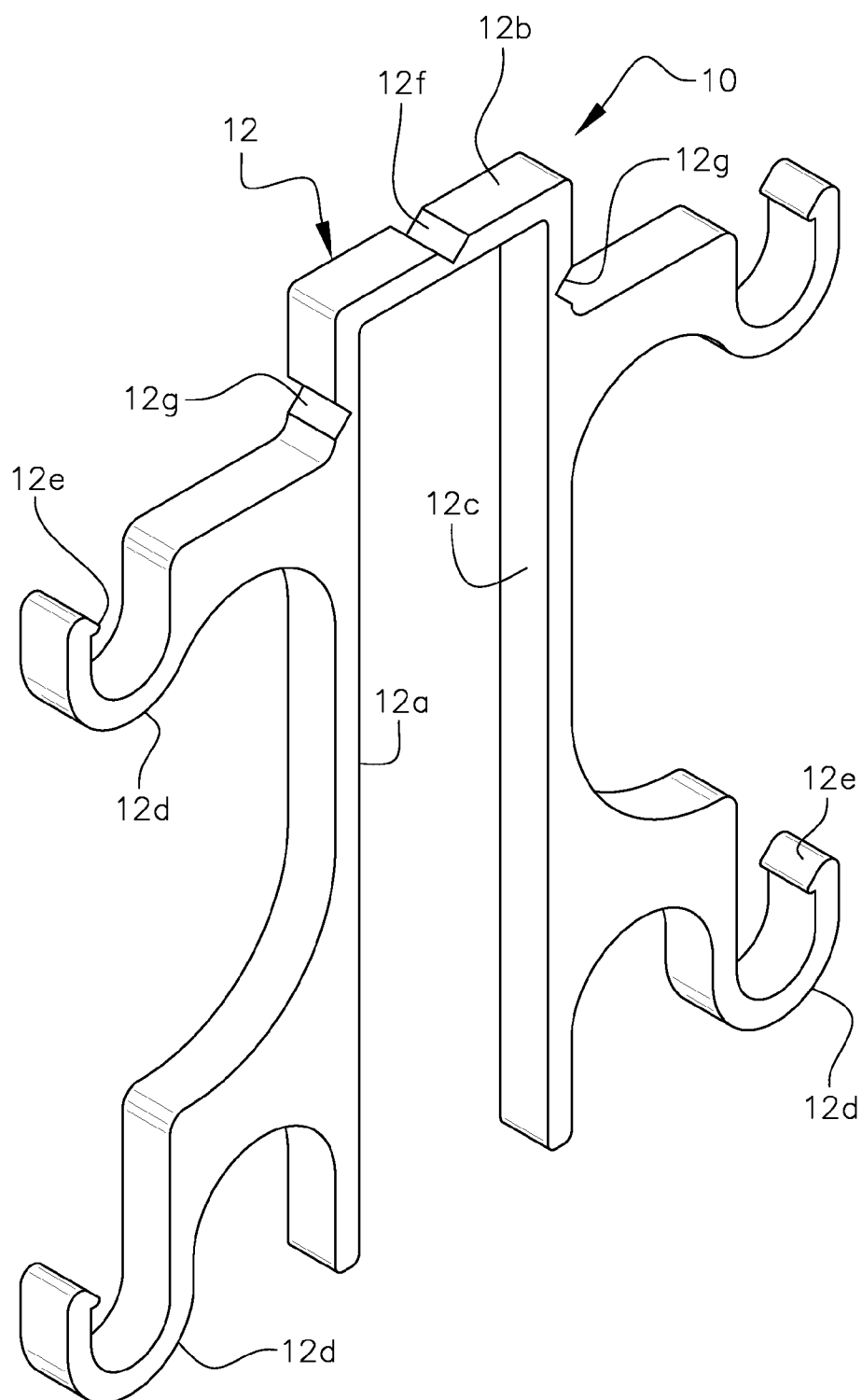


FIG. 1

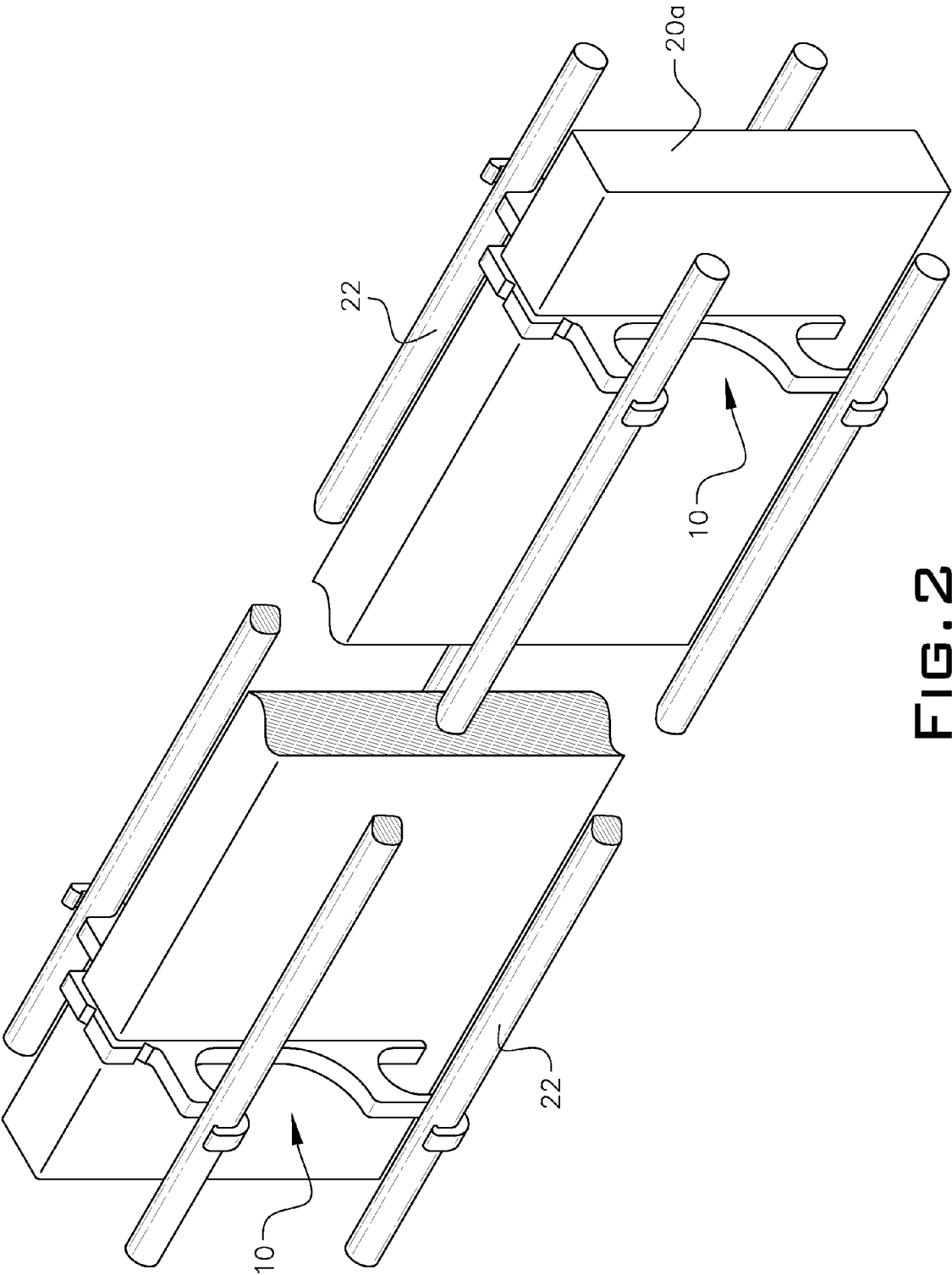
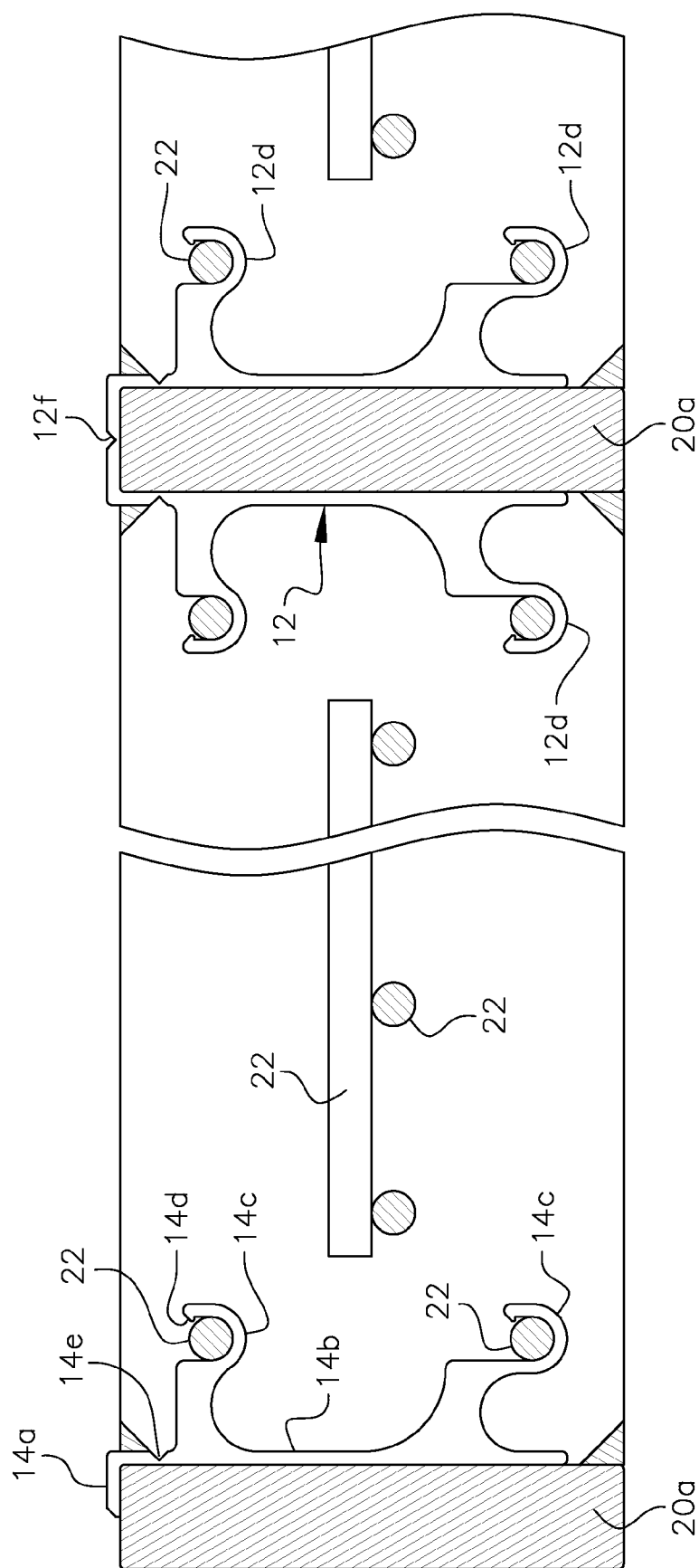


FIG. 2



3. 6. 1

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

RELATED APPLICATION

[0001] This application 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 is 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.

SUMMARY OF THE INVENTION

[0004] The invention is a rebar support bracket for use in forming concrete structures. It comprises a generally U-shaped bracket member having two legs and an intermediate segment therebetween, the bracket member being configured to slide over a form member used to form a structure into which concrete is to be poured. The bracket member has its legs depend along the form member a predetermined distance. Each leg of the bracket member has two spaced-apart J-shaped members aligned vertically with each other, and each J-shaped member is configured to support a rebar member to be used in forming the structure.

[0005] In a preferred embodiment, a distal end of each J-shaped member includes an inward directed appendage or nipple for preventing the rebar member from readily floating out from its engagement with the J-shaped member during the cement pour or lifting out during handling by the workers.

[0006] For circumstances when only half of a bracket is needed, the intermediate segment can include means for breaking off one side of the rebar support bracket. For example, a scored V-shaped groove can be provided. Other means are known in the art, however, the providing of a score mark can be done easily even with the molding process.

[0007] When the poured concrete structure has been poured and cured, removal of the intermediate segment will leave no evidence of the bracket buried in the concrete. This can be done by providing with each leg means for breaking off and separating the intermediate segment from each of said legs. Again, the preferred method is the providing of a scored V-shaped groove located on a portion of each leg near the intermediate segment.

[0008] It is preferred that the bracket be made from material such as metal base material or polymeric or plastic material.

[0009] In another embodiment of the invention, a rebar support bracket for use in forming concrete structures can be made to be used on the outside form members. In this case, essentially half the above-described bracket is needed. That is, the invention is a generally L-shaped bracket member having a first leg and a second leg, with the bracket member being configured to be positioned on a form member used to

form a structure into which concrete is to be poured, and where the first leg is placed against a top edge of form member and the second leg depends along a depth of the form member a predetermined distance. The second leg of the bracket member has two spaced-apart J-shaped members aligned vertically with each other, and each J-shaped member is configured to support a rebar member to be used in forming the structure.

[0010] As described above, for the saddle configuration bracket member, a distal end of each J-shaped member includes an inward directed appendage for preventing the rebar member from readily floating out from its engagement with the J-shaped member.

[0011] This embodiment optionally includes means for breaking off and separating the first leg from the second leg and again preferably, this can be a scored V-shaped groove located on a portion of said second leg near the first leg.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] In the accompanying drawings:

[0013] FIG. 1 is a perspective conceptual view of one embodiment of the present invention;

[0014] FIG. 2 is a perspective view of the invention depicted in FIG. 1 in use over a 2x8 form; and

[0015] FIG. 3 is a partial cross-sectional view depicting the embodiment of FIG. 1 being used on a common bulkhead form and on the left side, another embodiment of the invention being used on an end form.

DETAILED DESCRIPTION OF THE INVENTION

[0016] Referring now to the drawings, FIGS. 1-3 disclose one embodiment of the present invention, which is a rebar support bracket for use in forming concrete structures, depicted generally as 10.

[0017] In one embodiment, the invention 10 comprises a generally U-shaped bracket member 12 having two legs 12a, 12c and an intermediate segment 12b therebetween, the bracket member 12 being configured to slide over a form member 20a used to form a structure (not shown as a whole) into which concrete is to be poured. The bracket member 12 has its legs 12a, 12c depend along the form member 20a a predetermined distance. Each leg 12a, 12c of the bracket member 12 has two spaced-part J-shaped members 12d aligned vertically with each other, and each J-shaped member 12d is configured to support a rebar member 22 to be used in forming the structure.

[0018] In a preferred embodiment, a distal end of each J-shaped member 12d includes an inward directed appendage or nipple 12e for preventing the rebar member 22 from readily floating out from its engagement with the J-shaped member 12d during the cement pour or lifting out during handling by the workers.

[0019] For circumstances when only half of a bracket is needed, for example on the left side of FIG. 3, the intermediate segment 12b can include means for breaking off one side of the rebar support bracket. For example, a scored V-shaped groove 12f can be provided. Other means are known in the art, however, the providing of a score mark can be done easily even with the molding process.

[0020] When the poured concrete structure has been poured and cured, removal of the intermediate segment 12b will leave no evidence of the bracket 10 buried in the concrete. This can be done by providing with each leg 12a, 12c with means for breaking off and separating the intermediate segment 12b from each of said legs 12a, 12c. Again,

the preferred method is the providing of a scored V-shaped groove **12g** located on a portion of each leg **12a**, **12c** near the intermediate segment **12b**.

[0021] It is preferred that the bracket be made from material such as metal base material or polymeric or plastic material.

[0022] In another embodiment of the invention and as alluded to above, as well as shown in FIG. 3, left side, a rebar support bracket **10** for use in forming concrete structures can be made to be used on the outside form members **20a**. In this case, essentially half the above-described bracket is needed. That is, the invention is a generally L-shaped bracket member having a first leg **14a** and a second leg **14b**, with the bracket member **10** being configured to be positioned on a form member **20a** used to form a structure into which concrete is to be poured, and where the first leg **14a** is placed against a top edge of form member **20a** and the second leg **14b** depends along a depth of the form member **20a** a predetermined distance. The second leg **14b** of the bracket member has two spaced-apart J-shaped members **14c** aligned vertically with each other, and each J-shaped member **14c** is configured to support a rebar member **22** to be used in forming the structure.

[0023] As described above, for the saddle configuration bracket member, a distal end of each J-shaped member **14c** includes an inward directed appendage **14d** for preventing the rebar member **22** from readily floating out from its engagement with the J-shaped member **14d**.

[0024] This embodiment optionally includes means for breaking off and separating the first leg **14a** from the second leg **14b** and again preferably, this can be a scored V-shaped groove **14e** located on a portion of said second leg **14b** near the first leg **14a**.

[0025] By way of example only, if the form is constructed out of 2x8 standard lumber, the bottom of the lower J-shaped member will be about one inch from the bottom edge of the 2x8 form lumber, while the top J-shaped member is located so that the top of the rebar resting within the J-shaped member is about one inch from the top edge of the 2x8 form lumber. Both J-shaped members are also typically configured so that the rebar is about 1½ inches from the side of the 2x8 form lumber.

[0026] Also shown in the drawings are chamber molding (not numbered) made from wood. These chamfer moldings typically provide for a 45 degree reveal on the structure being made after the form **20a** is removed from the cured concrete.

[0027] 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:

a generally U-shaped bracket member having two legs and an intermediate segment therebetween, the bracket member being configured to slide over an edge of a form member used to form a structure into which concrete is to be poured;

the bracket member having its legs depend along the form member a predetermined distance;

each leg of the bracket member further comprising two spaced-apart J-shaped members aligned vertically with each other; and

each J-shaped member being configured to support a rebar member to be used in forming the structure.

2. The bracket according to claim 1, wherein a distal end of each J-shaped member includes an inward directed appendage for preventing the rebar member from readily floating out from its engagement with the J-shaped member.

3. The bracket according to claim 1, wherein the intermediate segment further comprises:

means for breaking off one side of the rebar support bracket.

4. The bracket according to claim 3, wherein said means for breaking off one side of the rebar support bracket is a scored V-shaped groove.

5. The bracket according to claim 1, wherein each leg further comprises:

means for breaking off and separating the intermediate segment from each of said legs.

6. The bracket according to claim 5, wherein said means for breaking off and separating the intermediate segment from each of said legs is a scored V-shaped groove located on a portion of each leg near the intermediate segment.

7. The bracket according to claim 1, wherein said bracket is made from material comprising:

metal or polymeric material.

8. A rebar support bracket for use in forming concrete structures comprising:

a generally L-shaped bracket member having a first leg and a second leg, the bracket member being configured to be positioned on a form member used to form a structure into which concrete is to be poured, where the first leg is placed against a top edge of form member and the second leg depends along a depth of the form member a predetermined distance;

the second leg of the bracket member further comprising two spaced-apart J-shaped members aligned vertically with each other; and

each J-shaped member being configured to support a rebar member to be used in forming the structure.

9. The bracket according to claim 8, wherein a distal end of each J-shaped member includes an inward directed appendage for preventing the rebar member from readily floating out from its engagement with the J-shaped member.

10. The bracket according to claim 8, wherein the second leg further comprises:

means for breaking off and separating the first leg from said second leg.

11. The bracket according to claim 10, wherein said means for breaking off and separating the first leg from said second leg is a scored V-shaped groove located on a portion of said second leg near the first leg.

12. The bracket according to claim 8, wherein said bracket is made from material comprising:

metal or polymeric material.

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