DEMOUNTABLE SOCKETS FOR GUARDRAIL POSTS

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ABSTRACT OF THE DISCLOSURE

A demountable socket for guardrail posts having a front and pair of sidewalls forming an opening for receiving a guardrail post with a bottom wall extending at right angle with the front wall and in spaced relation with the sidewalks, and tabs for fastening the socket to the sides of a purlin extending outwardly at right angle along the free edges thereof with upper portions separated from the sidewalks and lower portions extending beyond the lower edge of the sidewalks, with both upper and lower portions positioned at right angle to the tabs and parallel to the bottom wall for further fastening the socket to the upper and lower surfaces of the purlin.

This invention relates to temporary guardrails and is more particularly directed to demountable sockets for guardrail posts.

During the construction of a high rise or multistoried building and the like, there will be periods when temporary guardrails have to be erected around openings and around the outside perimeter of the building in order to protect the workers from falling. These temporary guardrails must be strong and remain there until the permanent walls have been erected. At the present time the skilled services of carpenters are required to fabricate the necessary railings and nail them in position. Since the posts of the temporary railings are normally nailed to the end portions of the projecting purlins, the joint between the posts and purlins is not as strong as required to support a person adequately while he may be leaning over the railing or if he bumped into it while working in the environs of the railing. Also the use of lumber in the conventional manner of making temporary guardrails results in a great deal of waste and consequent high cost. The present invention contemplates avoiding the above mentioned objections and having as its principal object to provide a socket that may be readily nailed to a purlin or to plywood and receive a post for guardrailings to be fastened thereto.

Another object of the present invention is to provide a demountable socket for guardrail posts that result in considerable savings in material and in the use of skilled labor that is required in the present manner of fabricating and removal of conventional temporary guardrailings.

A further object of the present invention is to provide a demountable socket for guardrail posts that is simple in construction, economical in cost and may be used many times in the fabricating of adequate and safe temporary railings.

A still further object of the present invention is to provide a demountable socket for guardrail posts having flanges that may or may not be bent to conform with the size and configuration of the purlin, beam or planking to which the socket is to be nailed thereby rendering the socket universal in use for the facile and economic installation of temporary guardrails.

With these and other objects in view, the invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claim.

In the drawing:

FIG. 1 is a perspective view of a temporary railing utilizing my demountable socket for guardrail posts.

FIG. 2 is a perspective view of my demountable socket.

FIG. 3 is a similar view taken from the opposite side and shown fastened to a purlin with a post in position in dotted lines.

FIG. 4 is a perspective view of my socket as modified to be attached to plywood sheathing.

FIG. 5 is a similar view of an alternate construction of my socket adapted for cylindrical posts.

Referring to the drawing wherein like numerals are used to designate similar parts throughout the several views, the numeral 10 refers to my socket for guardrail posts stamped from a flat sheet of metal. The socket 10 as best shown by FIG. 2 consists of a front wall 11 having side walls 12 extending at right angle thereto formed by bending the sheet of metal along 13, 14. Flanges 14 extend at right angle to the side walls 12 and lie in a common plane parallel to that of the front wall 11 to form an opening 30 for receiving the end of a 2 x 4 piece or similar of lumber. The upper end portions 18 of the flanges 14 are separated from the side walls 12 as at 17 to permit the bending of the flanges 14 as is explained in detail hereinafter and the lower ends 19 extend below the bottom edges of the walls 11, 12. At the bottom portion of the front wall 11, foot portion 15 is formed by bending the latter as at 16 at the base of the front and side walls 11, 12. The foot portion 15 extends beyond the plane of the flanges 14 in order to permit the fastening of the foot portion 15 to the lower edge of a purlin 20. The socket 10 is provided with a plurality of openings for nailing the socket 10 to the purlin 20, the front wall 11 being provided with holes 21, the flanges with holes 22 and the foot portion 12 with an elongated slot 23 and holes 24.

When it is desired to erect a temporary railing as shown by FIG. 1 wherein purlins 20 extend beyond the perimeter of a building during its construction, a demountable socket 10 is placed along the edge portion of the purlin 20 at the approximate position it is desired to be fastened. A nail is received at the elongated slot 23 and hammered into the purlin 20 sufficiently to hold the socket 10 in position with the flanges 14 abutting against the 2 x 4 purlin 20. After a number of the sockets 10 have been nailed thusly, they are aligned and nails 25 are inserted into the holes 22 and hammered into the purlins 20 to secure the sockets 10 to the purlins 20. The upper and lower portions 18, 19 of the flanges 14 are then bent as at 26, 27 to form the flanges 14 and 18 as shown by FIG. 3 and be nailed thereto. Rail post members 28 are inserted into the openings 30 formed by the front wall 11, side walls 12 and purlin 20 and nails 27 are then inserted through openings 21 to fasten the post members 28 to the socket 10. Then railings 31 are nailed across the top portions of the post members 28 to complete the temporary railing.

When it is decided to remove the temporary railing structure, the railing members 31 are dismantled from the upright post members 28. The nails 27 are readily removed to permit the upright members 28 to be lifted from the sockets 10. Then the nails 25 are withdrawn and the sockets 10 are removed from the purlins 20 and are stored ready to be reused as desired.

In the event that my sockets 10 are to be mounted over the edges of plywood as shown by FIG. 4, the upper edge
portions 18 of the flanges 14 are bent as at 32 to form a depending flange portion 33 that engages the face of the plywood 34. The socket 10' as shown by FIG. 4 differs left unbent. Nails driven into the plywood 34 through the holes 22 will now fasten the socket 30 securely to the plywood 34. The socket 10' is shown by FIG. 4 differs from the socket 10 shown by FIG. 2 that the foot portion 15 is foreshortened to permit the socket 30 to be mounted on the plywood 34 without the foot portion 15 engaging the front surface of the plywood 34 and still forming a stop for the post 28.

In FIG. 3 I show an alternate construction 40 of my socket 10 made to receive a rounded post 41 as the railing support member. The front wall portion 42 is formed into a semi-cylindrical shape 42 with straight wall portions 43 extending rearwardly to the flanges 14 to form an arcuate socket opening 44 into which the rounded post 41 is inserted. Tabs 45 extending beyond the lower portion of the rounded front wall 42 and bent inwardly as at 46 support the post 41 in the socket 40. Holes 47 permit nails to fasten the socket 40 to the post 41.

It is apparent from the foregoing taken in connection with the drawing that by the present invention, I have provided a demountable socket for temporary railing which is readily and economically erected and demounted. The socket 10 is adapted for use on purlins of varying sizes as well as on plywood sheeting. The use of skilled help is not required to fasten the sockets 10 in place and to nail the posts and railing to form the temporary guardrail.

What I desire to secure by Letters Patent of the United States is:

1. A demountable socket for guardrail posts consisting of a front wall, side walls extending at right angle from side edges of said front wall, flanges extending outwardly of said side walls and lying substantially in a plane, said flanges each having a slot separating the upper portion of said flanges from said side walls and a bottom portion extending below a lower edge of said side walls, a bottom wall extending from said front wall and along said side walls to form a pocket for a railing post, said upper and bottom portions extending at right angle to said flanges forming tab portions and being substantially parallel with said bottom wall, said front and side walls extending above said tab portions and said front walls and said flanges having opening for receiving fastening members for securing said demountable socket on a railing support member.

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