

July 6, 1937.

A. J. MATTER

2,086,280

SUPPORT

Filed Dec. 14, 1934

Fig. 1

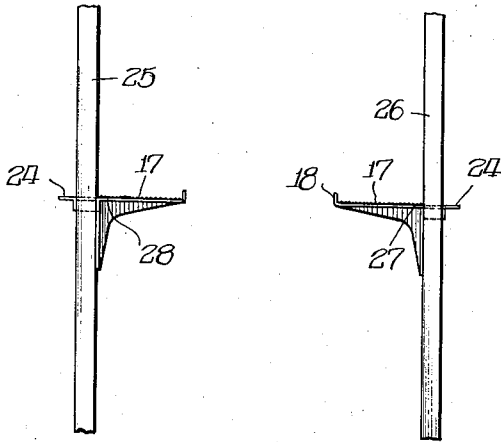


Fig. 2

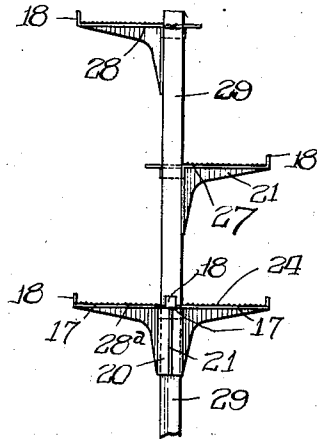


Fig. 3

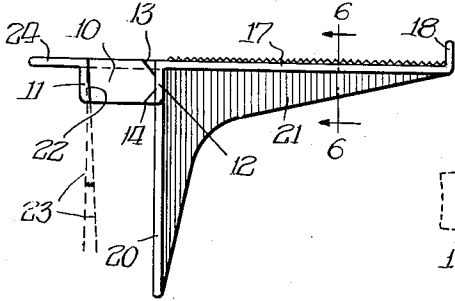


Fig. 4

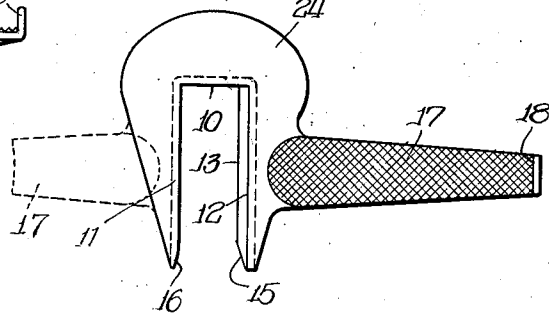


Fig. 5

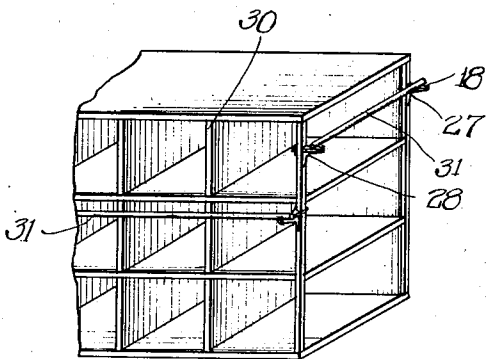
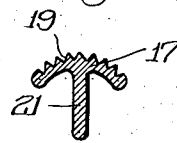


Fig. 6



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UNITED STATES PATENT OFFICE

2,086,280

SUPPORT

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Application December 14, 1934, Serial No. 757,459

2 Claims. (Cl. 248—295)

My invention relates to supports of that particular type which are in the form of angle brackets having a horizontal supporting member or step and means for adjustably connecting the support or bracket to a wooden post or other structure.

The principal object of my invention is to provide an angle bracket or support of this general character to include an outwardly projecting supporting member having an upper surface which will afford a better engagement with the object supported thereon, in association with attaching means, whereby to adapt the support for special use as a foot rest for a ladder or in the construction of a pair of stilts.

A further object of my invention is to provide a foot rest or step for ladders and stilts in which the effectiveness of the outwardly projecting horizontal member in supporting an object is augmented by a contiguous flange forming a part of the attaching means.

My invention therefore consists in the particular construction and arrangement of parts, as hereinafter described and more specifically set forth in the appended claims.

In the accompanying drawing, Fig. 1 shows the invention as used in connection with a pair of stilts;

Fig. 2 shows the invention as used with a one pole ladder;

Fig. 3 is a front elevation of one of the supports comprising the invention;

Fig. 4 is a top plan view of one of the supports;

Fig. 5 is a perspective illustrating the supports as used in connection with an open bin for supporting material racks; and

Fig. 6 is a section taken on the line 6—6 of Fig. 3.

In carrying out my invention the main portion of the support is in the form of an angle bracket presenting a horizontal supporting member or step 17 and a depending brace member 20 at right angles thereto at the inner end thereof, said members being braced together in the usual manner by a web 21 between them, and for the purpose of attaching this angle bracket or step to a wooden timber or post it is provided at its inner end with a pair of spaced apart rigid jaws 11 and 12 connected together at one end, as at 10, forming a U-shape attaching member to receive the timber or post between the jaws at the open end of said member. This attaching member is formed integrally with the main portion of the support or step on a line with the horizontal member, and for the purpose of strengthening

the structure there is an outwardly projecting flange 24 around the U-shape attaching member as a continuation of the horizontal member 17 of the bracket or step. In addition to strengthening the support this flange serves also to increase the area of the bearing surface of the horizontal member or step, for which purpose said flange is wider at the closed end of the U-shape attaching member especially where it joins the step. To facilitate the application of the support to a wooden timber or post the outer ends of the rigid jaws are beveled, as at 15, 16.

It will be understood that the jaws of the attaching member serve in the usual manner in adjustably connecting the support to a wooden timber or post by slidable engagement therewith, and in order to retain or fasten the support in any desired position one of the jaws is provided at its inner side with inwardly projecting sharp edges, 13, 14, which bite into the wood and cooperate with the slightly inclined inner face 22 of the companion jaw, the extent of the inclination being indicated by the dotted lines 23, 23. By this arrangement the biting edges will enter the wood to a more or less extent according to the amount of pressure applied on the horizontal supporting member 17, and thereby securely hold the bracket or step in position.

As an essential feature of my invention, with particular reference to the use of the support or bracket as a step for a one pole ladder 29, or in connection with a pair of stilts 25, 26, the upper surface of the outwardly projecting supporting member 17 is curved upwardly in the arc of a circle transversely and this surface is grooved or serrated to provide sharp teeth 19 (Fig. 6). This curved and toothed surface will give a better grip on the sole of the shoe when the bracket or step is used in the construction of a ladder or a pair of stilts, and will allow of a slight rocking motion of the foot thereon while at the same time prevent the foot from slipping. Slipping of the foot from the horizontal supporting member of the bracket or foot rest is further overcome in the present instance by engagement of the sole of the shoe with the widened flange 24 on the attaching member, or that part of said flange adjoining the supporting member 17 of the step, and to prevent slipping of the foot laterally, or away from the pole, there is the usual upwardly projecting stop 18 at the outer end of said supporting member. The widened flange as a continuation of the horizontal supporting member or foot rest in front thereof adjoining the pole of the stilt is particularly useful to an inexe-

rienced stilt walker, as it will give a firmer foothold until the user becomes acquainted with the transversely curved steps providing for a rocking motion thereon. When the support is used as a bracket the particular shape of the horizontal supporting member will also afford a better grip on a shelf placed thereon, and when used to support rods or pipes, 31, of a bin 30 (Fig. 5) the teeth at the uppermost portion of the curved supporting member will better hold the rod or pipe on the bracket; but this form of horizontal supporting member or step is of special importance in association with the use of the supports in connection with stilts.

In the showing of the application of the support or step to a pair of stilts in Fig. 1 it will be noted that the outwardly projecting supporting members 17 of the steps 27, 28, project toward each other, and although the support is turnable for engagement from either side of the pole I prefer to have the outwardly projecting supporting member extend from one of the jaws, 12, in one instance, and the other jaw, 11, in the other instance, so that they are right and left in application to stilts or to a single ladder pole (Fig. 2), as indicated in full and dotted lines Fig. 4. This Fig. 4 also illustrates that the bracket or step may be made with outwardly projecting supporting members at opposite sides of the attaching member, that is, extending from both jaws 11 and 12, as illustrated at the lower part of Fig. 2, where there is also shown a further modification of an additional or other supporting member. This last mentioned modification is referred to by the reference numeral 28a.

This support may be used in a variety of ways and in each case the support is forcibly pressed into engagement around one edge of the member to which it is applied, thereby tightly engaging the sharp grippers 13 and 14 which hold the support in place against longitudinal displacement thereon. Even though the supports do fit the members to which they are applied somewhat loosely, the grippers will hold them tightly in place.

I claim:

1. An adjustable bracket or step comprising an angular support or foot rest presenting a horizontal member or step and a depending brace member, the horizontal member or step being curved upwardly transversely and serrated to increase its gripping action on the object to be supported thereon; together with means formed integrally with the angular support on a line with the horizontal member thereof for attaching the support to a wooden timber or pole rectangular in cross section, said attaching means including spaced apart jaws connected together at one end and adapted to receive the wooden timber or pole between the jaws from the other or open end, the inner edge of one of the jaws being inclined vertically and the inner edge of the other jaw having inwardly projecting biting edges to grip the wooden timber or pole between the jaws when pressure is applied to the supporting member or foot rest, and a reinforcing flange extending around the jaws and portion connecting said jaws.

2. An adjustable bracket or step comprising an angular support or foot rest presenting a horizontal member or step and a depending brace member, the horizontal member or step being curved upwardly transversely and serrated to increase its gripping action on the object to be supported thereon; together with means formed integrally with the angular support on a line with the horizontal member thereof for attaching the support to a wooden timber or pole rectangular in cross section, said attaching means including spaced apart jaws connected together at one end and adapted to receive the wooden timber or pole between the jaws from the other or open end, the inner edge of one of the jaws being inclined vertically and the inner edge of the other jaw having inwardly projecting biting edges to grip the wooden timber or pole between the jaws when pressure is applied to the supporting member or foot rest, and a wide flange extending around the jaws and portion connecting said jaws to reinforce the attaching means and provide an auxiliary support contiguous to the horizontal member or step of the bracket or support.

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