Dec. 13, 1932. T. H. SYMINGTON 1,890,629

PLANK OR RAIL FENCE

Filed Jan. 17, 1931 3 Sheets-Sheet 1

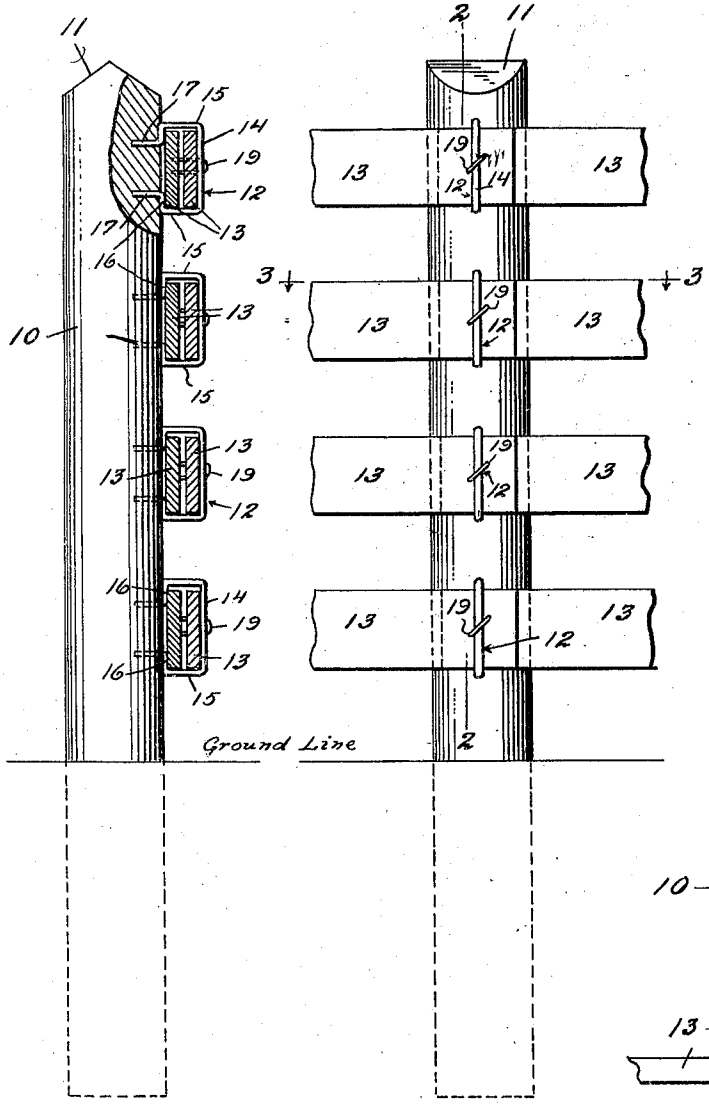


Fig. 2.

Fig. 1.

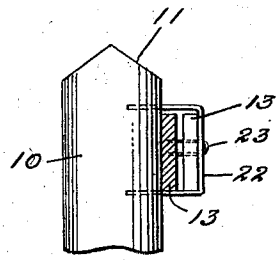


Fig. 7.

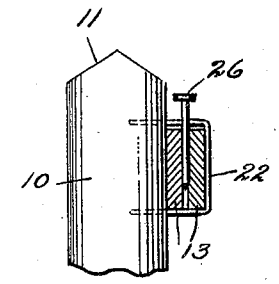


Fig. 11.

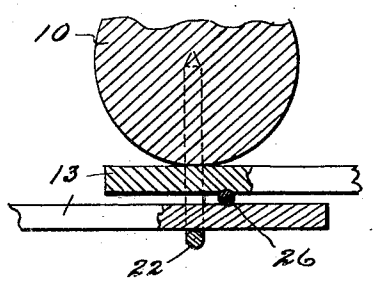


Fig. 12.

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PLANK OR RAIL FENCE

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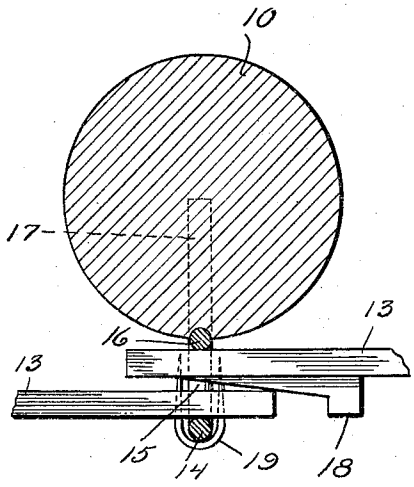


Fig. 3.

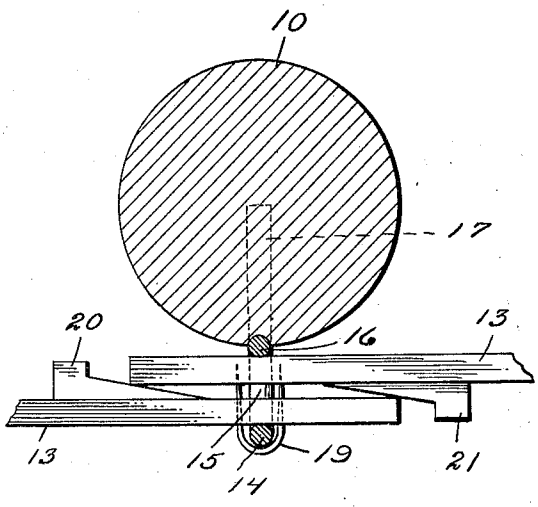


Fig. 5.

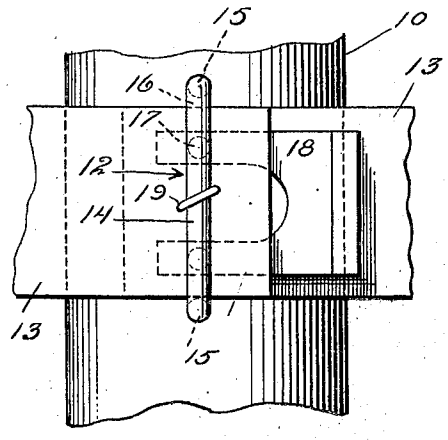


Fig. 4.

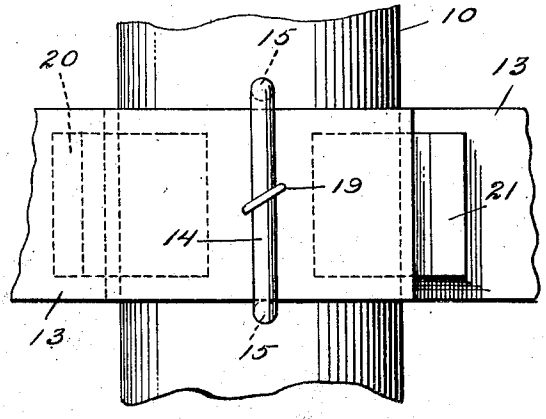


Fig. 6.

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PLANK OR RAIL FENCE

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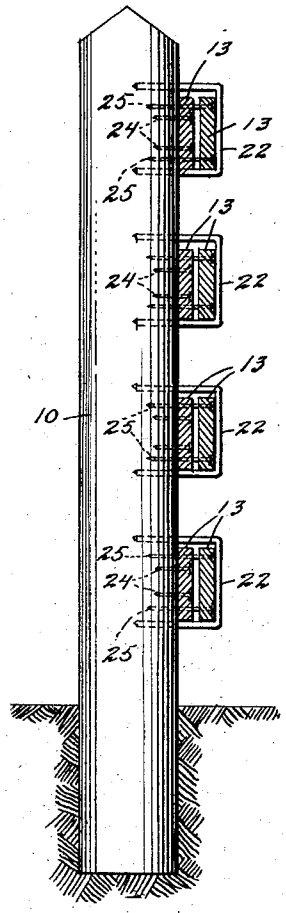


Fig. 9.

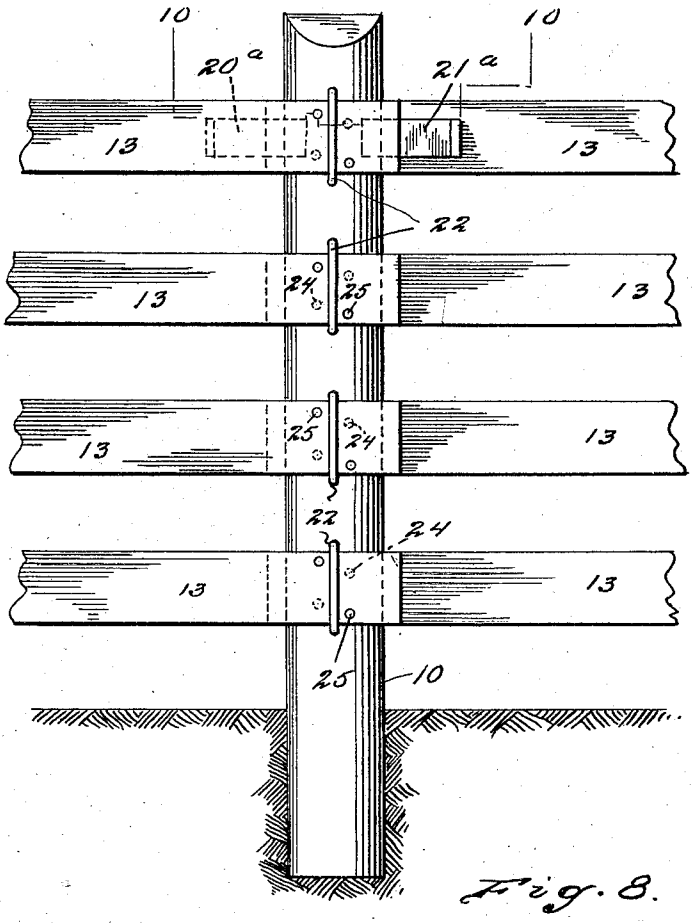


Fig. 8.

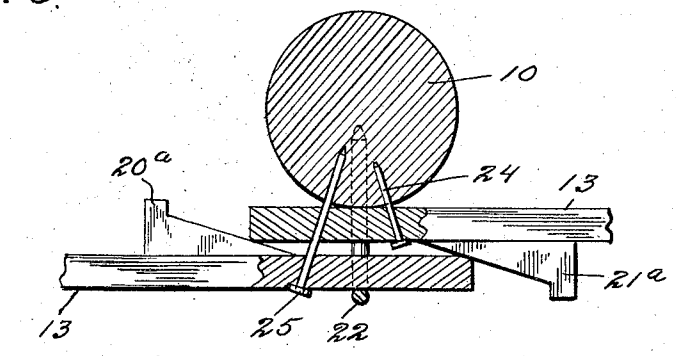


Fig. 10.

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Patented Dec. 13, 1932 1,890,629

UNITED STATES PATENT OFFICE

THOMAS H. SYMINGTON, OF BALTIMORE, MARYLAND, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO EDITH R. SYMINGTON AND ONE-HALF TO THOMAS R. SYMINGTON, BOTH OF BALTIMORE, MARYLAND

PLANK OR RAIL FENCE

Application filed January 17, 1931. Serial No. 509,515.

The present application is to some extent a continuation in part of my co-pending application for plank or rail fence construction, filed July 18, 1929 and given Serial No. 379,227, and also an improvement over what is disclosed in my co-pending application Serial No. 509,516, filed January 17th, 1931.

Said first named application discloses the idea of providing a fence post with a plurality of U-shaped retaining members within which are slidably engaged boards or planks which constitute the fence, the planks or boards being held in association with the retaining members by means of staples driven into the edges of the boards or planks in straddling or embracing relation to the retaining members. Said first named co-pending application describes, particularly, the use of a composite or concrete fence post in which the substantially U-shaped retaining members have their ends embedded. I have discovered that a cement or concrete fence post of this character is open to serious objections principally on account of the fact that cement is hygroscopic, the result being that in freezing weather chipping and cracking may occur. Furthermore, I have discovered that it is always a disadvantage for a plank or board to lie flatly against a post of any description, either wooden or composite. The second named co-pending application discloses, broadly, the idea of spacing the boards away from each other and from the post but the means is different from what is embodied in the present application.

It is with the above facts in view that I have devised the present invention which has for its general object the provision of a fence construction in which use is made of wooden posts and retaining members for planks or boards, the retaining members being of such construction and shape and so related to the post and the boards that there will be the minimum area of contact, there being consequently practically no opportunity for water to remain in contact with either the post or the planks to any great extent, it being consequently clear that rotting of the wood will be prevented and the length of life of the fence greatly increased.

An important object of the invention is to provide a fence construction in which the retaining members for the planks or boards are partially embedded within the post so that any lateral or other twisting or distortion effect will be avoided, there being a positive holding action at all times.

Another object of the invention is to provide a fence construction employing retaining members for planks or boards which are cylindrical in shape or circular in cross section so that the contact with the planks will be only in the form of lines instead of areas.

Another object of the invention is to provide a fence construction having positive means for maintaining overlapping planks or boards in spaced relation so that there will be no possibility of a film of water accumulating and remaining between them.

Another object of the invention is to provide a fence construction in which the planks or boards may be removed with comparative ease, as may be extremely desirable in hunting country.

Still another object is to provide a method of separating overlapping planks or boards so that water cannot remain entrapped between them.

An additional object is to provide a fence which will be extremely simple and inexpensive to make, neat and attractive in appearance, efficient and durable in service, and a general improvement in the art.

To the attainment of the foregoing and other objects and advantages, the invention preferably consists in the details of construction and the arrangement and combination of parts to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which:

Figure 1 is a front elevation of a fragment of a fence costructed in accordance with my invention,

Figure 2 is a vertical cross sectional view taken on substantially the line 2—2 of Figure 1,

Figure 3 is a horizontal cross section taken on substantially the line 3—3 of Figure 1 and illustrating one method of separating the planks or boards,

Figure 4 is a front elevation of what is disclosed in Figure 3,

Figure 5 is a cross sectional view similar to Figure 3 illustrating another method of separating the planks or boards,

Figure 6 is a front elevation of what is disclosed in Figure 5,

Figure 7 is a fragmentary view similar to Figure 2 showing a modification,

Figure 8 is an elevation similar to Figure 1 showing another modification,

Figure 9 is a section on the line 9—9 of Figure 8,

Figure 10 is a cross section on the line 10—10 of Figure 8 and showing still another slight variation,

Figure 11 is a fragmentary view showing a method of temporarily securing the planks or boards, and

Figure 12 is a plan view of what is shown in Figure 11.

Referring more particularly to the drawings the numeral 10 designates a fence post which is preferably of wood and of any of the well known varieties for the purpose. It is of course conceivable that this post might be of any desired cross sectional shape but as a matter of fact it is preferably round or cylindrical and it may also be noted that it may be of uniform or varying diameter, this detail being immaterial. In order to shed water the upper end is advisably beveled off at opposite sides as shown at 11 though it might be simply pointed if desired. However, in actual practice I have discovered that by simply beveling off opposite sides at an appropriate angle there is little likelihood of checking.

It is even conceivable that the post might be of composite construction as disclosed in said co-pending application but as a matter of fact I really prefer that it be simply of wood inasmuch as this is a well recognized suitable material and as it is less liable to injury or damage in freezing weather owing to its organic nature.

Regardless of what the composition of the post may be, I provide it with a plurality of retaining members 12 of substantially rectangular shape or in some respects U-shape and which are anchored within the post, by driving if the post be of wood or by embedding if it be of composite material. In the preferred form of the invention these retaining members are what may be called of somewhat loop shape and they are formed of wire or rod of suitable gauge depending upon the weight and size of the planks or boards 13 to be secured and which constitute the fence. Logically these retaining members should be galvanized or otherwise treated to render them substantially weather proof.

In the preferred form of the invention the members 12 are not of exactly U-shape inasmuch as they comprise bight portions 14 from which extend arms 15 which are not straight but which are offset as at 16, the ends 17 being embedded within the post by driving them into holes previously bored in the post, the diameter of these holes being slightly less than the diameter of the ends 17. It will be noted that the end portions 17 are closer together than the arms 15 in order that the retaining members will be, in effect, rectangular in shape for supporting and retaining the planks 13.

As disclosed, the planks or boards 13 are arranged in overlapping relation and rest within the retaining members 12. In view of the fact that the retaining members are formed of wire of suitable gauge it is quite apparent that there will be only line contacts of the planks or boards with the lower arms 15 of the retaining members and therefore there will be no opportunity for water to collect at this point as it will naturally drain away from the undersides of the lower arms.

In order to separate the planks or boards 13, I may adopt either one of various expedients. In Figure 3 I have disclosed the idea of employing a wedge 18 which is driven in between the ends of the boards or planks where they overlap at the post. After this wedge is driven in I contemplate forcing in a staple 19 which embraces the bight portion of the retaining member 12 with its arms passing through one plank or board and into the other but not penetrating the post. Figure 4 shows that this wedge member 18 is formed open at its center so as not to interfere with the driving of the staple 19 into place. The wedge does not remain permanently but is removed after the staple is driven in.

Instead of using a single wedge as disclosed in Figures 3 and 4 use may be made of a pair of wedges 20 and 21 as clearly illustrated in Figures 5 and 6, these wedges likewise being intended to be withdrawn after the staple has been driven in. In this instance it is not necessary that the wedges be forked or have open centers as illustrated in Figures 3 and 4 inasmuch as their adjacent ends do not approach the location where the staple is to be driven in.

In some instances or under some circumstances it may be desired to use retaining members of a simpler form than those illustrated at 12 and therefore reference is made to Figure 7 wherein there is disclosed a retaining member 22 which is of the same general characteristics above described except that it is of simple U-shape instead of having offset or angular arms defining a partially closed rectangular bight portion. A staple 23 is shown in this figure applied with the use of either a single wedge or a pair and embracing or straddling the retaining member, passing through the outermost board or plank and penetrating the underlying plank

or board. To all intents and purposes this figure shows just what is above described except that the arms of the U-shaped retaining member are not offset toward each other.

In view of the fact that the arms of the staples 19 are rather close together it may occur, particularly with the use of planks or boards of certain kinds of wood, that there may develop a tendency of the wood to split between the arms of the staples and the ends of the boards. In view of this circumstance I contemplate, as an alternative arrangement, making use of the expedient disclosed in Figures 8, 9 and 10 wherein are illustrated the post 10, planks or boards 13 and retaining members 22 as in Figure 7. However, instead of making use of staples such as shown at 19 in Figures 1 to 6 and at 23 in Figure 7, the boards contacting the post are secured thereto as by ordinary nails 24 while the other or overlying boards are held in place by nails 25 which penetratingly engage the first mentioned boards. If preferred the nails 25 might be of sufficient length to penetrate the post also as shown in Figure 10. Wedges 20^a and 21^a may be used in exactly the same manner as disclosed in Figure 5 for the purpose of holding the boards separated while the nails 25 are driven in. By referring to Figure 10 it will be noted that the preferred nail arrangement is to arrange them so that they extend toward the axis of the post thereby providing clearance with respect to the securing members 22 so that the nails may be more readily driven home. Of course the wedges are removed in exactly the same manner as above described after the nails 25 are in place, their sole function being to spread the boards apart so that there will be a space between them in the completed fence.

Instead of employing securing members penetrating the boards and post, a nail or the like may be inserted and forced transversely downwardly between the overlapping ends of the boards or planks as clearly indicated at 26 in Figures 11 and 12. Of course in either instance the effect is the same, that is to say the ends of the planks or boards are forced apart so that there will be an air space between them which will positively preclude any accumulation of water from rain or moisture from dew between them. Even when the outermost planks or boards are forced against the retaining members as they are bound to be upon the insertion of the nail, it is apparent that there is no opportunity for water to collect in view of the fact that the boards or planks will contact with the bight portions of the retaining members along mere lines in contradistinction to areas. It is also apparent that the boards themselves are held out of contact. As the nail is partially embedded in both boards they will of course be prevented from longitudinal displacement.

The form of the device shown particularly in Figures 11 and 12 is of special advantage in hunting country where it is frequently desirable to be able to pull out the planks or boards in order to provide a gap in a fence. An inspection of these two figures will disclose the fact that there are no staples holding the planks in place, sole reliance for the securing action being placed upon the downwardly extending vertical nails which under ordinary circumstances will hold the planks or boards in place but which will permit ready removal in case of necessity or desirability. In these two figures the nail is intended to remain in place instead of being a mere tool like the above described wedges employed while other fastening means is placed in position.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a very simple and inexpensive fence construction which will be particularly advantageous and desirable not only at ordinary locations but also where it is desired that accessibility to a field or the like be possible. It will also be noted that ample provision has been made in every respect to avoid actual contact of the boards or planks used in the fence so that there will be no possibility of an accumulation of a film or layer of water from rain, dew or otherwise, which would operate, naturally, to cause a deterioration or rotting of the material. It is thought that the construction, operation and advantages should be readily apparent to one skilled in the art without further explanation.

While I have shown and described the preferred embodiment of the invention, it should be understood that the disclosure is merely an exemplification of the principles involved as the right is reserved to make all such changes in the details of construction as will widen the field of utility and increase the adaptability of the device provided such changes constitute no departure from the spirit of the invention or the scope of the claims hereunto appended.

Having thus described the invention, I claim:

1. In a fence construction, a post, a plurality of vertically spaced retaining members carried by the post, said retaining members having bight portions and offset arms and a pair of board members having their ends overlapped and engaged within each retaining member, the offsetting of said arms preventing contact of the boards with the post.

2. In a fence construction, a post, a plurality of vertically spaced retaining members carried by the post, said retaining members having bight portions and offset arms and a pair of board members having their ends overlapped and engaged within each retaining member, the offsetting of said arms pre-

venting contact of the boards with the post, said arms being partially embedded in the face of the post.

3. In a fence construction, a post, a plurality of retaining members mounted thereon and each formed as a substantially rectangular open loop including a bight portion and angular arms directed toward each other, said arms being embedded in the face of the post, and a pair of boards having their ends overlapped and engaging within each retaining member and held out of engagement with the post by said angular arms.

4. In a fence construction, a post, a plurality of substantially U-shaped retaining members mounted thereon, a pair of boards having their ends overlapped and engaged within each retaining member, said overlapping ends being separated, and means extending transversely of the barrels for holding them against relative longitudinal movement.

5. In a fence construction, a post, a plurality of vertically spaced retaining members thereon of substantially U-shape, a pair of boards having their ends overlapped and fitted within each retaining member, said overlapping ends being in spaced relation, and means penetratingly engaging the overlapping ends of the boards in transverse relation thereto for holding them against relative longitudinal movement.

6. In a fence construction, a post, a plurality of vertically spaced retaining members thereon of substantially U-shape, a pair of boards having their ends overlapped and fitted within each retaining member, said overlapped ends being out of contact, and securing means at the side of the retaining member and penetratingly engaging the boards.

7. In a fence construction, a post, a plurality of vertically spaced retaining members thereon of substantially U-shape, a pair of boards having their ends overlapped and fitted within each retaining member, the boards being out of contact, and a securing member straddling the retaining member and penetratingly engaging both boards.

8. In a fence construction, a post, a plurality of substantially U-shaped retaining members carried thereby, a pair of boards having their ends overlapped and engaged within each retaining member, said boards being spaced apart, and securing means penetratingly engaging the boards at opposite sides of the retaining member for maintaining the boards against relative longitudinal movement.

9. The method of building a fence from boards and a post having substantially U-shaped retaining elements projecting therefrom, comprising inserting the ends of the boards within said retaining members in overlapping relation, spreading the overlapping ends apart, and inserting fastening means through said ends.

10. In a fence construction, a post, a plurality of substantially U-shaped retaining members mounted thereon, a pair of boards having their ends overlapped and engaged within each retaining member, and substantially vertically extending means engaged between said overlapped ends for maintaining the same separated, said means being partially embedded within the confronting faces of the boards and operating to prevent relative longitudinal movement thereof.

In testimony whereof I affix my signature.

THOMAS H. SYMINGTON.