Jan. 20, 1925

1,523,758

P. DE LANE

SHORE

Filed Oct. 31, 1923

2 Sheets-Sheet 1

Fig. 1.

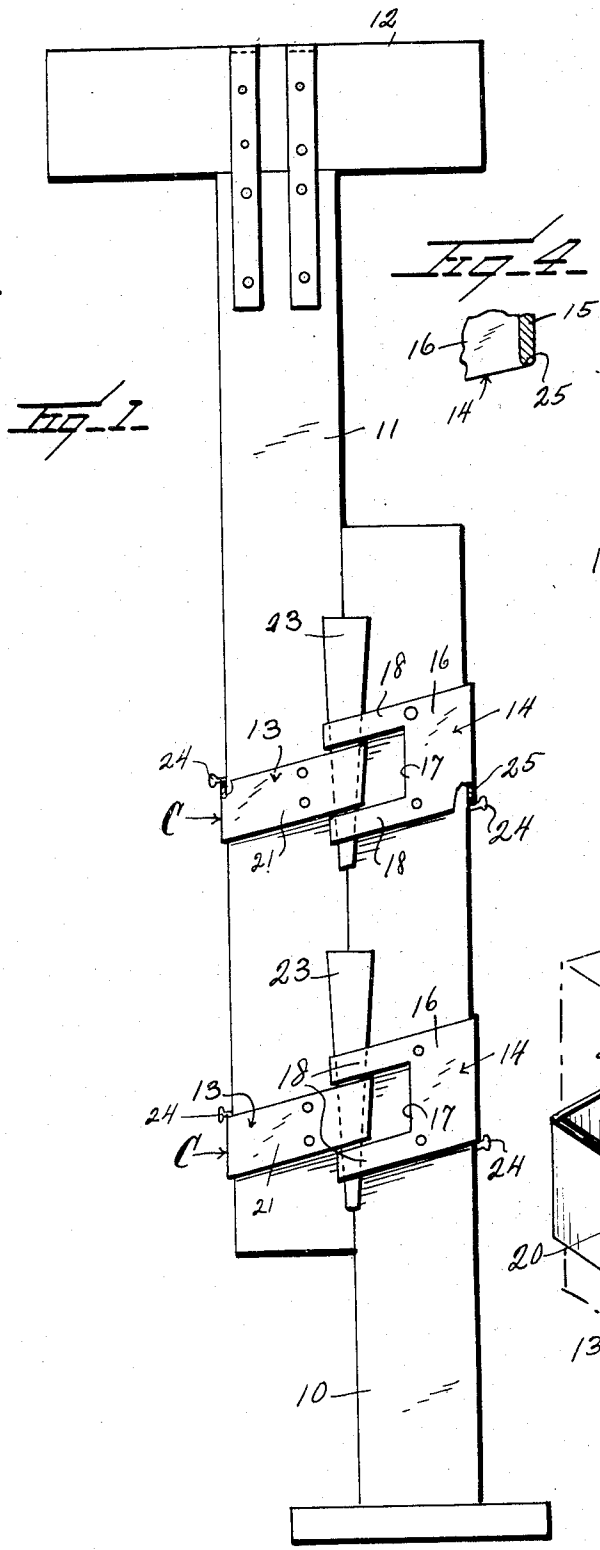


Fig. 4.

Fig. 2.

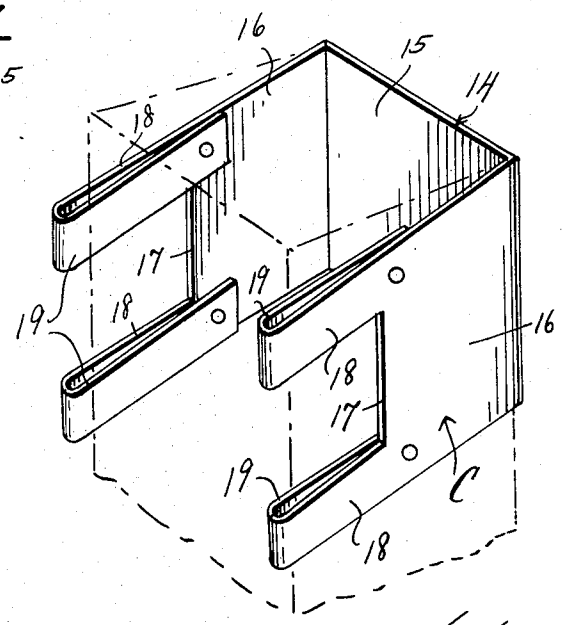
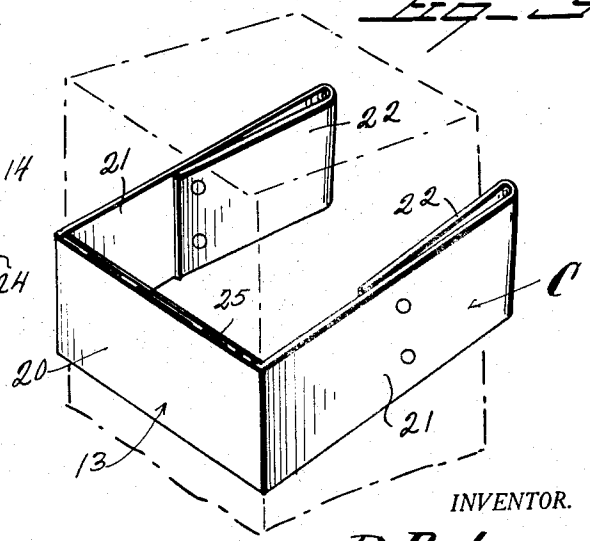


Fig. 3.



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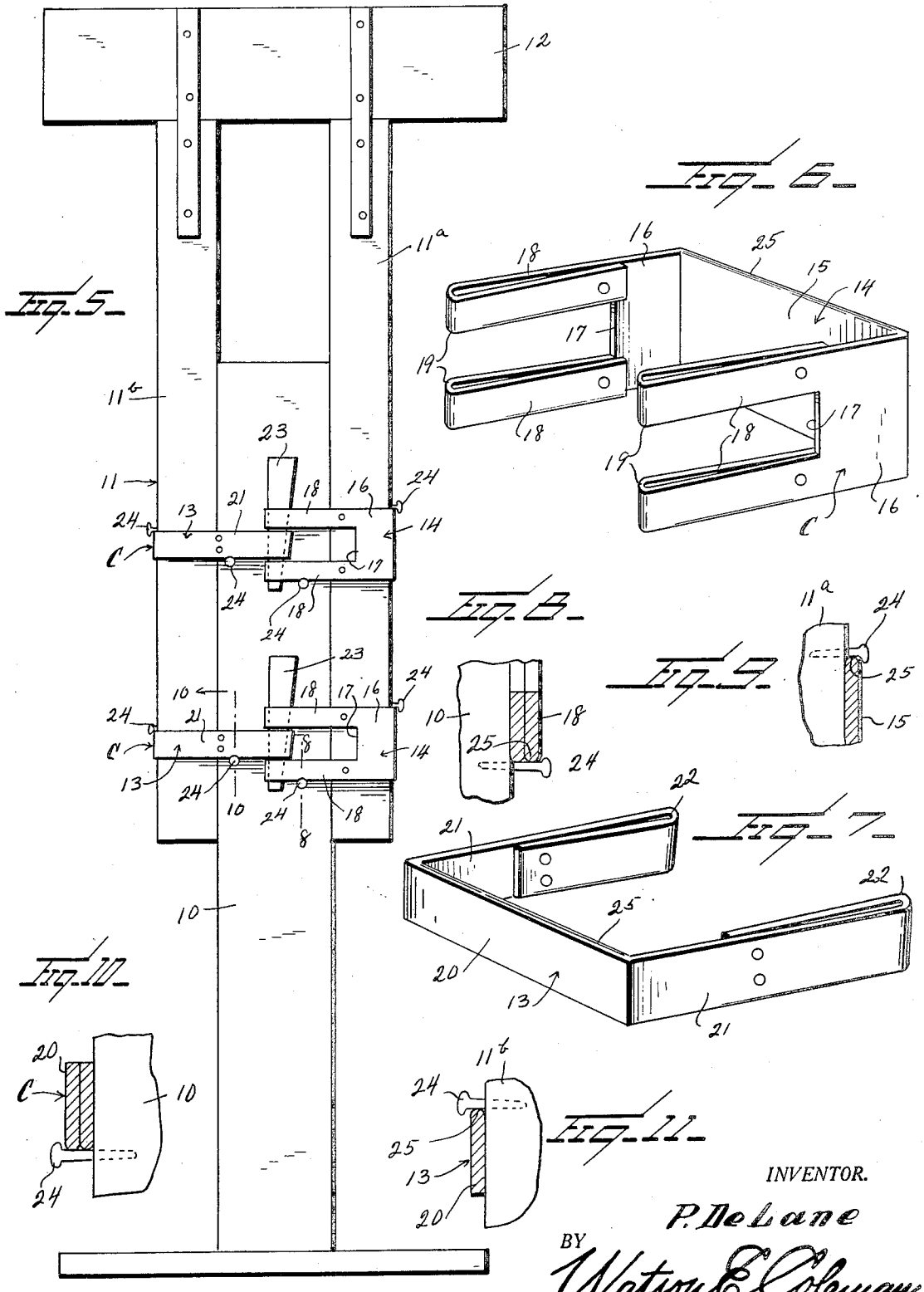
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UNITED STATES PATENT OFFICE.

PASCAL DE LANE, OF HUNTINGTON PARK, CALIFORNIA.

SHORE.

Application filed October 31, 1923. Serial No. 671,946.

To all whom it may concern:

Be it known that I, PASCAL DE LANE, a subject of the King of Italy, residing at Huntington Park, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Shores, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in shores and more particularly to an improvement in a clamp for securing together relatively adjustable sections of a shore used for supporting platforms or the like.

An important object of the invention is to provide a device of this character which is very easily loosened to enable adjustment of the sections of the shore and which may be very inexpensively produced.

A still further object of the invention is to provide a device of this character which will be durable and efficient in service and a general improvement in the art.

These and other objects I attain by the construction shown in the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a side elevation of a strut constructed in accordance with my invention;

Figure 2 is a perspective of one section of the clamping collar;

Figure 3 is a perspective of the other section of the clamping collar.

Figure 4 is a detail view showing the construction of the lower end of the end wall to prevent cutting of the supports.

Figure 5 is an elevation of a different type of shore showing the type of clamps employed with this shore;

Figure 6 is a perspective view of one of the clamp sections;

Figure 7 is a perspective view of the other of the clamp sections;

Figure 8 is a section on the line 8—8 of Figure 5;

Figure 9 is a section showing the construction of the upper edges of the end wall of the section 14; and

Figure 10 is a section on the line 10—10 of Figure 5.

Figure 11 is a section similar to that shown in Figure 9 showing the construction of the upper edge of the section 13.

Referring now more particularly to the drawings, the numerals 10 and 11 represent relatively adjustable sections of a shore consisting of vertically disposed beams, one of which is adapted to abut the shore and the other of which is provided at its upper end with a transverse head portion 12 for supporting an overhead structure of any character. While the upper and lower beams are shown in the present instance as consisting of a single timber either of these beams or both may be composed of a plurality of timbers if so desired.

In combination with the adjustable shore sections I provide a clamping collar or collars C, each of which is formed in two sections 13 and 14. The section 14 consists of a rear wall 15 with the side edges of which are engaged side walls 16 the upper and lower edges of which incline downwardly from the rear wall 15. The free end of the side wall 16 is provided with a furcation 17 forming at the upper and lower ends of the wall arms 18, the ends of which are bent back upon themselves and riveted to provide loops 19 the purpose of which will presently appear. The section 13 consists of a rear wall 20 provided at its side edges with side walls 21, the upper and lower edges of which incline upwardly from the rear wall 20 and are provided at their free ends with loops 22 formed by reverting the ends of the side walls. These side walls are of a width equal to the width of the furcation 17. The angle of the side walls 21 is similar to the angle of the side wall 16 so that when the rear walls 20 and 15 are arranged in parallelism, as they will be when they are engaged with opposite sides of the assembled sections of the shore, these arms will have the same angle and the ends of the arms 21 will engage within the furcation formed in the wall 16. It will be seen that by this construction the loops 22 and 19 are aligned for the reception of a wedge 23 and that when this wedge is forced into the loops the walls 20 and 15 will be drawn toward one another thereby drawing the sections 10 and 11 of the shore into firm engagement so as to prevent slipping thereof.

In order to prevent slipping of the collars during placement thereof spikes 24 will preferably be driven into the shore sections 10 and 11. These spikes further assist in supporting the weight which is placed upon the clamp and since the lower edge of the walls 15 and 20 will come into very firm engagement with the spikes, the upper edges

of the wall 20 and the lower edge of the wall 15 are rounded, as indicated at 25, so that they will not cut the spikes. By employing an inclined collar of this character the sections of the shore may be very firmly clamped together and at the same time the clamp is so constructed that a very slight relative movement of the shores will cause the sections to bind firmly upon the walls thereof, thus assuring against any real slippage of the shore sections. The outer or free ends of the loops 19 and 22 will be so constructed that when the loops are in assembled relation the included angle formed by a continuation of the outer walls will be the same as the included angle of the wedge, so that the wedge will contact firmly with the walls of the clamp throughout the width of such walls.

In such instances the upper section 11 of the bore is formed in two separate sections 11^a and 11^b, as illustrated in Figure 5, and with this form of shore it is necessary to vary the arrangement of the clamp since upon downward movement of the upper section the opposite faces of the shore are simultaneously moved downwardly and accordingly a clamp such as shown in Figures 1 to 3 inclusive would shift downwardly with the upper section of the shore. The sections 13 and 14 of the clamp C are accordingly so constructed that the side walls 16 and 21 thereof are at right angles to the rear walls 15 and 20, as more clearly shown in Figure 1, and the clamp when applied instead of being upon a slant is horizontally disposed. The ends of the loops 19 are arranged in the same vertical plane and the ends of the loops 22 are provided with an incline corresponding to the inclination of the wedge 23. As this wedge is driven downwardly the sections of the clamp are drawn together to draw against opposite faces of the section 10 of the shore, the upper shore sections 11^a and 11^b. With this form of clamp the rounded surface is applied to the upper surface of the back portions of both clamp sections 13 and 14 for it will be obvious that in order to perform any function the spikes 24 will have to be arranged above these clamping sections. The lower edges of the lower loops 19 and of the loops 22 are rounded and further spikes 24 are driven beneath these rounded portions into the side faces of the shore 10. The latter spikes will prevent downward movement of the clamp upon the section 10 while the former will necessitate downward movement of the clamp before the sections 11^a and 11^b can move downwardly. It will be seen that the sections of the clamp will have a tendency to pivot upon the spikes carried by the section 10 of this last named form and by this pivoting movement will cause the bights of the loops thereof to bind very tightly against the wedge, the binding action increasing in proportion to the tendency of the outer or rear walls of the clamp sections to move downwardly.

While I have herein illustrated the specific embodiments of my invention which are preferred by me it will, of course, be understood that the structure herein shown is capable of some change and modification without in any manner departing from the spirit of my invention and I accordingly do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. A clamp for shores comprising a pair of sections having parallel end walls and parallel side walls at an angle to such end walls, the incline of the side walls of said sections to their respective end walls being similar, each of the side walls of said sections being provided with loops for the reception of wedges connecting side walls at the same side of a shore whereby to shift the end walls toward one another.

2. A shore comprising a pair of members adjustable longitudinally of one another and a clamp formed in a pair of sections, each section being formed from a strip of flat material and having an end wall flatly abutting the outer face of one section of the shore and side walls abutting the side faces of the shore, said end walls being vertically spaced longitudinally of the shore, the side walls being at an angle to the end walls and being provided at their free ends with loops co-acting for the reception of a wedge.

3. In combination with a shore embodying upper and lower sections, a clamping collar surrounding overlapping ends of the sections consisting of two separable sections having the central portions thereof flatly abutting opposite faces of the shore and provided at their ends with loops, wedges engaging said loops to draw the sections of the clamping collar together upon the shore, and limiting elements carried by the upper and lower sections of the shore preventing downward movement of the upper section of the shore with relation to the clamping collar or downward movement of the clamping collar upon the lower section of the shore.

In testimony whereof I hereunto affix my signature.

PASCAL DE LANE.