Jan. 23, 1934. G. H. MILLER 1,944,257

ADJUSTABLE CURB FACE

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Fig. 1.

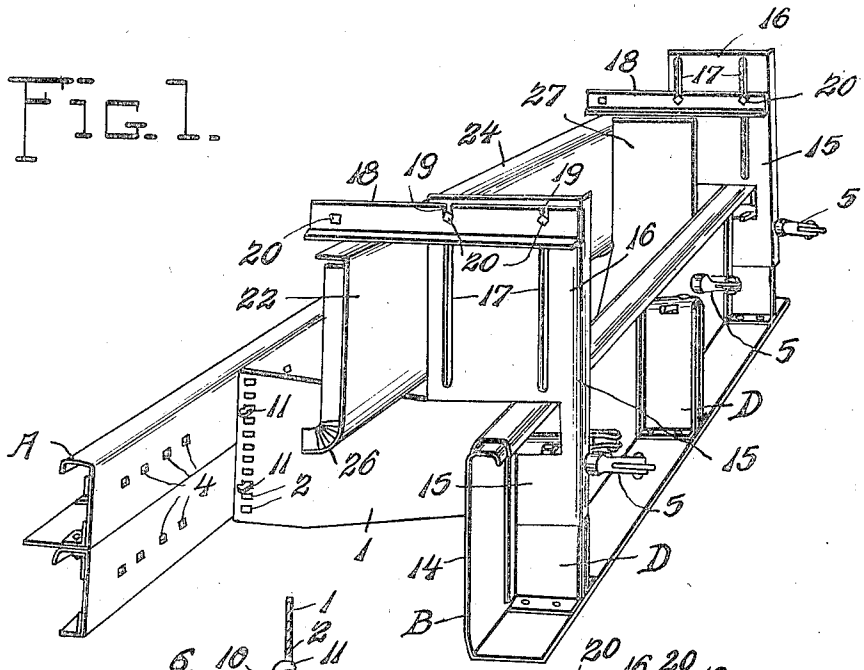


Fig. 3.

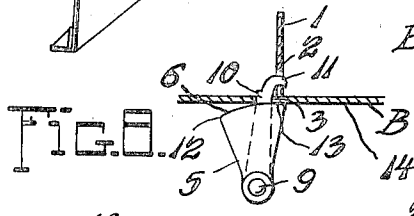
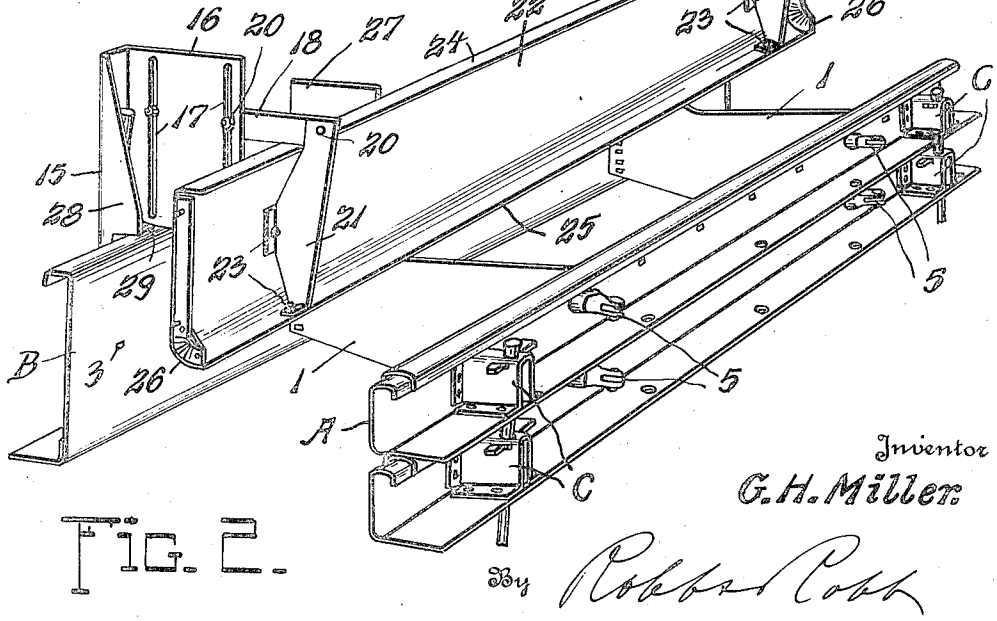


Fig. 2.



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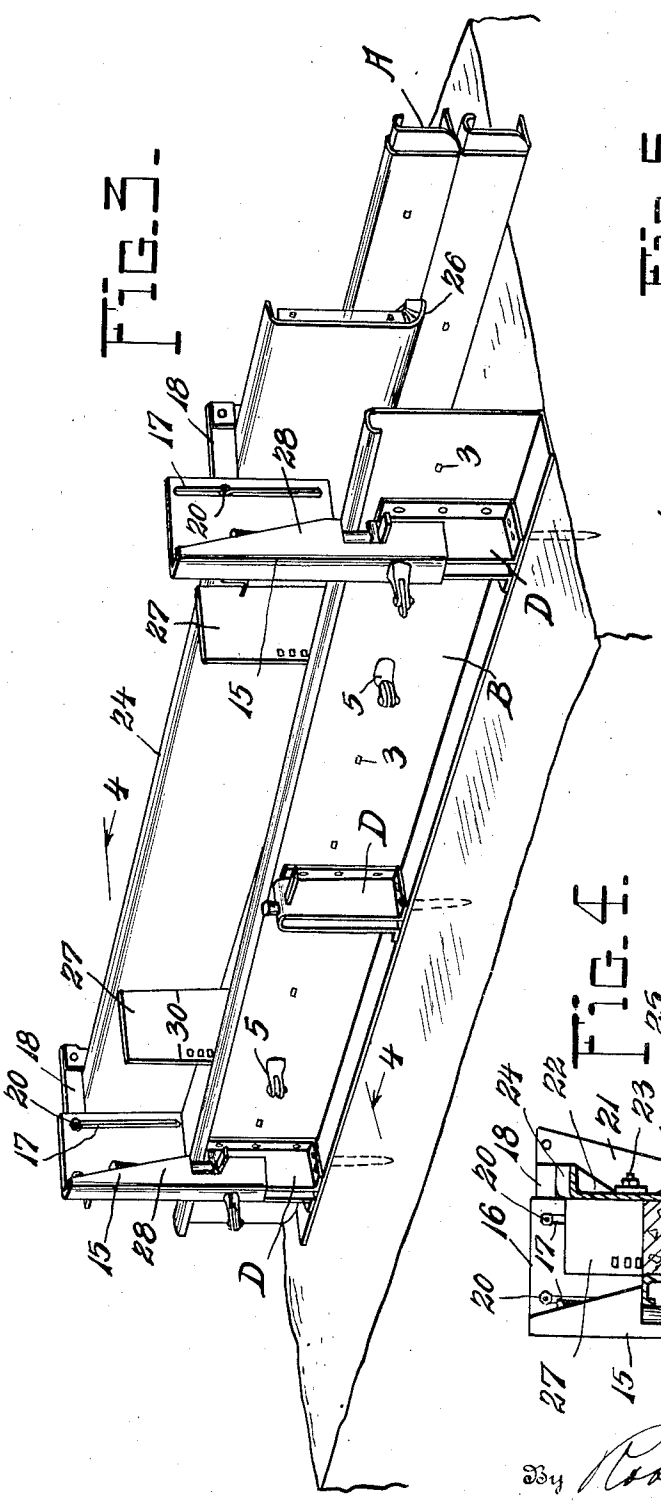


FIG. 3.

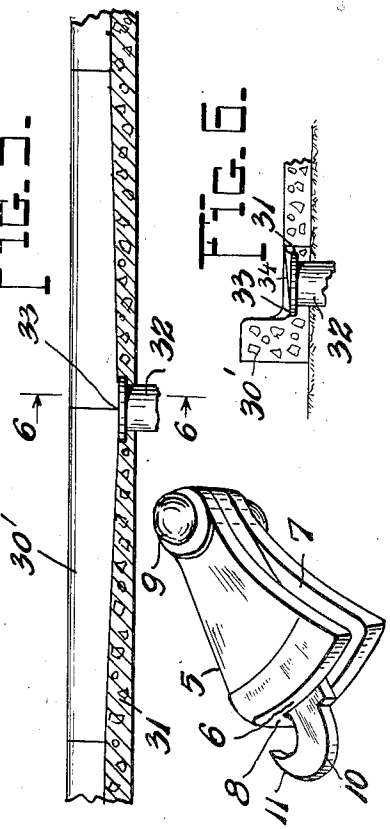


FIG. 5.

FIG. 6.

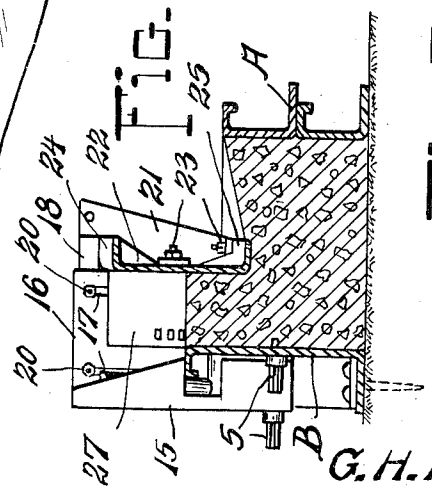


FIG. 4.

FIG. 7.

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UNITED STATES PATENT OFFICE

1,944,257

ADJUSTABLE CURB FACE

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Application February 19, 1930. Serial No. 429,720

1 Claim. (Cl. 25—118)

This invention has to do with devices known as curb forms and has for one of its primary purposes to provide a form of this type for adjustably supporting and bracing the face rail or form member to conform to surface conditions. It is desirable and it is in fact the prevailing practice and has been for many years, to provide a gutter having alternate deep and shallow portions. A sewer is provided at each deep portion. By sloping the gutter upwardly away from the sewer, provision is made for collecting the water and the like due to inclement weather.

As the gutter runs down in both directions from its highest point toward the sewer openings, the level and angle of the gutter consequently change, and molds of different heights would have to be used for each section making it necessary to use a large number of molds, which is troublesome as well as expensive. To avoid this difficulty, I have provided a mold embodying a novel device for adjusting the inclination of the gutter.

To the above and other ends, my invention contemplates the provision of a simple apparatus consisting of elements attached respectively to the back and face curb rails or forms, and novel instrumentalities included in said elements for adjusting the inclination of the bottom of the face rail with respect to the back rail, and holding the face rail in any desired position of adjustment. A front rail is also provided to constitute the limit of the curb adjacent the concrete road to be paved. The front rail, together with the back rail, rest on the subgrade and support the adjusting instrumentalities.

For the purpose of varying the length of the curb section, I provide the back rail and the front rail with a plurality of longitudinally spaced openings and partitions spaced apart and interposed between the back rail and the front rail. Each partition is provided with a vertical series of openings at its ends and said partition openings are adapted to be disposed adjacent any chosen front rail and back rail openings. Simple securing means passes through any hole in each rail and in an opposed opening in the partition member to firmly secure said partition in position between said rails.

This securing means is of a readily detachable type so that not only may adjustment be made for the length of curb section, but the partitions may be dismantled with facility.

With these and other objects and advantages in view, the invention comprises certain other novel constructions, combinations, and arrangements of parts as will be subsequently specified and claimed.

For a full and more complete understanding of the invention, reference may be had to the following description and accompanying drawings, in which—

Figures 1, 2, and 3 are different perspective views of the structure embodying my invention.

Figure 4 is a cross sectional view taken approximately in the plane indicated by the line 4—4 of Figure 3.

Figure 5 is a fragmentary longitudinal sectional view, illustrating the inclination of the gutter upwardly in opposite directions from the sewer, the latter being shown in elevation.

Figure 6 is a fragmentary sectional view taken approximately in the plane indicated by the line 6—6 in Figure 5, the sewer being shown in elevation.

Figure 7 is a perspective view of the securing means which is employed in my invention.

Figure 8 is a plan sectional view showing the manner of employment of the securing means illustrated in Figure 7.

While a preferred specific embodiment of the invention is herein set forth, it is to be understood that I am not to be limited to the exact constructions illustrated and described, because various modifications of these details may be provided in putting the invention into practice within the purview of the appended claim.

My novel construction embodies a curb rail A built up from a pair of flange members to a height corresponding to the depth of the concrete roadway and corresponding also to the depth of the road end of the curb to be formed. The back rail B is provided for the purpose of forming a back for the curb to be constructed, that is, to form that side of the rail which faces the walk. The rails A and B are substantially parallel and are spaced apart a distance equal to the cross sectional width of the combined curb and gutter. The rails A and B are provided with the usual stake boxes C and D for securely holding said rails in place in the ground. For the purpose of providing end limits to the curb section, partitions 1 are disposed intermediate the rails A and B at spaced points. Adjacent each vertical edge of each member 1 I provide a plurality of openings 2. The back rail B is provided with a longitudinal series of openings 3 and the curb rail A is provided with one or more longitudinal series of similar openings 4. The rails A and B are so arranged that, with a partition 1 disposed between and at right angles to said rails and having one

end adjacent an opening in the rail A, the opposite end of the partition 1 will be adjacent an opening in the rail B so that said partition when fastened in place is perpendicular to said rails. For the purpose of fastening said partition in place, I have provided a simple device 5 illustrated in perspective in Figure 7 and in operation in Figure 8. This device comprises a member substantially sector in shape having a cam surface 6. Said member comprises a pair of spaced sectors open at one side 7 and closed at 8 throughout a portion of their opposite side. A pivot pin 9 is securely fastened to the sectors and passes through them. Loosely pivoted on said pin 9 intermediate the sectors is a hook member 10 having a hook element 11 which projects beyond the cam portion 6. Figure 8 illustrates the manner of use of the device 5 as applied in securing the partition member 1 to the back rail B thereof. The same construction is used in connection with the curb rail A. In operation the low end 12 of the cam 6 is positioned adjacent the hook member 10 and the latter is threaded through the opening 3 and the element 12 is hooked through the opening 2 in the partition 1. The cam portion 6 is then rotated with respect to the hook member 10 until the high portion 13 of the cam 6 tightly engages the side 14 of the rail B and draws the partition 1 tightly against said rail B. It is thus seen that with the use of the securing device 5 the partition 1 may be very tightly secured to the rails A and B. Additional security may be maintained by providing two securing devices as shown in connection with the curb rail A.

Secured to the back rail B is an adjusting bracket 15 held in place on a stake box D by means of one of the securing devices 5 above described. The bracket 15 has an upwardly extending portion 16 provided with one or more vertical slots 17. Disposed transversely with respect to said slots is a bar 18 provided with slots 19 registering with the slots 17. A bolt 20 passes through each pair of registering slots and is adapted to be tightened to adjustably secure said bar 18 to the bracket 15. The outer end 19 of the bar 18 has secured thereto by the bolt or the like 20, a bracket 21 which depends from the bar 18. A curb face rail 22 is securely fastened to the bracket 21 by means of rivets or the like 23, the upper extremity 24 of said face rail engaging the bars 18. It is apparent from the illustrations taken with the above description that the face rail 22 may be adjusted to any desired inclination with respect to the rails A and B. The bottom 25 of the face rail 22 is rounded at 26 so that when the concrete is poured in place there will be a fillet between the face and gutter of the curb.

Each partition 1 is substantially L-shaped and has an arm 27 which extends upwardly between the face and back rails of the curb. The longitudinal edges 30 of the arm 27 engage the adjacent sides of the back rail B and face rail 22. The width of the arm 27 therefore defines the width of the upwardly projecting portion of the curb.

The bracket members 15 have inwardly extending flanges 28 and each flange has a foot 29 extending between it and the portion 16. The bottom of the portion 16 together with the foot 29 rests on the top of the rail B and provides proper bearing to prevent movement of the bracket 15, once it is secured in position. The portion of the bracket 15 which is secured to the stake box D, embraces the sides of the stake box to further insure against improper displacement of the bracket.

Figures 5 and 6 illustrate the finished curb, the pavement portion being designated 30′ and the gutter portion 31. It will be noted from Figure 5 that a sewer 32 is placed at the lowest point 33 of the gutter, and from Figure 6 it is apparent that the surface of the gutter slopes laterally downward at 34 from the road toward said pavement portion 30′.

Although the parts of the front plate or rail A are fastened together by any suitable means, the provision of a clamp member 5 for each of said parts, makes for a rigid connection between one edge of each division plate and the plate A, and in addition serves further to hold the parts together.

While I have used the expressison "rail" in referring to certain parts of my invention, I desire it understood that I have had in mind the broad meaning of the word "rail" in the sense of a form member, and have applied this term to the back, face, or gutter, and front plates of the curb form.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

In a curb and gutter form of the class described, a back rail, a front rail, each of said rails having openings arranged lengthwise thereof, division plates defining the length of curb section and formed with openings along the edges of said plates, and means cooperating selectively with an opening in each rail and certain of the openings of said plates for adjusting the length of the section in vertical disposition of said plate.

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