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SEAWALL AND FENCE CONSTRUCTION

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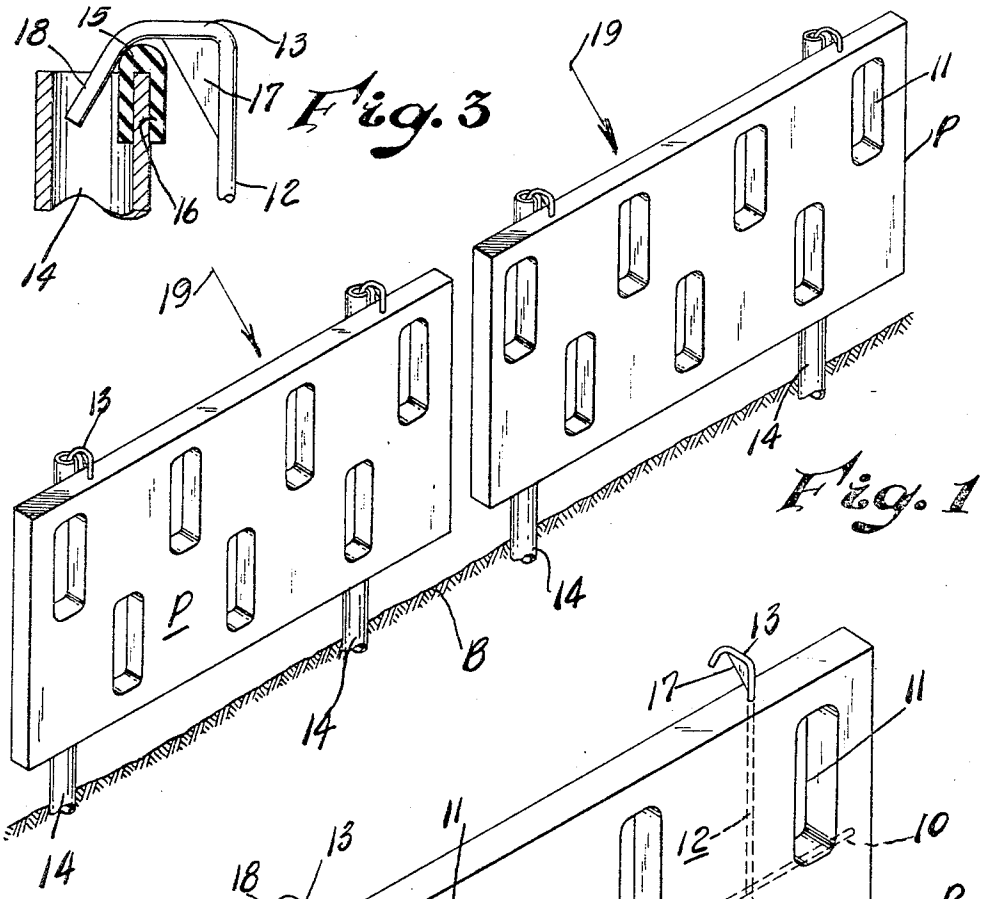


Fig. 3

Fig. 1

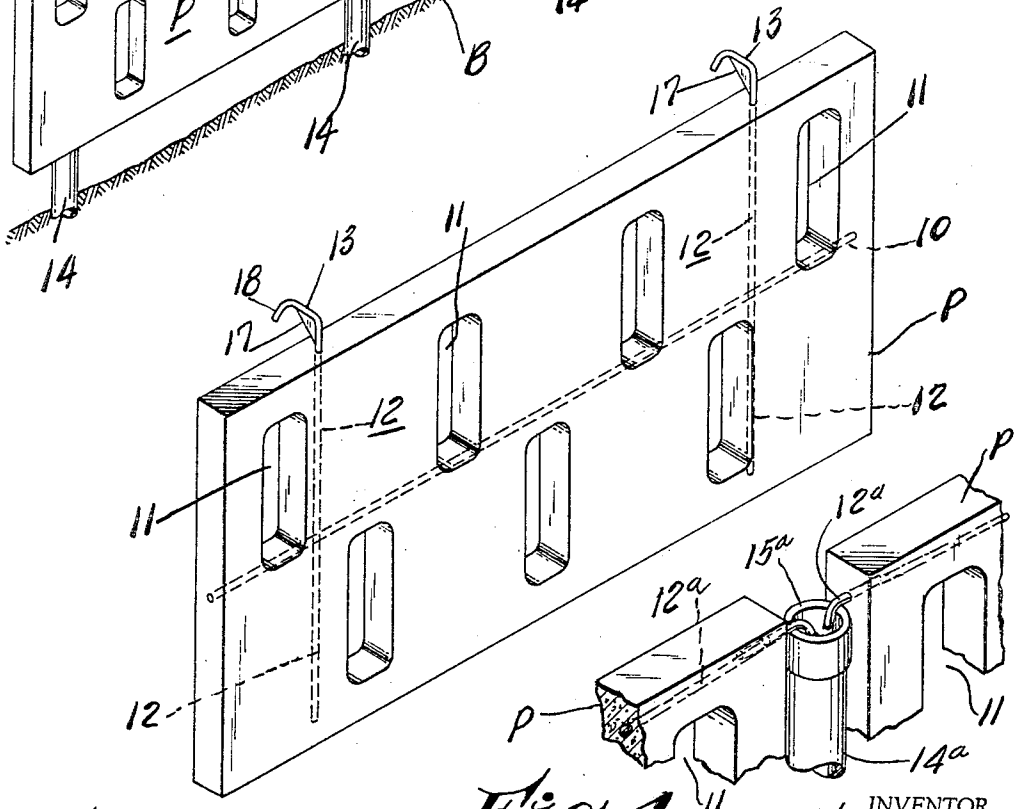


Fig. 2

Fig. 4

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SEAWALL AND FENCE CONSTRUCTION

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ABSTRACT OF THE DISCLOSURE

This invention relates to precast seawalls and concrete fence constructions in which panels are swingingly mounted on posts anchored in a lake bottom or on dry land and on which the panels are swingingly mounted to swing during storms, heavy winds, and other severe weather conditions to break the winds and waves to control the shifting of sand and make for quieter and more calm water flowing through and past the panels. Whereas the mounted panels are subjected to a swinging action in stormy weather, it is also true that the structure using this same construction can be utilized as a fence which can be erected on land adjacent the shore line and will break up heavy winds in the open or in a passageway without damage to the fence or the immediate area.

It is, therefore, the prime object of the invention to provide an improved seawall and/or fence which operates, due to heavy winds or other weather disturbances, to break up heavy waves and/or winds, which can be readily precast or prefabricated, and which can be readily transported to the locality where the sea wall or fence is to be erected.

Another object of the invention is to provide a seawall and fence construction provided with a plurality of panels, which panels are precast or prefabricated, and provided with a plurality of passages through said panel, which passages permit water flow through the panel to release the pressure produced by heavy winds and storms, parts of the waves spilling through these passages reducing the pressure and limiting the swinging travel of the panels.

A further object is to provide a swinging panel construction which dampens heavy wave patterns and smoothes the water traveling through the installation.

Still a further object is to provide a swingable seawall panel construction which swings with the force and weight of the water and wind striking the panel.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

FIG. 1 is a fragmentary, perspective side elevational view of the seawall.

FIG. 2 is an enlarged side elevational view of one of the panels.

FIG. 3 is an enlarged, fragmentary, sectional view, showing the mounting of the panels on the post supports.

FIG. 4 is a fragmentary, perspective view showing a slightly different arrangement of the post supports and hinge bars.

Referring now more particularly to the accompanying drawing in which we have shown the preferred embodiment of our invention, the letter B indicates the bottom of the lake, the waves of which it is desired to break up and control by swinging contact of the heavy panel P, which can be of any desired size and design, which panels can be suitably reinforced by means of metal reinforcements **10** or the like, and a plurality of passages **11** of any design, size, or pattern can be provided in the panels as shown.

The panels P are provided with spaced apart vertical hinge bars **12**, the upper ends **13** of which are angularly disposed and releasably bearing on the pipe support **14**, all as clearly shown in FIG. 3 of the drawing, and these pipe supports **14** are usually driven into the lake bottom and are preferably hollow to accommodate an arc-shaped wear member **15** formed of hard rubber or similar material, which member is grooved as at **16** to engage the open end of the bearing **15** provided on the pipe **14** to form a smooth operating, noiseless bearing connection with the hook-shaped end **13** of the hinge bars.

Gussets **17** are welded to the upper end section of the hinge bars **12** at the point of bend to form a reinforcement at this point, the free end section **18** of said hinge bars leading downwardly into the pipe support, as shown, and it will be obvious that when large waves and heavy winds engage the panels, blowing from the general direction indicated by the arrows **19**, (see FIG. 1 of the drawing), the panels will swing on the pipe supports **14**, the large waves striking the panels will be broken up and water will flow through the passages **11** over, under, and around the panels to calm the water on the opposite side of the panels.

Under certain conditions it may be desirable to install the pipe supports or posts **14***a* between the adjacent ends of the panels P to permit a greater swing stroke in both directions, and in this design the upper end sections of the hinge bars are formed with horizontally disposed sections **12***a* projecting from the end walls of the panels, and the member **15***a* will be a complete ring to accommodate the end section of both hinge bars which will ride thereon and it will, of course, be obvious that each individual panel may swing in accordance with the pressure exercised by the wind and water engaging the individual panels.

It will also be understood that the panels may be used as a fence which can be located between buildings, in passages, or in any designated location where it is desired to curtail heavy winds, and in this construction the body of the panel can be of any desired design and construction in which strong air currents and heavy winds, from certain directions, are broken up and dissipated, and the fence may also serve as an advertising medium.

The construction of the panels and manner of mounting make an economical manufacturing proposition, the parts of which can be easily molded, transported, and mounted, and the anchorage of the pipe supports and hanging of the panels can be readily accomplished by inexperienced workmen with no special tools or equipment.

From the foregoing description it will be obvious that we have perfected a very simple, practical, and economical sea wall and/or fence, all parts of which may be prepared and procured prior to the time of installation.

We claim:

1. A seawall and fence construction of the class described comprising: a preformed panel formed with a plurality of passages therethrough; projecting hinge bars provided in said panel in spaced apart relation and having a hook-shaped projection on the upper ends thereof;

hollow support posts anchored adjacent said panels; bearings mounted on the top edge of the hollow portion said support posts; and reinforcing plates of disposed in the angle of the hook-shaped projection, the terminal portion of said projection extending into said hollow portion and movably resting upon and in releasable engagement with the bearings on said support posts.

2. In a seawall construction: a plurality of vertical hollow support posts having a bearing surface and adapted to be anchored in alignment in a portion of a large body of water such as a lake; laterally spaced apart, unitary lightweight concrete panels supported by said posts and having a plurality of openings therethrough; and anchor members having hook-shaped projections for extending into the hollow portion of said support posts swingably connecting said panels to the posts in a manner to permit them to freely pivot about said bearing surface with the wave action, said openings passing water therethrough as said panels function to dissipate the waves.

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