

A STRENUOUS CITY.

WHAT GALVESTON HAS DONE FOR HERSELF BY BUILDING A SEAWALL.



SCENE SHOWING RIPRAP AND FOUNDATION OF SEAWALL.

Special Correspondence.

THAT the dawning of the twentieth century brought about the accomplishment of greater things in all phases of American civic enterprise, there is no possibility of doubt. It has ushered in an era of loftier ideals, renewed energies and the desire to do things never before attempted. It is, in short, the beginning of an era of the accomplishment of things never before dreamed of as possibilities. There have, in times past, been strenuous periods in the life of almost every hamlet in the western hemisphere, but never has there been a period so filled with the get-ahead-and-stay-there spirit as exists at the present time. Each and every city in America has its ambition to surpass her sister city, if only in the matter of having better streets or more manufacturing enterprises. There is now, at all times, one ambitious desire, and that is simply to outdo one's neighbors in civic development. This ambition is truly American. To attain the highest moral, physical and political conditions the brain and brawn of American manhood are brought into action. The impassioned desire allows no hesitating or stopping of the wheels of progress. "On to an ideal condition" is the slogan of the modern municipality; nothing short of the achievement will be contented. Every branch of modern, up-to-date arts, mechanics and engineering are the necessary adjuncts in the proper government and dispensation of the greatest good to the greatest number in any municipality with twentieth century ambitions.

The last half of the nineteenth century witnessed the real evidences and accomplishment of many of the once so-called or merely imagined conditions of municipal struggles and aims. Engineering, electrical and mechanical feats, were performed not dreamed of during the first half. That era saw wonderful developments in scientific research.

Coupled with all these achievements there were failures, but they were few. There were disasters which brought grief to millions of hearts. In all of this latter, however, the real push and pluck of Americanism suffered not.

GALVESTON, A STRIKING EXAMPLE.

Perhaps the most striking example of this spirit of indomitable pluck and energy in the face of a most appalling calamity is that of the people of Galveston, Tex. On Sept. 8, 1900, a storm and tidal wave almost totally destroyed the city as well as almost all of the coast country of the Lone Star state. Nearly 30,000 lives were sacrificed to the ravages of the cataclysm and the

homes of as many more were devastated. The world wept for their dead and contributed handsomely to their relief. They buried their loved ones and then looked about for something to promise encouragement for faint hearts. Few were the days idly spent in consideration of the problems before them. Stout hearts—American hearts—proclaimed that a "Greater Galveston" would rise from the debris.

Today the world knows little of the achievements gained by these survivors of one of the most appalling disasters which ever overtook an American community. They went about the accomplishment of a task as unprecedented as the calamity in the annals of American civic history. This task was the provision of a means of protection against the recurrence of such a combination of wind and water as had been experienced. Counting the cost was of minor importance, as permanence and stability were the two factors necessary to restore confidence in the stricken city and invite capitalistic investment to its enterprise.

The city of Galveston is situated upon the eastern terminus of an island of the same name, which is about three miles wide by thirty-one miles long, in the Gulf of Mexico, and about five miles from the mainland. Galveston Bay affords one of the safest harbors on the Gulf or Atlantic seaboard, and has sufficient depth of water to float any ship. The city and federal governments have done much toward its improvement, the latter having expended more than ten millions of dollars in jetties, dikes and other deep water improvements, besides the erection of three modern forts, and is continuously improving other natural facilities. The port ranks first in the export of cotton, cotton by-products and exports annually millions of bushels of wheat and corn and thousands of tons of other commodities. Scores of steamships and railway lines are necessary to handle this enormous business. The products of the entire middle west find this the natural gateway to the markets of the east, and of the world.

PLANS FOR PROTECTION.

For a means of holding and protecting this enormous business, then, there can be little wonder that following close upon the heels of even so great a calamity the surviving population should proclaim even greater things for the city's future. For this protection a seawall or breakwater was proposed. Few there were who realized the stupendousness of such a task, but with the spirit of aggression born of their forefathers, they set about the inauguration of the enterprise. The reader must consider the enormity of the task from a stupor viewpoint in order to even partially appreciate it.

The opinions of expert engineers were asked, and from the hundreds offered the plans possessing the most desirable or ideal features were, of course, adopted. One and a half millions of dol-

lars were required to execute the plans selected. For this an issue of 4 per cent county refunding bonds was deemed most expedient, and a "seawall bond election" was called for the result of that election is the greatest testimony to the real spirit of protection that could be imagined. Out of a possible population of 50,000 in the county there were only three votes cast against the proposition. The issue was made and subscription books for their sale were opened. Bonds in denominations of from \$100 to \$5,000 were printed. The population, almost to a man, bought the bonds. Laborers stood shoulder to shoulder with capitalists in the promotion of the sale. One purchased according to his ability and before the expiration of two years the full amount had been subscribed and the actual construction of the wall was inaugurated. The first piling was driven for the wall proper on October 27, 1902.

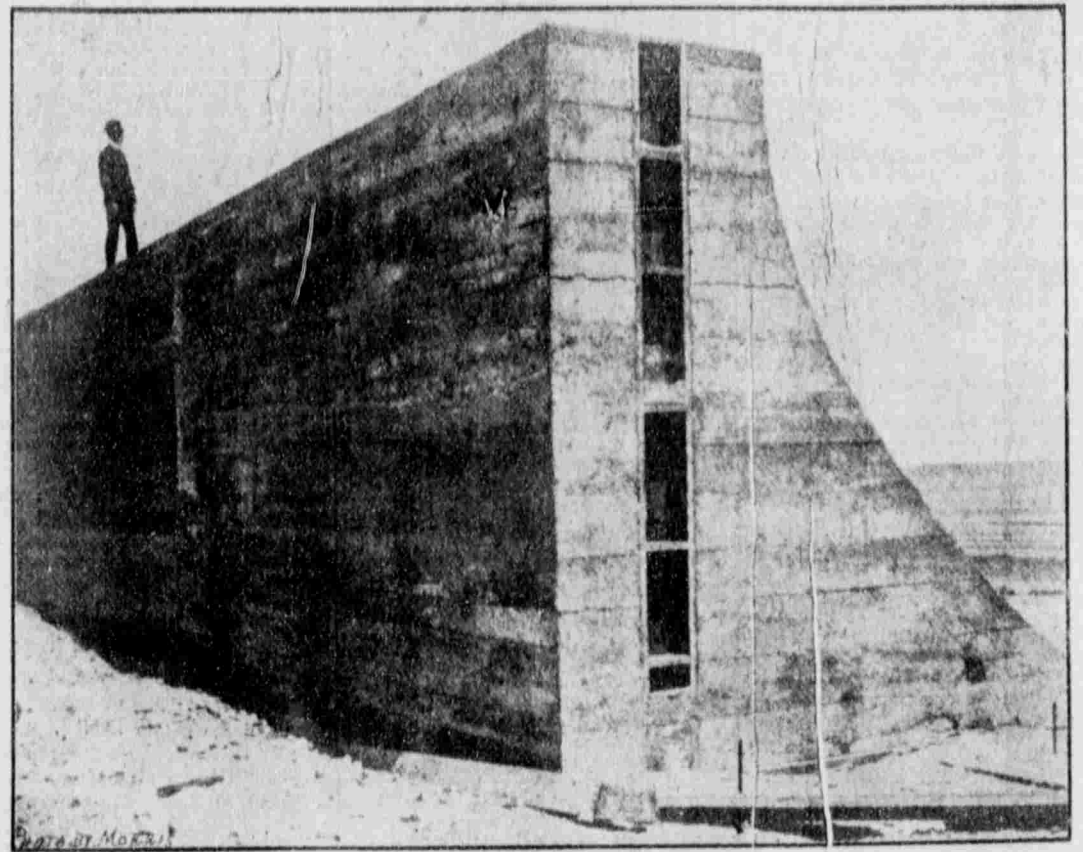
The specifications and plans as submitted by the board of engineers composed of Gen. H. M. Robert, United States Army Corps of Engineers; Alfred Noble of Chicago, and H. C. Ripley of Ann Arbor, Michigan, all expert engineers, called for a solid seawall over three miles, or to be accurate, 17,593 feet long, extending from the south jetty westward along the Gulf beach to Thirty-ninth street; to be constructed of concrete, 17 feet above mean low water, or 15 feet higher than the highest point reached by the water in the storm of 1900, its width at the bottom to be 16 feet and at the top five feet. The sea face of the wall to be curved so that its upper portion will be vertical. The foundation to be built on piles protected from undermining by sheet piling and riprap. To be located back from the high water line, where the ground is about three feet above mean low tide. Back of the wall to be filled in on a 200-foot level. On top 35 feet to be laid with vitrified brick, to provide a driveway of 30 feet and a promenade pavement of nine feet, including four of the five feet of top of wall. Back of the pavement 60 feet of the level embankment to be sown in Bermuda grass. This, they said, must constitute the kind of wall needed to encircle the eastern end of the island and Gulf side of the city, and not impair the beauty of the magnificent beach.

THE ACTUAL CONSTRUCTION.

The accompanying photographs of the work as it appears today shows the determination of the Galveston people. To more clearly understand the building of the seawall, it may be explained that there are five distinct phases of this important protection work, each of which, while conducted independently of the others, is dependent upon each other in forming the whole defense of this port and city against further attack by wind and wave. The first work is driving the long piling for the foundation. These piles are driven to the clay stratum,

STAYING OF THE OCEAN'S WAVES

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THE FIRST SECTION CONSTRUCTED.

city of Galveston will afford to the world a monument as an exemplification of civic pride and ambition not to be seen in any other American city, no matter what enterprise is concerned.

A STILL GREATER EFFORT.

This seawall, however, does not complete the ideal conditions sought by the city. An additional two millions of dollars is being accumulated for the purpose of raising that part of the island occupied by the city to an even height with the seawall. It is proposed that the city be filled with sand pumped by hydraulic power from the sea, or otherwise, to raise the grade to 16 feet next to the wall and sloping to the present grade of about eight feet on the bay shore, or north side of the city across the island.

For this purpose the state government is remitting a portion of all taxes paid by the city for a period covering 17 years. A bond issue will be made and the remitted taxation will make the bonds secure. The bill and charter provide for the issuance of these bonds and strictly forbid that this money be used except for a sinking fund for the bonds which must be issued for the work. There is now available a little over \$257,000, which can be used in purchasing bonds.

This is better explained by the provision in the grade raising bill passed by the legislature with a view of aiding Galveston in this undertaking and prescribing the handling of the money. Section 5 of the grade raising law says: "The moneys herein and hereby granted and donated to the city of Galveston are declared to be a trust fund, for the purpose of aiding the city of Galveston in paying the interest and sinking fund upon an issue or issues of bonds, the proceeds of which bonds are to be used exclusively for the elevation and raising of the streets, avenues, alleys, sidewalks and lots in said city above calamitous overflows, and for securing and protecting such filling. The use or diversion of such moneys for any other purpose whatever is hereby prohibited; provided, that whenever the moneys in the hands of the city treasurer received from the state under the provisions of this or any previous law shall exceed the sum of one year's interest, and 2 per cent sinking fund on the bonds herein referred to that have been issued and are then outstanding, such excess shall be invested by the city in the purchase of said bonds. A violation of the provisions of such section shall constitute a misapplication of public money, and the person or persons so offending shall be punished as provided for in article 96 of the Penal Code of Texas."

The following extracts from the new charter are self-explanatory and interesting:

Section 69 provides for the issuance of \$2,000,000 bonds of \$100 each, 5 per cent, due in fifty years, etc., "and their proceeds shall be used and expended for raising and filling to grade the avenues, streets, sidewalks, alleys, blocks, outlots and lots in said city, viz: First in point of time:

Beginning at or near the northerly or Gulf end of Twenty-fifth street or Rosenberg avenue and north of the site of the Galveston seawall, as designated by order of the commissioners' court of Galveston county, and filling easterly and westerly therefrom, simultaneously covering the same area.

The territory to be so filled is bounded and described as follows:

Beginning at the intersection of the north line of Broadway and Forty-fifth street, where the levee designated by

the board of seawall engineers intersected said street, thence easterly along the north line of Broadway to its intersection with the west line of Thirtieth street; thence northerly along the west line of Thirtieth street in the south line of Avenue A; thence easterly along the south line of Avenue A to the line of said seawall; thence with the line of the said seawall site to its terminus at Thirty-ninth street; thence with the site of said levee so designated to its intersection with Broadway at Forty-fifth street.

Second, in point of time:

Any portion of the following described part of said city of Galveston may be designated to be filled and raised to grade by the board of

commissioners of said city, to wit: All that part of the said city between Thirtieth and Thirty-ninth streets and north of Broadway.

Also provided that the city commissioners shall have the right to expend not exceeding \$100,000 in raising the grade of the streets, avenues and alleys in any part of the city.

Before many more years shall have passed the world that wept for the stricken people of this beautiful island City will applaud the survivors for their indomitable energy.

Galveston will be her own mistress and defy the wind and wave, and her enterprises will be lasting testimony of what real genius and pluck America can produce.

M. J. L.

COL. MYRON T. HERRICK, OHIO'S NOMINEE.



COL. MYRON T. HERRICK

Col. Myron T. Herrick is the Republican gubernatorial candidate of Ohio. He is a man of magnetic personality and one of the most popular candidates who has ever represented his party in the state of Ohio. His candidacy is nationally important on account of the prominent part Ohio plays in national political affairs.

IS ENGLAND'S CRITICAL PROBLEM.



The question of the hour in England and throughout the British empire is the fiscal proposition of Colonial Secretary Chamberlain to abandon England's free-trade policy. Although side-tracked in the commons by Premier Balfour's recent adroit speech, the question by its importance continues of first prominence in the public eye. The enemies of the government are seizing the opportunity to work for the overthrow of the administration. In this event Lord Rosebery would probably be made premier. Above are pictures of Rosebery, Joseph Chamberlain, who in this measure has reached the crisis of his career, and Campbell Bannerman, leader of the opposition.

FLOOD DISASTERS TURN STREETS INTO RIVERS.



This authentic snapshot, by our special photographer, gives a graphic idea of how the streets of the various towns affected by the great floods of Missouri, Kansas and Illinois appear after the fell work of the inundation. The streets, as the picture shows, are now rivers of from three to twenty feet in depth.