Vol. LXXIV

SATURDAY, NOVEMBER 2, 1901



[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statemes t of cost.

A COMPETITIVE DESIGN FOR THE NEWARK, N. J., CITY-HALL. MR. C. L. ROOS, ARCHITECT, NEWARK, N. J.

PLANS AND ELEVATION OF THE SAME.

A COMPETITIVE DESIGN FOR THE NEWARE, N. J., CITY-HALL. MESSES. VAS & TAXACH, ARCHITECTS, BUDAPESTH.

PLANS AND ELEVATION OF THE SAME.

[The following named illustration may be found by reference to our advertising pages.

HOUSES IN AMIENS, FRANCE; MAISON DU SAGITTAIRE, RUE DES VERGEAUX. -- LA MALE-MAISON: ANCIEN BAILLAGE.

This plate is copied from La Construction Moderne.

[Additional illustrations in the International Edition.

A COMPETITIVE DESIGN FOR THE NEWARK, N. J., CITY-HALL. MESSES. BRUN, HAUSER & LAPOINTE, ARCHITECTS, NEW YORK, N. Y.: TWO PLATES.

THE OLD PRESBYTERIAN CHURCH [1814], LENOX, MASS.

ST. PETER'S RECTORY, CLINTON ST., CAMBRIDGE, MASS. MR. C. HERBERT MCCLARE, ARCHITECT, CAMBRIDGE, MASS.

PROJECTED RESTORATION OF THE CHURCH OF THE PIETA, VENICE, ITALY. PROF. PIO AGAZZI, ARCHITECT.



MARBLE IN ALASKA. - J. E. Cronin, who has recently returned from Marble Creek, on Prince of Wales Island, and W. K. Sheldon, who has just joined him from San Francisco, have some wonderful stories to tell of the fine character of the marble to be found at Shakan, on Prince Edward Island. The marble is said to be equal to the best Italian marble. Mr. Sheldon said: "When I received samples of this marble last February I saw at once that it was unlike any marble now being produced in the United States, but identical with the marble produced in the world-famous quarries of Carrara, Italy. While there are a number of profitable quarries in the United States and a large amount of American marble is used, yet the Italian product has always occupied a field which no American marble could fill, as evidenced by the fact that during the fiscal year ended June 30, 1900, nearly 40,000 tons of Italian marble were imported into the United States. This marble from Alaska, in texture, color and chemical analysis, is identical with the Carrara deposit, and there is no reason why it should not supplant the foreign product entirely. I went to Alaska in March and found a mountain of high-grade marble. While I was fully convinced as to the quality of the material, I did not wish to make a final report on the property as a commercial proposition until large blocks had been quarried, taken to the market, and sawed. We therefore quarried a number of blocks, and I took them to San Francisco and had several of them sawed. These blocks, of course, were taken from the surface of the ground, and, having been subjected to climatic influences for several centuries, were soft for a depth of several inches from the surface; but the trial demonstrated the fact that the deposit is a remarkably sound one, and I have every reason to believe that the per-centage of high-grade sound marble will be much larger than in any of the deposits now being worked in the United States. In fact, when you consider that in developing marble quarries it is customary to take out and throw away from 10 to 20 feet of the surface material, the results obtained are unprecedented. The amount of the matter is that on an island in southeastern Alaska, within a few feet of deep water, there is a larger area of high-grade marbles than the combined areas of all the quarries now being worked in the United States." - Seattle Post Intelligencer.

PACIFIC COAST LUMBER IN THE EAST. - During last year 500,000, 000 feet of lumber were exported from the Pacific Coast, and 300,000,000 feet sent East by rail. — Exchange.

Great Britain and American Competition. - At the recent International Engineering Congress at Glasgow, the presiding officer was Mr. James Mansergh, President of the British Institution of Civil Engineers. In the course of his opening address, he referred to foreign, and especially American, competition. He said that an alarm had been sounded in their ears of late, warning them that the United Kingdom had touched the high water mark of the prosperity derivable from manufacturing industries, based upon engineering, or served by it with the means of transport and communication. This might be so. The nation had no royal secret for arresting the revolution of fortune's wheel. The question was whether Britishers could maintain their ground, to say nothing of increasing their lead. Would the engineer in future flourish best in Britain or abroad? One heard much talk nowanature nourish nest in Sritain or across 1. One neard much taix nowa-days about the British need for more technical education for workers, and of better instruction in the art of living for the people gener-ally, and he was not disposed to disparage this desire for more light. He feared that only too good a case could be made out for the allega-tion that a mistaken statutory system had discouraged in Great Britain— for the time being, at least—the naturalization and development of ele-trical-engineering on the largest scale. Instead of the electrical and mechanical development of lighting and power plant being undertaken propens scale proportional to its early promise, the work had to be done upon a scale proportional to its early promise, the work had to be done by "sample"—every small specimen differing from the others. Long years passed before any English engineer was in a position to give out an electrical-power contract amounting to £100,000. Meanwhile, competitors in America and on the Continent of Europe had been forging petitors in America and on the Continent of Europe had been longing fast ahead. So Englishmen had lost their chance, and would probably have to take other people's electrical plant for some time, instead of striking out their own leading line, as their forefathers did in railway work and ship-building years ago. — N. Y. Evening Post.

THE LARGEST STONE ARCH. - The new stone viaduet at Luxemburg, Germany, will be, when completed, the largest stone arch in existence, The details of construction have been furnished to the State Department by Vice-Consul-General Murphy of Frankfort, in which he says:
"The following facts in regard to the bridge may be of interest. The
Cabin John Bridge has long enjoyed the distinction of possessing
the largest stone arch in existence, the length of its chord being about
67 metres (2198 feet). The stone arch next in importance is at Lavan, France, with a chord of 611 metres (201.8 feet). The Luxemburg arch is to have a span of 84 metres (275 6 feet), and will accordingly be 55 8 feet longer than the arch of the Cabin John Bridge. The roadway will be 44 metres (144.4 feet) above the Petrusse River, a small brook, whose deep valley separates Luxemburg from the site of its new railwaystation. There will be really two distinct parallel bridges, 6 metres (19.7 feet) apart, whose foundations will be of concrete. The whole plan of construction is new and remarkable, as an examination of the plans will at once show. The total width of the bridge between the parapets will be 16 metres (625 feet). The stone used is of excellent quality, and is furnished by quarries in the immediate vicinity. The materials required are as follows: Masonry, 22,000 cubic metres (776, 952 cubic feet); wood for scaffolding, 800 cubic metres (28,252 cubic feet); metals (iron, zinc, and cables), 45 tons. The bridge will cost 1,400,000 francs (\$270,000), and is being built by the Government of the Grand Duchy of Luxemburg at its own expense. Preliminary work was commenced in December, 1899, and it is intended to open the viaduet for traffic in the spring of 1903. — Exchange.

GIGANTIC MAP OF PARIS. —"Up to a year ago," says a Paris dispatch to the London Telegraph of September 6," Paris was the only commune of France which did not possess a gigantic map setting out not only every street of the city, but showing every building and plot of land, with an index as to its owner and value. In October, 1898, the Municipal Council decided to remedy this defect, and the survey has just been completed. Paris, it appears, comprises 88,587 private buildings—that is to say, houses, workshops or edifices belonging to in-dividuals. Of this total 84,882 are residential properties, 1,316 work-shops or manufactories, and 2,389 residences and workshops combined. It is estimated that these 88,587 properties have an annual rental value of \$176,000,000 and that the actual value of the edifices is about \$4,000. 000,000. These totals only refer to the buildings within the fortifications of the city.

FREDENSBORG. - Fredensborg is the largest of the King of Denmark's palaces. It has an imposing exterior, and is surrounded by wonderful palaces. It has an imposing exterior, and its surrounced by wonderful arenues of limes, but is extremely simple in its interior arrangements. The bedrooms are small, and furnished in the plainest style, and there are hardly any dressing-rooms or wardrobes. A very wonderful view may be had from the palace roof, which its made entirely of copper. This metal is much used in Copenbagen; some of the steeples have copper steps by which they can be ascended. Rosenborg has a hand-somer interior than Fredensborg, and is full of beautiful artistic objects, including (it is said) the finest Venetian glass in the world. — London Chemills.

A NOTABLE BRIDGE FEAT. — In the transportation of logs from the heart of the California timber-belt to the mills, an important engineerheart of the valuorma timber-out to the mins, an important engineer-ing feat has been accomplished. A canon on the south fork of the American River had to be traversed, and as it was 1,000 feet deep, it was determined to build a steel-wire suspension-tramway. The distance across the canon is 2,850 feet. Between the two terminal towers the space is 2,650 feet. Two parallel cables span this immense gap, without space is 2000 level. I we parallel causes span this immense gap, without support between the towers. On these cables runs a cage conveying a car capable of carrying 3,000 feet of green, and, therefore, very heavy, timber on each trip. The tower terminals are anchored in the solid rock, supporting the cables, on which, over the canon of a depth of 1,000 feet, where the river's course seems like a rivulet, passes to and fro the skeleton iron cage, running on deep grooved trolley wheels, and carrying its enormous load of green timber with great apparent ease. — N. Y. Evening Post.

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 $\boldsymbol{\pi}^{\text{CCORDING}}$  to the newspapers, the close of the Buffalo The Exposition will show it to have been, financially, a disastrous failure. The accounts are, of course, not yet made up, but enough is known to show that the loss to the persons interested will be more than four million dollars. The stockholders, who subscribed and paid in two millions and a half, will get nothing back; the contractors who erected the buildings will lose about a million; the second mortgage bonds, which were issued to the amount of five hundred thousand dollars, will be defaulted, and of the first-mortgage bouds about twenty per cent will be defaulted, the trustees for the holders of the first mortgage bonds, into whose hands the money taken at the gates was paid, having received only enough to redeem eighty per cent of the face value of the bonds. It is said that the contractors will try to hold the stockholders and directors liable for the money owed them, on the ground that the act of incorporation of the Pan-American Exposition Company, which provided that directors and stockholders should not be liable for the debts of the corporation, was unconstitutional. It is very unlikely that the attempt will succeed, but the stockholders seem likely to have a season of persecution in the courts added to their other misfortunes.

**Ⅲ**HE people of Boston, or, at least, the Boston newspapers, are agitated over the question of illuminating-gas. It is difficult to avoid a suspicion, in reading the literature of the controversy, that the newspapers are stimulated, to a certain extent, in their treatment of the questions involved, by the interest of the financiers who are seeking control of the Boston gas-supply; but it seems to be evident that schemes which will not bear investigation are being carried out at the expense of the life and health of citizens. It would seem as if the business of making and supplying gas to a metropolitan district of a million inhabitants ought to be a profitable one, and people accustomed to the honest management of gas-companies, and to Massachusetts traditions in regard to the treatment of the property of stockholders by the directors of corporations, have been unpleasantly surprised to find that both the corporations supplying gas to the citizens of Boston are bankrupt, that the next payment of interest on their bonds will be defaulted, and that one of them, at least, is piling up an enormous floating-debt for the stockholders and bondholders to meet. Meanwhile, although the problem of what has become of their hard-earned savings interests a good many modest investors in United Gas bonds and other securities of the kind, the part of the matter which affects the citizens more generally is that the Boston, or, rather, the Bay State, Gas-light Company, after supplying its customers with reasonably good coalgas, has now substituted an extremely dangerous water-gas, and the State Gas Commissioners seem to be unable to prevent the change. According to the newspapers, the substitution of water-gas for coal-gas is not made on the ground of economy. the cost of coal-gas in Boston being, if anything, less than that of water-gas, but is due to the influence of parties controlling the Company who are interested in the sale to it of naphtha

for enriching the water-gas, and would rather see thr people a week poisoned by it than lose a good custom long the people of Boston will submit to be sacrific sake of furnishing a profitable market for the v poison remains to be seen; but the descendants of the are not remarkable for their meekness under what sider oppression, and it is quite likely that the wint of the Legislature will be asked to take the matter in

THE Chicago Tribune calls attention, not without  $m{\Gamma}$  pride, to the advantage which Chicago enjoys other large American cities in having, to a certa the heavy teaming through the town separated lighter traffic by the simple process of keeping stree heavy drays out of certain avenues through the city, New York or Boston they are kept out of the park d It is hardly necessary to point out the dangers and as of mingling heavy wagons, electric-cars, light carr pedestrians in the same narrow street, and, in Boston it will, before long, he absolutely necessary to reelectric-cars at least from Washington Street, as t already been removed from Tremont Street. Anot in which Boston, particularly, might have shown n thought is in the placing of the two great railway both of which are set where, in order to reach them, i sary to cross one or more great thoroughfares for hea including not only the wagons and drays bringing i the railways, but also those carrying an immense a freight intended for the wharves and ferries, or for o tions of the city, and having nothing to do with th traffic, which they only obstruct. In Paris, where th of the individual citizen and his family is better stu anywhere else in the world, the freight-department of railways is always separated by half a mile at least, by more than a mile, from the passenger-departme mother or nurse with little children can conduct her o and from the trains without a thought of danger, an being distracted by the roar of the elevated trains, the cars, and the streams of drays, express-wagons and which intervene between a Boston station and the re city. In fact, the division of traffic around the gra stations is so complete that, at some of them, a space is for omnibuses from the principal department-stores, Bon Marche, the Printemps and the Louvre, whi waiting at the arrival of every train, to take customer respective establishments and bring them back aga city like Paris, this simple arrangement is of the grea to timid rural shoppers, who, instead of being turn into the midst of a roaring mob, to find their way best they can, need only get into the appropriate or be transported to the door of a place where, in most c can make all their purchases, and where, at least, find polite assistance in reaching any other point of that they wish to go to. Naturally, there is adv. the plan for the department-stores concerned as well public, but this is not necessarily an objection to it.

☐ HE designing of the forty-two new branch libraries negie, has been entrusted to Messrs. McKim, the city of New York owes to the genero ity of White; Babb, Cook & Willard, and Carrere & Hast will act together in arranging a uniform general details of the buildings being left to the firm to which allotted. The only exception is the Seventy-ninth is brary, for which plans have already been made by M Brown Lord. The sites for most of the buildings have been chosen, but it is hoped, by this arrangement, plans can be prepared with great rapidity as soon a acquired, and that, through the comparative uniform design, important economies in cost of constructio secured.

R. JAMES BROOKS, who died in London, ( was one of the ablest of modern English archite though he was an old man, and his professiona was rather of the last generation than of this, he stil honored place in the profession. He was awarded t Gold Medal of the Institute of British Architects in



