THE LOUISIANA PURCHASE EXPOSITION—ITS SCOPE AND ITS PURPOSE.

BY SAMUEL WILLIAMS.

The Louisiana Purchase Exposition, opened at St. Louis April 30, was planned to be "the greatest exposition ever held in the world." It was thought that the most fitting commemoration of one of the most important centennials in American history would be a World's Fair presenting a comprehensive and instructive illustration of the progress of all nations in arts, industries, and culture. It was an ambitious scheme, calling for the expenditure of enormous sums of money, a vast amount of skillful exploitation work, the exertion of America's influence with foreign governments, and the employment of an array of well known experts in collect-

ing and classifying the exhibits. But there seems to have been plenty of practical ability and high intelligence as well as ambition behind the scheme, and its projectors have unquestionably succeeded in creating an exhibition far surpassing all former ones in the amplitude, magnificence, and beauty of its equipment. Ten million dollars were granted by the city of St. Louis—\$5,000,000 by popular and an equal amount by municipal subscription—and an appropriation of \$5,000,000 was made by the United States Treasury, to which has recently been added a treasury loan of \$4,600,000, to be repaid from the exposition receipts, making \$19,600,000 expended by the Exposition Company in the three years since its organization. Forty-four States of our Union are

The Palace of Machinery.

Colonnade of the Palace of Manufactures.

Sculptured Groups in Front of the Palace of Electricity.

Palace of Transportation.

North Vestibule of the Palace of Machinery.

Part of the North Facade, Palace of Manufactures.

THE OPENING OF THE LOUISIANA PURCHASE EXPOSITION.

spending nearly \$7,000,000 on their exhibits, and thirty of them have beautiful State buildings erected on the grounds. The United States government has a special building and exhibits installed at an expense of \$1,600,000, and about sixty foreign governments are participating at an expense of over \$7,500,000. Mexico, France, England, Belgium, Brazil, Germany, Austria, Italy, Sweden, Holland, China, Cuba, Japan, Ceylon, Canada, Siam, India, and other countries have erected fine pavilions, some of which are noble replicas of famous old buildings, such as the Grand Trianon of France, the Orangery of Kensington Palace in England, Germany's Castle of Charlottenburg, Prince Pu' Lun's Peking residence, and Siamese and Japanese temples.

The site comprises 1,240 acres of lovely undulating park land, much of it covered with forest. The landscape gardener's art has heightened its scenic beauty. A commission of famous architects laid out the building scheme. About 1,000 structures are posed on the site. Many of these are exhibit buildings of enormous dimensions and grand and imposing in architectural design. Of the twelve largest exhibition palaces, that of Agriculture measures 1,600 by 500 feet; the Transportation Palace, 1,300 by 525; Manufactures, 1,200 by 525; Varied Industries, 1,200 by 525; Machinery, 1,000 by 525; Liberal Arts and Mines and Metallurgy, each 750 by 525; Electricity and Education, each 600 by 525. The exhibit palaces cover 128 acres of ground. Eight of these buildings, grouped on broad avenues and lagoons that focus on Art Hill with its cascades crowned by Festival Hall and the Terrace of States, compose what is called the "Main Picture." This picture is intended to be an exhibit of American architecture and sculpture at the beginning of the twentieth century, and over \$500,000 was set apart for the artists designing the sculptural decorations herein displayed.

The exhibits of all nations are the results of competitive selection. All exhibits have been subjected to an admirable scientific classification and are installed in their respective buildings in 144 groups and 807 classes, so that everything can be studied in comparison with all that belongs to its own class or group. Whenever practicable the "live exhibit," the process as well as the product, is demonstrated, and this has led to a great many "outdoor exhibits." Some fifteen acres in the "Mining Gulch" are devoted to mining and metallurgical demonstrations not admissible in the Mines and Metallurgy Palace. Although the Transportation Palace covers about fifteen acres and contains four miles of railway track, Germany's elaborate display of her terminals is on outside tracks, and the airship exhibits and contests are at the Stadium, half a mile west. All the space in the Electricity Palace had been reserved for preferred exhibits, more than a year ago, and yet many interesting exhibits competing for awards in this department are "live exhibits" at work as part of the immense lighting and power plant of the Exposition in the Machinery Palace. The British, French, German, Japanese, and other foreign pavilions are treasure houses of famous old paintings, sculptures, tapestries, pottery, and other decorative art work not entered in the competitive exhibits of the Palaces of Liberal Arts, Manufactures, and Fine Arts. The school, university, manual training, and technical institutions of Germany, France, England, and America are luminously illustrated here, both in organization and method, and the teaching of defectives will be shown in actual operation.

Scientists and members of all the technical professions will find that great entertainment has been prepared for them—laboratory demonstrations of all sorts; laboratory tests of locomotives, of power generators, and other machinery; elaborate models of harbor improvements and great engineering works in all parts of the world, including the great Assouan dam; tests of kites, aeroplanes, dirigible balloons, and other airship experiments. In addition there are such great attractions for them as the World Congress of Art and Science and a long series of technical and professional congresses, with distinguished participants

from many foreign countries. For musicians there are great musical events extending throughout the Exposition period, with recitals by the most distinguished organists on the most powerful and wonderful organ that was ever built.

For breeders of live stock there will be a live-stock show distributing \$250,000 in premiums, besides the prizes added by the breeding associations, which are all taking a profound interest in the contests.

For the physical culture advocate and the sportsman, the International Olympian Games for 1904 will be held in the noble Stadium and Athletic Field provided for them on the Exposition site, where will also be held a long series of inter-state, inter-collegiate, and inter-scholastic games and sports, for the expenses of which the Exposition has appropriated \$150,000.

The dominant idea to which the projectors of this Exposition have steadily adhered, was to make it an epochal event in the progress of mankind, a great world-university course, as it were; throwing world-wide light on all the paths of progress; aiding and stimulating invention; arousing that competitive instinct in man which impels him to improve the highest achievements of others, to produce something better than the best. The influence of former Expositions on subsequent progress has been distinctly manifest, and why should not the influence of an Exposition of far greater scope and resources be still more marked and memorable, as an inspiration to inventive genius and as a guide to popular taste and to social, civil, and industrial betterment? As the completest display ever made of the resources of our own country and of the

eter. The ground color of this roof is azure; it is dotted with stars and marked with meridians, to represent the heavens. In this building is the mechanism that connects with the underground machinery and moves the hands, also the mechanism that strikes the great bell. The south wall is of plate glass, and the glass in turn is hidden from view by a swinging door, except for a few minutes during every hour, when the door is thrown back automatically, revealing the works within. Above the dome is a figure of Time.

On the right of this central building is a similar structure, though smaller; the roof, also a hemisphere, represents half the earth, showing the western continents. Within hangs the 7,000-pound bell, which sounds the hours in deep tones that can be heard all over the Exposition grounds. And it is at the first stroke of the bell that the door swings open, revealing the clockwork.

A companion structure stands on the left of the central building, and within is an immense hour-glass that turns automatically every hour.

At night these three buildings will be brilliantly illuminated, and so will be the dial, to do which electric bulbs will nestle under the plants that form the numerals and cover the hands. To cause the necessary effect, two thousand lights will be used.

This clock, in so far as the machinery goes, is an exhibit of a western manufactory; the floral arrangement has been planned by the Chief of Agriculture of the Exposition and his assistants. Following the latest plans, the inner surface of the dial—the smaller

circle, which is bordered by a wide rim containing the numerals—will be of white, low-growing flowers bordered by a thin hedge of foliage plants. Within the rim the numerals of the hours will be dark tall foliage plants, thrown into relief by intervening white blossoms, the same as those growing in the inner circle. The border of the rim will be a circle of low-growing flowers, and beyond this again will be spears of foliage plants, red alternating with yellow, which will indicate the seconds, 1,800 of the one color and the same number of the other, making 3,600 in all.

Surrounding the complete circumference of the dial on the outside will be six feet of lawn, and surrounding this again will be a broad path of red-colored earth.

The minute and the hour hands are long steel troughs, in which fertilized earth has been placed to supply nourishment to the vines that will cover the metal and completely hide

it from view. The minute hand weighs 2,500 pounds, and the vines that will cover it would hide from view the front of a large house.

The effect in the daytime will be that of a mass of green moving slowly over a field of white, and pointing at brilliant-colored hours and minutes; at night, a glowing indicator will move above glowing numerals.

PARTICULARS OF THE GREAT CLOCK.

Diameter of dial	112 feet.
Length of minute hand	70 feet.
Diameter of the hands across the center ..	10 feet.
Minute hand moves each minute	5 feet.
Weight of minute hand	2,500 pounds.
Weight of bell	7,000 pounds.
Diameter of bell at mouth	70 inches.
Height of bell	60 inches.

The total cost of the eleven Washington University buildings, used by the Louisiana Purchase Exposition, is \$1,480,000. These buildings are all permanent structures.

Idaho was one of the first States at the World's Fair to complete its agricultural exhibit. The showing is a revelation as to that State's resources, and the taste displayed in the arrangement is much admired by all who see it.

President Roosevelt, from his desk in the White House at Washington, pressed the electric button which set in motion the wheels of the World's Fair machinery. This was done at exactly 1 o'clock, eastern time, or 12 o'clock, noon, St. Louis time.

THE GREAT FLORAL CLOCK AT THE ST. LOUIS EXPOSITION.

wonders wrought by our own people, it will not only be a beneficial revelation to themselves, but greatly enhance the prestige of our republic abroad. In such a representation of the races of men and of the products of nations, each is a teacher, each a learner, and must derive from it a clearer sense of the dignity of manhood and of the kinship of the human family.

THE LARGEST CLOCK IN THE WORLD.

BY CLAUDE H. WETMORE.

Sixteen times larger than any timepiece in the world will be the floral clock on the Exposition grounds at St. Louis, which is located in front of the north entrance to the Palace of Agriculture, and separated from that building by a driveway. Although it is what is known as a floral clock, it will keep accurate time, for beneath the vines and other plants, skilled artisans have constructed machinery similar to the works of a watch, but which in size bears the same comparison as does the dinotherium, which once inhabited the Miocene beds of Europe and Asia, to the titmouse of today.

The disk consists of a circle of flower beds one hundred and twelve feet in diameter; and the hands are long, green pointers, the largest of which moves five feet a minute. At the place where these hands join in the center, a tall man could lie down and the surface beneath would extend four feet beyond his head.

Between the dial and the Palace of Agriculture are three small ornate buildings. The central one, which is fourteen feet square at the base and fourteen feet to the cornice line, is of Grecian architecture, except the roof, which is a hemisphere twelve feet in diam-

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The Palace of Liberal Arts.

The Palaces of Electricity and Education, Showing One of the Many Ornamental Bridges.
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