

anxiety. The positive refusal of the government to become responsible for any part of the expenses of the Exhibition added to the embarrassment; for it was now seen that private resources and the good will of the people must furnish the entire sum necessary for the success of the enterprise. Several measures were accordingly adopted



GENERAL JOSEPH R. HAWLEY.

by the Centennial Commission looking to the creation of a treasury. By an act of Congress, passed on the 1st of June, 1872, provision was made for the organization of a Centennial Board of Finance, to which the whole monetary management of the Exposition should be entrusted. This board was organized by the election of John Welsh of Philadelphia as president. William Sellers and John S. Barbour were chosen vice-presidents. The office of secretary and treasurer was conferred on Frederick Fraley; that of auditor, on H. S. Lansing; and that of financial agent, on William Bigler. The board was authorized to issue stock in shares of ten dollars each, the whole number of shares thus issued not to exceed one million. It was also provided that a series of Centennial Memorial Medals should be struck at the mint of the United States, and that the sale of such medals should be under the exclusive control of the Board of Finance. The medals were elegantly executed in several styles and sizes—of gilt, silver, and bronze—furnishing for after ages an impressive token of the American Republic in its hundredth year.

Careful estimates, made by the Centennial Commission and the Board of Finance, placed the entire expense of the Exposition at *eight million five hundred thousand dollars*. Of this sum about two and a half millions were raised by the sale of stock—a work which was at first entrusted to the banks of the country and afterward to a Bureau of Revenue established for that purpose. Long before this amount was secured, however, the legislature of Pennsylvania made a glorious

record for that State by appropriating one million dollars for the Exhibition. The "City of Brotherly Love" did better still by voting the sum of one million five hundred thousand dollars. The people of New York City made a contribution of a quarter of a million. The State of New Jersey gave a hundred thousand dollars; New



CENTENNIAL MEDAL.—OBVERSE.



CENTENNIAL MEDAL.—REVERSE.

Hampshire, Connecticut, and Delaware, ten thousand dollars each. But notwithstanding these magnificent contributions, the aggregate sum fell far short of the estimates; and the Centennial Commission—in the face of the former illiberal action of Congress—resolved to make a second appeal to that body for help. A bill was accordingly prepared, asking for an appropriation of three million dollars from the national treasury; but on the 6th of May, 1874, the bill was decisively defeated—an act well calculated to bring the American name into contempt and shame.* The managers of the Exposition were again thrown back upon the people for sympathy and aid.

Meanwhile, the sale of stock and of medals, as well as other enterprises for the increase of the Centennial funds, was going on successfully. The Exposition gained constantly in public favor. Even in the Far West, Centennial orators traveled through the country districts, stirring up the enthusiasm of the people. The public Free Schools, by exhibitions and excursions, contributed their part towards the success of the great celebration. In June of 1874,

* After times may be astonished to know that the empire of Japan cheerfully contributed six hundred thousand dollars to the success of the American Centennial after the Congress of the United States had *twice* refused to vote a cent.

the President of the United States extended a cordial invitation to all the civilized nations of the world to participate in an International Exhibition of Arts, Manufactures, and Products of the Soil and Mine, to be held in the city of Philadelphia in 1876, in honor of the one hundredth anniversary of American Independence. By and by, the contagion spread even to Congress, and that body passed an act appropriating five hundred and five thousand dollars for the erection of a Centennial Building in honor of the United States and for the illustration of the functions and resources of the American Government in times of peace and of war. The legislatures of several of the States also became interested in the enterprise, and made appropriations—ranging from five thousand to fifty thousand dollars—for the purpose of erecting State Buildings on the Exhibition grounds, the sum thus contributed amounting to nearly a half million dollars. Finally, as the success of the Exposition became more and more assured, the patriotism of the people and the clamors of the press *drove* the national Congress into an appropriation of a million five hundred thousand dollars to supply the deficit which was still reported by the Board of Finance. Such were the principal measures by which the Centennial fund was finally secured.

One of the first matters to which the attention of the Centennial Commission was directed, was the selection of suitable grounds for holding the Exposition. But that problem was soon solved in the most satisfactory manner. By the act of March 3d, 1871, it was decided by Congress that the Exhibition should be held within the corporate limits of Philadelphia. The authorities of that city, throwing their whole energies into the enterprise, at once proffered to the commissioners the free use of Fairmount Park, one of the largest and most magnificent in the world. This beautiful tract, presenting every variety of surface, well wooded and well watered, extends on both sides of the Schuylkill for more than seven miles, and along the banks of the Wissahickon for nearly the same distance. The entire park embraces two thousand seven hundred and forty acres, and presents to the eye every thing that is lovely and refreshing in woodland scenery, beautified and adorned by the hand of art. The portion of the grounds more particularly set apart for the purposes of the Exposition, including an area of four hundred and fifty acres, lies on the right bank of the Schuylkill, below Belmont, and was formerly known as the old Lansdowne Estate.

The formal transfer of the grounds to the Centennial Commission was made on the 4th of Ju'y, 1873. An immense throng of citizens



THE CENTENNIAL GROUNDS AND BUILDINGS

and strangers gathered in the park to witness the ceremonies. The address of presentation was made by the Honorable Morton McMichael of Philadelphia, and the response by General Hawley, president of the Commission. The dedicatory oration was then delivered by Governor Hartranft of Pennsylvania, who, after reciting the congressional acts and various other measures upon which the Centennial enterprise had thus far proceeded, continued in the following eloquent manner:

"We have assembled here to dedicate a portion of this beautiful park to the uses of a great International Exhibition, which is to commemorate the anniversary of our country's birth. Upon the threshold of the century to expire in 1876, thirteen poor and feeble colonies, with no common ties other than their love of liberty and hatred of oppression, declared their independence. These Thirteen Colonies, with their offspring, now increased in number to thirty-seven, stretch their empire across a continent, and afford the grandest exhibition of a nation's progress in the world's history. In all the wondrous changes wrought in the nineteenth century, none are so wondrous and conspicuous as the industrial, moral, and physical growth of this our native land. With those powerful auxiliaries, steam and the telegraph—both of which our country gave to mankind—we are striding with majestic steps toward a dominion unrivaled by any other nation on the face of the earth. Let us, then, from every State—north, south, east, and west—bring to this great city, the consecrated place where our liberty was born, the evidences of our culture, the proofs of our skill, and our vast and varied resources, that the world may have a glimpse of our enlargement, industry, wealth, and power. To the myriads who will gather here, let us accord a welcome which shall be in keeping with the dignity and magnitude of our country. Here, too, let our own people gather, garnering new and fresh ideas from a survey of the world's arts and industries; and let us dedicate ourselves to a higher civilization, to more extensive fields of development, to more liberal and more widely diffused education, to the purification of our institutions, and to the preservation of that liberty which is the foundation-stone of our prosperity and happiness."

Governor Hartranft was followed by George M. Robeson, secretary of the navy, who read a proclamation by the President of the United States; and then the General Regulations for the government of the Exposition were announced as follows:

I. The International Exhibition of 1876 will be held in Fairmount Park, in the city of Philadelphia, in the year 1876.

II. The date of opening the Exhibition will be April 19th, 1876, and of closing will be October 19th, 1876.

III. A cordial invitation is hereby extended to every nation of the earth to be represented by its arts, industries, progress, and development.

IV. A formal acceptance of this invitation is requested previous to March 4th, 1874.

V. Each nation accepting this invitation is requested to appoint a Commission, through which all matters pertaining to its own interests shall be conducted. For the purpose of convenient intercourse and satisfactory supervision, it is especially desired that one member of every such Commission be designated to reside at Philadelphia until the close of the Exposition.

VI. The privileges of exhibitors can be granted only to citizens of countries whose governments have formally accepted the invitation to be represented, and have appointed the aforementioned Commission; and all communications must be made through the Governmental Commissions.

VII. Applications for space within the Exposition buildings, or in the adjacent buildings and grounds under the control of the Centennial Commission, must be made previous to March 4th, 1875.

VIII. Full diagrams of the buildings and grounds will be furnished to the Commissioners of the different nations which shall accept the invitation to participate.

IX. All articles intended for exhibition, in order to secure proper position and classification, must be in Philadelphia on or before January 1st, 1876.

X. Acts of Congress pertaining to custom-house regulations, duties, etc., together with all special regulations adopted by the Centennial Commission in reference to transportation, allotment of space, classification, motive power, insurance, police rules, and other matters necessary to the proper display and preservation of materials,—will be promptly communicated to the accredited representatives of the several governments cooperating in the Exposition.

On the day after the dedication of the grounds in Fairmount Park, a copy of the President's proclamation, already mentioned, was transmitted to each of the foreign ministers resident at Washington. At the same time, the American secretary of state notified the minis-

ters that the proposed display was intended as an International Exhibition of Arts, Manufactures, and Products of the Soil and Mine; that the special design of the Exposition was to commemorate the Declaration of the Independence of the United States; that another prime object was to furnish to all nations an opportunity for mutual improvement and a higher culture in beholding the products of each other's civilization; that the President of the United States indulged the hope that all the diplomatic representatives of foreign nations would bring the Exposition and its objects to the attention of the people of their respective countries; and that the Exhibition might greatly conduce to the establishment and perpetuation of international friendship and good will. These official communications were cordially received by the foreign ministers and by the governments which they represented. The President's invitations were quickly accepted; and before the expiration of the allotted time, the following nations had notified the American Government of their desire and intention to participate in the Exposition: The Argentine Confederation, Austria, Belgium, Bolivia, Brazil, Chili, China, Denmark, Ecuador, Egypt, France (including Algeria), German Empire, Great Britain and her Colonies, Greece, Guatemala, Hawaii, Hayti, Honduras, Italy, Japan, Liberia, Mexico, Netherlands, Nicaragua, Norway, Orange Free State, Persia, Peru, Portugal, Russia, Siam, Spain, Sweden, Switzerland, Tunis, Turkey, United States of Colombia, Venezuela.

One of the earliest and most difficult of the subjects which engaged the attention of the Centennial Commission was the proper analysis and classification of the materials to be exhibited. Until this question was settled it could not be known what buildings to erect or how to erect them. Nor could the various nations know in advance how to select and arrange their products so as to come into proper competition with each other, until a General Classification should be prepared and reported. It was foreseen, moreover, that a mistake in this regard would be in a great measure fatal to the success of the Exposition, as a bad classification would be sure to result in heaping up in the Centennial buildings a vast and chaotic mass of materials which nobody could appreciate or understand. In this important work of classification the Commissioners—considering the magnitude and novelty of the task imposed upon them—succeeded admirably. It was decided to arrange all of the materials which should be presented for exhibition in ten great classes or departments,

the names of which should suggest, even to the common beholder, the particular object on display. The following was the General Classification adopted by the Commission:

- I. RAW MATERIALS; Mineral, Vegetable, and Animal.
- II. MATERIALS AND MANUFACTURES USED FOR FOOD OR IN THE ARTS; the results of Extractive or Combining Processes.
- III. TEXTILE AND FELTED FABRICS; Apparel, Costumes, and Personal Ornaments.
- IV. FURNITURE AND MANUFACTURES OF GENERAL USE IN CONSTRUCTION AND IN DWELLINGS.
- V. TOOLS, IMPLEMENTS, MACHINES, AND PROCESSES.
- VI. MOTORS AND TRANSPORTATION.
- VII. APPARATUS AND METHODS FOR THE INCREASE AND DIFFUSION OF KNOWLEDGE.
- VIII. ENGINEERING; Public Works, Architecture, etc.
- IX. PLASTIC AND GRAPHIC ARTS.
- X. OBJECTS ILLUSTRATING EFFORTS FOR THE IMPROVEMENT OF THE PHYSICAL, INTELLECTUAL, AND MORAL CONDITION OF MAN.

Each of these general departments was divided and subdivided until a proper classification of all the materials about to be exhibited was secured.

To erect buildings suitable in character and capacity—buildings illustrative of the taste, equal to the enterprise, and worthy of the genius of the American people—was the next great duty devolved upon the Centennial Commission. Here success was necessary. To succeed was to elicit the admiration of every people; to fail was to fail ingloriously. The reputation of the United States was at stake. For the foremost men of all the world, the savants of Europe and Asia—art critics, wits, and journalists; statesmen, poets, and philosophers; admirers of the beautiful, keen-scented satirists, and dislikers of republicanism out of every clime under heaven—were sure to gaze upon and criticise whatever should be built in Fairmount Park, and to carry abroad the story of our honor or our disgrace. Grand and imposing structures would add to the dignity of the great occasion. Mean and insignificant buildings would insure a mean and insignificant exhibition, and that, in its turn, would produce among all nations a contemptuous estimate of the American people and their institutions.

After much deliberation, the Centennial Commission determined upon the erection of five principal buildings, the name and character

of each to be determined by the nature of the materials therein to be displayed. The first of these, called **THE MAIN BUILDING**, was designed with special reference to the exhibition of Products of the Mine, Workmanship in the Metals, Manufactures in general, Educational and Scientific displays. The second building—called **THE MEMORIAL HALL**, or **ART GALLERY**—was planned for the exhibition of the Fine Arts in all their various branches and modifications—Sculpture, Painting, Engraving, Lithography, Photography, Industrial and Architectural Designs, Decorations, and Mosaics. The third principal building was named **MACHINERY HALL**, and was designed for the display of Machines of every pattern and purpose known to man—Motors, Generators of Power, Pneumatic and Hydraulic Apparatuses, Railway Enginery, and Contrivances for Aerial and Water Transportation. The fourth edifice projected by the Commissioners was called **AGRICULTURAL HALL**, and was planned for the exhibition of all Tree and Forest Products, Fruits of every grade and description, Agricultural Products proper, Land and Marine Animals including the Apparatus used in the Care and Culture of the same, Animal and Vegetable Products, Textile Materials, Implements and Processes peculiar to Agriculture, Farm Engineering, Tillage and General Management of Field, Forest, and Homestead. The fifth and last building, called **HORTICULTURAL HALL**, was designed for the proper display of Ornamental Trees, Shrubs, and Flowers—Hot-houses, Conservatories, Graperies; Tools, Accessories, Designs, Construction, and Management of Gardens. Such was the general plan under which the principal edifices of Fairmount Park were begun.

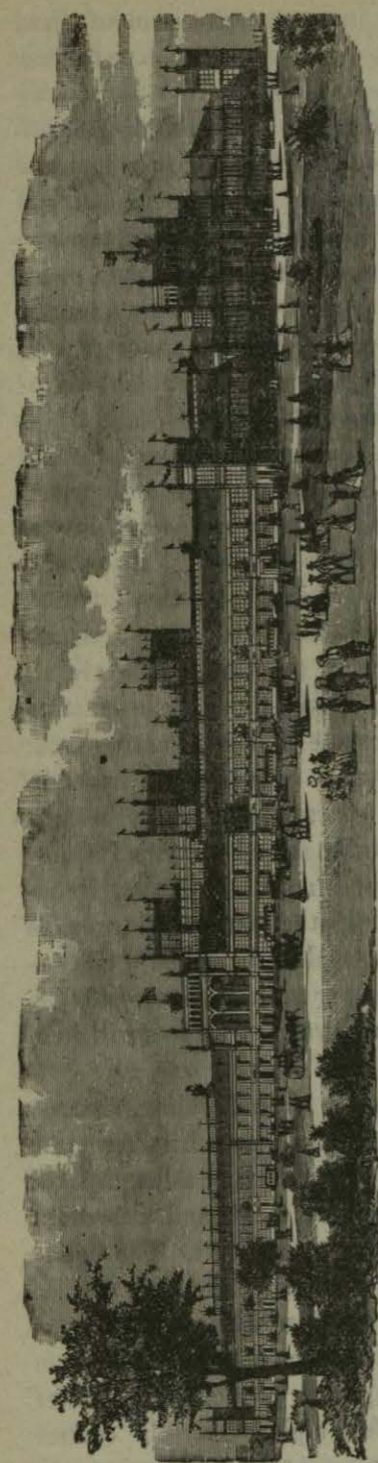
On the 4th of July, 1874, the foundations of Memorial Hall were laid with appropriate ceremonies. In the following September, work was begun on the Main Building, and was steadily carried forward during the whole of the next year and until the beginning of February, 1876, when the immense structure was completed. Machinery Hall was built between the months of January and October, 1875. On the 1st of May, in the same year, the foundations of Horticultural Hall were laid, and the building was brought to completion April 1st, 1876. Agricultural Hall was not begun until September of 1875, but the work was carried forward so rapidly that the edifice was completed by the middle of the following April. Meanwhile, the work on **THE GOVERNMENT BUILDING**, the construction of which had been provided for by the congressional act of March 3d, 1875, was pressed to completion early in 1876. Moreover, it had become apparent to the Commissioners that the space provided in Memorial Hall

would by no means accommodate the immense exhibition of Fine Arts which was now confidently expected; and an **ART ANNEX** was accordingly planned and built. It was also found from the rapidly accumulating applications for space that the Main Building itself would be filled to overflowing; and two Annexes—the principal one for carriages and the other for the display of the Minerals of the United States—were accordingly added to that immense structure.

Other buildings—illustrative of various interests and enterprises brought together from the ends of the earth—were rapidly planned and constructed. A **WOMAN'S PAVILION**, projected and carried to completion by an organization called the Women's Centennial Executive Committee, was begun in the middle of October, 1875, and finished in the following January. The building was designed for the special exhibition of whatever woman's skill, patience and genius have produced, and are producing, in the way of handicraft, invention, decorations, letters, and art. Next came the several States and Territories, selecting grounds and constructing a series of **STATE BUILDINGS**, commemorative of the spirit and illustrating the resources of the respective commonwealths of the Union. Nearly all the foreign nations participating in the Exposition made haste to erect, for their own convenience and for the honor of native land, elegant **GOVERNMENT BUILDINGS**—French, Spanish, or British—which became a kind of head-quarters and rendezvous for the several nationalities. Then came model dwellings and Bazaars, School-houses and Restaurants, Judges' Halls and model Factories, Newspaper Buildings and Ticket Offices,—until the Centennial grounds (capacious as they were) were filled with—shall it be called a city?—the most imposing, spacious, and ornate ever seen in the world. A more complete description of some of those grand structures will here be appropriate.

The first and largest of them all was the Main Building, situated immediately east of the intersection of Belmont and Elm Avenues. The edifice was in the form of a parallelogram, having a length from east to west of eighteen hundred and eighty feet,* and a breadth from north to south of four hundred and sixty-four feet. The building throughout its greater extent was one story high, the main cornice being forty-five feet from the ground. The general height within was seventy feet, rising to ninety feet under the principal arcades. From each of the four corners of the building rose a rectangular tower forty-eight feet square and seventy-five feet high. Over the central

* Eighteen hundred and seventy-six feet (the Centennial number) in the clear.



MAIN EXPOSITION BUILDING.

portion of the main structure a raised roof one hundred and eighty-four feet square was likewise surmounted at the corners by four towers a hundred and twenty feet in height. In the middle of the two sides, looking north and south, were the principal projections, four hundred and sixteen feet in length. The corresponding projections at the ends were two hundred and sixteen feet long, and extended, the western in the direction of Machinery Hall, and the eastern towards the city. In these four projections were placed the main entrances to the building; that on the east facing the carriage-ways to the city; the southern receiving passengers from the street-cars and the dépôt of the Pennsylvania Railway; the western being rather an exit to other parts of the grounds than an entrance proper; and the northern facing Memorial Hall and the Schuylkill.

In the ground-plan of this immense building a central nave or avenue, a hundred and twenty feet in width, traversed the main diameter to the distance of eighteen hundred and thirty-two feet. Parallel with this, two side aisles a hundred feet wide, and of the same length with the principal nave, divided the spaces between the same and the sides of the building. These three main avenues were intersected at right angles by cross aisles forty-eight feet in width, dividing the whole area

of the floor into blocks or squares, with spacious avenues entirely around them. The principal nave and its parallel aisles were likewise intersected by the main and two subordinate transepts, dividing the central space of the ground-floor into nine great squares, free from columnar support, and embracing an area of over a hundred and seventy-three thousand square feet. The entire area of the ground-floor was eight hundred and seventy-two thousand three hundred and twenty square feet; of the floors in the projections, thirty-seven thousand three hundred and forty-four feet; of the tower floors, twenty-six thousand three hundred and forty-four feet;—making an aggregate area of nine hundred and thirty-six thousand and eight square feet, or *twenty-one and forty-seven hundredths acres!* The ground-floor proper covered a space of a little more than twenty acres.*

The building was chiefly of iron and glass, and contained a mass of material unprecedented in the history of architecture. The outer walls were carried up in brick-work to the height of seven feet from the foundations, which consisted of stone piers of the most substantial masonry. Above the brick-work the panels between the columns of support were occupied with glazed sash, sections of which were movable for purposes of ventilation. The roof was of tin, laid solidly on boards of pine; and the exterior ornaments—abounding on all the corners, angles, and towers—were of galvanized iron. The columns of interior support—numbering six hundred and seventy-two, and ranging from twenty-three to one hundred and twenty-five feet in length—were of rolled iron, and had an aggregate weight of two million two hundred thousand pounds. The roof trusses and girders were of the same material, and weighed about five million pounds. No less than seven million feet of lumber were used in the construction of the building.

* A comparison of the leading Centennial buildings (in respect of dimensions) with other famous edifices may prove of interest.

NAME OF STRUCTURE.	AREA OF GROUND-FLOOR.	
Main Exposition Building,	872,320 Square feet,	20.02 Acres.
Machinery Hall,	558,440 " "	12.82 "
Agricultural Hall,	442,800 " "	10.16 "
Memorial Hall,	76,650 " "	1.76 "
Horticultural Hall,	73,912 " "	1.69 "
The Louvre (including the court),	309,888 " "	7.11 "
St. Peter's,	273,927 " "	6.28 "
The Capitol,	261,348 " "	6.00 "
The Coliseum,	245,340 " "	5.63 "
St. Paul's,	142,500 " "	3.27 "
Cathedral of Milan,	139,968 " "	3.21 "
Tuileries,	108,864 " "	2.50 "
Westminster,	103,733 " "	2.38 "
St. Sophia,	82,600 " "	1.89 "
St. Stephen's,	81,420 " "	1.86 "
Notre Dame,	56,160 " "	1.27 "