Authentic Guide

...TO...

CHICAGO

AND THE

WORLD'S COLUMBIAN EXPOSITION.

PUBLISHED BY

THE MERCHANTS' WORLD'S FAIR BUREAU
OF INFORMATION CO.

CHICAGO.

1893
AUTHENTIC GUIDE TO

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MERCHANTS' WORLD'S FAIR
BUREAU OF INFORMATION COMPANY.

CHICAGO.

1893.
This Building is located between
State and Dearborn Streets,
Half block east of Post Office.

The Main Offices of the
MERCHANTS’
World’s Fair Bureau of Information Co.
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CHICAGO

AND THE

WORLD'S COLUMBIAN

EXPOSITION
I.

A CHAPTER CONCERNING CHICAGO.

F
ew, indeed, were there on that memorable morning of the 10th October, 1871, looking over the charred and calcined ruins of Chicago, but a few short hours before “in one red burial blent,” who had faith prophetic enough to picture the gruesome ruins as the Garden City of to-day, the smouldering site as the heart of the commerce of America, or that morass and swamp to the southward as the home of the mighty World’s Columbian Exposition, the Marvel City of America. True it is, that the indomitable resolve of the citizens soon began to assert itself. As is well said by Kipling in his story of Chicago, ‘Man had built Chicago and could build it again.” Some one, he tells us, saw a ‘burnt-outer’ pick up a brick from his ruins and asked him what he was looking for. ‘Looking to see how soon they will be cool enough to lay again,’ said he. “The most extravagant prediction of a representative Chica
gan of those days was, “By the year 1900 the new Chicago will boast a population of one million souls.” To-day (1893) the city contains over a million and a quarter inhabitants! It required the prophetic vision of a Whittier to

\[
\text{Hear the tread of pioneers} \\
\text{Of nations yet to be;} \\
\text{The first low wash of waves, where soon} \\
\text{Shall roll a human sea.}
\]

Necessar
ily very limited as the space at the compiler’s disposal is, equally small seems the need for any historical details concerning a city essentially of the present. In 1801, the site was a sluggish swamp; by 1811, it has progressed to the minor importance of a small military post, shortly afterward abandoned and the scene of the sanguinary Fort Dearborn massacre; in 1831, it was a village of 12 houses; in 1841, an incorporated city with 5,752 inhabitants; in 1871, rich, proud and magnificent, but suddenly, on that terrible October night, all but swept out of existence; and now, in 1893, the greatest railroad centre, the largest live stock market and primary grain port of the world, the chosen site of the most magnificent exposition the world has ever seen. This is Chicago, and of her may America well be proud.
PREFACE.

The first requisite of a stranger visiting the World's Fair City, is, without a doubt, an accurate, concise, and intelligent guide book. How much more is such a guide an essential to a visitor to that vast architectural triumph; well called "The White City?" Its mammoth buildings and myriad exhibits are indeed bewildering without one. Many books are prepared, but few possess any merit (other than in their publisher's eyes, as a medium for every profitable advertising).

The Merchant's World's Fair Bureau of Information, conscious of the first want, and ever careful of the needs of their patrons, determined at the very inception of their undertaking to have specially prepared, by an expert and highly qualified writer, an authentic, and accurate Guide to Chicago and the World's Fair, expressly written for their use; concise yet clear, intelligent and thoroughly up to date; this guide has been prepared by a resident of Chicago who has, from the very inception of the Exposition, been almost daily upon the World's Fair grounds or in its buildings, collecting authentic and exclusive information and data. A perusal of its pages will enable the reader, readily, easily, and intelligently to find his way around the sights of the World's Fair City and thoroughly to explore, with the least waste of time, the multitudinous wonders of the greatest Exposition the universe has ever beheld.

CHICAGO, January, 1893.
II.
THE METHODS OF ARRIVAL IN THE WORLD’S FAIR CITY.

Turning at once without further digression to the practical needs of the tourist as most suited to the pages of a practical pocket guide, we proceed to consider the various routes open to him whereby to arrive at or depart from Chicago.

PASSENGER DEPOTS OF CHICAGO.

The passenger depots of the chief railroads entering into Chicago are conveniently situated near the business center of the city, and a considerable number of the railroad companies do a large suburban business. The principal depots are as follows:

- Atchison, Topeka & Santa Fe, Central Depot, Polk Street and Third Ave.
- Baltimore & Ohio, Grand Central Depot, Fifth Avenue and Harrison Street.
- Chicago & Erie, Central Depot, Polk Street and Third Avenue.
- Chicago & Alton, Central Depot, Canal and Adams St. (West Side).
- Chicago & Eastern Illinois, Central Depot, Polk St. and Third Ave.
- Chicago & Grand Trunk, Central Depot, Polk Street and Third Avenue.
- Chicago & Northern Pacific, Central Depot, Fifth Avenue and Harrison St.
- Chicago, Burlington & Quincy, Central Depot, Canal and Adams Streets, (West Side).
- Chicago & North Western, Central Depot, Wells and Kenzie Street, (North Side.)
- Chicago, Milwaukee & St. Paul, Central Depot, Canal and Adams Street. (West Side).
- Chicago, Rock Island & Pacific, Central Depot, Van Buren and Sherman Streets.
- Chicago, St. Paul & Kansas City, now called Chicago Great Western, Central Depot, Harrison Street and Fifth Avenue.
CITY HALL AND COURT HOUSE.
Cleveland, Cincinnati, Chicago & St. Louis, (Big Four), Central Depot, foot of Lake Street.

Illinois Central, Central Depot, foot of Lake Street. (The new depot of this company, now in the course of erection is located at the foot of Park Row, but trains for the World’s Fair traffic will run as usual from Van Buren Street and the Lake Front, opposite where the steamboats for the lake trip to the World’s Fair start).

Lake Shore & Michigan Southern, Central Depot, Van Buren and Sherman Streets.

Louisville, New Albany & Chicago, (Monon Route), Central Depot, Polk Street and Third Avenue.

Michigan Central, Central Depot, foot of Lake Street.

Pennsylvania Company, Central Depot, Canal and Adams Street, (West Side).

Pittsburg, Fort Wayne & Chicago, Central Depot, Canal and Adams Street, (West Side).

Wabash Railroad, Central Depot, Polk Street and Third Avenue.

Wisconsin Central, now a portion of the Chicago & Northern Pacific system, Central Depot, Fifth Avenue and Harrison St. Elevated R. R.

These railroads will give the traveller excellent opportunities of viewing the suburban part of Chicago, many pretty towns having grown up for 50 miles out along these lines.

When the visitor arrives at any of these depots, coming to visit the World’s Fair, a word or two of caution is necessary for his guidance.

The police force of Chicago though numbering 2,700 men, is unfortunately too small by half, and as a consequence every scheme and device for defrauding the stranger and the unwary flourishes. The safest plan is to have no dealings or conversation with anybody who desire to force his acquaintance upon a stranger, or afford him information, or conduct him to any place, unless these persons wear the police uniform, or are dressed in the uniform of the efficient guides of the Merchant’s World’s Fair Bureau of Information Company.

Above all, be wary of the man who pretends that he knows you, and knows where you come from. He is generally a bunko steerer, or a "capper" for a shell game.
GRAND CENTRAL DEPOT,
Fifth Avenue and Harrison Street.

LAKE SHORE DEPOT,
Van Buren and Sherman Streets.
The average visitor, it is presumed, knows what a bunko steerer means. It would be well to tell the visitor never to show his money to a stranger, or trust his satchel with anyone with whom he is not perfectly acquainted.

Avoid all great bargains offered to you in the street, it is not the custom in this city to do legitimate business in such a manner. The average sensible and sober traveller need fear nothing if he is only a trifle circumspect. The streets, in seasonable hours, are as safe as his own house if he will only mind his own affairs and take care that other people do the same. It is only the "sucker" who, wandering after sights, (some of them more amu-ing than polite,) falls in the way of "Captain Shark" and his gang.

The principal depots of Chicago, as has been before stated, are close to the business center, and are served by a network of street car lines. In addition to this a competent supply of public conveyances are to be found at every railroad depot. Parmee'ee's Omnibusses are thoroughly reliable and will convey the traveler to any of the hotels and check his baggage at reasonable rates. His officials board all trains before they reach Chicago, are in uniform, and may be relied upon implicitly. For the guidance of the stranger a full copy of the hack ordinance is here printed so that he may avoid imposition upon the part of the Chicago Cabmen, who have an unfortunate habit (common to all' cabmen) of taking all they can get of a stranger.

HACK ORDINANCE.

RATES OF FARE FOR HACKS, CABS, AND OTHER TWO-HORSE VEHICLIER—For conveying one or two passengers from one railroad depot to another railroad depot, $1. For conveying one or two passengers not exceeding one mile, $1. For conveying one or two passengers any distance over one mile and less than two miles $1.50. For each additional two passengers of same party or family, 50 cents. For conveying one or two passengers in said city any distance exceeding two miles, $2. For each additional passenger of the same party or family, 50 cents. For conveying children between five and fourteen years of age, half the above price may be charged for like distances; but for children under five years of age no charge shall be made—provided that the distance from any railroad depot, steamboat landing, or hotel, to any other railroad depot, steamboat landing, or hotel, shall in all cases be estimated as
CENTRAL DEPOT,
Polk Street and Third Avenue.

UNION DEPOT,
Canal and Madison Streets.
not exceeding one mile. For the use by day of any hackney coach or other vehicle drawn by two horses or other animals, with one or more passengers, per day, § 8. For the use of any such carriage or vehicle by the hour, with one or more passengers, with the privilege of going from place to place, and stopping as often as may be required, as follows: For the first hour, §2; for each additional hour or part of an hour, §1. Every passenger shall be allowed to have conveyed upon such vehicle, without charge, his ordinary traveling baggage, not exceeding in any case one trunk and twenty-five pounds of other baggage. For every additional package, where the whole weight of baggage is over one hundred pounds, if conveyed to any place within the city limits, the owner or driver shall be permitted to charge 15 cents.

HANSOM CAB ORDINANCE.

Rates of Fare for Hansom Cabs and Other One-Horse Vehicles.—The price or rate of fare to be asked or demanded by the owners or drivers of cabs or other vehicles drawn by one horse or other animal for the conveyance of passengers for hire, shall be not more than as follows: One mile, or fraction thereof, for one or more passengers for the first mile, 50 cents. One mile, or fraction thereof, for any distance after first mile, for one or more passengers, 25 cents. For the first hour, 75 cents. For each quarter hour additional after first hour; 20 cents. For service outside of the city limits and in the parks, for the first hour, $1. For each quarter-hour additional after the first hour, 25 cents. The provision regarding amount of baggage allowed free, and rates of charge for excess, is the same as in the Hack Ordinance.

Omnibus and Baggage Transfer Rates—Omnibuses run between all the depots and to all the principal hotels, connecting with all the passenger trains. The rate of fare to or from an depot or hotel is 50 cents, payable in exchange for a ticket to the agent on train or to the collector in the vehicle. The price charged by the same company (Parmelee's) for transferring baggage to or from any train, and to or from any place within the city limits, is 50 cents for the first piece and 25 cents for each piece additional.

The Hotels of the City of Chicago.

It is doubtful if any other city in the United States or in the world is so well supplied with hotels in which the tourists or visitor
LIBBY PRISON WAR MUSEUM.

SCENE ON THE CHICAGO RIVER.
can be housed in comparative comfort or superlative splendor, according to the state of his pocket.

There are "all sorts and conditions" of hotels in Chicago, ranging in price from $40.00 a day down to $1.00. In fact, with regard to them it is only a case of the old adage "you pay your money and take your choice". While they will be, on occasions, taxed to their utmost in Chicago during the World's Fair, so that the safe plan is to secure accommodations beforehand, still the average visitor need not fear that he will be required to sleep in a freight car or slumber on the Lake Front.

A list of the principal hotels, with rates, are here given. The principal ones in the business portion of the city are:

- Sherman House, (American) Clark Street, cor. Randolph Street.
- Tremont, (American) Dearborn Street, cor. Lake Street.
- Palmer House, (American and European) State Street, corner Monroe Street.

On the route to and in the neighborhood of the Exposition are the following hotels:

- Alabama Hotel, (American and European) Bowen and Berkley Avenues. Rates $2.50 to $3.00.
- Alhambra Hotel, (American) State and Archer Avenue. Rates $2.50 to $3.50.
- Chicago Beach Hotel, Fifty first and East End Avenue. Rates $4.00 to $15.00.
- Clarendon Hotel (American) Clark and Ontario Streets. Rates, $2.50 to $4.00.
- Columbia Hotel (American and European) Thirty-first and State Street. Rates, $2.00 to $4.00.
SHERMAN HOUSE.

HOTEL WELLINGTON.
World's Columbian Exposition.

Columbia European Hotel, (European) 196 Fifty-first Street. Rates, $1.50 and up.

Columbian Hotel, Seventy-third Street and Kinney Avenue.
Commercial Hotel, (American) 243 Sixty-third Street, (Englewood). Rates, $2.00 and upwards.
Cornell Avenue Hotel, (European), Cornell Avenue between 5th and 5.1/2nd Street. Rates, $1.50 to $4.00.

Englewood World's Fair Hotel, (American and European), Seventy-first and State Streets.
Exhibitors' Union, Stony Island Avenue and Seventy-first Street. 1,000 rooms.

The Exposition Depot Hotel, (European), Cor. Seventy-first and Avenue B. Rates $1.00 and up. 360 rooms.

The Family Dormitory Association, Yates Avenue and Seventy-fifth Street. 750 rooms.

Grand Crossing Hotel, (American), Seventy-sixth Street and Woodlawn Avenue. Rate $2.00.

Great Eastern Hotel, (European), Sixtieth Street and St. Lawrence Avenue. 1,100 rooms.

Greenwood Avenue Hotel, (American), Greenwood Avenue and Grand Crossing. Rate $1.00.

Great Western Hotel, Seventy-third Street and Stony Island Avenue.

Hampden Hotel, (American and European), Thirty-ninth and Langley Avenue. Rates $2.00 to $5.00.

Hyde Park Hotel, (American), Fifty-first and Lake Avenue. Rates, $3.00 to $8.00.

Hotel Alvord, (American), N. W. Cor. Oakwood Boulevard and Cottage Grove Avenue. Rates $2.00.

Hotel Beatrice, (European), Cor. Fifty-seventh Street and Madison Avenue. Rates, $2.50 to $5.00.

Hotel Buckner, (American and European), 5479 Lake Avenue. Rates $2.50 and up.

Hotel Caldwell, (American and European), 315 Sixty-third Street. (Englewood). Rates, American, $2.00 and up; European, $1.00 to $3.00.

Hotel Concord, (American), 1836 to 1840 Wabash Avenue. Rates, $2.00 to $4.00.
Hotel Damon, (European), for Knights of Pythias and friends, Sixty-fourth and Wentworth Avenue. Rates $1.00 and up.

Hotel Delaven, (European), Ontario and Clark. Rates, $1.00 to $2.50.

Hotel Drexel, (American) 3956 Drexel Boulevard. Rates, $2.00 to $4.00.

Hotel Endeavor, Lake Shore south of Seventy-first Street.

Hotel Edwards, (American), 228 to 236 Washington Boulevard. Rates, $1.50 to $2.50.

Hotel Gresham, (European and American), 2246 Wabash Ave. Rates, $1.50 to $3.00.

Harvard, (American and European) 5714 Washington Avenue. Rates, $2.00 and up.

Hotel Helene, (European and American), 108 to 114 Fifty-third Street. Rates $1.50 to $3.00.

Hotel Holland, (American and European), Fifty-third and Lake Avenue. Rates, $2.50 to $4.00.

Howard, (European), 6802 and 6804 Yale Avenue, (Englewood). Rates, $1.00 and up.

Hotel Metropole (American and European) Twenty-third and Michigan Avenue. Rates, 4.00 to $15.00.

Hotel Norwalk, (American and European,) opposite South Park Station. Rates $2.00 and up.

Hotel Royal, (American and European), 518 Sixty-third Street, Englewood Rates American $2.00, European $1.00.

Hotel Security, (European), Stoney Island Avenue and Seventy-third Street.

Hotel Stockholm, (European), 54 and 56 Chicago Avenue. Rates 75c. to $1.00. Swedish.

Hotel Svea, (American), 129 to 133 East Chicago Avenue. Rates, $1.50 to $2.00. Swedish.

Hotel Vendome, (American and European), Fifty-fifth Street and Monroe Avenue. Rates, American $1.50 to $2.50, European 50c. to $1.00.

Hotel Vendome, (American), Centre and North Park Avenues. Rates, $2.00 to $4.00.

Hotel Veteran, 7302 Stony Island Avenue.
TREMONT HOUSE.

FIRST NATIONAL BANK BUILDING.

Hotel Woodruff, (American), 2103 Wabash Avenue. Rates $2.50 to $5.00.

Jackson Park Hotel and Restaurant, (American and European), 135 Fifty-sixth Street. Rates, $2.50 to $4.00.

Julian Hotel, (American), Sixty-third and Stewart Avenue. Rates $3.00 to $6.00.

Libby Hotel, (European), 114 and 1416 Wabash Avenue. Rates, $1.00 to $2.50.


The Mecca Hotel, (American and European), Thirty-fourth and State Streets. Rates, $1.00 to $1.00.

Morgan House, Sixty-second Street. Rates, $1.00 and up.

New England Hotel. Seventy-third and Stony Island Avenue, 240 rooms.

The Oak View, (European) Sixtieth Street and Edgerton Avenue. Rates, $1.00 and up.

Oakland Hotel, (American and European), Oakwood Avenue and Drexel Boulevard. Rates $2.50 to $5.00.

Park House, (European), cor. Fifty-sixth and Lake Avenue (Hyde Park). Rates $2.00 and up.

The Park Gate Hotel, Sixty-third Street and Stony Island Avenue.

Parkside Hotel, (European), Stony Island Avenue and Sixty-third. Rates $2.00 to $6.00

Paxton Hotel, (American and European), State and Twenty-fifth Streets. Rates $1.50 to $3.00.

The Pullman Hotel, (American and European), Fifty-fifth Street and Washington and Madison Avenues. Rates, $2.00 to $5.00.

Raymond and Whitcomb Grand Hotel, Washington Avenue and Fifty-ninth for Raymond and Whitcomb tourists, 387 rooms.

Soldier's World's Fair Hotel, Seventy-third Place and Stony Island Avenue.

Southern Hotel (American) Twenty-second and Wabash Avenue. Rates $2.00 to $4.00.

South Shore Hotel, Seventy-third Street and Bond Avenue.
THE CRIB.

SCENE ON THE CHICAGO RIVER.
South Shore Tenting Company.
Strickland Hotel, (European), Lake Avenue, between Thirty-eighth and Thirty-ninth. Rates, $1.50 to $6.00.
Transit House, (American), Union Stock Yards. Rates, $2.00 to $3.00.
Union Park Hotel, (European), 517 to 521 West Madison Street. Rates, $1.00 to $2.00.
The Woman's Dormitory Association, Ellis Avenue and Forty-third Street. 750 rooms.
Westminster Hotel, (American), 264 and 266 North Clark Street. Rates, 2.00 to $3.50.
White House, (American), 2108 to 2110 Wabash Avenue. Rates, $2.00 to $3.50.
Wyndham Hotel, (American), 2932 and 2934 Prairie Avenue. Rates, $2.00 to $3.50.
Yorkshire Hotel, (American), 1837 Michigan Avenue. Rates, $2.50 to $3.50.

RESTAURANTS.
Good Restaurants are the rule rather than the exception in Chicago. They abound in all parts of the city. They are usually reasonable as regards prices. The following is a list of some of the principle places where the "inner man" can be satisfied:


There are also numerous lunch counters such as the Columbian, 148 Monroe st. Kohlsaat's 196 Clark st., 83 Lake st., 324 Dearborn St., 130 Washington St., 175 Jackson st., and Coyne's, 164 Madison st.
Tacoma Building.

Residence—Franklin McVeagh.
III. HOW TO GET ABOUT CHICAGO.

In case of any doubt as to reaching rooms or hotel by the car lines, which have a uniform fare of 5 cents for each person, the safest plan is to inquire of a police officer as to the proper car to take, and be guided by his advice.

A list of the principal street car routes and elevated railroads are here given for the guidance of tourists:

**SOUTH SIDE.**—Fare, 5 cents. Transfers to or from any of the main or branch lines may be had from the conductor without additional charge.

Wabash Avenue and Cottage Grove Avenue Cable lines—Trains bearing signs “Hyde Park” run on Wabash to Twenty-second, to Cottage Grove, to Fifty-fifth Street, to Jefferson, to Fifty-sixth, to Lake Avenue. Time, fifty-three minutes.

Trains bearing sign “71st st. and Oakwoods” run same as above to Fifty-fifth Street, continuing on Cottage Grove to Seventy-first. Time, fifty-five minutes.

Indiana Avenue cars are attached to the Wabash and Cottage Grove Cable trains as far south as Eighteenth Street, whence they are drawn by horses east to Indiana Avenue, and south to Fifty-first Street.

Horse cars run from Washington Street, south on Clark to Van Buren, and east on Van Buren to Wabash Avenue, transferring passengers there to the Cottage Grove cable line.

State Street Cable line—Trains bearing sign “39th” run south on State Street to Thirty-ninth. Time, thirty minutes. All other State Street cable lines run to Sixty third Street. Time, forty-six minutes.
Archer Avenue cars attached to State Street Cable trains are dropped at Archer Avenue, and horses draw them to Thirty-eighth Street and Kedzie Avenue on Archer Avenue. Time, sixty-two minutes.

Wallace, Hanover and Butler streets cars, attached to State Street cable trains, are dropped at Archer Avenue, thence by horses on Archer to Hanover, to Twenty-ninth Street, to Butler Street, to Thirty first Street, to Wallace, to Thirty-ninth. Time, forty minutes.

From the State Street cable, passengers may be transferred to:

Twenty-second Street line Cottage Grove Avenue to South Branch Chicago River.

Twenty-sixth Street line, Cottage Grove Avenue to Halsted Street.

Thirty-first Street line, Illinois Central tracks (lake shore) to South Branch Chicago River.

Thirty-fifth to Stanton Avenue—From State Street to Stanton Avenue, to Thirty-ninth Street.

Thirty ninth Street and Stock Yards line, Cottage Grove Avenue to Wentworth Avenue, to Root Street, to Stock Yards.

Forty-third Street line, Illinois Central tracks to State, to Root Street, to Stock Yards.

Forty-seventh Street line, State to Ashland Avenue.

Fifty-first Street line, State to Grand Boulevard (Washington Park.)

Sixty-first Street or Woodlawn line, State to Cottage Grove Avenue, to Sixty-third, to Illinois Central tracks.

Sixth-third Street line, on Sixty-first Street, State to Wentworth Avenue, to Sixty third, to Ashland Avenue.

Auburn Park line, on Sixty-first Street, State to Wentworth Avenue, to Vincennes Avenue, to Seventy-ninth, to Halsted.

Sixty-ninth Street line, on State, Sixty-fourth Street, to Vincennes Avenue, to Sixty ninth, to Leavitt Street.

Wentworth Avenue line, from Washington Street, on Clark, to Archer Avenue, to Wentworth Avenue, to Sixty-third.

Halsted Street line—Horse cars connect with the West Side street cars at Halsted and O'Neil streets, running on Halsted to Sixty-ninth Street.
Ash and Avenue line—From Archer Avenue, on Ashland, to Sixty-ninth Street.

These lines transfer passengers east or west on any of the cross-town lines intersecting them.

Elevated Railway—This line extends from Congress Street on the alley between State Street and Wabash Avenue. The stations are: Congress Street, Twelfth, Eighteenth, Twenty-second, Twenty-sixth, Twenty-ninth, Thirty-first, Thirty-third, Thirty-fifth, Thirty-ninth, Indiana Avenue (here the line crosses to the alley between Prairie and Cu’umet avenues), Forty-third, Forty-seven h, Fifty-first, Fifty-fifth, Fifty-eighth, Sixty-first, South Park, Cottage Grove, Lexington, Madison, Stoney Island, and Jackson Park. Fare, 5 cents

Northwest Side.—Fare, 5 cents—Milwaukee Avenue Cable line, from Madison, on La Salle to Randolph, to Fifth Avenue, to Washington, through tunnel to Desplaines, to Milwaukee Avenue, to Armitage Avenue. Forty minutes.

Milwaukee and North Avenue line, via Milwaukee Avenue cable to West-North Avenue, to Fortieth Street. Forty-five minutes.

Noble Street line, via Milwaukee Avenue cable to Noble Street, to Blackhawk, to Holt, to North Avenue, to Ashland Avenue, to Clybourn Place, to Wood Street. Forty minutes.

Indiana Street line—From State, on Randolph to Halsted, to Indiana, to Western Avenue. Forty minutes.

West Side—Fare 5 cents. Lake Street line—From State on Lake Street, to West Fortieth Street. Fifty minutes.

Randolph Street line—From State, on Randolph and West Lake to Western Avenue. Thirty-five minutes.

Madison Street Cable line—From La Salle and Madison through Washington Street tunnel, and on West Madison to West Fortieth Street Thirty-five minutes.

Ogden Avenue line—From La Salle and Madison, via Madison Street cable to Ogden Avenue, thence on Ogden Avenue to Millard Avenue. Fifty-five minutes.

Harrison and Adams Street line—From Michigan Avenue, on Adams, to Deplaines, to Harrison, to Western Avenue. Forty minutes.
Center Avenue and Adams Street line—From Michigan Avenue on Adams to Center Avenue, to Twenty-first Street, to Western Avenue. Fifty minutes.

Van Buren Street line—From State, on Madison, to Fifth Avenue, to Van Buren, to Western Avenue. Forty minutes.

Also from State, on Van Buren, to Kedzie Avenue. Forty minutes.

Blue Island Avenue line—From Washington, on State, to Madison, to Clinton, to Adams, to Halsted, to Blue Island Avenue, to Western Avenue. Fifty minutes.

South Halsted Street line—From State, on Randolph, to Halsted, to O'Neil Street, connecting with Halsted Street cars of the South Side system. Forty minutes.

Clinton and Jefferson Street line—From State, on Randolph, to Clinton, to Twelfth, to Jefferson, to Meagher Street. Thirty-five minutes.

Taylor Street line—From Washington, on Michigan Avenue, to Adams, to Fifth Avenue, to Harrison, to Canal, to Taylor, to Western Avenue. Forty minutes.

Twelfth Street line—From Randolph, on State, to Madison, to Fifth Avenue, to Twelfth Street, to Douglas and Central Park Boulevard. Forty-five minutes.

Also from State, on Van Buren, to Jefferson, to Twelfth, to Douglas and Central Park Boulevard. Fifty minutes.

Eighteenth Street line—From State, on Randolph, to Halsted, to Eighteenth, to Leavitt, to Blue Island Avenue. Sixty minutes.

Canalport Avenue line—From State, on Washington, to Clinton, to Harrison, to Canal, to Canalport Avenue, to Halsted, to O'Neil. Forty minutes.

Ashland Avenue and Sangamon Street line—From Michigan Avenue, on Adams, to Sangamon, to Austin Avenue, to Centre Avenue, to Erie, to Ashland Avenue, to Clybourn Place. Fifty-five minutes.

**NORTH SIDE SYSTEM**—Fare, 5 cents.—City Limits Cable line—From Monroe, on Dearborn, to Randolph, to La Salle, through tunnel to Illinois, to Clark, to Diversey Avenue. Thirty minutes.

Also from Monroe, on Dearborn, to Randolph, to La Salle, through tunnel to Illinois, to Wells, to Clark (at Wisconsin Street), to Diversey Avenue. Thirty minutes.
Lincoln Avenue Cable line—Two routes same as above, to Clark and Center Streets; from Clark, on Center, to Lincoln Avenue, to Wrightwood Avenue, connecting here with several minor horse-car lines. Thirty-five minutes

Clark Street, Fullerton and Webster Avenue line—Via Lincoln Avenue cable to Lincoln and Fullerton Avenues, on Fullerton Avenue, to Racine Avenue, to Webster Avenue. Forty Minutes.

Garfield Avenue and Center Street line—Via Lincoln Avenue cable to Lincoln and Garfield Avenues, on Garfield Avenue, to Racine Avenue. Forty minutes.

Clybourn Avenue line—Via Wells Street cable to Division Street, on Division, to Clybourn Avenue, to Fullerton Avenue. Forty-five minutes.

Sedgwick Street line—From Washington, on Clark, to Kinzie, to Market, to Division, to Sedgwick, to Center Street. Thirty minutes.

Larrabee Street line—From Washington, on Clark, to Kinzie, to Market, to Chicago Avenue, to Larrabee, to Lincoln Avenue. Thirty-five minutes.

Halsted Street line—Via Clybourn Avenue cable to Halsted, to Evanston Avenue. Fifty minutes.

Division Street line—Via Clybourn Avenue cable to Division to Milwaukee Avenue. Thirty-five minutes.

State and Division Streets line—From Lake, on State, to Division, to Clark. Fifteen minutes.
Scene in Lincoln Park.

Scene in South Park.
IV.

NOTABLE SIGHTS AND OBJECTS OF INTERESTS.

It is a strange fact that Chicago—once a flat and marshy waste—should rank with any city in the world, for the beauty of its parks and boulevards. Stranger still, the fact, that she has reversed the Scriptural injunction and unlike the wise man of old, "built upon the sand", the largest, loftiest and most magnificent buildings ever yet constructed. These form, perhaps, the most "notable sights and objects of interest", to those unfamiliar with the wonders and beauties of the great World's Fair City. Let us take first a drive along these boulevards, which completely encircle the city and through the succession of beautiful parks; thus we catch a glimpse of ARTISTIC Chicago. Later, we can view those world-famed buildings which fitly illustrate COMMERCIAL Chicago, and which are among the many things to be seen in the World's Fair city.

PARKS AND BOULEVARDS.

Starting from the foot of Michigan Avenue we drive southward, along that wide and level boulevard, passing innumerable residences of beauty and magnificence and arrive at 35th Street; turning eastward on this street we strike Grand Boulevard, which enters Washington Park, at 51st Street.

WASHINGTON PARK is about six miles from the center of the city and covers 400 acres. This park is noted especially for its "Meadow", a beautiful expense of greensward and a picturesque body of water called the "mere". Among other interesting features there is an immense conservatory, for propagating the myriad variety of plants and flowers, which constitute the chief beauty of the Park.

Washington Park may be reached by taking Cottage Grove Avenue cars. This line extends along the entire eastern border of
the park. The Alley South Side Elevated, may be taken from Congress street to Washington Park. The cable car fare is only five cents each way. The regular suburban trains on either the Lake Shore & Michigan Southern Railway, or the Chicago, Rock Island & Pacific Railway (running out of the same depot, at Van Buren and Sherman streets) will land passengers on Garfield’s boulevard (55th and Clark streets) about one mile west of Washington Park.

Another magnificent boulevard, Drexel, opens into Washington Park at its north-eastern angle from the east, by a wide plaza, through the center of which extends a lawn, richly ornamented by landscape gardening. Here are displayed the most elaborate designs and contrasts of floral coloring: the “Sphinxes” and “Monument” wrought in fine detail from growing cacti; the Sun dial which shows the correct solar time; the “Elephant”, the American flag, in correct colors with many other unique and tasteful arrangements. On either side of this lawn are the driveways, and at Drexel avenue stands the fountain, presented by the Messrs. Drexel Brothers, the Philadelphia bankers, in memory of their father, after whom also the boulevard was named. The boulevard is laid out on the plan of the Avenue l’Imperatrice, in Paris, and has two broad drives, one on either side of a central space, filled with various species of trees, and ornamented with flower beds, among which wind the prominades, with bowers and rustic seats. The entire boulevard is 200 feet wide.

**Jackson Park**, the site of the World’s Columbian Exposition, and next in order is described elsewhere.

After leaving Washington Park from the south west, Garfield Boulevard is taken and after a drive of four miles we arrive at **Gage Park**, the smallest park in the boulevard system. Another drive of about five miles, along Western avenue Boulevard brings us to Douglas Park, situated four miles southwest from the City Hall, between west 12th street on the north, Albany avenue on the west, West 19th street on the south, and California avenue on the east. This is a beautiful and popular park, and is the spot chosen by the Chinese of Chicago for their annual “Festival” of the “Kites”, which is religiously observed every August. Eleven acres of the park are covered by a lake, fed with the mineral water of an artesian well. There is a refectory, from the balconies of which a fine view is to be
Scene in Lincoln Park.

Scene in Garfield Park.
had of the parks scenery. Here we find a conservatory and propagating houses which furnish 60,000 plants annually for transplanting.

Douglas Park is reached by the 12th street cars, which run on Randolph street to Fifth avenue; by the Ogden avenue cars, which run on Madison street; and by the local trains of the Chicago, Burlington & Quincy Railway, which stop at Douglas Park Station. The depot is the Union, at Canal and Adams street. The Chicago Passenger Railway Company’s tracks have been extended to Douglas Park, via Western avenue and 12th streets. After leaving Douglas Park we reach Garfield Park, via Douglas Boulevard. This beautiful park was named in honor of the martyred president. This Park lies about four miles west of the city’s center between Western street on the north and Colorado avenue on the south. It contains 185 acres of ground. A beautiful lake covering seventeen acres contains four dainty islands. Garfield Park is reached by the North-western Railway to Central Park Station, also by street cars on Lake and Madison Streets, or by way of Washington Boulevard.

Central Boulevard connects Garfield and Humboldt Parks. After leaving the latter Lincoln Park in reached via Humboldt Boulevard.

Lincoln Park covers 250 acres and is bounded on the east by the lake, and on the west by Clark street, and extending from North avenue on the south to Diversey avenue on the north. Lake Shore Drive continuing from the entrance, extends from Oak street to its northern limits, and commands a view of the lake. The park is made up of beautiful lawns, flower-beds, intricate walks and winding drives, trees and shrubbery and 260 acres of lakes add to the general effect. There are a refreshment pavilion on the border of one of the lakes with a plentiful supply of boats, and a zoological collection. There is also a bronze Indian group, of life size, mounted on a granite pedestal—presented by Mr. Martin Ryerson; and a bronze statue of Schiller, erected by the German citizens in 1886, on the anniversary of the poet’s death. It stands at the south end of the large flower beds. To these have been added a Lincoln monument, by St. Gaudens, and a drinking fountain, a legacy of Eli Bates; the La Salle monument, presented by Lambert Tree; and the equestrian monument of General Grant, erected by the city in 1891. After making a tour of Lincoln Park, the South side is reached by
The Lake Shore Drive to the river crossed by Rush street bridge thus completing an almost uninterrupted drive of thirty-five miles of boulevards and parks.

COMMERCIAL BUILDING.

The business portion of Chicago with its wide streets and lofty buildings is the wonder and admiration of strangers. A walk about this section of the city will convince one that there is no city in the world that can equal Chicago in building operations. The following buildings will serve as examples in this respect:

The Masonic Temple is located on the northeast corner of State and Randolph streets. It is probably the highest office building in the world. The building is provided with 16 elevators; a 12 foot corridor runs on every floor around the interior of the building. The Temple is 20 stories high.

The Woman's Temple, corner of La Salle and Monroe streets, was erected by the Woman's Temperance Building Association. The building is one of the most magnificent exhibits of architecture in the city. It has a frontage of 190 feet on La Salle street. The building cost $1,100,000.

The Title and Trust Building, located at 102 Washington street, is a magnificent structure, 17 stories in height, built from plans made by Henry Ives Cobb, architect. The cost of the building and ground was $1,300,000, both being the property of the Chicago Title and Trust Company, a corporation capitalized at $1,500,000.

The Studebaker Carriage Factory and Repository is on Michigan avenue boulevard, next to the Auditorium. The building is 107 feet front, by a depth of 170 feet; 8 stories high, exclusive of basement. The entire structure is 135 feet high.

The Security Building is almost perfect in detail, durability, magnificence and convenience. This building is located on the southeast corner of Madison street and Fifth avenue.

The Schiller was erected by the German Opera House Company at a cost of $700,000. The building is built of gray stone, and is beautiful and imposing. The Schiller is located on Randolph street, between Clark and Dearborn streets.
Owings Building.

Residence—S. W. Allerton, Prairie Avenue, Cor. 20th.
The Herald Building is a completely fitted newspaper office and a magnificent structure. Solidly built, elegant in interior appointments, and replete with all the modern conveniences, it is a feature in urban architecture. The building is located at 154 to 158 Washington street. Its height is 124 feet.

The Ashland Block is situated on the northeast corner of Clark and Randolph streets. It is thoroughly fire-proof. The beams, girders, and columns are of the highest grade of steel.

The Unity Building is an office building par excellence. This handsome structure is located on the east side of Dearborn street, between Washington and Randolph streets. It is 16 stories high, is fire-proof, and cost about $1,000,000.

The Pullman Building, at the corner of Michigan avenue and Adams street, besides being one of the largest and handsomest office buildings in the city, is an object of interest as the official headquarters and home of the world-famous Pullman Palace Car Company.

The Rand-McNally Building, located at 160 Adams street, has a frontage of 149 feet on Adams street, and 166 feet back to Quincy. This building was the first steel structure erected in Chicago.

The Phoenix Insurance Building is on the corner of Jackson and Clark street, it covers a ground space of 50x214 feet, and contains 10 stories.

The Tacoma Building, an immense structure, 12 stories in height, is situated on the corner of La Salle and Madison streets.

The Home Insurance Building is located on the northeast corner of La Salle and Adams streets. It is 10 stories high and covers a ground space of 14,000 square feet.

The Leiter Building, now occupied by Siegel, Cooper & Co., was erected in 1892, and is the largest store in the world used for retail purposes. It stands on State street and extends from Van Buren to Congress streets, being 402 feet in length by 143 feet in depth, and is 133 1-2 feet in height, divided into 8 stories, basement and attic.

The Rookery Building occupies the block bounded by Adams, La Salle and Quincy streets and Rookery place. It is 170x180 feet and 11 stories high.
Water Works.

Lake Michigan.
The following is a list of the principal office buildings:

Adams Express, 180 Dearborn street.
Allerton, South Water street near State street.
American Express, 72 & 74 Monroe street.
Ashland, Clark and Randolph streets.
Atlas, 45—61 Wabash avenue.
Athenaeum, 18—26 Van Buren street.
Auditorium, Congress street and Wabash avenue.
Ayers, 166—172 State street.
Bartlett, Dearborn and Van Buren streets.
Batchelder, Clark and Randolph streets.
Bay State, State and Randolph streets.
Board of Trade, La Salle and Jackson streets.
Bonfield, 199 Randolph street.
Borden, Randolph and Dearborn streets.
Bort, 17—21 Quincy street.
Boyce, 112 & 114 Dearborn street.
Boylston, 205—209 Dearborn street.
Brother Jonathan, 4 Sherman street.
Bryan, 160—174 La Salle street.
Calumet, 187—191 La Salle street.
Caxon, 328 Dearborn street.
Central Manufacturing, 74—88 Market street.
Central Music Hall, State and Randolph streets.
Central Union, 277 Madison street.
Ceylon, Wabash avenue and Lake streets.
Chamber of Commerce, Washington and La Salle streets.
Chemical Bank, 87 Dearborn street.
Chicago Opera House, Clary and Washington streets.
Chickering Music Hall, 239 Wabash avenue.
Cisco, 84 & 86 Washington street.
Citizen's Bank, 119 & 121 La Salle street.
City Hall, Washington and La Salle streets.
Cobb, 124 & 126 Dearborn street.
Columbus, State and Washington streets.
Commerce, 14 & 16 Pacific avenue.
Commercial National Bank, Monroe and Dearborn streets.
Como, 325 Dearborn street.
Counselman, La Salle and Jackson streets.
Court House, Washington and Clark streets.
Crilly & Blair, 171 Dearborn street.
Criminal Court, Michigan street and Dearborn avenue.
Custom House, Clark and Adams streets.
Dale, 308 Dearborn street.
Davison, 153 Fifth avenue.
De Soto, 146 Madison Street.
Dexter, 76 Adams street.
Dickey, 46 Dearborn street.
Dogget, 34 Lake street.
Donohue & Henneberry, 407 Dearborn street.
Dore, State and Madison streets.
Drake, Wabash avenue and Washington street,
Dyche, State and Randolph streets.
Ely, Wabash avenue and Monroe streets.
Empire, 130 La Salle street.
Equitable, 110 Dearborn street.
Evening Journal, 161 Dearborn street.
Evening Post, 164 & 166 Washington street.
Exchange, Van Buren street and Pacific avenue.
Fairbanks, Wabash avenue and Randolph street.
First National Bank, Dearborn and Monroe streets.
Foote, Clark and Monroe streets.
Forbes, 193 Washington street.
Franklin, 349 Dearborn street.
Fry, 84 & 86 La Salle street.
Fuller, 148—156 Dearborn street.
Fullerton, 94 & 98 Dearborn street.
Gaff, 230 La Salle street.
Girard, 296 Dearborn street.
Greenebaum, 72 Fifth avenue.
Grocers, 29—43 Wabash avenue.
Hale, State and Washington streets.
Hampshire, La Salle and Monroe streets.
Hansen, 116 Dearborn street.
Harding, 155 Washington street.
Hawley, 142 Dearborn street.
Henning & Speed, 121 Dearborn street.
Herald, 154 Washington street.
Hobbs, 95 Washington street.
Holt, 165 Washington street.
Holbrook, 215 Wabash avenue.
Home Insurance, La Salle and Adams streets.
Honore, 204 Dearborn street.
Howland, 192 Dearborn street.
Hyman, 146 South Water street.
Illinois Bank, 117 Dearborn street.
Imperial, 252 Clark street.
Ingals, 190 Clark street.
Insurance Exchange, La Salle and Adams streets.
Inter-Ocean, Dearborn and Madison streets.
Jarvis, 124 Clark street.
John Jones, 119 Dearborn street.
Katahdin, Dearborn street near Van Buren street.
Kedzie, 120 & 122 Randolph street.
Kearsarge, Dearborn and Jackson streets.
Kent Block, 151 Monroe street.
Kent Building, 12 Sherman street.
Kentucky, 195—203 Clark street.
Kimball Hall, 243—253 Wabash avenue.
Kingsbury, 115 Randolph street.
King, 85 Washington street.
Kranz, 78 Washington street.
Lakeside, Clark and Adams streets.
La Fayette, 70 La Salle street.
La Salle, La Salle and Madison streets.
Lees, 159 Fifth avenue.
Lenox, 88 & 90 Washington street.
Lind, Randolph and Market streets.
Lowell, 308 Dearborn street.
Lumber Exchange, South Water and Franklin streets.
Major, 151 La Salle street.
Mallers, 226 & 228 La Salle street.
Manhattan, 307—321 Dearborn street.
Manierre, Madison and Dearborn streets.
Marine, Lake and La Salle streets.
Mason, 94 Washington Street.
Masonic Temple, State and Randolph streets.
McCormick, 73 Dearborn street.
McNeil, 130 Clark street.
McVicker's, 78—84 Madison street.
Mentor, 163 State street.
Mercantile, 112—118 La Salle street.
Merchants', La Salle and Washington streets.
Methodist Church, Washington and Clark streets.
Metropolitan, Randolph and La Salle streets.
Monadnock, Dearborn and Jackson streets.
Monon, 326 Dearborn street.
Montauk, 111—117 Monroe streets.
Morrison, Clark and Madison streets.
Nevada, Franklin and Washington streets.
Nicon, 169—175 La Salle street.
Northern Office, Lake and La Salle streets.
Ogden, Lake and Clark streets.
Open Board of Trade, 18—24 Pacific avenue.
Oriental, 122 La Salle street.
Otis, 158 La Salle street.
Owings, 213 Dearborn Street.
Oxford, 84 La Salle street.
Parker, 97 Washington street.
Phenix, 138 Jackson street.
Pontiac, Dearborn and Harrison streets.
Portland, 109 Dearborn street.
Post-Office, Clark and Adams streets.
Potwin, 126 Washington street.
Powers, Madison street and Michigan avenue.
Pullman, Adams street and Michigan avenue.
Purington, 304 Wabash avenue.
Quincy, Clark and Adams streets.
World's Columbian Exposition.

Quinlan, 81 & 83 Clark street.
Rawson, 70—74 Dearborn street.
Real Estate Board, 59 Dearborn street.
Reaper, Washington and Clark streets.
Rookery, Adams & La Salle streets.
Rialto, Van Buren and Sherman streets.
Royal Insurance, 165 Jackson street.
Ryerson, 49 Randolph street.
St. Mary's, Madison street and Wabash avenue.
Safe and Lock, 51—55 Dearborn street.
San Diego, Wabash avenue and River street.
Schiller, Randolph street between Clark and Dearborn streets.
Schloesser, La Salle and Adams streets.
Sears, 99 & 101 Washington street.
Security, Fifth avenue and Madison street.
Shepherd, Madison street, near Fifth avenue.
Shreve, 93 Washington street.
Sibley, 2—16 North Clark street.
Spaulding, 243 State street.
Staats-Zeitung, 99 Fifth avenue.
Stock Exchange, 171 Dearborn street.
Stewart, State and Washington streets.
Stevens' Art, 24 and 26 Adams street.
Superior, 77 & 79 Clark street.
Syracuse, 173 Randolph street.
Tacoma, La Salle and Madison streets.
Taylor, 140 Monroe street.
Telephone, 203 Washington street.
Temple Court, 225 Dearborn street.
Teutonia, Fifth avenue and Washington street.
Times, Fifth avenue and Washington street.
Title and Trust, 98—102 Washington street.
Tobey, 243 State street.
Traders', 6—12 Pacific avenue.
Trayner, 182 State street.
Tribune, Dearborn and Madison streets.
Union, Washington and La Salle streets.
Unity, 75—81 Dearborn street.
U. S. Express, 87 Washington street.
University Club, 116 & 118 Dearborn street.
Vermont, 155 Fifth avenue.
Venetian, 34 & 36 Washington street.
Wadsworth, 181 Madison street.
Watson, 123 La Salle street.
Washington, 110 Fifth avenue.
Wachusett, Dearborn and Van Buren streets.
Western Bank Note, Michigan avenue and Madison street.
Wheeler, 6 & 8 Sherman street.
Williams, 87 Dearborn street.
Willoughby, Franklin and Jackson streets.
W. C. T. U. Temple, La Salle and Monroe Streets.
Y. M. C. A., La Salle street between Madison and Monroe streets.

Not alone for the immensity of her commercial structure is Chicago noted. There are buildings of public and semi-public character that compare favorably with those of any city in the World.

The City Hall and Court House covers the square bounded by Clark, Washington, La Salle and Randolph streets. This handsome structure is well worth the visitors attention. In front of the building, on Washington street, stands the Columbus statue and Drake fountain, presented to the city by Mr. John B. Drake. A bronze statue of the great discoverer, seven feet high, cast in the Royal foundry, at Rome, surmounts a pedestal. The statue is a production of a Chicago artist, R. H. Park. The fountain is provided with an ice chamber capable of holding two tons of ice and is surrounded by a water pipe, containing ten faucets, each supplied with a bronze cup. The entire cost was $15,000. The buildings are constructed of upper Silurian lime stone, quarried in this state, and adorned with columns of granite. The length of each of the two facades is 840 feet, the width of the entire building 280 feet and its height from the ground line 124 feet. The Eastern hall, fronting on Clark street, is occupied by the various officials of Cook County, who are located in spacious and elegant apartments; the rooms devoted to the administration of justice being models of court-room convenience. The Western half fronting on La Salle street is devoted to offices and departments of a municipal character.
Board of Trade.

Cook County Hospital.
The Government Building occupied by the Post Office and Custom House, cost $600,000, but was so imperfectly constructed that its demolition is an event of the near future. It is to be found corner of Clark and Adams street.

The Board of Trade Building is a splendid example of ornate architecture. It is situated corner of Pacific avenue and Jackson street. It is well worth the visitors time to view from the gallery, which looks down upon the "floor" the busy scene below. The noise and turmoil of excited brokers, buying or selling thousands of bushels of grain in one "deal" especially on a day, when there is a rise or fall of several cents per bushel, in the price, is like some description of the Inferno.

The structures occupied by the financial institutions of Chicago are among the many evidences of the city's solidity. For the benefit of the visitors we publish the following list of banks:

American Exchange National Bank, Dearborn and Jackson streets.
Banker's National Bank, Masonic Temple, corner State and Randolph streets.
Bank of Commerce, 188-192 La Salle street, (Woman's Temple Building.)
Bank of Montreal, 188-192 La Salle street, (Woman's Temple Building.)
Central Trust and Savings Bank, corner Fifth avenue and Washington street.
Chemical National Bank, 85 Dearborn street.
Chicago Clearing House Association, 103 Monroe street.
Chicago National Bank, Southwest corner Dearborn and Monroe streets.

Chicago Trust and Savings Bank, 122 & 124 Washington street.
Columbia National Bank, Northwest La Salle and Quincy streets.
Commercial Loan & Trust Company, 115 La Salle street.
Commercial National Bank, Southwest corner Dearborn and Monroe street.
Continental National Bank, Southwest corner La Salle and Adams street.
Corn Exchange Bank, 217 La Salle street, (Rookery Building.)
Division Street Bank, 319 East Division street.
Drover's National Bank, 4207 South Halstead street.
First National Bank, Northwest corner Dearborn and Monroe street.
Fort Dearborn National Bank, 187 Dearborn street, Adams Express Building.
Hibernian Banking Association, Northwest corner Clark and Randolph streets.
Hide & Leather National Bank, Southeast corner La Salle and Madison streets.
Illinois Trust and Savings Bank, Southeast corner La Salle and Adams street.
International Bank, 110 La Salle street.
Merchants Loan and Trust Company, 103 Dearborn street.
Merchants National Bank, 80 & 82 La Salle street.
Metropolitan National Bank, 188—192 La Salle street, Woman's Temple Building.
National Bank of America, 188—192 La Salle street, Woman's Temple Building.
National Bank of Illinois, 115 Dearborn street.
National Live Stock Bank, Union Stock Yards.
Northwestern Bond and Trust Co., 175—179 Dearborn street.
Northwestern National Bank, Southeast corner La Salle and Adams street.
Oakland National Bank, 3961 Cottage Grove avenue.
Park National Bank, Northwest corner Washington and Dearborn streets.
Prairie State National Bank, 110 W. Washington street.
Union National Bank, Northeast corner of La Salle and Adams streets.
Union Trust Co., corner Dearborn and Madison streets.
Chicago Trust and Savings' Bank, 122 & 124 Washington street.
Dime Savings' Bank, 104 & 106 Washington street.
Prairie State Savings' and Trust Co., 45 South Desplaines street.

BANKERS.

13a
E. L. Brewster & Co., corner Dearborn and Monroe streets.
John Buehler, Northwest corner La Salle and Randolph streets.
H. Claussenius & Co., 82 Fifth avenue.
E. S. Dryer & Co., Northwest corner Washington and Dearborn streets.
Gross, Miller & Felsenthal, 108 La Salle street.
N. W. Harris & Co., 163—165 Dearborn street.
Hopkins, Kennett & Co., Board of Trade Building.
Leopold Mayer & Son, 157 Randolph street.
Meadowcraft Bros., Northwest corner Dearborn and Washington streets.
Municipal Investment Company, 164 Dearborn street.
C. L. Neihoff & Co., 49 La Salle street.
Peterson & Bay, corner Randolph and La Salle street.
L. Silverman, 93 & 95 Dearborn street.
Heinemann & Wasmansdorff, 145 & 147 Randolph street.

EDUCATION AND ART.

Some of the structures devoted to Education and Art are well worth a mention.

The University of Chicago buildings are located on Midway Plaisance not far from the Exposition grounds. This great institution of learning is the result of the munificence of Mr. John D. Rockafeller who has already donated $3,600,000 for its maintenance.

The Public School buildings are large and roomy and solidly built structures scattered over the city.

The Art Institute building is located on the Lake Front, facing Adams street. The architecture is purely classic and the designers were Messrs. Shipley, Rutan & Coolidge, of Boston. The structure is 320 feet long by 107 and 208 feet wide. It is to be devoted to the exhibition of sculpture, metal work and pictures. In this connection may be mentioned the

Public Library building, on the Lake Front between Randolph and Washington streets; the Chicago Athenaeum building
located at 18 Van Buren street and the Newberry Library corner North Clark and Oak streets. Other educational institutions are the Union College of Law, 80 Dearborn street; the Northwestern University, located at Evanston, eleven miles from the city, the College of Physicians and Surgeons and the Rush Medical College (both adjoining Cook County Hospital) are handsome and commodious buildings. The former consists of four stories and basement, surmounted by a tower 100 feet in height. The Rush Medical College is a beautiful building. There are about 2,000 students receiving instruction in Medicine and surgery in the medical schools of Chicago.

The theological colleges are the Garnett Biblical Institute, at Evanston, belongs to the Methodist Episcopal church; the Baptist Union Theological Seminary, Morgan Park: the Chicago Theological Seminary—Congregational—Union Park; The Presbyterian Theological Seminary of the Northwest, North Halsted street and St. Ignatius College, West Twelfth street.

Libraries and Reading Rooms.

The following list of libraries and reading rooms is intended for visitors who have a literary bent and who might desire, occasionally to spend a quiet evening after the fatigue of sight seeing.

Armour Mission, thirty-third street and Armour avenue.
Chicago Athenaeum Library, 18-26 Van Buren street.
Chicago Brother International Tract and Miss Society, 26-28 College place.
Chicago Historical Society Library, 142 Dearborn avenue.
Chicago Law Institute, Room 414 County Building.
Chicago Medical Society Library Public Library, City Hall.
Chicago Public Library 4th floor City Hall.
Colored Men's Library, 400 Dearborn street.
Hammond Library, Ashland avenue, corner Warren.
Illinois Tract Society of Seventh Day Adventists, 26-28 College place.
Pullman Public Library, 73-75 Arcade Buildings.
Ravenswood Public Library, Commercial and Sulzer streets.
South Chicago Public Library, Ninety-third street and Houston ave.
RESIDENCES.

Douglas Statue.

Stock Yards.
For many years the stock attraction of Chicago was the Stock Yards. Strangers immediately upon their arrival in the city, were in the habit of asking the location of that wonderful industry. The attractions of the Garden City have been so greatly augmented that now it is only one of the many objects of interest. It is an interesting spectacle, however, and a few words of description will not be amiss. The Stock Yards occupy about 400 acres of ground. There are 3,300 pens, 1,800 covered and 1,500 open, enabling 2,500 head of cattle, 14,000 sheep and 150,000 hogs to be handled at one time. The yards contain twenty miles of streets, twenty miles of water troughs, fifty miles of feeding troughs, and seventy-five miles of water and drainage pipes. There are five artesian wells, having an average depth of 1,230 ft. There are also eighty-seven miles of railroad tracks, all the roads, having access to the yards. Its cost was $4,000,000. The meet packing industry is one of the many features. The firm of Messrs. Armour & Co., occupies seventy acres of flooring, and employs 3,500 men. The Stock Yards and Factory houses are reached by rail from Van Buren street depot, by State street cable line or South Halsted street horse cars.

THE FIRE DEPARTMENT.

If a "burnt child is afraid of fire," certainly a city, that had the terrible experience that Chicago had, ought to profit by it. The fire department is worthy of the great city. It consists of nearly 1,000 men, and officers. The department owns seventy-two steam fire engines, twenty-two chemical engines, three powerful fire tugs, one stand pipe and water tower, for reaching lofty buildings, twenty-eight hook and ladder trucks, 100 hose wagons, carts, and carriages, 421 horses, two life saving guns, twelve life saving nets, 6,500 feet of ladders and twenty-eight miles of hose. The fire alarm system includes 1,919 automatic signal boxes, 2,031 miles of wire, and a network of overhead and underground telegraph lines.

THE WATER WORKS.

The system which supplies Chicago with water from Lake Michigan is complete in every detail. The North Side Water-Works are
located corner of Pine street and Chicago ave., those on the West Side are to be found at Ashland and Blue Island avenues. These plants have a capacity of 250,000,000 gallons daily. The system consists of 1,346 miles of pipes and cost over $17,000,000.

A visit to the North Side works will prove an interesting one. The water-tower is 175 feet high, the top of which is reached by a winding stair case from which a fine view can be obtained of the city and the lake. There is a well under the building from which a tunnel extends under the lake, three miles to the crib. This is merely a coffer-dam for the purpose of protecting the tunnel inlet from floating ice and other substances. The crib is in charge of a keeper and the visitor will do well to board one of the small steamers and take an excursion thither on some pleasant day.

SOCIETIES AND CLUBS.

Like many other institutions in Chicago the clubs and societies, while yet in their infancy are rapidly forging their way to the front rank. Whether organized for social, political, literary or other purpose, the members, lend their zeal and energy to enhancing the welfare of their particular club. Hence many of these organization have become prominent factors in the advancement of the city's interests.

The following summary of clubs and societies will enable the visitor to locate the principal ones:

SOCIETIES AND CLUBS.

Apollo Club, Apollo hall, State and Randolph streets.
Argo Club, on Lake Michigan and end of Illinois Central Pier.
Ashland Club, 575 Washington boulevard.
Audubon Club, 110 La Salle street.
Banker's Club.
Calumet Club, Michigan ave. and 12th street.
Cambrian Benevolent Society, Welsh Presbyterian church, Sangamon and Monroe streets.
Canadian-American Society, 228 La Salle street.
Caledonian Society, 45 Washington street.
Catlin Boat Club, Lake Shore and Pearson street.
Chicago Academy of Sciences, 40 Dearborn street.
Chicago Art Institute, 200 Michigan ave.
Chicago Astronomical Society.
Chicago Athenaeum, 18 Van Buren street.
Chicago Athletic Association, Michigan ave., near Madison st.
Chicago Base Ball Club, Thirty-fifth street and Wentworth ave.
Chicago Bicycle Club, 189 Michigan ave.
Chicago Bowling Club, 500 North Clark street.
Chicago Camera Club, 182 Wabash ave.
Chicago Club, 43d Monroe street.
Chicago Cricket Club, 170 State street.
Chicago Cricket Club, 85 street.
Chicago Cycling Club, Lake ave. and Fifty-seventh street.
Chicago Electric Club, 103 Adams street.
Chicago Fencing and Boxing Club, 109 Randolph street.
Chicago Florist Club.
Chicago Gun Club, Sherman House.
Chicago Historical Society, 142 Dearborn ave.
Chicago Literary Club, 107 Dearborn street.
Chicago Rifle Club.
Chicago Relief and Aid Society, 53 La Salle street.
Chicago Shooting Club, Sherman House.
Chicago Society of Decorative Art, 200 Michigan ave.
Chicago Tennis Club, 2901 Indiana ave.
Chicago Yacht Club.
Chicago Woman's Club, 200 Michigan ave.
Commercial Club, 159 La Salle street.
Cook County Wheelmen.
Cumberland Gun Club, Sherman House.
Diana Hunting Club.
Douglas Club, 3518 Ellis ave.
Douglas Cycling Club, 226 Loomis street.
English Hunting and Fishing Club.
Farragut Boat Club, 3018 Lake Park ave.
Fireman's Benevolent Association, 19 Dearborn street.
Fortnightly Club, 202 Michigan ave.
Fox Lake Shooting and Fishing Club, Tremont House.
Fox River Fish and Game Association.
Germania Club, 649 North Clark street.
Girls Friendly Society, 336 Huron street.
Hyde Park Club, Wabash ave. and Fifty first street.
Illinois Club, 154 Ashland ave.
Illinois Humane Society, Auditorium building.
Illinois State Sportsmen's Association, 46 Madison street.
Indiana Club, 3349 Indiana ave.
Irish-American Club, 40 Dearborn street.
Iroquois Club, 110 Monroe street.
John A. Logan Club.
Kenwood Club, forty-seven street and Lake ave.
Lakeside Club, 3140 Indiana ave.
La Salle Club, 542 West Monroe street.
Marquette Club, 365 Dearborn ave.
Mechanics Institute, 50 Dearborn street.
Oakland Club, Ellis and Oakwood aven.
Ogden Boat Club, Lake shore, foot of Superior street.
Park Club, Fifty-seventh street and Rosalie court.
Philosophical Society, Fairbank hall.
Phoenix Club, Calumet ave. and Thirth-first street.
Policemen's Benevolent Association, City hall.
Press Club, 131 Clark street.
St. George Cricket Club.
St. George's Benevolent Association, 182 Madison street.
Sportsmen's Club, Sherman House.
Standard Club, Michigan ave. and Twenty-fourth street.
State Microscopical Society, 184 Wabash ave.
Sunset Club.
Twentieth Century Club.
Union Club, Washington place and Dearborn ave.
Union League Club, Jackson street and Custom House place.
University Club, 116 Dearborn street.
Veteran Union League, 204 Dearborn street.
Wah-na-ton Association.
Wanderers' Cricket Club.
Washington Cycling Club, 651 West Adams street.
Washington Park Club, South Park ave. and Sixty-first street.
Western Society of Engineers, 78 La Salle street.
West Chicago Club, 45 Throop street.
Whitechapel Club, 122 La Salle street.
Woman's Christian Temperance Union, La Salle and Monroe streets.
Woman's Sufferage Club, Sherman House.
Working Women's Home Association, 20 South Peoria street.
Young Men's Christian Association, La Salle street, between Monroe and Madison streets.

THEATERS AND PLACES OF AMUSEMENT.

Chicago is now acknowledged to be the theatrical center of the country, taking precedence even of New York, for a long time the "fetich" of the amusement world. The oldest theatres in the city are McVicker's and Hooley's, of equal importance and popularity are the Columbia, Grand Opera House, Chicago Opera House, Hay-Market, Havlin's, Schiller and the

**Auditorium.**—This magnificent theatre is one of the sights of the city. The main entrance is on the Congress street side of the great Auditorium building. The foyer is reached by a marble staircase with bronze balusters. The interior is sumptuously decorated and appointed. The seating capacity is 4,041. There are forty boxes, two balconies and a gallery. The interior is lighted by nearly 6,000 incandescent electric lamps. One of the features is an immense organ, containing 7,193 pipes. The stage contains 6,862 square feet and is complete in every detail.

**McVickers Theatre** is located on Madison street between State and Dearborn streets. This house enjoys the distinction of being the oldest theatre in the city. The present structure is a very handsome affair, the interior being beautifully decorated. McVickers' theatre is not only fire proof, but owing to its many exits it can be almost instantly emptied.

**Hooley's Theatre** is situated on Randolph street, between Clark and La Salle streets. It is a first-class house and enjoys a very aristocratic patronage.

**The Columbia Theatre** is located on the corner of Dearborn and Monroe streets. It is a very popular place of amusements.

**The Grand Opera House** is situated on Clark street between Randolph and Washington street.
The Chicago Opera House is a very handsome theatre located corner of Washington and Clark streets.

Havlins' cozy theatre is to be found on Wabash avenue, south of Eighteenth street.

The following is a list of theatres and other places of amusement. Academy of Music, (Jacobs'), 83 South Halsted street. Alhambra, (Jacobs'), 1920 State street. Auditorium, Wabash ave. and Congress Street. Casino, 227 Wabash ave.


Freiberg's Opera House, Twenty-second street, between State street and Wabash ave.


Kohl & Middleton's Clark Street Dime Museum, 150 Clark street.

Kohl & Middleton's State Street Dime Museum, 294 State street.

Last Days of Pompeii, Cottage Grove ave and Sixty-first street. Libby Prison, Wabash ave, between Fourteenth and Sixteenth streets.

Lyceum, Desplains street, between Madison and Washington streets.

Panorama, Battle of Gettysburg, 401 Wabash avenue.
Panorama, Chicago Fire, 1:0 Michigan ave.
Panorama, Niagara Falls, 402 Wabash ave.
People's, 339 State street.
Schiller, Randolph street, between Clark and Dearborn streets.
Standard, Halsted and Jackson streets.
Marlow Opera House, Sixty-third street and Stewart ave.
Waverly, West Madison street, between Loomis and Throop streets.

CHURCHES.

If it be true that the citizens of Chicago are noted for their fondness for the "affairs of the body," the number and beauty of their churches show that they do not neglect, "the affairs of the soul." There are in the city about 530 churches. From point of architecture and finish some of the most noted are the church of the Epiphany, (Episcopal,) corner of Ashland avenue and Adams street, South Congregational Church, corner Drexel boulevard and Fortieth street, South Park Avenue M. E. Church, corner of South Park ave. and Thirty-third street, Saint Paul's Universalist Church, Prairie ave. and Thirtieth street, Immanuel Baptist Church, Michigan avenue near Twenty-third street, First Presbyterian Church, corner of Indiana avenue and Twenty-third street, and the Roman Catholic Cathedral of the Holy Name, corner of North State and Superior streets.

Other churches of importance are: The Central Church, Central Music Hall, corner State and Randolph street, and the Peoples Church, McVickers Theatre. Other leading churches are as follows: Among the Protestant Episcopal Churches are St. James, corner of Cass and Huron streets, North Side Cathedral of S. S. Peter and Paul, corner of Washington boulevard and Peoria streets, Grace Church, Wabash avenue, south of Fourteenth, Christ Church, corner of Michigan avenue and Twenty-fourth street, Saint James' (Roman Catholic,) corner of Wabash avenue and Thirtieth street, Saint John's (Roman Catholic,) Clark and Eighteenth streets, and the church of the Holy Family (Roman Catholic,) usually known as "the Jesuit Church" corner of West Twelfth and May street. Also the Union Park Congregational Church, corner of Ashland avenue and Washington boulevard, the Third Presbyterian
Church, corner Ashland and Ogden avenues, Union Park Temple, of the Swedenborgians, corner of Washington boulevard and Ogden avenue, and the synagogue of Zion Congregation (Hebrew) close to the last named on Ogden avenue.

Of the Methodist churches may be noted the Western Avenue Church, at Western avenue and Monroe street, and the Centenary Church, West Monroe near Morgan streets. The principal buildings of the Congregational sect are Plymouth Church, Michigan boulevard, between Twenty-fifth and Twenty-sixth streets, First Church, corner of Washington boulevard and Ann street and New England Church, Dearborn avenue and Delaware place.

Besides these are, Unity Church, (Unitarian,) Dearborn ave., opposite Washington square, and the Sinai Temple, (Reformed Jewish,) corner of Indiana avenue and Twenty-first street.

Suburban Towns.

Many of the Chicago's wealthy citizens reside in the suburbs, going to and from their business, by trains run for accommodation purposes, by the principal roads entering the city. Others in more moderate circumstances are enabled to own their own houses, which they might not be able to do within the city limits, owing to the price of property. Some of these homes are very beautiful. The following is a list of the principal suburban towns and villages: Alpine, twenty-six miles on the Wabash railroad. Altenheim, ten and a half miles on the Chicago & Northern Pacific railroad. Argyle Park, five and a half miles on the Evanston Division of the Chicago Milwaukee & St. Paul railroad. Arlington Heights, twenty-two and a half miles on the Wisconsin Division of the Chicago & North-western railway. Auburn Park, nine miles on the Chicago Rock Island & Pacific railroad. Austin, six and a half miles, on the line of the Galena Division of the Chicago & North-western railway. Avondale, five and a half miles on the Wisconsin Division of the Chicago & North-western railway. Blue Island, sixteen miles on the Chicago, Rock Island & Pacific railroad. Brighton Park, seven and a half miles, reached by the Chicago, St. Louis & Pittsburg, and Chicago & Alton railroad. Burlington Heights, twenty and a half miles on the Chicago, Burlington & Quincy railroad. Calvary, ten miles on the Milwaukee Division of

25a
THE

WORLD'S COLUMBIAN

EXPOSITION.
GEO. R. DAVIS,
Director General.
I.

THE WORLD'S COLUMBIAN EXPOSITION.

Chicago possessed four practically available sites, each presenting many good reasons for favorable selection. The Directors of the Exposition, in whose hands was placed the duty of selecting a suitable site, gave so much time and attention to this important matter as few business men could or would. Working steadily, with competent architects, engineers and sanitary experts, and giving many months of their valuable time to this arduous undertaking, they finally arrived at a result which met the approval of the National Commission, and which must be absolutely satisfactory to the millions of visitors in whose interests this great enterprise is to be carried through. The site adopted by the Board of Directors is that portion of the justly celebrated South Park System of Chicago, known as Jackson Park and the Midway Plaisance. Having in view the comfort and convenience of the hundreds of thousands of our citizens and those from abroad, this site affords advantages which upon reflection must be appreciated and clearly understood by the practical mind. This beautiful location is within easy distance of the business portion of Chicago, and is accessible by means of the most complete transportation facilities. Jackson Park has a frontage on Lake Michigan of one and one-half miles, and contains 600 acres of ground. The Midway Plaisance, which forms the connecting link between Jackson and Washington Parks, is one mile long and 600 feet wide, making an additional area of 85 acres. The frequent illustrations of buildings and grounds, with careful descriptions shown in this guide will give the reader a very complete
idea of this stupendous work. The comfort and convenience of visitors are considered in every arrangement, and the occasion should not only be enjoyable and instructive in the highest degree, but also one to cherish always as the greatest event of a lifetime. The attractions provided are so numerous that it would be impossible to convey an adequate idea of their extent and variety. The architectural groupings and grandeur of highly ornamental design, collectively, excel all previous attempts at any other Exposition. The plan of arrangements for the grounds presents features in landscape effects, statuary, fountains, inland lakes, ornamental bridges, avenues and floral designs, so artistic in their beauty as to command the admiration of the world. The frontage of the grounds on Lake Michigan, the Queen of all the great lakes, affords grand opportunities for marine displays of the most magnificent character, and which will be taken full advantage of by the management to furnish beautiful attractions which otherwise could not be attempted.

The information which has previously gone to the public has been fragmentary, incomplete, and to a great extent prospective rather than of that official or authoritative character which can only arise from practical results. To-day finds all the great buildings, which only existed to the architectural eye twelve months ago, now entirely completed and ready for the inspection of visitors. With the growth and development of the original plans the financial necessities of the Fair also tremendously increased, but public enthusiasm fortunately kept pace with this rapid development until the contemplated five million dollar World’s Fair of three years ago grew to a World’s Columbian Exposition with $18,750,000 actually expended before the gates were opened to visitors. In addition to this millions of dollars were expended by the several States in the construction of their magnificent State Buildings and for the proper installation of the State exhibits.

The management of the World’s Columbian Exposition may be said to be vested in four organizations: The National
Commission, authorized by Congress; the World's Columbian Exposition, organized under the Laws of the State of Illinois; the Board of Lady Managers, authorized by Congress, and the World's Congress Auxiliary. The National Commission is composed of eight Commissioners at Large with Alternates; two Commissioners from each State, Territory, and the District of Columbia, one Democrat and one Republican, appointed by the President on a nomination by their respective Governors. This Commission has delegated its authority to eight of its members who constitute a Board of Reference of Control and who act with a similar number selected from the World's Columbian Exposition. The officers of this Commission are: President, Thomas W. Palmer; Vice Presidents, Thomas W. Walker, M. H. DeYoung, D. D. Penn, C. W. Allen and Alexander B. Andrews; Secretary, John C. Dickinson. The World's Columbian Exposition is composed of forty-five citizens of Chicago, elected annually by the stockholders. On this body falls the burden of raising the necessary money and of the active management. Its officers are: President, Harlow N. Higinbotham; Vice President, F. W. Peck; Second Vice President, R. A. Waller; Secretary, H. O. Edmonds, and Solicitor, W. K. Carlisle.

The Board of Lady Managers is composed of two Members with Alternates from each State and Territory, and nine from the City of Chicago. It has the supervision of Women's participation in the Exposition, and of whatever exhibits of women's work may be made. This recognition of Woman marks an epoch in World's Expositions, as in no previous international Fair have woman and her work, influences and industrial importance been recognized. Mrs. Bertha H. Palmer is President and Mrs. Susan Gale Cooke Secretary of the Board of Lady Managers.

The World's Congress Auxiliary was organized for the purpose of holding a series of Congresses to supplement the Exposition that will be made of the material progress of the world by a portrayal of the achievements in science, literature, education, government, jurisprudence, morals, charity,
art, religion and other branches of mental activity. The Hon. C. C. Bonney of Chicago is President of the Congress Auxiliary, but equal praise for its success is due to the Hon. Thomas B. Bryan, the cosmopolitan scholar of the Exposition, whose matchless diplomacy has been so many times invoked to crown the triumphs of the great World's Fair enterprise. George R. Davis, of Chicago, is Director General of the entire Exposition, and therefore its chief executive officer. In the joint Board of Control is of course vested the actual management, and from the verdict of this board there is no appeal. The financial situation of the World's Columbian Exposition at the present time is most satisfactory. The recent appropriation of Congress, quickly followed by the sale of $4,000,000 debenture bonds, placed the enterprise in a position to meet any expense to be incurred before the opening of the gates. To Lyman J. Gage, Ex-President of the World's Columbian Exposition, is due great praise for his excellent services in every hour of financial crisis which the Exposition has experienced. The following figures, official and estimated, show the amount of cash from all sources that will be available for Exposition expenses up to the close of the Fair.

From capital stock and proceeds of the City of Chicago bonds: $10,500,000
Appropriation from U. S. Treasury in souvenir coins: 2,500,000
Premium on same: 2,500,000
Proceeds on Debenture Bonds: 4,000,000

Total: $19,500,000
Gate Receipts for Admission to the Exposition: 10,000,000
From concessions and privileges: 3,500,000
Salvage: 1,500,000

$15,000,000

Total estimated receipts: $34,500,000
From this $34,500,000 there must be deducted the total cost of construction and operating expenses which are estimated as follows:

Cost of constructing the buildings, preparatory expenses, etc., to May 1st, 1893 ............... $18,750,000
Operating expenses from May 1st, 1893 ............... 2,500,000

Total .................................................. $21,250,000

If these figures are borne out by results, and every World's Fair official appears to think they will be, there will be available for payment of bonds and distribution among stockholders in 1894 about $13,250,000. If their expectations are realized stockholders will have reason for congratulation.

The World's Columbian cost three times as much as any previous Exposition in the history of the World. It occupies four times as many acres, and has about twice as much space under roof as the greatest of former Expositions. No Exposition of the past has ever received the support of more than one-third the nations of the World, while the Columbian Exposition has received recognition and application for space from every civilized nation of the globe. Russia, a nation which has always held aloof from the international Expositions of Europe, testifies a special friendship for the United States by sending a magnificent collection of priceless art treasures, which have never before been allowed to cross the Russian frontier. The following are the countries which officially made application for space and received allotments: Argentine Republic, Austria, Belgium, Bolivia, Brazil, Bulgaria, Chili, China, Columbia, Corea, Costa Rica, Cuba, Denmark, Egypt, Ecuador, France and its Provinces, Great Britain and every British Possession, Greece, Guatemala, Hawaiian Islands, Hayti, Honduras, Hungary, Italy, Japan, Liberia, Mexico, Madagascar, Norway, New Foundlands and all Colonies, Nicaragua, Paragua, Persia, Peru, Russia, Salvador, San Domingo, Servia, Siam, Sweden, Switzerland, Uruguay and Venezuela.
Of these the following countries have independent government buildings: Austria, Canada, Ceylon, China, Columbia, Costa Rica, Ecuador, France, Great Britain, Guatemala, Hayti, Italy, Japan, Nicaragua, Norway, Russia, Sweden and Turkey.

Concessions have been made for the purpose of conducting theatres, restaurants, shops and representations of native life to the following governments: Algeria, Austria, China, British India, Dahomey, Egypt, Hungary, the Islands of the Pacific, Italy, Japan, Morocco, Persia, Sandwich Islands and Tunis.

The following shows the appropriations made by various foreign governments:

<table>
<thead>
<tr>
<th>Country</th>
<th>Appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentine Republic</td>
<td>$100,000</td>
</tr>
<tr>
<td>Austria</td>
<td>102,300</td>
</tr>
<tr>
<td>Belgium</td>
<td>57,000</td>
</tr>
<tr>
<td>Bolivia</td>
<td>30,000</td>
</tr>
<tr>
<td>Brazil</td>
<td>600,000</td>
</tr>
<tr>
<td>Columbia</td>
<td>100,000</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>150,000</td>
</tr>
<tr>
<td>Denmark</td>
<td>67,000</td>
</tr>
<tr>
<td>Danish West Indies</td>
<td>1,200</td>
</tr>
<tr>
<td>Ecuador</td>
<td>125,000</td>
</tr>
<tr>
<td>France</td>
<td>733,000</td>
</tr>
<tr>
<td>Germany</td>
<td>800,000</td>
</tr>
<tr>
<td>Great Britain</td>
<td>291,000</td>
</tr>
<tr>
<td>Barbadoes</td>
<td>5,840</td>
</tr>
<tr>
<td>British Guiana</td>
<td>25,000</td>
</tr>
<tr>
<td>British Honduras</td>
<td>7,500</td>
</tr>
<tr>
<td>Canada</td>
<td>100,000</td>
</tr>
<tr>
<td>Cape Colony</td>
<td>50,000</td>
</tr>
<tr>
<td>Ceylon</td>
<td>65,600</td>
</tr>
<tr>
<td>India</td>
<td>30,000</td>
</tr>
<tr>
<td>Jamaica</td>
<td>24,333</td>
</tr>
<tr>
<td>Leeward Islands</td>
<td>6,000</td>
</tr>
<tr>
<td>New South Wales</td>
<td>243,325</td>
</tr>
<tr>
<td>New Zealand</td>
<td>27,500</td>
</tr>
</tbody>
</table>
WORLD'S COLUMBIAN EXPOSITION.

<table>
<thead>
<tr>
<th>Country</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinidad</td>
<td>15,000</td>
</tr>
<tr>
<td>Greece</td>
<td>60,000</td>
</tr>
<tr>
<td>Guatemala</td>
<td>200,000</td>
</tr>
<tr>
<td>Hawaii</td>
<td>40,000</td>
</tr>
<tr>
<td>Honduras</td>
<td>20,000</td>
</tr>
<tr>
<td>Hayti</td>
<td>25,000</td>
</tr>
<tr>
<td>Japan</td>
<td>630,000</td>
</tr>
<tr>
<td>Liberia</td>
<td>7,000</td>
</tr>
<tr>
<td>Mexico</td>
<td>50,000</td>
</tr>
<tr>
<td>Morocco</td>
<td>150,000</td>
</tr>
<tr>
<td>Netherlands</td>
<td>100,000</td>
</tr>
<tr>
<td>Dutch Guiana</td>
<td>10,000</td>
</tr>
<tr>
<td>Dutch West Indies</td>
<td>5,000</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>31,000</td>
</tr>
<tr>
<td>Norway</td>
<td>56,280</td>
</tr>
<tr>
<td>Orange Free State</td>
<td>7,500</td>
</tr>
<tr>
<td>Paraguay</td>
<td>100,000</td>
</tr>
<tr>
<td>Peru</td>
<td>140,000</td>
</tr>
<tr>
<td>Russia</td>
<td>46,820</td>
</tr>
<tr>
<td>Salvador</td>
<td>12,500</td>
</tr>
<tr>
<td>San Domingo</td>
<td>25,000</td>
</tr>
<tr>
<td>Spain</td>
<td>14,000</td>
</tr>
<tr>
<td>Cuba</td>
<td>25,000</td>
</tr>
<tr>
<td>Sweden</td>
<td>108,000</td>
</tr>
<tr>
<td>Uruguay</td>
<td>24,000</td>
</tr>
</tbody>
</table>

Total (approx) \(\$5,750,000\)

It is estimated that the expenditures of foreign governments, in addition to the above, will be at least \(\$2,500,000\).

The following shows the assignment of space made to some of the prominent nations of the globe:

<table>
<thead>
<tr>
<th>Country</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>150,000</td>
</tr>
<tr>
<td>Belgium</td>
<td>120,000</td>
</tr>
<tr>
<td>Denmark</td>
<td>20,000</td>
</tr>
<tr>
<td>France</td>
<td>250,000</td>
</tr>
<tr>
<td>Germany</td>
<td>250,000</td>
</tr>
</tbody>
</table>
Great Britain, .................................. 250,000  
Japan, ........................................ 60,000  
Mexico, ....................................... 61,000  
British Colonies, .............................. 100,000  
Canada, ....................................... 70,000  
Greece, ........................................ 10,000  
Russia, ........................................ 100,000  
Sweden, ....................................... 40,000  
Norway, ....................................... 50,000  
Spain, .......................................... 30,000  

Total ........................................... 1,600,000

The true magnitude of the World's Columbian Exposition can only be realized when it is stated that, the United States not considered, the space allotted to foreign nations alone exceeds the total space of any previous World's Fair. In addition to this will come the space of American exhibitors, which far exceeds the aggregate of all the foreign nations of the world. Nearly every State in the Union made appropriations for State buildings and State exhibits, and there are no less than thirty State buildings on the grounds.

The most important bureau in connection with the World's Columbian Exposition is undoubtedly the Bureau of Construction. Of this bureau D. H. Burnham is Chief, Edward C. Shankland is Chief Engineer, and F. L. Olmstead is Landscape Architect. In their several departments the work of each of these gentlemen shows to excellent advantage. Chief Burnham has been indefatigable in his labors, and the acres of graceful structures that now adorn these grounds are a monument to his executive abilities. The credit of completing these buildings in the remarkably short time is by public acclaim accorded to Chief Burnham. The example of his unceasing energy has been an inspiration to every subordinate, and in an enterprise where so much depended upon co-operation, he has made the construction department a perfect mechanism. Chief Engineer Shankland is a comparatively young man, only 38
years old, but he has had years of experience in important government works. He came to public attention in the early stages of the Exposition by making the important discovery that no allowance had been made for "wind pressure" in some of the most important buildings to be constructed in the windy city of Chicago and with the immense buildings here constructed, the matter of "wind pressure" is a most important problem, and Mr. Shankland's discovery and the timely rectification of the error saved the management hundreds of thousands of dollars. He is a man of few words, is unassuming and courteous to all. He is possessed of remarkable energy and during the construction of the World's Fair buildings has, like others, worked day and night for the success of the great undertaking. Landscape Architect, Olmstead, will be judged by his works. The "bird's eye view" of the Exposition grounds is his own creation, and while many architect achieved artistic triumph in the construction of various buildings, the admirable ensemble of their location is due to Landscape Architect Olmstead.

The World's Fair site is in Jackson Park and Midway Plaisance, about six miles from the centre of the city of Chicago, and 1,037 acres is embraced in the site. This is nearly four times the area of any previous exposition, and the number of square feet under roof, over 5,000,000, is nearly twice as much as the greatest exposition of the past. The beauty of the location of the buildings of the World's Columbian Exposition is, that nearly every structure fronts on the lake, the entire Eastern limits of the park for a mile and a half being washed by the waters of Lake Michigan. In the Northern portion of the park are grouped nearly all the State buildings, the Fine Art building, and the various structures of Foreign Nations. Next comes the Fisheries building, which is situated just North of the lagoon, and directly West of the Fisheries building on the opposite side of the park, stands the Woman's building and on the same side of the lagoon, which parallels the lake, are the Horticultural building and the Transportation building. To the Southward of the
Government building, on the East side of the lagoon and bordering on the lake, is the giant structure of the Fair, the Manufactures and Liberal Arts building. South of this edifice is the great pier, for lake steamers, extending 1,000 feet into the lake, and on one wing of which is the Music Hall. Extending Westward from the pier is a long avenue several hundred feet wide. All down this grand avenue, encompassing a beautiful sheet of water, stand imposing buildings along the majestic facades of which sweeps the gaze of the visitor on the Administration building nearly a mile distant. West of the Agricultural building stands Machinery Hall which is its equal in size and is especially rich in architectural lines and details. To the Northward of the Administration building on either side, and facing the Grand avenue stand two more immense buildings, one for the Electrical and the other for the Mining exhibit. Near by is the wooded island a delightful gem of primitive nature—in striking contrast with the elaborate productions of human skill which surround it. In the Southwest portion of the grounds are great depots, the numerous railway tracks and the stock pavilions. The Forestry building fronts the lake in the Southeast, and near by is the Sawmill, the Dairy building and various other smaller but equally interesting structures.

The architectural groupings and grandeur of highly ornamental design will, collectively, excel all previous attempts at any Exposition. The plan of arrangements for the grounds will present features in landscape effect, statuary, fountains, inland lakes, ornamental bridges, avenues and floral designs so artistic in their beauty as to command the admiration of the world. The frontage of the grounds on Lake Michigan affords grand opportunities for marine displays of the most magnificent character, which will be taken full advantage of by the management to furnish beautiful attractions which otherwise could not be attempted.

It may be said that the exhibits at the Exposition cover a wider range are far more numerous than were ever before gathered together. The whole World is interested
and all the Nations of the earth will participate with the grandest and most creditable characteristic exhibits of their arts, sciences, natural resources, customs, condition and progress of their people. From far-away India, Burmah, Siam, China, Japan, Persia, Islands of the Pacific, Australia, Tasmania, Egypt, Turkey and the strange lands of mysterious and almost unknown Africa will come attractions of interesting character. All the European nations display great interest in the Exposition, and all give assurance of the unqualified support and co-operation. Their finest collections of art will be gathered here, and each country promises to display in the most complete manner its varied resources. All of the countries of South and Central America with Mexico are making the most elaborate preparation for an extensive exhibition of their splendid resources and products. Millions of money will be expended by these foreign countries, and the beauty of the Exposition will be enhanced thereby to a greater degree. The contemplated plans of many of these countries indicate an intention to construct buildings of the finest character in which to make their exhibits. The style of architecture will be characteristic of the country represented. It will thus be seen that in addition to the beautiful buildings erected by the Exposition there will also be a grand display of architecture from every part of the world, making the variety of design so extensive as to be bewildering in its outlines.

BUILDINGS AND GROUNDS.—The dimensions of the great Exposition buildings are indicated in the following table:

<table>
<thead>
<tr>
<th>Buildings and Grounds</th>
<th>Dimensions in feet</th>
<th>Area in Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactures and Liberal Arts</td>
<td>787 x 1687</td>
<td>30.5</td>
</tr>
<tr>
<td>Administration</td>
<td>262 x 262</td>
<td>1.6</td>
</tr>
<tr>
<td>Mines</td>
<td>350 x 700</td>
<td>5.6</td>
</tr>
<tr>
<td>Electricity</td>
<td>345 x 690</td>
<td>5.5</td>
</tr>
<tr>
<td>Transportation</td>
<td>256 x 960</td>
<td>5.6</td>
</tr>
<tr>
<td>Transportation Annex</td>
<td>425 x 900</td>
<td>8.8</td>
</tr>
<tr>
<td>Woman's</td>
<td>199 x 388</td>
<td>1.8</td>
</tr>
</tbody>
</table>

11
Art Galleries .......................... 320 x 500  3.7
Art Galleries Annexes (2) ............ 120 x 200  1.1
Fisheries ............................. 165 x 365  1.4
Fisheries Annexes (2) .................. 135 diam.  .8
Horticulture ........................... 250 x 998  5.7
Horticulture Greenhouses (8) ......... 24 x 100  .5
Machinery ............................. 492 x 846  9.6
Machinery Annex ....................... 490 x 550  6.2
Machinery Power House ................. 490 x 461  
Machinery Pumping Works ............. 77 x 84  2.1
Machinery Machine Shop .............. 103 x 250  
Agriculture ........................... 500 x 800  9.2
Agriculture Annex ..................... 300 x 550  3.8
Agriculture Assembly Hall, etc ...... 125 x 450  1.3
Forestry ............................... 208 x 528  2.5
Sawmill ............................... 125 x 300  .8
Dairy .................................. 100 x 200  .5
Live Stock (2) ........................ 65 x 200  .9
Live Stock Pavilion ................... 280 x 440  2.8
Live Stock Sheds ...................... 40.0  
Casino ................................ 120 x 250  .7
Music Hall ............................. 120 x 250  .7

153.7

United States Government ............ 345 x 415  3.3
United States Government Imitation Battleship .... 69.25 x 348  .3
Illinois State ........................ 160 x 450  1.7
Illinois State Wings (2) ............. 3  

159.3

The Exposition buildings, not including those of the Government and Illinois, have also a total gallery area of 45.9 acres, thus making their total floor space 199.7 acres. The Fine Arts building has 7,885 lineal feet, or 145,852 square feet of wall space.
11.

THE JOURNEY TO THE FAIR

The World's Columbian Exposition is located at Jackson Park and Midway Plaisance, seven miles South of the City Hall of Chicago. By railroad the time occupied to reach it is about half an hour, by steamboat forty-five minutes, and by cable cars about one hour's journey.

These are the three principal methods of reaching the Exposition grounds with a possible fourth route for the luxurious, to be found by driving to the park by way of the magnificent Michigan Avenue Boulevard. The more usually used routes are:

I. By Illinois Central Railroad—(From the Lake Front Depot, or at the foot of Van Buren street quitting the cars at South Park Station or Woodlawn Park Station). South Park Station, usually called Hyde Park, is perhaps the more convenient. Trains run each way every few minutes and the round trip fare (if a ticket is procured before entering the cars) is twenty-five cents. The line skirts Lake Michigan almost until it reaches the Park and the view is varied and pleasing. A loop is in course of construction by which excursion trains containing visitors by any railroad will be enabled to enter the Central Railroad Station in the grounds without quitting the cars or any transfer.

II. By South Side Elevated Road, running from Congress street Station near the Auditorium which has its own depot in the grounds. Fare five cents. It affords a speedy and agreeable method of reaching the grounds.
III. By Boat on Lake Michigan, leaving the docks on the Lake Front, at the foot of Van Buren street and landing at the Exposition Pier opposite the foot of 63rd street. Round trip fare twenty-five cents, single trip fifteen cents.

IV. By the Cottage Grove Avenue cable cars, taking those labeled (Jackson Park) which runs as far as the 57th street entrance to the grounds. Fare five cents each way.

According to conservative estimates by those who have given the subject a great deal of study, the average daily attendance at the Exposition will be upwards of 150,000. It is believed that on some days the attendance will reach more than 400,000—the approximate number who visited the Paris Exposition of 1889 on its last day. Jackson Park, where the exposition will be held, is between seven and eight miles from the center of the city, where are situated the great hotels and railway depots, and where the great majority of visitors must necessarily start.

By what means are the enormous crowds to get to and from Jackson Park? The existing railway and street car facilities are equal to transporting only about 50,000 an hour, or, say, 250,000 during the hours within which nearly all visitors will want to reach the Exposition. These facilities will be increased, of course, and may be doubled. But even on that supposition there remains an immense number of visitors, ranging on different days all the way from 100,000 to 200,000 to be transported.

The great majority of this excess must be taken to Jackson Park by steamboats on Lake Michigan. There is no reason whatever why two or three hundred steamboats may not ply between the Lake Front park and the Exposition grounds.

The distance is such that the round trip can easily be made in an hour and a half, allowing ample time for taking on and discharging passengers. The landing facilities for steamboats at either end of the route are practically unlimited. At Jackson Park very extensive piers and docks have been constructed.

The lake route to the Exposition grounds is unques-
tionably the most delightful and popular. There can be no doubt that the great majority of visitors will prefer to reach the park by that means if the facilities are such as to enable them to do so. The steamboats are sure to carry full loads even on the days when the combined facilities for reaching the grounds are greatly in excess of the crowds.

From the deck of a steamboat the visitor will obtain a view such as he cannot get in any other way, and it will be one of such surpassing attractions that no visitor will be content to miss it. He will traverse Chicago's great outer harbor, where almost innumerable craft, large and small, with colors flying, will be plying to and fro. Passing out into the lake he will see spread before his gaze for miles, a panorama of the best built and busiest city in the world. Before he tires of this the scene changes and before him lies the marvelously beautiful perspective of the Exposition with its gilded dome, its fountains, statuary, greensward and flowers—all gay with color or surroundings. The architectural and landscape features of the Exposition will present a much more beautiful picture from the lake than they would from the top of Eiffel tower, and this fact will weigh potently in inducing visitors to patronize the steamboats. The cooling lake breezes and the charming music on the water will also have their effect in the same direction.

The Exposition management is not overlooking anything which will contribute to the success of the great enterprise or to the accommodation, comfort and pleasure of the millions of visitors that are expected. Among other things it has given a great deal of attention and study to the question of transportation facilities to and from the grounds. The Directors fully appreciate the fact that the lake route will be considered incomparably the most pleasurable of all, and also that its availability is practically unlimited. Accordingly they are providing every possible facility for the reception of the visitors at the grounds by that route, and stand ready to encourage in every proper way all transportation companies, corporations and individuals who
may contemplate putting steamboats in the Exposition passenger transportation business.

One important consideration, not referred to above, which is exceedingly favorable to Exposition visitors, and to those who may engage in the Exposition steamboat traffic, is this: Nearly all of the great railway depots in Chicago are situated near the river or lake so that it will be entirely practicable for the steamboats to take aboard their loads of passengers and to transport them thence to the Exposition grounds. Visitors will thus avoid all the trouble and expense of making their way through the crowded city. There is no question that this arrangement will accommodate thousands of visitors and so influence them to prefer the lake route. Still further accommodation to passengers will undoubtedly be furnished through perfecting arrangements whereby the railroads can sell round trip Exposition excursion tickets, which will entitle the holders not only to the railway journey, but also to the steamboat trip directly from the depot of arrival to the Exposition grounds and return.

The steamer christened the Christopher Columbus, was built for the special purpose of carrying passengers from the World’s Fair pier in front of the Auditorium to the Exposition buildings at Jackson Park. She has accommodations for 7,000 passengers, and is by far the largest excursion boat afloat. In appearance she is entirely unlike any recognized type of passenger steamer and is almost as great a departure from any existing type as was the original whale-back barge. Her hull, excepting that the lines are somewhat finer, resemble the ‘pigs’ which are used as freight carriers.

The steamer is built entirely of steel. She is 362 feet over all, 42 feet beam and 24 feet deep. She is supplied with a triple expansion engine of 2,600 horse power, and steam at a maximum pressure of 160 pounds is supplied by six boilers of the Scotch type. She is expected to develop a speed of twenty miles an hour with a single screw of 14 feet diameter.
The hull is on the web frame principle and is subdivided with nine water tight bulkheads, in addition to which extending from bow aft, is a fore-an-aft bulkhead 42 feet long. She has a double bottom, 42 inches deep, with a water ballast capacity of 730 tons, built on the McIntyre principal. The only radical departure from the ordinary whaleback model in the hull proper is the fact that space for the boilers and engine is provided amidship instead of aft.

Unlike the other craft built by the barge company, however, she is provided with seven turrets, which rises seven and one-half feet above the turtle-back deck. These alone indicate the peculiar use for which she is intended. These turrets provide room for stairways, engine-room and air fans. They also support the steel deck, upon which will be built the cabins. The space between decks is left open amidships will be the dining and refreshment booths.

The steel saloon deck is sheathed with wood, and as the boat is intended only for excursion purposes, there will be no staterooms. The entire deck is taken up with the grand Saloon, 225 feet long and 30 feet wide. The after end will be cut off and used exclusively for ladies. The rest is all open, and it is richly and handsomely furnished and finished.

A most attractive feature of the grand saloon is a marble and glass fountain with a glass tank six feet in diameter filled with lake water. In it is shown the many varieties of fish found in the great lakes, including the famous speckled trout. The water is supplied by an electric motor and is drawn from one of the water ballast compartments.

Above the saloon is the promenade deck, 257 feet long. At the forward end is the texas, the grand stairway from the saloon, the wheelhouse and the officers quarters. She promises to be prominent among the many wonderful features of the World’s Fair. Already the strange craft and the many
possibilities opened for the feature by her construction are most important questions in the maritime world.

The Christopher Columbus is the first whaleback passenger boat ever built and launched. The ship was built expressly for passenger service on the lake, and her first important work will be carrying of excursionists from the lake front to Jackson Park during the World's Fair. The launching was accomplished under the immediate direction of Capt. Alex. McDougall, inventor of the whaleback style of vessels, and superintendent of the construction of the fleet of vessels already in service on the lakes.

The feature of the whaleback ship is that she presents no lines of resistance to the buffeting waves and rides without rolling through the heaviest seas. Her hull lies practically under water. All that portion protruding above the surface is round and smooth and the billows pass over it without the least perceptible shock. It is an innovation in ship building, which from Noah to McDougall has always been one of the crude, clumsy pattern. Above the round long hull of the whaleback rises a succession of towers on steel uprights too small to offer perceptible resistance to the waves and above these are built whatever of structure is necessary to have elevated. The maddest seas sweep over the elusive back of the vessel and beneath the towers, affecting in no way the carriage of the ship.
III.
A TOUR OF THE GROUNDS.

We will assume that the visitor, or patron of the Merchants World's Fair Bureau of Information Company has arrived in Chicago over night, and with the assistance of the guide furnished him has reached his previously engaged rooms. Then refreshed by a sound sleep, fortified by a substantial breakfast he desires to start off bright and early to visit the myriad wonders of the vast and beautiful "White City". Naturally, he desires, on the first day of his visit to reach the Fair grounds as rapidly as possible. Let him proceed to the Elevated Railroad Depot at Congress Street, between Wabash Avenue and State Street, and then take the cars direct for the World's Fair Grounds. This line which is located in the alley between Wabash Avenue and State Street serves as one of the principal routes to the World's Fair grounds. It has twenty locomotives, sixty cars, thirty-seven miles of track, and cost $3,750,000. Opened for traffic on June 6, 1892, it reaches Jackson Park in thirty-two minutes. The stations are: Congress Street (down town terminus), Twelfth, Eighteenth, Twenty-second, Twenty-sixth, Twenty-ninth, Thirty-first, Thirty-third, Thirty-fifth, Thirty-ninth, Indiana Avenue, (here the line crosses to the alley between Prairie and Calumet Avenues), Forty-third, Forty-seventh, Fifty-first, Fifty-fifth, Fifty-eighth, Sixty-first, South Park, Cottage Grove, Lexington, Madison, Stony Island and Jackson Park. Fare, 5 cents single journey. The views on the route are not particularly interesting, consisting mainly of
back yards and clothes lines, but as the train reaches 40th Street it crosses fine Boulevards, and later runs in view of Washington Park. At the Fair grounds the train lands the visitor right in the grounds; in a specially constructed depot. Paying the entrance fee of 50 cents he receives a ticket and enters the Fair grounds; in close proximity to the principal buildings which will be the prime objects of his inspection.

On entering the grounds the visitor will find himself at once confronted by the Transportation Building. This, in the form of three large train sheds, is 256 by 900 feet and has a floor area of nearly 9½ acres. An annex is 425 by 900 feet and contains 9¼ acres of floor area. Cost of both, $370,000. Architects, Adler & Sullivan of Chicago. The cupola is 166 feet high; is exactly in the center of the building, and is reached by eight elevators, which will form an exhibit. The main entrance is on the opposite side and consists of a great single arch, elaborately ornamented. It is the feature of the building and is called the "Golden Door". The annex consists of one story buildings, 64 feet wide, placed side by side.

The Transportation Building is exquisitely refined and simple in architectural treatment, although very rich and elaborate in detail. In style it savors very much of the Romanesque, although to the initiated the manner in which it is designed on axial lines, and the solicitude shown for fine proportions, and subtle relations of parts to each other, will at once suggest the methods of composition followed at the Ecole des Beaux Arts in Paris.

Viewed from the lagoon, the cupola of the Transportation Building forms the effective southwest accent of the quadrangle, while from the cupola itself, reached by eight elevators, the northern court, the most beautiful effect of the entire Exposition may be seen in all its glory.

The main entrance to the Transportation Building consists of an immense single arch enriched to an extraordinary degree with carvings, bas-reliefs and mural paintings, the entire feature forming a rich and beautiful, yet quiet, color climax, for it is treated in leaf, and is called the "Golden
The remainder of the architectural composition falls into a just relation of contrast with the highly wrought entrance, and is duly quiet and modest, though very broad in treatment. It consists of a continuous arcade with subordinated colonnade and entablature. Numerous minor entrances are from time to time pierced in the walls, and with them are grouped terraces, seats, drinking fountains and statues.

The interior of the building is treated much after the manner of a Roman Basilica with broad nave and aisles. The roof is therefore in three divisions. The middle one rises much higher than the others, and its walls are pierced to form a beautiful arcade and clear story. The cupola, placed exactly in the center of the building, and rising 165 feet above the ground, is reached by eight elevators. These elevators of themselves naturally form a part of the transportation exhibit, and as they also carry passengers to galleries at various stages of height, a fine view of the interior of the building may easily be obtained. The main galleries of this building, because of the abundant elevator facilities, prove quite accessible to visitors.

The main building of the transportation exhibit measures 960 feet front by 250 feet deep. From this extends westward to Stony Island avenue an enormous annex covering about nine acres. This is one story only in height. In it may be seen the more bulky exhibits. Along the central avenue or nave, the visitor may see facing each other scores of locomotive engines, highly polished and rendering the perspective effect of the nave both exceedingly novel and striking. Add to the effect of the exhibits the architectural impression given by a long vista of richly ornamental colonnade, and it may easily be seen that the interior of the Transportation Building is one of the most impressive of the Exposition. It covers a space of 960 by 256 feet, and with the annex and entresol includes a total area of nearly seventeen acres, all under cover. The heaviest locomotives and cars have been transferred from the installation track to tracks for their reception in the annex, whose accommodations are such that
entire trains can be shown connected as in actual use. Eight elevators run from the center of the main building to balconies 115 and 128 feet high. The observatory commands a beautiful and comprehensive view of lake, urban and suburban scenery. The main entrance is of noble dimensions, consisting of a series of receding arches treated in gold leaf, and decorated with carvings, bas-relief and paintings. Other entrances are provided, and near them seats, terraces, fountains and statues are grouped. The interior is admirably arranged for advantageous display, and into its broad nave and aisles the annex will open in such a manner as to afford long and striking vistas.

The scope of this department is suggested by its classifications which recognize or are associated with nearly all diversities of industrial development, and include interests as broad as the world itself. Its object is to illustrate with some degree of historical accuracy the successive stages of improvement in methods and appliances of transit and conveyance (on land and water, or in air) peculiar to all countries from the remotest period of invention to the present time. This is effected by means of actual specimens, or models, drawings and photographs, when the originals cannot be obtained. By comparison and contrast these "objects of interest" impart a vast deal of information at once novel, entertaining and instructive.

The Railway exhibit, within its own exclusive area of over eight acres, epitomizes the wonderful story of the adaptation of steam to practical uses, from the crude, experimental engines of Watt, Trevethick, Stephenson and Cooper to the immense and powerful locomotives of to-day.

In the Marine Division are seen vessels peculiar to the navigable waters of all races and peoples, embracing an infinite variety of rowing and sailing craft—from the Indian birch canoe, the clumsy Chinese junk, the Egyptian galley, the Roman trireme and war boats of barbarous tribes to the clipper, the graceful yacht and stately steamship of the nine-
teenth century; besides everything of interest pertaining to the science of navigation—to life-saving apparatus, etc.

The third division shows all forms and types of vehicular construction and movement on land (except railways), and grouped in strange juxtaposition, the old and the new—the palanquin of Japan, the primitive ox-cart of the Roman farmers, the Greek chariot, the English sedan, and the modern bicycle, omnibus and pleasure carriage. Saddlery, harness, trappings, etc., will also be shown in this division. Nor will aerial, pneumatic and other systems of transportation be neglected.

While all requisite efforts have been made to induce a full representation of interests local to the United States, the Chief of this department also vigorously urged its claims upon the attention and co-operation of foreign nations through personal correspondence and the friendly offices of our accredited agents abroad, and with most gratifying success.

The Baltimore & Ohio Railway Company make a historical exhibit at the World's Fair which will be of absorbing interest to all railroad men. Major J. W. Pangborn has charge of its preparation. The Baltimore & Ohio claims to be the oldest railroad in the world, its two or three predecessors having been mere tramways for transporting coal, stone or ore. The actual construction of the road began on July 4, 1828, and its first section was in operation six months before the Liverpool & Manchester road, the first railroad, in the present sense of the word, in Europe. The Baltimore & Ohio claims also to be the only one of the pioneer roads which has retained its original name and has remained under a continuous succession of management.

The New York Central Railway in its exhibit at the World's Fair strikingly illustrates the wonderful improvements that have been made in railway transportation by showing a magnificent, complete vestibuled train and along side of it a reproduction of the first train of cars used in this
country, the cars of which resemble old-fashioned stage coaches.

The illustration of the great engineering work of the world will be one of the most interesting features of the transportation exhibit. A large and very perfect model of the Forth bridge has been secured. The management of the Gothard Railway Company of Switzerland, also shows a large model or relief map of that road. This will illustrate in the most graphic manner possible the famous St. Gothard tunnel and the manner in which mountain inclines are surmounted by modern engineering science.

The Hoboken Ferry Company, of New York, shows a facsimile model of the twin screw steamer at the World's Fair, built in 1805, with original engines and boiler. As a contrast to this venerable craft it shows the model of a modern screw ferry boat, the Hamburg, built in 1892.

The Pilot Commission of New York makes an exhibit of a model of a pilot boat, on the scale of one-half inch to the foot, and a number of oil paintings illustrating the pilot service.

A very interesting exhibit is made by the steamship and railway companies of England. The collection of models of battle-ships, yachts, cruisers, steamers and merchant vessels is more complete than was ever before exhibited. The London & Northwestern Railway send over a complete train of cars headed by a great compound locomotive named "Great Britain." This affords an opportunity to compare the English compartment cars and sleepers with American coaches. Several of the railways show their signaling systems.

Chief Willard A. Smith, of the Transportation Department of the World's Fair, secured for exhibition one of the old voyager's boats, which he found in the State Historical Museum of Wisconsin, at Madison. The boat is an old bateau of the pattern used by the French-Canadian fur traders in their voyages on the lakes and rivers of the Northwest before Illinois or Wisconsin had been organized as territories. It is a leviathan of canoes, weighing 1,100 pounds, is
thirty feet long, and in its day carried eighteen men and over a ton of goods for the Indian trade. Secretary Thwaite, of the Wisconsin Historical Museum, on one of his canoe trips two years ago found the relic, water-logged, on the banks of the upper St. Croix, and had it conveyed to Madison.

The Great Western Railway of England exhibits the famous old locomotive, "The Lord of the Isles," which was built at the Company's works in Swindon in 1851, from designs by the late Sir Daniel Gooch. This locomotive was a notable exhibit at the first World's Fair in London in 1851. From that time until July, 1881, it was continually in service and ran during that period a distance of 789,300 miles without being fitted with a new boiler. As a pioneer of early railroading, and as a contrast to the powerful modern "Mogul," this old locomotive will attract much attention.

Thomas Cook & Son, of London, the well-known tourists' agents, make an exhibit of means of transportation including the following: Norwegian carriole, Norwegian sleigh, Lapland dog sleigh, Irish car, Neapolitan cart, Turkish caique, Palestine encampment, camel saddle and harness, elephant with howdah, Bombay bullock cart, catamaran, Chinese palanquin, Japanese jinriksha, antique English sedan chairs, old English traveling chariot, models of dahabeahs and Nile steamers, models of boats, and also to show models of various Egyptian temples.

One of the novel exhibits in the marine section of the Transportation Department at the World's Fair are 200 pen engravings of American steam vessels, beginning with the Clermont and following down a typical series to the present day. The pictures were sent by the New York Seaboard, a marine paper.

The Baltimore & Ohio Railroad makes an elaborate display. It includes models of the rolling stock and motive power, showing its construction of the first fourteen miles which were opened for traffic May 24, 1827, from Baltimore to Ellicott Mills, when strap iron was nailed to wooden stringers, and the two of the three open coaches, which were
called wagons, were hauled by horses. The next step shows the “York,” the first Locomotive constructed, which was built by Phineas Davis, and was purchased by the company for $4,000, the price agreed upon before it was built. The “wagons” or coaches the “York” pulled, and which the horses pulled before it was constructed, are also represented by models on the strap-iron track, just as they were when they made their first trip. The next representation is models of the improvement of the “York,” being what is known as the “Grasshopper” or “Crab” locomotive, and were received by the road from the same maker. The first regular passenger coaches, or models of them are also exhibited.

Chief Willard A. Smith, of the transportation department, made arrangements for a number of interesting displays while in Europe. “The British Commission” found it necessary to ask for double the amount of space it had previously requested. Exhibits are made by the leading railroad companies. They include railway machinery and appliances designed to bring out in the strongest manner the points of difference between English and American practices. A complete passenger train is shown standing upon a standard track. Signal appliances (in the practical adoption of which England is far ahead of this country) will be illustrated thoroughly. The marine exhibit is the most complete that ever left the shores of Great Britain. All of the leading shipbuilders and manufacturers of marine appliances, naval armament and equipment are represented by models and full-sized apparatus. Among these models is one which has cost over $200,000. The leading steamship companies also have very interesting exhibits. The bicycle exhibit represent twenty-nine leading manufacturers of Great Britain. The best engineering models in Great Britain have been secured, including the magnificent model of the Fourth bridge, the lighthouse and harbor works, models of the corporation of Trinity house, models of the life-boat service association, etc. Also there have been secured many historical relics of the early days of rail-
roading, including some of the first acts of parliament relating thereto, and such other articles of interest as an early brass railway ticket, very similar to the baggage checks now used in this country.

The French Commission sent at least eight locomotives. Austria sends some carriages and saddlery. The German government send several locomotives and cars, and a model of the railway station at Frankfort, which is considered the best in the world. The German government has also sent a considerable portion of the postal museums, which is the largest and best in the world. Among the other models of special interest are some of the old vessels of the Hanseatic league from Lubeck Bremen. There are a number of carriages from Germany, some of great historical interest. The Belgian exhibit is not large, but includes two locomotives, some other railway machinery and a large number of carriages.

Some Big Figures.—The Transportation Building is 250 feet wide by 960 feet long. The area of the floor is nearly 9½ acres. 3,500,000 feet of lumber were used in its construction, and over 1,100,000 pounds of iron. The Transportation annex is 900 feet long by 425 feet wide with a floor area of 9½ acres. Both cost $370,000 and were constructed under the architectural supervision of Messrs. Adler & Sullivan, of Chicago. In appearance the buildings resemble monster train houses side by side, and will probably be sold for this purpose after the close of the Exposition. 180 closets and toilet rooms are located in this building for the convenience of visitors. A railroad lunch counter will be also accessible for the hungry with far better fare than the average lunch counter provides.

Relating to Transportation the following figures will be interesting: While the Fair was under construction there were 154,514 feet of railroad tracks, of which 87,565 remain for visitors' use.

The Transportation Building, like all the other principal buildings except the Art Palace, is made of staff, which is a composition of plaster, cement, and hemp, or similar fiber.
All the Exposition buildings, and many of the State buildings are covered with staff. It is lighter than wood, is fire-proof, waterproof, and, if kept painted, will last many years. The architectural and sculptural designs in the coverings of the buildings are first modeled in clay, from which model moulds are made, and the staff covering is then cast very much as iron is cast. Staff has been used for more than one hundred years as a covering for buildings, notably in South America. The amount of this work on the Exposition buildings is equal to the covering of one wall of a four-story building fifteen miles long.

The Power in the Transportation building is furnished from 24,000 horse-power of steam which is provided for the Exposition. The engines are in the power house outside of Machinery Hall, and one of them is about twice the size and power of the celebrated Corliss engine. Oil will be used for fuel. The boilers present a solid bank 600 feet long. Of the 24,000 horse-power, 17,000 is provided for electricity.

The following is the complete and official classification of the Transportation Exhibits:

CLASSIFICATION OF TRANSPORTATION EXHIBITS.

DEPARTMENT G.
TRANSPORTATION-RAILWAYS, VESSELS, VEHICLES.

GROUP 80.

Railways, Railway Plant and Equipment.

sheds and other protection against snow. General plans, elevations and models of stations and other railroad structures.

Class 500. Railway Equipment.—Locomotives for passenger and freight service. Locomotive appliance, head-lights, bells, whistles, brake valves and apparatus, etc. Plans, drawings and photographs of locomotives and locomotive shops.

Passenger cars.—Mail, baggage and express coaches, drawing-room, parlor, dining, officers' and private cars, etc. Passenger car furnishings and appliances.

Freight Cars.—Box, caboose, stock, horse, milk, refrigerator, and other varieties. Working cars, sweeping, ditching, wrecking, etc.; snow plows, hand, inspection, push and velocipede cars, baggage barrows and trucks. Freight car appliances of all descriptions. Plans, drawings, photographs of cars and car works.


Mechanical Department.—Organizations. Records, plans and management of shops. Devices for coaling locomotives, etc. Testing laboratories, Machines, apparatus and methods of testing.

General Train Management.—Dispatching, signaling, etc. Speed indicators and recorders. Interlocking switches and signals, block systems, etc. Crossing protection by gates, signals, etc. Wrecking tools and appliances. Plans of yards and methods of storing, cleaning and keeping cars. Car interchange and inspection. Systems of accounting, records, tracers.

Railway employes.—Methods of testing for color-blindness, etc. Uniforms, organizations, etc. Railway sanitation and surgery and appliances used therein.

Class 502. Railway Management.—Legal department, treasury and accounting departments, passenger department. Advertising. Tickets, ticket cases, punches, baggage checks, etc.; Freight department, methods of rate-making, soliciting, handling, billing, etc.; Plans, arrangements and appliances for handling and housing of freight. Freight-handling machinery, track-scales, apparatus for transferring grain from car to car. Traffic Associations, their objectir, methods, etc.

Class 503. History and statistics, exemplified by exhibits of old locomotives, cars, track material and other relics.
Railway law and legislation. Railway technical engineering and mechanical associations. Railway literature.

GROUP 81.

STREET CAR AND OTHER SHORT LINE SYSTEMS.

Class 504. Cable roads and cars. Construction, equipment, methods of operation. Grips and other appliances.

Class 505. Electric railway cars. Systems of track construction, equipment and supplies for electric roads, methods of operation, appliances and furnishings.

Class 506. Cars for street railways or tramways operated by horse-power or other means of propulsion not specified. Construction, equipment and supplies. Methods of operation.

Class 507. Elevated and underground railways.—Plans, models and maps, showing systems of construction. Systems of operation and maintenance.

GROUP 82.

MISCELLANEOUS AND SPECIAL RAILWAYS.

Class 508. Mountain railways, spirals, switchbacks, rack rails and all systems for climbing inclines, ship railways, multiple speed railways (moving platforms and sidewalks), gravity roads, sliding railways, plans, profiles drawings, photographs and models.

GROUP 83.

VEHICLES AND METHODS OF TRANSPORTATION ON COMMON ROADS.

Class 509. Hand-barrows, wheel-barrows, trunk and barrel trucks.

Class 510. Carts, trucks, drays, farm wagons, garden truck wagons.

Class 511. Freight wagons and other heavy wagons for special purposes, beer wagons, express wagons, wagons for moving heavy objects, as timbers, stone, iron etc. Sprinkling carts. (For fire engines and ladder trucks see group 70).

Class 512. Large wagons for pleasure parties, picnic parties and excursions: "breaks," "barges," "wagonettes," etc.

Class 513. Omnibuses, herdies, cabs, hansom's, etc.

Class 514. Drags, Concord leather spring coaches; mud wagons for mail, express and passenger service.

Class 515. Pleasure carriages, coaches, Victorias, broughams, dog carts, etc.
Class 516. Light pleasure carriages buggies, phaetons, etc.; trotting wagons and sulkies.

Class 517. Sleighs, sleds, cutters, toboggans, snow shoes, etc.

Class 518. Steam and electric carriages, and all vehicles for carrying passengers on common roads operated by other than horse-power.

Class 519. Ambulances for special purposes—for the sick and injured. Hearses.

Class 520. Bicycles, tricycles and the appurtenances.

Class 521. Rolling chairs for invalids and others, baby carriages, etc.

Class 522. Wagons and carriage woodwork, hardware and fittings.

Class 523. Harness, saddlery, robes, whips and accessories of the stable.

GROUP 84.

AERIAL, PNEUMATIC AND OTHER FORMS OF TRANSPORTATION.

Class 524. Transportation of letters and parcels in pneumatic tubes.

Class 525. Shop-fittings for the transportation of parcels and money.

Class 526. Balloon transportation and captive balloons for observation and experiment.

Class 527. Passenger elevators and lifts.

GROUP 85.

VESSELS, BOATS—MARINE, LAKE AND RIVER TRANSPORTATION.

Class 528. Sailing vessels and boats. Sailing vessels used in commerce, pilot boats, fishing vessels, sailing yachts, ice boats, ship’s boats, pleasure boats, canoes and small boats of all kinds propelled by sails, oars, or paddles. Models, designs, drawings, descriptions, specifications, photographs, paintings, etc.

Class 529. Steamships and all vessels propelled by steam, electricity or motive power other than sails, oars or paddles, Ocean steamships, coasting, lake and river steamers. Tank steamers, cable steamers, steam pilot vessels, fishing vessels, steam fire, police and patrol boats, steam yachts, tow boats, steam launches, napth launches; vessels designed for jet propulsion or to be propelled by any unusual device. Models, designs, etc.
Class 530. Vessels, boats and floating structures for special purposes. Docks and other receptacles for vessels and structures used for docking and hauling out vessels or boats. Transports for carrying railway trains or cars, barges, canal boats; coal rafts and coal boxes; water boats, dredges, floating derricks, elevators, etc. Dry docks and marine railways. Models, designs, drawings, etc.

Class 531. Marine mechanical appliances. (For nautical instruments, see Group 151.) (For marine engines, boilers, pumps, condensers and appurtenances see Group 69.) Devices for propulsion, devices for obtaining forced draft, steam capstans, windlasses, deck winches, appliances to facilitate loading and discharging cargoes, steering apparatus; marine electric motors, electric indicators, engine room and bridge signals system and apparatus; boat lowering and detaching apparatus, speed indicators and speed registers, appliances for laying, picking up and repairing ocean telegraph cables, etc.

Class 532. Construction, outfit, equipment and repair of vessels. Methods, articles, fittings or appurtenances. Methods and materials used; special designs for hull or fittings; plates, cellulose, woodite, etc.; water-tight compartments, rudders, masts and spars, rigging; anchors, chains and cables; hawsers, ropes, cordage, wire rope, etc.; sails, blocks and tackles, oars, etc.

Class 533. Methods of lighting, heating, ventilation and refrigeration of ships.

Class 534. Protection of life and property and communication at sea. Harbors, light-houses, buoys and similar aids to navigation and all pertaining thereto; life-saving service, boats, rafts, belts, etc.; precautions against fire aboard ship and devices for extinguishing it; storm and coast signals; marine signals. Models, plans, samples, etc.

Class 535. Wrecking apparatus. Sub-marine armor and divers' appliances, pontoons for raising vessels, equipment for wrecking-steamers, etc.

Class 536. Miscellaneous. Trophies of yacht and boat clubs, relics of merchant marine and river transportation, relics of Arctic and other exploration, seamen's associations uniforms and designations of rank, flags and ensigns of merchant marine, yacht clubs, etc., designs, maps, charts and boats.
GROUP 86.

NAVAL WARFARE AND COAST DEFENSE.

Class 538. Armored vessels. Battle-ships, rams, cruisers, coast defense ships. Models, designs, drawings, descriptions, specifications, photographs, paintings, etc.

Class 538. Unarmored vessels. Frigates, sloops and gun vessels, cruisers, dispatch vessels and tenders, torpedo boats, sub-marine boats, public vessels for special service, revenue vessels, surveying vessels, etc. Man-of-war boats, etc. Models, designs, etc.

Class 539. Ships and boats of war of barbarous and semi-civilized nations. Models, drawings, photographs, etc.

Class 540. Models and relics of famous ships of war, relics of naval battles, etc.

Class 541. Training ships, naval schools, naval institutes, naval reserve, etc.

Class 542. Guns and armor, and adjuncts and appliances of naval warfare (see also Group 113.) Guns, armor, torpedoes, small arms for naval use, projectiles and ammunition, fuses, sub-marine mines, methods, devices, fittings or appliances designed for use in naval warfare and coast defense.

The transportation exhibits naturally include everything of whatsoever name or sort, devoted to the purpose of transportation, and range from a baby carriage to a mogul engine; from a cash conveyor to a balloon or carrier pigeon. Technically this exhibit includes everything comprised in Class G of the official classification.

Leaving the Transportation Building by the same door as we entered at and proceeding southward the tourist notices the Hygeia Cooling Plant. This exhibit is useful as well as instructive, for in it is cooled for drinking purposes the water of the famed Hygeia Spring of Waukesha, Wisconsin, which is transmitted in pipes direct from the spring to the Exposition grounds. At numerous and noticeable stands in the grounds the thirsty traveler is able to slake his thirst and at the price of one cent a glass to receive a sparkling glass of this beneficial beverage from the hands of an attractively attired and beautiful girl.

The next noticeable feature is the official Exhibit of the Pennsylvania Railroad housed in the building to
our right. It is well worth a careful inspection as indicative of the excellent facilities to be found on this justly famous line of railway.

Proceeding, we pass the exhibit of the United States Wind Engine and Pump Company of Batavia, Illinois, and find ourselves before the Cold Storage plant of the Exposition. This is a concession made to the Hercules Iron Works and will be a novel feature to many attending the Fair. Within it will be made from 80 to 90 tons of ice each day. Three distinct systems will be shown, also the ice harvesting and the preservation of perishable articles in cold storage. This will be a pleasant spot to cool off in when the thermometer is 100° outside. The building is 130 by 255 feet, five stories high with four imposing towers, each 100 feet high, for observatories and ascended by elevators. The central tower is 191 feet high, is used as a smokestack, and is said to be the most artistic smokestack in existence. A skating rink is also operated here. Having seen the various processes we proceed and now notice The

Terminal Railway Station, where all trains entering the grounds during the period of the Fair will discharge passengers. All railways will have access to the Fair Grounds from the city via Seventy-fifth street, entering the southwest corner of the grounds. The central station stands between the Mining Building and the Machinery Hall annex, blocking on the west that thoroughfare, leading to the Administration Building on the east. Thirty-five tracks, thirty-four of which are laid in pairs, terminate on the west side of the station. All railroads running trains to the grounds will, with one exception, discharge passengers here. The one exception is the Illinois Central road. Four railway tracks extending north on Seipp avenue from Seventy-first street are the stem or pan-handle of the entire system. By means of the Y's at Seventy-first street trains are turned over the Seipp avenue tracks. An annex to the grounds extends south of Sixty-seventh street for two blocks or more. These tracks cut in half, north and south. To the east of them the space is taken up
by the great warehouse for packing-cases. To the west the "storage yards," as they are called, spread out into twenty-four lines of tracks. Between these yards and the terminal yards at the station four main tracks extend, with half a dozen others connecting the two great webs. During the Exposition the four track connection will be always open, while the others may be used by special trains which it may be desired to back down into the storage yards and hold in waiting. The Illinois Central Railroad, by special concession, discharges passengers at the Midway Plaisance crossing, where four stations are erected. All other excursion trains will run into the Central or Terminal Depot so that no transfer of passengers will be necessary. The Terminal Railroad depot is 150 by 300 feet, with an annexed train shed 100 by 672 feet, cost $225,000, and is built to accommodate 25,000 at one time. Provision is made for loading and unloading 36 trains at one time on reserved tracks. Two monster locomotives adorn its main entrance, each weighing 160,000 pounds and being mounted on a pedestal. They are exhibited by the Rogers Locomotive Works and the Brooks Company respectively.

The elevated station of the South Side Rapid Transit Company will be a central point for incoming and outgoing visitors. This road enters the grounds high over the Illinois Central tracks, at Sixty-third street, terminating on the south end of the roof of the annex to the Transportation Building. The elevated station is on a level with the roof of the Transportation Building, with three pairs of stairs leading up to it. On the same level there is a transfer platform to the elevated Intramural Line which encircles the grounds. This line starts at a big elevated loop northeast of the Government Building and runs north to the limits of the park at Fifty-sixth street. Here it follows the Fifty-sixth street line west to Stony Island avenue, and down the avenue line to a point half-way between Sixty-second and Sixty-third streets. Here it turns obliquely towards the Transportation Building, parallels it, passes over the Central Railroad station's tracks
and along the south end of the Machinery Hall annex. It turns east along the south side of the annex, thence obliquely into the southeast corner of the park. Here it turns north, terminating in another loop, which is just east of the Agricultural annex and just south of the convent La Rabida. Trains run at the rate of 12 miles an hour and make 11 stops in the run of 36-10 miles. Stops will be made at the Transportation Building (entrance of the Elevated Railroad), the Central Railroad terminal station, the Colonnade between Machinery and Agricultural Buildings, the Forestry Building and the loop near the Krupp Iron Works. On the return journey after passing the South Side Elevated Railroad entrance the intramural road will load and discharge passengers at Sixty-second, Fifty-ninth and Fifty-seventh streets, the Iowa State Buildings and the terminal loop near the Government Plaza. The stations are covered platforms with stairways leading to the tracks above. Tickets will be collected at the stairways the same as on an ordinary elevated road. The fare will be 10 cents. Each car has seven doors on either side, and a colored canvas curtain running in a continuous line from end to end. They are handsomely decorated in bronze color, and each bears in letters of gold with scarlet trimmings the single word "Intramural." The cars come from the works of Jackson & Sharp, Wilmington, Delaware. They are 50 feet long, 8 feet wide and built to accommodate 98 passengers each. The seats are arranged as in a summer street car, across the width. One lever only is used to open and shut all the doors, which are split in the middle and slide back instead of turning on a hinge. The peculiar feature of the cars is the method of propulsion employed. Instead of a detached locomotive each train of four or less cars is controlled from the front part of the first car where the engineer is stationed with his levers and air-brake. The motors are placed on the axles of the cars and by a novel spool arrangement they are capable of taking enough electricity to generate 400 horse power, from a wire which runs between the rails. A train crew consists of an engineer, con-
ductor and two brakemen. The air brake is modeled on a new pattern in which the air is supplied through a combination motor and pump carried in the cab with the engineer. Capital of the road, one million dollars. Capacity, 8,000 people per hour. The distances on the grounds are so great that visitors will find this arrangement to be a great source of convenience and comfort. Other means of transit will be provided inside of the grounds. One of these, and in fact the most attractive of all, will be the means of water transit through the lagoons, canal and basin. The waterways inside the grounds cover an area of about eighty-five acres. Here are provided launches and small craft of all kinds. One can board these boats and travel a distance of nearly three miles, passing on the route all of the principal buildings and points of attraction. It will be one of the grandest sights of the world, and one to leave an everlasting impression on the minds of those who view it. It will be a panorama of beautiful architecture, landscape effects, floral designs, statuary, fountains, etc. We now notice before us the gilded dome of the

Administration Building, which by popular verdict is pronounced the gem and crown of the Exposition palaces. It is located at the West end of the great court in the Southern part of the site, looking Eastward, and at its rear are the transportation facilities and depots. The most conspicuous object which will attract the gaze of visitors on reaching the grounds is the gilded dome of this lofty building. This imposing edifice cost $550,000. The architect is Richard M. Hunt, of New York, President of the American Institute of Architects, to whose established reputation it is a notable contribution. It covers an area of 260 feet square and consist of four pavilions 84 feet square, one at each of the four angles of the square and connected by a great central dome 120 feet in diameter and 220 feet in height, leaving at the center of each facade a recess 82 feet wide, within which are the grand entrances to the building. The general design is in the style of the French Renaissance. The first great
story is in the Doric order, of heroic proportions, surrounded by a lofty balustrade, and having the great tiers of the angles of each pavilion crowned with sculpture. The second story, with its lofty and spacious colonnades, is of the Ionic order. The four great entrances, one on each side of the building, are 50 feet wide and 50 feet high, deeply recessed and covered by semi-circular arched vaults, richly coffered. In the rear of these arches are the entrance doors, and above them great screens of glass, giving light to the central rotunda. Across the face of these screens, at the level of the office floor, are galleries of communication between the different pavilions. The interior features of this great building even exceed in beauty and splendor those of the exterior. Between every two of the grand entrances, and the connecting the intervening pavilion with the great rotunda, is a hall or loggia 30 feet square, giving access to the offices and provided with broad, circular stairways and swift running elevators. Above the balcony is the second story, 50 feet in height. From the top of the cornice of this story rises the interior dome, 200 feet from the floor, and in the center is an opening 50 feet in diameter, transmitting a flow of light from the exterior dome over head. The under side of the dome is enriched with deep panelings, richly moulded, and the panels are filled with sculpture in low relief, and immense paintings representing the arts and sciences. In size this rotunda rivals, if it does not surpass the most celebrated domes of a similar character in the world.

The dimensions of the Administration Building are as follows: 262 feet square. Height of outer dome, 277½ feet. Height of inner dome, 188 feet. Diameter of dome, 120 feet. The four pavilions are 82½ feet square and 74 feet high. The entrances are 50 feet high and 37 feet wide. At the at the base of the dome, 136 feet from the ground, is a promenade gallery, 18 feet wide. Material used.—3,250,000 feet of lumber, 1,562,607 pounds of structural steel. Floor area, 4.2 acres. The building is most richly ornamented in bas-reliefs, frescoing and sculpture. Around the base of the dome, on
the corners of the pavilions, and at the entrances are three groups of statuary emblematic of the arts and sciences. These groups are from twenty to thirty feet in height. The building contains the offices of the Exposition management the press headquarters, the foreign department, the post office, bank and information bureau.

Located at the Southern extremity of the Western lagoon, or lake, and North of the Transportation building is the Mines and Mining Building. This building is 700 feet long by 350 feet wide, and the Architect is S. S. Beman, of Chicago. Its architecture has its inspiration in early Italian Renaissance, with which sufficient liberty is taken to invest the building with the animation that should characterize a great general Exposition. There is a decided French spirit prevailing the exterior design, but it is kept well subordinated. In plan it is simple and straightforward, embracing on the ground floor spacious vestibules, restaurants toilet rooms, etc. On each of the four sides of the building are placed the entrances, those of the North and South fronts being the most spacious and prominent. To the right and left of each entrance inside start broad flights of easy stairs leading to the galleries. The galleries are 60 feet wide and 25 feet high from the ground floor and are lighted on the sides by large windows, and from above by a high, clear story extending around the building.

The main fronts look Southward on the the great central court and Northward on the Western and middle lakes, and an island gorgeous with flowers. The principal fronts display enormous arched entrances, richly embellished with sculptural decorations emblematic of mining and its allied industries. At each end of these fronts are large square pavilions surmounted by low domes, which mark the four corners of the building, and are lighted by large arched windows extending through the galleries.

Between the main entrance and the pavilions are richly decorated arcades, forming an open loggia on the ground floor and a deeply recessed promenade on the gallery floor.
ADMINISTRATION BUILDING.
level which commands a fine view of the lakes and islands to the Northward and the great central court on the South. The covered promenades are each 25 feet wide and 230 feet long and from them is had access to the building at numerous points. These loggias on the first floor are faced with marbles of different kinds and hues, which will be considered part of the mining exhibits, and so utilized as to have marketable value at the close of the Exposition. The loggia ceiling will be heavily coffered and richly decorated in plaster and color. The ornamentation is massed at the prominent points of the facade. The exterior presents a massive, though graceful appearance.

CLASSIFICATION OF EXHIBITS IN THE MINES AND MINING BUILDING

DEPARTMENT E.

GROUP 42.

Mines, Mining and Metallurgy.

Class 290. Collection of minerals, systematically arranged.
Specimens illustrating the formations of the earth systematically arranged.

GROUP 43.

MINERAL COMBUSTIBLES, COAL, COKE, PETROLEUM, NATURAL GAS, ETC.
Class 293. Asphaltite and asphaltic compounds—Unitaite, wortzilite grahamite, albertite, bitumen, mineral tar, amber.
Class 294. Petroleum, illuminating and lubricating oil.
Class 295. Natural gas.—Methods of conveying and using.

GROUP 44.

BUILDING STONES, MARBLES, ORNAMENTAL STONES AND QUARRY PRODUCTS.
Class 296. Building stones, granites, slates, etc., rough hewn, sawed or polished for buildings, bridges, walls, or
other constructions, or for interior decorations, or for furniture,—marble, white, black or colored. Stagmitic marbles, only brecciated marbles, silicified wood, agates, jaspers, porphyries, etc., used in buildings, decoration, statuary, monuments, vases or furniture.

GROUP 45.
GRINDING, ABRADING, AND POLISHING SUBSTANCES.
Class 297. Grinding-stones, hones whetstones, grinding and polishing materials, sand quartz, garnet, crude topaz, diamond, corundum, emery in the rock and pulverized, and in assorted sizes and grades.

GROUP 46.
GRAPHITE AND ITS PRODUCTS, CLAYS AND OTHER FICTILE MATERIALS AND THEIR DIRECT PRODUCTS—ASBESTOS, ETC.
Class 298. Crude graphite, in blocks and in powder.
Class 299. Graphite and compounds for coating iron.
Class 300. Graphite lubricants.
Class 301. Electrotypers' graphite.
Class 302. For pencils, crayons, etc.
Class 303. Graphite crucibles and melting pots.
Class 304. Clays, kaolin, silex and other materials for the manufacture of porcelain faience and of glass, bricks, terra cotta, tiles, and fire brick; various examples.
Class 305. Refractory stones for lining furnaces; sandstone, steatite, etc., and refractory furnace materials. Mica; kidney, sheet or ground.
Class 306. Bauxite clay for the manufacture of aluminum.
Class 307. Asbestos, crude and manufactured.
Class 308. Meerschaum.

GROUP 47.
LIMESTONES, CEMENT AND ARTIFICIAL STONE.
Class 309. Lime, cement and hydraulic cement, raw and burned, accompanied by specimens of the crude rock, or material used; also artificial stone, concrete, beton, specimens of lime, mortar, and mixtures with illustrations of mixing, etc. Hydraulic and other cements.
Class 310. Beton mixtures and results, with illustrations of the processes.
Class 311. Artificial stone for building purposes, building blocks, cornices, etc. Artificial stone mixtures for pavements, walls, or ceilings.
Class 312. Asphaltic mastics and mixtures; asphaltic sand, asphaltic limestone.
Class 313. Gypson; crude and boiled calcareous; plasters, mastics, etc.

GROUP 48.
SALTS, SULPHUR, FERTILIZERS, PIGMENTS, MINERAL WATERS AND MISCELLANEOUS USEFUL MINERALS AND COMPOUNDS.

Class 314. Salt from beds or from brines.
Class 315. Nitre and other nitrates.
Class 316. Sulphates, alums and other salts.
Class 317. Sulphur and pyrites for the manufacture of sulphuric acid.
Class 319. Pig iron, iron oxides, ochres, vermilion, etc.
Class 320. Mineral fertilizing substances, gypson, phosphate of lime, marls, shells, coprolites, etc., not manufactured. (For commercial fertilizers and compounds see Group 17.)
Class 321. Mineral Waters. Artesian well water (for commercial forms, as bottled and as beverages see Group 10.) natural brines, saline and alkaline, efflorescences and solutions.

GROUP 49.
METALLURGY OF IRON AND STEEL WITH THE PRODUCTS.
Class 322. Ore mixtures, fluxes and fuels.
Class 323. Blast furnaces, stacks, stoves, blowing apparatus and arrangements.
Class 324. Pig iron, cast iron and mixtures.
Class 325. Cupola furnaces.
Class 326. Direct processes, sponge and blooming plant and apparatus.
Class 327. Puddling furnaces and appliances.
Class 328. Bessemer machinery; details and arrangements.
Class 329. Basic process and apparatus.
Class 330. Open Hearth Steel. plant and apparatus.
Class 331. Crucible Steel. plant and apparatus.
Class 332. Nickel steel.
Class 333. Manganese iron and steel, chrome steel, aluminium steel, tungsten steel, other forms of steel.
Class 334. Iron and steel, bars, rods, sheets, wire.

GROUP 50.
ALLUMINUM AND ITS ALLOYS.
Class 335. Alluminum pure and commercial; ingots, castings, bars, rods, wire sheets and partially manufactured.
Class 336. Aluminum alloys.
Class 337. Aluminum alloy wire and wire cloth.
Class 338. Process for the extraction of aluminum; electric reduction and results.

GROUP 51.
COPPER AND ITS ALLOYS, METALLURGY.
Class 339. Native copper and the methods of extracting, melting and refining it.
Class 340. Copper ores and their treatment by fire. Copper smelting, pneumatic process, converter system.
Class 341. Copper extraction in the "wet" way.
Class 342. Copper in ingots, bars, and rolled, with specimens illustrating its various stages of production. Copper and zinc, brass industry and products regarded as materials of manufacture.
Class 343. Copper and aluminum, aluminum bronze.

GROUP 52.
METALLURGY OF TIN, TINPLATE, ETC.
Class 344. Tin ores and their treatment.
Class 345. Block tin and its extraction from tin ore.
Class 346. Tinplate and methods of cleaning and coating iron and steel plates.
Class 353. Metallurgy of zinc, nickel and cobalt.
Class 347. Production of spelter.
Class 348. Sheet and bar zinc.
Class 349. Production of zinc oxide.
Class 350. Nickel in ingots, bars, rods, sheets and wire.
Class 351. Nickel covered steel and iron by rolling.
Class 352. Nickel "plating."
Class 353. Nickel salts.
Class 354. Special nickel alloys, as German silver, etc.
Class 355. Nickel steel (see Class 332.)

GROUP 54.
METALLURGY OF ANTIMONY AND OTHER METALS NOT SPECIFICALLY CLASSED.
Class 356. Crude and star antimony.
Class 357. Antimony compounds and principal alloys.
Class 358. Arsenic, white arsenic, orpiment and realgar.
Class 359. Bismuth and alloys; quicksilver and amalgams.

GROUP 55.
EXTRACTION OF GOLD AND SILVER BY MILLING.
Class 360. Gold Mills and accessories.
Class 361. Silver Mills and accessories.
Class 362. Apparatus and accessories of amalgamation, handling quicksilver.
Class 363. Retorting, melting, stamping shipping bullion.

GROUP 56.
EXTRACTION OF GOLD AND SILVER BY LIXIVIATION.
Class 364. Roasting and chloridizing furnaces.
Class 365. Chlorination process and adjuncts.
Class 367. Other processes.

GROUP 57.
EXTRACTION OF GOLD, SILVER AND LEAD BY FIRE.
Class 366. Furnace, plant and appliances.
Class 368. Lead bullion moulds and bars.
Class 369. Refining operations.

GROUP 58.
QUARRYING AND WORKING STONE.
Class 370. Quarrying, channelling and cutting engines.
Class 371. Derrick and fittings.
Class 372. Slate cutting, sawing and planing machines.
Class 373. Machines and apparatus for cutting, turning and polishing marble, granite and other stone (see Group 78.)

GROUP 59.
PLACER, HYDRAULIC AND "DRIFT" MINING.
Class 374. Apparatus and machines for washing gravel; sluices, cradles, toms, rockers, rifles, etc.
Class 375. Construction of ditches, flumes, pen-stocks, etc.
Class 376. Pipes for conveying water.

GROUP 60.
TOOLS AND APPLIANCES OF UNDERGROUND MINING, TIMBERING AND SUPPORTING.
Class 378. Timber cutting and framing machines
Class 379. Methods of timbering shown by examples.
Class 380. Underground chutes, gates and appliances for delivering ores. Methods and appliances for ventilating, lighting and signaling.

GROUP 61.
BORING AND DRILLING TOOLS AND MACHINERY AND APPARATUS FOR BRINGING OUT ORE AND COAL.
Class 381. Pic's, gads and hammers.
Class 382. Hand-drills, hammers and blasting instruments.
Class 383. Drilling by steam or compressed air "power drills."
Class 384. Diamond drills for prospecting or for sinking and driving.
Class 385. Well and Shaft boring, (various systems.)
Class 386. Boring for water, oil or gas-tools and methods.
Class 387. Machines, apparatus and implements for cutting coal.

GROUP 62.

Pumps, Engines and Apparatus used in Mining for Pumping, Draining and Hoisting.

GROUP 63.

MOVING, STORING AND DELIVERING ORES, COALS, ETC.

Class 388. Tramways, turn-tables, automatic hoisting and conveying on the surface contrivances for loading and unloading ores and coal.
Class 389. Cars of all kinds.
Class 390. Automatic dumping.
Class 391. Ore bins and appliances.

GROUP 64.

APPARATUS FOR CRUSHING AND PULVERIZING.

Class 392. Rock breakers.
Class 393. Rolls.
Class 394. Large stamps.
Class 395. Stamps and mortars.
Class 396. Revolving grinding mills.
Class 397. Coal breakers.

GROUP 65.

SIZING APPLIANCES.

Class 398. Grizzlies and bar screens and sieves.
Class 399. Perforated plates.
Class 400. Wire-mesh, sieves and trammels.
Class 401. Sizing by currents of water or air. Overflows.
Class 402. Sizing by belts.

GROUP 66.

ASSAYING APPARATUS AND FIXTURES.

Class 403. Plans of assay offices.
Class 404. Furnaces, muffles and appliances.
Class 405. Scorification and cupelling.
Class 406. Volumetric methods and apparatus.
Class 407. Fluxes and their receptacles.
Class 408. Assay ballances, etc. (See Group 112.)
Class 409. Assay tables, assay schemes and methods.

GROUP 67.

HISTORY AND LITERATURE OF MINING AND METALLURGY.

Class 410. Maps, relief models and pictures to illustrate the geology and distribution of minerals and mines, and the methods of working mines.
Class 411. History and statistics of mines and mining districts; Charts, diagrams and tabular representations. Statistics of mineral productions.
Class 412. Mine engineering,—surface and underground surveying and plotting, projection of underground work, location of shafts, tunnels, etc., surveys for aqueducts and for drainage.

Boring and drilling rocks, shafts, tunnels, etc.; surveys for aqueducts and for ascertaining the nature and extent of mineral deposits.

Construction.—Sinking and lining shafts by various methods, driving and timbering tunnels and the general operations of opening, stoping and breaking down ore; timbering, lagging and masonry.

Hoisting and delivering at the surface, rock, ore or miners; pumping and draining by engines, buckets or by adits.

Ventilating and Lighting.

GROUP 68.

Originals or Reproductions of Early and Notable Implements and Apparatus used in mining and Metallurgy.

East of the Mines and Mining Building is the ELECTRICAL BUILDING, the seat of perhaps the most novel and brilliant exhibit in the whole exposition, is 345 feet wide and 700 feet long, the major axes running north and south. The south front is on the great quadrangle or court: the north front faces the lagoon; the east front is opposite the Manufactures building, and the west faces the Mines Building.

The general scheme of the plan is based upon a longitudinal nave 115 wide and 114 feet high, crossed in the middle by a transept of the same width and height. The nave and the transept have a pitched roof, with a range of sky-lights at the bottom of the pitch, and clear story windows. The
rest of the building is covered with a flat roof averaging 62 feet in height, and provided with sky-lights.

The second story is composed of galleries connected across the nave by two bridges, with access by four grand staircases. The area of the galleries in the second story is 118,546 square feet or 2.7 acres.

The exterior walls of this building are composed of a continuous Corinthian order of pilasters, 3 feet 6 inches wide and 42 feet high, supporting a full entablature, and resting upon a stylobate 8 feet 6 inches. The total height of the walls from the grade out side is 63 feet 6 inches.

At each of the four corners of the building there is a pavilion, above which rises a light open spire or tower 169 feet high. Intermediate between these corner pavilions and the central pavilions on the east and west sides, there is a subordinate pavilion bearing a low square dome upon its lantern.

The Electricity Building has an open portico extending along the whole south facade, the lower or Ionic order forming an open screen in front of it. The various subordinate pavilions are treated with windows and balconies. The details of the exterior orders are richly decorated and the pediments, friezes, panels and spandrels have received a decoration of figures in relief, with architectural motives, the general tendency of which is to illustrate the purposes of the building.

The appearance of the exterior is that of marble, but the walls of the hemicycle and the various porticos and loggia are highly enriched with color. the pilasters in these places being decorated with scagliola, and the capitals in metallic effects in bronze.

VanBrunt & Howe, of Kansas City are the architects. The cost is $375,000.

CLASSIFICATION OF EXHIBITS IN THE ELECTRICITY BUILDING.

DEPARTMENT L.

GROUP 122.

APPARATUS ILLUSTRATING THE PHENOMENA AND LAWS OF ELECTRICITY AND MAGNETISM.

Class 757. Statical electricity.
Class 758. Thermo electricity; thermo-electric batteries.
Class 759. Magnets, temporary and permanent.
Class 760. Induction coils, converters, etc.

GROUP 123.

Apparatus for Electrical Measurements.
Class 761. Standard resistance coils.
Class 762. Standard condensers.
Class 763. Standard batteries.
Class 764. Instruments of precision; voltmeters, ammeters, voltmeters, etc.

GROUP 124.

Electric batteries, Primary and Secondary.

GROUP 125.

Machines and Appliances for Producing Electrical Currents by Mechanical power—Dynamical Electricity.
Class 765. Dynamos of direct current, constant electrical motive force; varying quantity.
Class 766. Dynamos of direct current, constant quality and varying E. M. F.
Class 767. Dynamos of alternating current, constant E. M. F., and varying quantity.
Class 768. Dynamos of alternating current, constant quantity and varying E. M. F.

GROUP 126.

TRANSMISSION AND REGULATION OF ELECTRIC CURRENT.
Class 769. Cables, wires and insulation; rheostats, switches, indicators, registering meters; ammeters voltmeters.
Class 770. Safety and protective appliances: lightning rods, lightning arresters, insulators, fusible cut-outs, safety switches, etc.
Class 771. Conduits, interior and underground.

GROUP 127.

ELECTRIC MOTORS.
Class 772. Direct constant current.
Class 773. Direct constant D. M. F.
Class 774. Alternating current.

GROUP 128.

APPLICATION OF ELECTRIC MOTORS.
Class 775. Street, underground, mining and other railways.
Class 776. Elevators, pumps, printing presses and general machinery.
Class 777. Toys, novelties and domestic appliances.

GROUP 129.

LIGHTING BY ELECTRICITY.

Class 778. The arc systems, their, lamps, fixtures, and appliances.
Class 779. The incandescent systems, their lamps, fixtures and appliances.

GROUP 130.

HEATING BY ELECTRICITY.

Class 780. For warming and heating apartments.
Class 781. For heating flat irons, soldering irons, and other objects used in industrial operations.
Class 782. Maintenance of constant high temperature in ovens.
Class 783. Electric heating furnaces.

GROUP 131

ELECTRO-METALLURGY AND ELECTRO-CHEMISTRY.

Class 784. Electrotyping.
Class 785. Electro-plating, gilding and nickeling.
Class 786. Electro-deposition of iron and other materials.

Class 787. Electrolytic separation of metals from their ores or alloys.

GROUP 132.

ELECTRIC FORGING, WELDING, STAMPING, TEMPERING, BRAZING, ETC.

Class 788. Apparatus for, and methods of forging, welding or joining iron, steel or other metals.
Class 789. Brazing, stamping, tempering, etc.

GROUP 133.

ELECTRIC TELEGRAPH AND ELECTRIC SIGNALS.

Class 790. Various systems of transmitting and receiving.
Class 791. Chronographs.
Class 792. Annunciators.
Class 793. Thermostats.
Class 794. Fire alarm apparatus.
Class 795. Police telegraph and Burglar alarm apparatus.
Class 796. Railroad signal apparatus.

GROUP 134.

THE TELEPHONE AND ITS APPLIANCES, PHONOGRAPH.

Class 797. Cables, constructions and underground work.
Class 798. Special protective devices.
Class 799. Switch boards.
Class 800. Transmitting apparatus.
Class 801. Receiving apparatus.
Class 802. Signalling apparatus.
Class 803. Long distance system.
Class 804. Various systems of operation.
Class 805. Subscriber's apparatus, Numbers, Code, Registers, etc.
Class 806. Phonographs, receiving and recording apparatus.
Class 807. Apparatus for the reproduction of recorded sounds and articulate speech.

**GROUP 135.**

**Electric in Surgery, Dentistry and Therapeutics.**

Class 808. Cautery apparatus.
Class 809. Apparatus for the application of the electrical current as a remedial agent—surgical and dental.
Class 810. Apparatus for diagnosis.
Class 811. Apparatus for the destruction of life.

**GROUP 136.**

**Application of Electricity in Various Ways not Before Specified.**

Class 812. Ignition of explosives, gas lighting, etc.
Class 813. Control of heating apparatus by electricity, as applied to steam and hot air pipes and registers.
Class 814. Electric pens.
Class 815. Application in photography.

**GROUP 137.**

**History and Statistics of Electrical Inventions.**

Class 816. Objects illustrating the development of the knowledge of electricity and of the application of electricity in the arts.
Class 817. Collection of books and publications upon electricity and its appliances.

**GROUP 138.**

**Progress and Development in Electrical Science and Construction, as Illustrated by Models and Drawings of Various Countries.**

Class 819. Foreign exhibits of electrical models and drawings.

Leaving the Electrical Building by the front entrance the visitor finds himself opposite the beautiful McMonnies Fountain with two electrical fountains on either side, located at the Western end of the main basin. The Statue of the Republic is at the other end of the basin. Turning to the right he then enters

Machinery Hall, of which Peabody & Stearns, of Boston, are the architects which has been pronounced by many architects second only to the Administration Building in the magnificence of its appearance. This building measures 850 by 500 feet, and with the Machinery Annex and Power House, cost about $1,200,000. It is located at the extreme South end of the park midway between the shore of Lake Michigan and the west line of the park. It is just south of the Administration building, and west and across a lagoon from the Agriculture building. The building is spanned by three arched trusses, and the interior presents the appearance of three railroad train-houses side by side, surrounded on all the four sides by a gallery 50 feet wide. The trusses are built separately so they can be taken down and sold for use as railroad train houses. In each of the long naves there is an elevated traveling crane running from end to end of the building for the purpose of moving machinery. These platforms are built so that visitors may view from them the exhibits beneath. The power for this building is supplied from a power-house adjoining the south side of the building.

CLASSIFICATION OF EXHIBITS IN MACHINERY HALL.

DEPARTMENT F.

GROUP 69.

MOTORS AND APPARATUS FOR THE GENERATION AND TRANSMISSION OF POWER, HYDRAULIC AND PNEUMATIC APPARATUS.

Class 413. Boilers and all steam or gas generating apparatus for motive purposes.

Class 414. Water wheels, water engines, hydraulic rams.

Class 415. Steam, air and gas engines.
MACHINERY HALL.
Class 416. Apparatus for the transmission of power—shafting, hanglers, belting, pulleys, couplings, clutches, cables, gearing. Transmission of power by compressed air, etc.

Class 417. Pumps and apparatus for lifting and moving liquids, water filters. (See also Department E.)

Class 418. Pumps and apparatus for moving and compressing air or gas. (See also Department E.)

Class 420. Hydraulic presses, freight elevators and lifts, traveling cranes and derricks. (See also Department E.)

Class 421. Beer engines, soda water machines, bottling apparatus, corking machines. (See also Department A.)

Class 422. Iron and other metallic pipes, tubes and fittings, stop valves, cocks, etc.

Class 423. Diving apparatus and machinery.

Class 424. Ice machines. Refrigerating apparatus.

GROUP 70.

FIRE ENGINES—APPARATUS APPLIANCES FOR EXTINGUISHING FIRE.

Class 425. Engines.

Class 426. Hose-carts and hose.

Class 427. Ladders and escapes.

Class 428. Standpipes, etc.

Class 429. Chemical fire-extinguishing apparatus.

GROUP 71.

MACHINE TOOLS AND MACHINES FOR WORKING METALS.

Class 430. Small tools for machinist’s use drills, taps and dies, gauges, etc.

Class 431. Squares, rules and measuring tools.

Class 432. Steam hammers, trip hammers, drop forging and swaging machines, hydraulic forging, etc.

Class 433. Planing, drilling, slotting, turning, shaping, milling, punching and cutting machines. Wheel cutting and dividing machines.

GROUP 72.

MACHINES FOR THE MANUFACTURE OF TEXTILE FABRICS AND CLOTHING.

Class 434. Machines for the manufacture of silk goods.

Class 435. Machines for the manufacture of cotton goods.

Class 436. Machines for the manufacture of woolen goods.

Class 437. Worsted working machinery and appliances.

Class 438. Machines for the manufacture of linen goods.

Class 439. Machines for the manufacture of rope and for twine making and for miscellaneous fibrous materials.
Class 440. Machines for paper making and felting.
Class 441. Machines for the manufacture of India-rubber goods.
Class 442. Machines used for the manufacture of mixed fabrics.
Class 433. Machines in the manufacture of tapestry, including carpets, lace, floor-cloth, fancy embroidery, etc.
Class 444. Sewing machines for heavy materials.
Class 445. Machines for preparing and working leather.
Class 446. Machines for making boots and shoes.

GROUP 73.

MACHINES FOR WORKING WOOD.
(See also Department A and E.)

Class 447. Direct acting steam sawing machines, with gang saws, band saws circular saws.
Class 449. Planing, sawing, veneering, grooving, mortising, tonguing, cutting, molding, stamping, carving and cask-making machines, etc.; cork-cutting machines, lathes for wood-work and machinery for the manufacture of matches, toothpicks, etc.

GROUP 74.

MACHINES AND APPARATUS FOR TYPE-SETTING, PRINTING, STAMPING, EMBOSsing, AND FOR MAKING BOOKS AND PAPER WORKING.

Class 450. Steam-power presses.
Class 452. Job presses.
Class 453. Hydraulic presses.
Class 454. Ticket printing and numbering machines.
Class 455. Type casting and setting machines. Linotypes.
Class 456. Hand-casting molds.
Class 457. Machines and printing blocks.
Class 458. Typographic electrotyping.
Class 460. Book-binding machinery.
Class 461. Envelope machines.
Class 462. Paper-cutters, card cutters.
Class 463. Printers’ cabinets and printers’ furniture generally.
Class 464. Composing sticks, cases.
Class 465. Brass and type-metal labor-saving appliances.
Class 466. Specimens of plain and ornamental types, cuts, music borders and electrotype plates.

Class 467. Type-founders' specimen books of type and typographical ornaments.

Class 468. Miscellaneous machinery used by printers and newspapers not otherwise specified. Folding machines, addressing, stamping, embossing, etc.

GROUP 75.

LITHOGRAPHY, ZINCOGRAPHY AND COLOR PRINTING

Class 469. Lithography—Tools, materials and appliances. The various methods of lithography, crayon, pen and ink; engraving, brush work, color printing, etc. Transferring, printing. Zincography.

Class 470. Color printing—Historical illustrations from the 16th century to the present time. (Relief engraving. The old chiaro-oscuros. Modern wood engraving. The Baxter process. Intaglio engraving, printed at one impression: i.e., from the plate rubbed in different colors, printed from several plates. Stenochromy. Chromo-lithography. Wax process, etc. The modern photo-mechanical process applied to color printing.)

GROUP 76.

PHOTO-MECHANICAL AND OTHER MECHANICAL PROCESSES OF ILLUSTRATING, ETC.

Class 471. Relief processes—Photo-mechanical processes producing relief blocks for printing in the type-press (etching, swell gelatine and washout process). Line processes (phototypographic etchings, typo-gravures, etc.)

Class 472. Half-toned process. Gelatine grain processes (Paul Pretsch's and later). Screen processes. (Meisenbach, etc.) The Ives process.

Class 473. Photo-lithography, etc. Photo-mechanical processes involving the production of printable designs on stone or zinc, i.e., photo-lithography, and photo-zincography. half-toned processes, (the Bitumen process, Poitevin's process, Asser's process, etc). Recent grain processes. Screen processes. Line processes. (Osborne's process).

Class 474. Collographic processes. Photo-mechanical processes, involving the production of gelatine or other glutinous films, to be used as printing surface in the lithographic press, i.e., collographic or photo-gelatine processes (alber-type, heliotype, artotype, etc.)

Class 475. Photo-mechanical processes—Producing intaglio plates for printing in the copper-plate press, i.e. photo-
gravure. Etching processes, deposit processes, heliotypes, heliogravures, etc. The Woodbury type moulds and impressions.

Class 476. Mechanical processes—Partly chemical, partly mechanical, devised as substitutes for the other hand process, but not involving photography. Chalcotype. Compte process, Gillot process, etching in relief, typographic etching properly so-called (chemotype, the graphotype, kaolotype) the wax process and allied processes (glyphography, kero-graphy, stylography, typographic etching, improperly so-called, etc.) Machine relief engraving, machine intaglio engraving (medal ruling), galvanography, stenochromy. mineralogrophy, nature printing, the anastatic process, etc. Appendix etching on glass (improperly so-called, which involves photography, but not the use of the press).

Class 477. Drawing for process work.


Class 479. Applications of the photo-mechanical process in the industrial arts. Prints on metal work, cloth, etc.

GROUP 77.

MISCELLANEOUS HAND-TOOLS, MACHINES AND APPARATUS USED IN VARIOUS ARTS.

Class 480. Machines for making clocks, watches and watch cases.
Class 481. Machines for making jewelry.
Class 482. Machines for making buttons, pins, needles, etc.
Class 483. Wire working machinery.
Class 484. Machines for ironing, drying, scouring and laundry work generally.
Class 485. Machines for making capsules and other pharmaceutical products.
Class 486. Machines used in various manufacturing industries not specifically mentioned.
Class 487. Emery and corundum wheels.
Class 488. Street rollers, sweepers and sprinklers.
Class 489. Steam guages, oil cocks and all kinds of appliances used in connection with machinery.
Class 490. For testing the strength of materials. Dynamometers.
GROUP 78.
MACHINES FOR WORKING STONE, CLAY AND OTHER MATERIALS.

(See also Department E.)

Class 491. Stone-sawing and planing machines, dressing, shaping and polishing, sand blasts, Tilghman's machines, glass-grinding machines, etc.

Class 492. Brick pottery and tile machines. Machines for making artificial stone.

Class 493. Rolling mills and forges—roll trains, hammers, squeezes, engines, boilers, and other driving power, heating furnaces, (coal and gas), special machines for shaping metal, such as spike, nail and horse shoe machines, tire mills, etc.

GROUP 79.
MACHINERY USED IN THE PREPARATION OF FOOD, ETC.

Class 494. Mills for the preparation of cereals.
Class 495. Sugar-refining machines. Confectioners' machinery.
Class 496. Oil-making machinery, presses and stills.
Class 497. Mills and machinery for spices, coffee, etc.
Class 498. Evaporating machinery for condensing milk, etc.

At the back of the Machine Shops and Boiler House, after crossing under the tracks of the Intramural Railroad, the visitor finds on the extreme right the Gas and Oil exhibits. Across the tracks are the Custom House and the outside exhibits of Germany. Next to the Oil exhibit, the tourist will encounter the Sawmills covering a space of 125 by 300 feet and erected at a cost of $35,000. Sawmills in operation as exhibits are shown here. Next is the unique exhibit of a loggers camp. Alongside of this is the Stock Pavilion and further Southward is the

Stock Exhibit. Forty acres are covered by the buildings for the stock exhibits. The pavilion is a great oblong building, having a show ring for animals and an amphitheatre for spectators. The pavilion is 280 by 440 feet in size. The stock sheds are built after the style of the Spanish or Mexican hacienda—a hollow square, entrance to the stall being
VIEW OF THE LAGOON.
from the court. The total cost of the buildings for live-stock is $335,000.

Near the lake are located the Dairy Barns. Here will be stabled the cows participating in the milk, butter and cheese tests, to be conducted during the Exposition. Next comes the Car House and Power House of the Elevated Railroad.

Close to the lake front is the Forestry Building. It is in appearance the most unique of all the Exposition structures. Its dimensions are 200 by 500 feet. To a remarkable degree its architecture of the rustic order. On all four sides of the building are verandas, supporting the roof of which is a colonade consisting of a series of columns composed of three tree-trunks each 25 feet in length, one of them from 16 to 20 inches in diameter and the others smaller. All of these trunks are left in their natural state, with bark undisturbed. They are contributed by the different States and Territories of the Union and foreign countries, each furnishing specimens of its most characteristic trees. The sides of the building are constructed of slabs with the bark removed. The window frames are treated in the same artistic manner as the rest of the building. The main entrances are elaborately finished in different kinds of wood, the material and workmanship being contributed by several prominent lumber associations. The roof is thatched with tan and other barks. The visitors can make no mistake as to the kinds of tree-trunks which form the colonade, for he will see upon each a tablet upon which is inscribed the common and scientific name, the State or country from which the trunk was contributed, and other pertinent information, such as the approximate quantity of such timber in the region whence it came. Surmounting the cornice of the veranda and extending all around the building are numerous flagstaffs bearing the colors, coats-of-arms, etc., of the Nations and States represented in the exhibits inside.

The visitor next sees the Agricultural exhibit of the French Colonies at the end of the South Pond.
MRS. BERTHA PALMER,
President Lady Board of Managers.
An exhibit of Windmills is in close proximity to this last attraction, and a little further along the Agricultural Implement exhibit is located.

Returning to the Forestry Building, and passing on the land side of it the visitor again meets a section of the Dairy Exhibit. Next to this, and across the tracks of the railroad, is the Shoe and Leather exhibit, a separate building showing this important industry in all its branches. Beyond this are located the Gun Works of Herr Krupp, of Essen, in Germany, where are shown some of the mammoth cannons, and the process for manufacturing, for which these works are celebrated throughout the world. Opposite the Forestry Building is the

Dairy Building, By reason of the exceptionally novel and interesting exhibits it will contain, is quite sure to be regarded with great favor by World's Fair visitors in general, while by agriculturists it will be considered one of the most useful and attractive features of the whole Exposition. It was designed to contain not only a complete exhibit of dairy products but also a Dairy School, in connection with which will be conducted a series of tests for determining the merits of different breeds of dairy cattle as milk and butter producers.

The building stands near the lake shore in the south eastern part of the park, and close by the general live stock exhibit. It covers approximately half an acre, measuring 95 by 200 is two stories high and cost $30,000. In design it is of quiet exterior. On the first floor, besides office headquarters, there is in front a large open space devoted to exhibits of butter, and farther back an operating room 25 by 100 feet, in which the Model Dairy will be conducted. On two sides of this room are amphitheatre seats capable of accommodating 400 spectators. Under these seats are refrigerators and cold storage rooms for the care of dairy products. The operating room, which extends to the roof, has on three sides a gallery where the cheese exhibits will be placed. The rest of the second
story is devoted to a cafe, which opens on a balcony overlooking the lake.

The Dairy School, it is believed, will be most instructive and valuable to agriculturists.

Next to the Dairy Building is the Ethnographical exhibit and just north of the latter is the Indian School.

On the rocky promitory beyond this last exhibit is located an exact fac-simile of the celebrated Monasterio of Santa Maria de la Rabida (Saint Mary of the Frontier). This is one of the exhibits most intimately connected with Columbus upon the grounds. It is itself an exact reproduction of that beautiful old monastery located near Huelva, in Spain, at the confluence of the Odiel and Tinto Rivers. At the doors of this Monastery, Columbus begged of the Prior, one Juan Perez de la Marchena, bread and water for his little son Diego. And, hospitably entertained by the worthy Franciscan Monks, he revealed to them his marvelous plan for finding that which he thought a near route to Japan and the Indies, but which immortal blunder as it was, resulted in the discovery of the great American continent. The original Monastery in Spain has been restored and preserved as a National museum since the year 1846. In the reproduction here are stored the original relics of Columbus collected from the various European countries by the indefatigable researches and exertions of the Hon. W. E. Curtis, of Washington D. C. They are loaned by the Spanish Government and Columbus' descendants upon the express conditions (owing to their priceless value) that they are guarded night and day by the United States troops. The reproduction of the Monastery is true to life. Even upon the slopes descending to the lake one finds the palm tree and the pine which flourished upon the hill slopes of La Rabida in far off and sunny Spain. Moored opposite the Monastery, and most fittingly placed there, are extract productions of Columbus' fleet: the Santa Maria, his own flagship, the Pinta and the Nina.

Westward from the Convent of La Rabida the visitor sees one of the most magnificent structures raised for the Expo-
sition, the Agricultural Building. The style of architecture is classic renaissance. This building is put up very near the shore of Lake Michigan, and is almost surrounded by the lagoons that lead into the Park from the lake. The building is 500 by 800 feet, its longest dimensions being east and west. For a single story building the design is bold and heroic. The general cornice line is 65 feet above grade. On either side of the main entrance are mammoth Corinthian pillars, 50 feet high and 5 feet in diameter. On each corner and from the center of the building pavilions are reared, the center one being 144 feet square. The corner pavilions are connected by curtains, forming a continuous arcade around the top of the building. The main entrance leads through an opening 64 feet wide into a vestibule, from which entrance is had to the rotunda, 100 feet in diameter. This is surmounted by a mammoth glass dome 130 feet high. All through the main vestibule statuary has been designed, illustrative of the agricultural industry. Similar designs are grouped about all the grand entrances in the most elaborate manner. The corner pavilions are surmounted by domes 96 feet high, and above these tower groups of statuary. The design for these domes is that of female figures, of herculean proportions supporting a mammoth globe.

To the southward of the Agricultural Building is a spacious structure devoted chiefly to Live Stock and Agricultural Assembly Hall. This building is conveniently near one of the stations of the elevated railway. On the first floor, near the main entrance of the building, is located a Bureau of Information. This floor also contains suitable committee and other rooms for the different live stock associations. On the first floor there are also large and handsomely equipped waiting-rooms. Broad stairways lead from the first floor into the Assembly room, which has a seating capacity of about 1,500. This Assembly room furnishes facilities for lectures, delivered by gentlemen eminent in their special fields of work, embracing every interest connected with live stock, agriculture and allied industries.
AGRICULTURAL BUILDING.
Landing at the pier opposite the main basin from one of boats belonging to the Henry Syndicate the visitor encounters the Casino covering a space of 148 by 246 feet. Leaving the Casino the visitor passes under the vast Peristyle, the connecting structure between Music Hall and the Casino. It is 600 feet long, 60 feet wide and 60 feet high. At the center is a grand archway forming a portal from Lake Michigan to the Grand Central Court. This portal is dedicated to Columbus and is inscribed with the names of the word's greatest explorers, crowning it is a group of statuary emblematic of the progress of the world. It bears 48 columns representing the states and territories. The cost of the peristyle with the Casino and Music Hall was $300,000. At the north end of the peristyle is the Music Hall covering a space of 140 by 260 feet. The audience hall has a capacity of 2,500 and provision is made for an orchestra chorus of 500. Having inspected the Music Hall the tourist is next confronted by the monster and mammoth structure of the exposition, Manufactures and Liberal Arts Building.

Notable for its symmetrical proportions, the Manufactures and Liberal Arts Building is the mammoth structure of the Exposition. It measures 1,687 by 787 feet and covers nearly 42 acres, being the largest Exposition Building ever constructed. Within the building a gallery 50 feet wide extends around all four sides, and projecting from this are 86 smaller galleries, 12 feet wide, from which visitors may survey the vast array of exhibits and the busy scene below. The galleries are approached upon the main floor by 30 great staircases, the flights of which are 12 feet wide each. "Columbia Avenue," 50 feet wide, extends through the mammoth building longitudinally, and an avenue of like width crosses it at right angles at the center. The main roof is of iron and glass and arches an area 385 by 1400 feet, and has its ridge 150 feet from the ground. The building, including its galleries, has about 42 acres of floor space.

The Manufactures and Liberal Arts Building is in the Corinthian style of architecture, and in point of being severely
AUTHENTIC GUIDE TO CHICAGO AND

MANUFACTURES AND LIBERAL ARTS BUILDING.
classic excels nearly all of the other edifices. The long array of columns and arches, which its facades present, is relieved from monotony by very elaborate ornamentation. In this ornamentation female figures, symbolical of the various arts and sciences play a conspicuous and very attractive part.

The exterior of the building is covered with "staff," which is treated to represent marble. The huge fluted columns and the immense archer are apparently of this beautiful material.

There are four great entrances, one in the center of each facade. These are designed in the manner of triumphal arches, the central arch way of each being 40 feet wide and 80 feet high. Surmounting these portals is the great attic story ornamented with eagles 18 feet high, and on each side above the side arches are great panels with inscriptions, and the spandrels are filled with sculptured figures in bas-reliefs. At each corner of the main building are pavilions forming great arched entrances, which are designed in harmony with the great portals.

The building occupies a most conspicuous place in the grounds. It faces the lake with only lawns and prominades between. North of it is the United States Government Building, south the harbor, and in-jutting lagoon, and west the Electrical Building and lagoon separating it from the great island, which in part is wooded and in part resplendent with acres of bright flowers of varied hues.

CLASSIFICATION OF EXHIBITS.

DEPARTMENT H.
MANUFACTURES.
GROUP 87.

CHEMICAL AND PHARMACEUTICAL PRODUCTS.—DRUGGISTS' SUPPLIES.

Class 543. Organic and mineral acids.
Class 544. The alkalies and alkaline earths.—Potash, sodo, ammonia, caustic soda, carbonate of soda, lime, magnesia, barytes, etc., with their salts and other compounds. Bleaching powders, etc.
Class 545. Metallic oxides and salts of the metals, and other commercial chemical compounds.
Class 546. Pure chemicals for chemists' use.
Class 547. Drugs and pharmaceutical preparations and compounds.
Class 548. Chemists' and druggists' wares and supplies.
Class 549. Flavoring extracts, essences, essential oils, toilet soap, perfumery, pomades, cosmetics, etc.
Class 550. Explosives and fulminating compounds.—Powder, giant powder, etc., shown only by empty cases and packages, "dummy packages," and cartridges, to illustrate the commercial forms.

GROUP 88.

PAINTS, COLORS, DYES AND VARNISHES.
(See also Group 48.)

Class 552. Colors and pigments—natural and artificial, dry and ground in oil. Printing inks, writing inks, blacking, cochineal, etc.
Class 553. White lead and white zince industry.
Class 554. Painters and glaziers' supplies.
Class 555. Artists' colors and artists' materials.

GROUP 89.

TYPEWRITERS, PAPER, BLANK BOOKS, STATIONERY.

Class 556. Paper, pulp and paper stock.
Class 557. Cardboard, cards, pastboard, binders-board, building-boards, and felts for walls and roofing for floors, ceilings and for decorations, embossed-boards, etc. Papier mache, useful articles made from paper.
Class 558. Wrapping papers, manilla paper, paper bags, tissue paper.
Class 559. Printing paper for books and for newspapers.
Class 560. Wrapping papers, bond paper, drawing papers, tracing papers and tracing linen; envelopes, blotting paper.
Class 561. Blank books, sets of account books, specimens of ruling and binding, including blanks, bill-heads, etc., book-binding.
Class 562. Ornamental and decorated paper, marbleized paper, etc.
Class 563. Wall papers, oil papers.
Class 564. Typewriters, stationery and stationers' goods, ink-stands, weights, rulers, pens, pencils, filingcases, letter presses, etc.
FURNITURE OF INTERIORS, UPHOLSTERY, AND ARTISTIC DECORATIONS.

Class 565. Chairs of all grades, rockers, settees, lounges, etc.
Class 565. Tables for various purposes—Billiard, card, dining, etc.
Class 566. Suites of furniture for the hall, parlor, drawing-room, library, dining-room and for the bed-chamber.
Class 568. Upholstery for windows, doors, curtains, portieres, etc.
Class 569. Mirrors and their mountings.
Class 570. Treatment of porches, doorways, halls and staircases, mantels, etc.
Class 571. Floors, ceilings, walls, doors and windows.
Class 572. Artistic furnishing, illustrated by completely furnished apartments, with selections of furniture and various objects of adornment from other groups.
Class 573. Sewing and embroidering. (See also Group 72.)

GROUP 91.
CERAMICS AND MOSAIC.
FOR CLAYS AND OTHER MATERIALS.
(See Group 46.)

Class 574. Bricks and terra cotta for building purposes, plain and enameled. Terra cotta ware for decorative purposes. Reproductions of ancient Roman and Grecian red ware.
Class 575. Stoneware and pottery, lead-glazed and salt-glazed ware, Doulton ware.
Class 576. Earthenware, stone, china, and semi-porcelain ware, faience, etc., with soft glazes, and with high-fire, feldspathic glazes and enamels.
Class 577. Porcelain with white or colored body, painted incised or pate-sur-pate decoration.
Class 578. Tiles.—Plain, encaussic and decorated tiles, bosses, tessarae, etc., for pavements, mural and mantal decorations, etc.
Class 579. Mural decoration, reredos and panels, borders for fire-places and mantels.
Class 580. Designs for and examples of pavements in tiles and mosaics.
GROUP 92.
MARBLE, STONE AND METAL MONUMENTS, MAUSOLEUMS, MANTELS, ETC.—CASKETS, COFFINS AND UNDERTAKERS' FURNISHING GOODS.

Class 581. Marble, stone and metal monuments, and mausoleums and fittings.
Class 582. Marble and stone fountains, balustrades and miscellaneous ornaments.
Class 583. Marble, stone and metal mantels and ornaments.
Class 584. Coffins, caskets and undertakers' furnishing goods.

GROUP 93.
ART METAL WORK—ENAMELS, ETC.

Class 585. Art metal work, selected examples of iron forgings, bronzes, bas-reliefs, repousse and chisled work.
Class 586. Cloisonne enamels.
Class 587. Chamy leve enamels.
Class 588. Niello work.

GROUP 94.
GLASS AND GLASSWARE.

Class 589. Plate glass in the rough, as cast and rolled, and as ground and polished.
Class 590. Blown glass, ordinary window glass, bottles, tubes, pipes, etc.
Class 591. Pressed glass and glassware generally for the table and various purposes; skylights, insulators, etc.
Class 592. Cut-glass ware for the table and various purposes. Engraved and etched glass.
Class 593. Fancy glassware—plain, iridescent, opalescent, colored, enameled, painted beaded, gilded, etc. Millefiori and aventurine glass.
Class 594. Crackled glass in layers, onyx glass, sculptured glass; reproductions of ancient glassware.
Class 595. Glass mosaics, beads spun glass, and glass fabrics.

GROUP 95.
STAINED GLASS IN DECORATION.

Class 596. Civic and domestic stained glass work, panels, windows, etc.
Class 597. Ecclesiastical stained glass work.
GROUP 96.

CARVINGS IN VARIOUS MATERIALS.

Class 598. Wood carving.
Class 599. Ivory carving.
Class 600. Bamboo incised work.
Class 601. Metal carving and chiseling.
Class 602. Sculptured and engraved glass.
Class 603. Sculpturing, carving, and modeling in porcelain. Pate-sur-pate.

GROUP 97.

GOLD AND SILVERWARE, PLATE, ETC.

Class 604. Gold and silverware, gilt ware for the table and for decoration.
Class 605. Silver table ware generally.—Plates, salvers, tureens bowls, dishes, baskets, candelabra epergnes, etc.
Class 606. Knives, forks and spoons.
Class 607. Fancy bonbon and other spoons; miscellaneous fancy articles in silver.—Snuff-boxes, match-boxes, cane heads, handles, chatelaines, etc.
Class 608. Ware of mixed metals.—Mokume ware, inlaid and incrusted ware, enameled and niello work.
Class 609. Plated ware on hard or nickel silver foundation.
Class 611. Plated ware on soft metal alloys.

GROUP 98.

JEWELRY AND ORNAMENTS.

Class 612. Gold ornaments for the person, plain, chased, or otherwise wrought or enameled, rings, bracelets, necklaces, chains, etc.
Class 613. Diamonds and various colored gems, as rubies, sapphires, emeralds, chrysoberyls, tourmalines, topazes, etc. mounted in various ornaments. (For gems in the rough and unmounted in part, see Department E.)
Class 614. Agates, onyx, jasper, ornaments for the person.
Class 615. Pastes and imitations of precious stones, mounted or unmounted.
Class 616. Gold-covered and gilt jewelry and ornaments.

GROUP 99.

HOROLOGY—WATCHES, CLOCKS, ETC.

(See also Group 151.)

Class 617. Watches of all kinds.
Class 618. Watch movements and parts of watches.
Class 619. Watch-cases.
Class 620. Watch makers' tools and machinery in part.
(For machines requiring power, see Department F.)
Class 621. Clocks of all kinds.
Class 622. Clock movements.
Class 623. Clock-making machinery.
Class 624. Watchmen's time registers.

GROUP 100.

SILK AND SILK FABRICS.

Class 625. Raw silk as reeled from the cocoon, thrown or twisted silks in the gum; organzine, tram, spun-silk yarn.
Class 626. Thrown or twisted silks, boiled off or dyed, in hanks, skeins or on spools; machine twist and sewing-silk.
Class 627. Spun-silk yarns and fabrics and the materials from which they are made.
Class 628. Plain woven silks, lute-strings, sarsnets, satines, serges, foulards, tissues for hat and millinery purposes, etc.
Class 629. Figured-silk piece goods, woven or printed. Upholstery silks, etc.
Class 630. Crapes, velvets, gauzes, cravats, handkerchiefs, hoisiery, knit goods, laces, scarfs, ties, veils; all descriptions of cut and made-up silks.
Class 631. Ribbons—plain, fancy and velvet.
Class 632. Bindings, braids, cords, galloons, ladies' dress trimmings, upholsterers', tailors', military and miscellaneous trimmings.

GROUP 101.

FABRICS OF JUTE, RAMIE AND OTHER VEGETABLE AND MINERAL FIBRES.

Class 633. Jute cloth and fabrics, plain and decorated.
Class 634. Ramie and other fabrics.
Class 635. Mats and coarse fabrics of grass, rattan, cocoa-nut and bark; mattings, Chinese, Japanese palm-leaf, grass and rushes; floor cloths of rattan and cocoa-nut fibre, aloe fibre, etc.
Class 636. Floor oil-cloths, and other painted and enamelled tissues, and imitations of leather with a woven base.
Class 637. Woven fabrics of mineral origin.—Fine wire-cloths, sieve-cloth, wire-screen, bolting cloth. (See also
Group 117.) Asbestos fibre, spun and wooven, with the clothing manufactured from it. Glass thread, floss and fabrics. (See also Class 595.

GROUP 102.

YARNS AND WOVEN GOODS OF COTTON, LINEN AND OTHER VEGETABLE FIBRES.

Class 638. Cotton fabrics.—Yarns, twines, sewing-cotton, tapes, webbings, battings, waddings, plain-clothes for printing and converting. Print cloths, brown and bleached sheetings of shirtings, drills, twills, sateens; gingham, cotton flannels, fine and fancy woven fabrics, duck, ticks, denims, stripes, bags, and bagging. Upholstery goods.—Tapestries, curtains and chenillas.

Class 639. Linen fabrics.—Linen thread, cloths and drills, plain and mixed; napkins, tablecloths, sheetings, shirtings, etc., cambrics, handkerchiefs, and other manufactures of linen.

GROUP 103.

WOVEN AND FELTED GOODS OF WOOL AND MIXTURES OF WOOL.

Class 640. Woolen and worsted fabrics.—Woolen yarns, union or merino worsted tops, noils and yarns, shoddy and mungo.

Class 641. Woolen goods.—All wool woolen cloths, docskins, cassimeres, indigo flannels and broadcloth, overcoatings, cloakings and jerseys, flannels, dress goods, etc., for both men and women.

Class 642. Blankets, robes, traveling rugs, horse blankets, shawls, bunting, etc.

Class 643. Worsted goods.—Coatings, serges, suitings, cashmeres, etc.

Class 644. Cotton and woolen-mixed woven goods.—Unions, tweeds, cheviots, flannels, linseys, blankets, etc.

Class 645. Woven on cotton warps.

Class 646. Upholstery goods.

Class 647. Sundries and small wares, webbings and gorings, bindings, beltings, braids, galloons, fringes and gimps, cords and tassels, and all elastic fabrics, dress trimmings, embroideries, etc.

Class 648. Felt goods, felt cloths, trimmings and lining felt, felt skirts and skirting, table and piano covers, felts for ladies' hats, saddle felts, druggets, endless belts for printing machines, rubber shoelining and other foot wear, hair feltings.
Class 649. Carpets and rugs, ingrains (two-ply and three-ply) and art carpets, tapestry and body Brussels, tapestry velvet, Wilton or Wilton velvet. Axminster, tapestry Wilton, Moquette, Ingrain and Smyrna rugs. other woolen rugs, rag carpets.

Class 650. Wool hats of every description.
Class 651. Fabrics of hair, alpaca, goat's hair, camel's hair, etc., not otherwise enumerated.

GROUP 104.

CLOTHING AND COSTUMES.

Class 652. Ready-made clothing—Men's and boys'.
Class 653. Dresses, gowns, habits, costumes.
Class 654. Hats and caps.
Class 655. Bonnets and millinery.
Class 656. Boots and shoes.
Class 657. Knit goods and hosiery, woven gloves, gloves of leather and skins.
Class 658. Shirts, collars, cuffs, cravats, suspenders, braces, and appliances.
Class 659. Sewing machines for domestic purposes.

GROUP 105.

FURS AND FUR CLOTHING.

Class 661. Fur mats and carriage or sleigh robes.
Class 662. Fur clothing.
Class 663. Fur trimmings.

GROUP 106.

LACES, EMBROIDERIES, TRIMMINGS, ARTIFICIAL FLOWERS, FANS, ETC.

Class 664. Laces of linen and cotton, of silk, wool, or mohair, made with the needle or the loom; silver and gold lace.
Class 665. Embroideries, crochet-work, etc.; needlework.
Class 666. Artificial flowers for trimming and for decoration of apartments.
Class 667. Fans.
Class 668. Trimmings in variety, not otherwise classed.
—Buttons, books and eyes, pins and needles.
Class 669. Art embroidery and needle-work.
Class 670. Tapestries, hand-made.
Class 671. Tapestries, machine-work.

GROUP 107.

HAIR WORK, COIFFURES, AND ACCESSORIES OF THE TOILET.
Class 672. Hair-work, as souvenirs and ornaments.
Class 673. Coiffures, wigs, switches, etc.
Class 674. Barbers' and hair-dressers' tools and appliances.
Class 675. Combs, brushes. (See also class 549.)

GROUP 108.

TRAVELING EQUIPMENTS—VALISES, TRUNKS, TOILET-CASES, FANCY LEATHER-WORK, CANES, UMBRELLAS, PARASOLS, ETC.
Class 676. Tents, shelters and apparatus for camping, camp stools, etc., hampers, baskets, etc.
Class 677. Shawl and rug straps and pouches, gun cases.
Class 678. Valises and various materials; dress-suit cases, satchels, hand-bags, etc.; toilet articles.
Class 679. Trunks of leather, paper, canvass and of wood and metal.
Class 680. Fancy bags, pouches, purses, card cases, portfolios, pocket-books, cigar cases, smoking pipes, cigar holders, etc.
Class 681. Canes.
Class 682. Umbrellas and parasols.

GROUP 109.

RUBBER GOODS, CAOUTCHOUC, CUTTA PERCHA, CELLULOID AND ZYLONITE.
Class 683. Clothing; Mackintoshes, capes, coats, boots, shoes, hats, etc.
Class 684. Piano and table covers, horse covers, carriage cloth.
Class 685. Stationers' articles.
Class 686. Druggists' articles, toilet articles.
Class 687. Medical and surgical instruments. (See also Group 148.)
Class 688. House-furnishing articles, mats, cushions.
Class 689. Hose, tubes, belting, packing.
Class 690. Insulating compounds.
Class 691. Toys of rubber.
Class 692. Gutta-percha fabrics.

GROUP 110.

TOYS AND FANCY ARTICLES.

Class 693. Automatic and other toys and games for the amusement and instruction of children.
Class 694. Bon-bons, fancy boxes and packages for confectionery.
Class 695. Miscellaneous fancy articles not especially classed.

GROUP 111.

LEATHER AND MANUFACTURES OF LEATHER.

Class 696. Hides and skins.
Class 697. Tanned leathers.—Belting, grain and harness leather. Sole-leather—Calf, kip and goat skins; sheep skins.
Class 698. Curried leathers.
Class 700. Alligator, porpoise, walrus and kangaroo leather.
Class 701. Russia leather.
Class 702. Oil leathers, wash leather, and all other varieties of leather not before named.
Class 703. Parchment for commissions, patents, deeds, diplomas, etc. Vellum for similar purposes, and for books and book-binding, for drums and tambourines, for gold-beaters' use, etc.
Class 704. Leather belting
Class 705. Embossed leather for furniture, wall decoration, etc. (For trunks, see Class 679. For harness, saddlery etc., see Class 523.)

GROUP 112.

SCALES, WEIGHTS AND MEASURES.

(See also Group 151.)

Class 706. Scales for commercial use in weighing groceries, produce and merchandise. Counter scales, etc., portable platform scales.
Class 707. Scales for weighing heavy and bulky objects, as hay, ice, ores, coal, railway cars, etc.
Class 708. Druggists' and prescription scales.
Class 709. Bullion scales. Assayers' and chemists' scales.
(See also Group 408.)
Class 710. Postal balances.
Class 711. Gas and water meters.
Class 712. Commercial weights and sets of weights,—Avoirdupois, troy, and apothecaries', with the weights of the metric system.
Class 713. Commercial examples of the measures of capacity, for solids and fluids.—Measuring glasses for the kitchen and for the laboratory.

GROUP 113.
MATERIAL OF WAR, ORDNANCE AND AMMUNITION. WEAPONS AND APPARATUS OF HUNTING, TRAPPING, ETC., MILITARY AND SPORTING SMALL-ARMS.
Class 714. Military small-arms, rifles, pistols, and magazine-guns, with their ammunition.
Class 715. Light artillery, compound guns, machine guns, mitrailleuses, etc.
Class 716. Heavy ordnance and its accessories.
Class 717. Knives, swords, spears and dirks.
Class 718. Fire-arms used for sporting and hunting, also other implements for same purpose. (See also Group 161.)

GROUP 114.
LIGHTING APPARATUS AND APPLIANCES.
Class 719. Lamps for burning petroleum, burners, chimneys, shades, table lamps, hanging lamps.
Class 720. Lanterns, coach lamps, street and special lights and lanterns.
Class 721. Illuminating gas, fixtures, burners, and chandeliers.
Class 722. Electroliers and electric lamps.
Class 723. The "Lucigen" and similar lighting apparatus.

GROUP 115.
HEATING AND COOKING APPARATUS AND APPLIANCES.
Class 724. Fire-places, grates, and appurtenances for burning wood, coal or gas.
Class 725. Hot air heating furnaces.
Class 726. Steam heaters, hot water heaters, radiators, etc.
Class 727. Stoves for heating, cooking stoves, kitchen ranges, grills roasting jacks, ovens, etc. Stove polish.
Class 728. Gas burners for heating, gas logs, gas stoves, etc.
Class 729. Petroleum stoves.
Class 730. Kitchen utensils and other miscellaneous articles for household purposes.

GROUP 116.
REFRIGERATORS, HOLLOW METAL WARE, TINWARE, ENAMELED WRAE.

Class 731. Refrigerators. Soda and aerated water fountains and appliances.
Class 732. Cast hollow-ware.—Kettles, pots, etc.
Class 733. Hollow-ware of copper, nickel, tin-plate and iron Bells.
Class 734. Enameled ware, granite ware and porcelain-lined ware. Enameled letters and signs.

GROUP 117.
WIRE GOODS AND SCREENS, PERFORATED SHEETS, LATTICE WORK, FENCING, ETC.

(See also group 65.)

Class 735. Wire cloth of brass or of annealed iron and steel
Class 736. Wire-cloth of special alloys, as aluminum bronze wire etc.
Class 737. Sieves of various grades and materials.
Class 738. Screens for special purposes.
Class 739. Perforated metal plates.
Class 740. Artistic lattice work.
Class 741. Wire netting.
Class 742. Wire fencing. (For trellis work for gardens and flowers, see also Group 26.)

GROUP 118.
WROUGHT-IRON AND THIN METAL EXHIBITS.

Class 743. Wrought-iron gates, railings, crestings, and artistic forgings, not otherwise specifically classed. (See also Department K.)
Class 744. Repousse, hammered and stamped metal ornaments used for buildings, bridges, and other structures.
Class 745. Beams, girders, columns, angle-irons, etc.
Class 746. Horse-shoes and crude forgings.
GROUP 119.

VAULTS SAFES, HARDWARE, EDGE TOOLS, CUTLERY.

Class 747. Builders' hardware.—Locks, latches, spikes, nails, screws, tacks, bolts, hinges, pulleys; furniture fittings; ships' hardware and fittings.
Class 748. Axes, hatchets, adzes, etc.
Class 749. Edge tools of various descriptions.
Class 750. Saws, files.
Class 751. Cutlery,—knives, scissors, shears, razors, etc. table cutlery.
Class 752. Vaults, safes and appliances, machinists' and metal workers' tools.

GROUP 120.

PLUMBING AND SANITARY MATERIALS.

Class 753. Bath tubs, bathing appliances and attachments.
Class 754. Water closets, syphons, flushing tanks; apparatus and receptacles for ventilation and sewerage.
Class 755. Porcelain laundry tubs, basins, cocks, drains, and other appliances.
Class 756. Plumbers' and gas fitters' hardware and miscellaneous appliances.

GROUP 121.

MISCELLANEOUS ARTICLES OF MANUFACTURE NOT HERETOFORE CLASSED.

DEPARTMENT L.

LIBERAL ARTS—EDUCATION LITERATURE, ENGINEERING, PUBLIC WORKS; MUSIC AND THE DRAMA.

GROUP 147.

PHYSICAL DEVELOPMENT, TRAINING AND CONDITION—HYGIENE.

Class 824. The nursery and its accessories.
Class 825. Athletic training and exercise gymnasium; apparatus for physical development and of gymnastic exercises and amusement; skating, walking, climbing, ball-playing, wrestling, acrobatic exercises, rowing, hunting, etc. Special apparatus for training in schools, gymnasias; apparatus for exercise, drill, etc.
Class 826. Alimentation.—Food supply and its distribution; adulteration of food, markets, preparation of food, cooking and serving, school kitchens and arrangements for
school canteens, methods of warming children's meals, etc. Dinner-pails, or receptacles for carrying meals for school children, working men, and others. Restaurants, dining halls, refectories, etc.

Class 827. Dwellings and buildings characterized by the conditions best adapted to health and comfort, including dwellings for working men and factory operatives, houses and villages for operatives in connection with large manufacturing establishments, tenement houses, "flats," and suites of apartments, city and country residences, club-houses, school-houses; designs and models of improved buildings for elementary schools, infant schools and creches, court-rooms, theatres, churches, etc.

Class 828. Hotels, lodging-houses.


Apparatus for carrying off, receiving and treating sewage. Slaughter-houses refuse, city garbage.

Apparatus and methods for filtering water and cleansing water-courses.

Apparatus intended for the prevention of infectious diseases. Methods, materials and instruments for purifying and destroying germs; disinfectors.

Apparatus and fittings for warming, ventilating, and lighting schools; school latrines, closets, etc.

Special school fittings for storing and drying clothing.

Precaution in schools for preventing the spread of infectious diseases; school sanitaria, infirmaries, etc.

Class 830. Hygiene of the workshop and factory.—(Classification modified from that of the Loudon health exhibition.)

Designs and models for improvement in the arrangement and construction of workshops, especially those in which dangerous or unwholesome processes are conducted.

Apparatus and fittings for preventing or minimizing the danger to health or life from carrying on certain trades. Guards, screens, air-jets, preservative solutions, washes, etc.

Objects of personal use. Mouth-pieces, spectacles, dresses, hoods, etc., for use in certain unhealthy and poisonous trades.
Illustrations of diseases and deformities caused by unhealthy trades and professions, methods of combating these diseases, preservative measures, etc.

Sanitary construction and inspection of workshops, factories and mines, new inventions or improvements for ameliorating the condition of life of those engaged in unhealthy occupations, means for economizing human labor in various industrial operations.

Class 831. Asylums and homes.—Asylums for infants and children, foundling and orphan asylums, children's aid societies. Homes for aged men and women, for the maimed and deformed, for soldiers and for sailors.

Treatment of paupers, alms-houses.

Treatment of aborigines, Indian reservations and homes.

Class 832. Hospitals, dispensaries, etc., plans, models, statistics. Shed hospitals for infectious fevers and epidemic diseases, tent hospitals, hospital ships, furniture and fittings for sick rooms.


Food inspection.—Treatment of adulterated foods, inspection and analysis, treatment of stale food substances, regulation of abattoirs, mills, etc., regulation of sale of horses, protective devices.

Building inspection, etc.—Building regulations and inspection, building drainage and plumbing, fire regulations, fire escapes, etc.

Personal inspection.—Color tests, etc., professional examination for licenses.

Immigration.—Reception, care and protection of immigrants.

GROUP 148.

INSTRUMENTS AND APPARATUS OF MEDICINE, SURGERY AND PROSTHESIS.

Class 834. Pharmacology, drugs, pharmacy, etc.—Medicines, officinal (in any authoritative pharmacopœia) articles of the materia medica, preparations unofficinal. (See Group 87.)

Class 835. Dietetic preparations intended especially for the sick. (For beef extracts, see Class 37.)

Class 836. Instruments for physical diagnosis, clinical thermometers, stethoscopes, ophthalmoscopes, etc.
Class 837. Surgical instruments, appliances and apparatus, with dressings, anaesthetics, antiseptics, obstetrical instruments, etc.

Class 838. Prosthesis.—Apparatus for correcting deformities, artificial limbs.

Class 839. Instruments and apparatus of dental surgery and prosthesis.

Class 840. Vehicles and appliances for the transportation and relief of the sick and wounded, during peace or war, on shore or at sea. (See also Department G.)

GROUP 149.

PRIMARY, SECONDARY AND SUPERIOR EDUCATION.

Class 841. Elementary instruction.—Infant schools and kindergartens. Descriptions of the methods of instruction, with statistics.

Class 842. Primary schools, city and country.—School-houses and furniture. Apparatus and fittings. Models and appliances for teaching, text-books, diagrams, examples. Specimens of work in elementary schools.

Class 843. Domestic and industrial draining for girls.—Models and apparatus for the teaching of cookery, housework, washing and ironing, needle-work and embroidery, dress-making, artificial flower-making, painting on silk, crockery, etc. Specimens of school work.

Class 844. Handicraft teaching in schools for boys.—Apparatus and fittings for elementary trade teaching in schools. Specimens of school work.

Class 845. Science teaching. Apparatus and models for elementary science instructions in schools. Apparatus for chemistry, physics, mechanics, etc.; diagrams, copies, text-books, etc.; specimens of the school work in these subjects.

Class 846. Art teaching. Apparatus, models and fittings for elementary art instructions in schools; diagrams, copies, text-books, etc.; specimens of art work, modeling, etc., in schools.

Class 847. Technical and apprenticeship schools—Apparatus and examples used in primary and secondary schools for teaching handicraft; models, plans and designs for the fitting up of workshop and industrial schools; results of industrial work done in such schools.

Class 848. Special schools for the elementary instruction of Indians.

Class 849. Education of detective classes.—Schools for the deaf, dumb, blind, and feeble-minded; adult schools for the illiterate.
Class 850. Public schools.—Descriptions, illustrations, statistics, methods of instruction, etc.

Class 851. Higher education.—Academies and high schools. Descriptions and statistics.

Colleges and universities.—Descriptions, illustrations of the buildings, libraries, museums, collections, courses of study, catalogues, statistics, etc.

Class 852. Professional schools.—Theology, law, medicine and surgery, dentistry, pharmacy; mining, engineering, agriculture, mechanic arts; art and design, military, naval, normal, commercial; music.


GROUP 150.

LITERATURE, BOOKS, LIBRARIES, JOURNALISM.

Class 854. Books and literature, with special examples of typography, paper, and binding. General works.—Philosophy, religion. sociology, philology, natural sciences, useful arts, fine arts, literature, history, and geography; cyclopedias, magazines, and newspapers; binding; specimens of typography.

Class 855. School books.
Class 856. Technical industrial journals.
Class 857. Illustrated papers.
Class 858. Newspapers and statistics of their multiplication, growth, and circulation.
Class 859. Journalism, statistics of: with illustrations of methods, organization and results.

Class 860. Trade catalogues and price-lists.
Class 861. Library apparatus; system of cataloguing and appliances of placing and delivering books.

Class 862. Directories of cities and towns.
Class 863. Publications by governments.

Class 864. Topographical maps. Marine and coast charts; geological maps and sections; botanical, agronomical, and other maps, showing the extent and distribution of men, animals and terrestrial products; physical maps; meteorological maps and bulletins; telegraphic routes and stations; railway and route maps; terrestrial and celestial globes, relief maps and models of portions of the earth's surface, profiles of ocean beds and routes of submarine cables.
GROUP 151.

INSTRUMENTS OF PRECISION, EXPERIMENT, RESEARCH, AND PHOTOGRAPHY. PHOTOGRAPHS.

Class 865. Weights, measures; weighing and metrological apparatus,—Balances of precision, instruments for mechanical calculation, adding machines, pedometers, cash registers, water and gas meters, etc.; measures of length, graduated scales, etc.

(For ordinary commercial forms, see also Group 112.)
(For testing machines, see Class 490.)

Class 866. Astronomical instruments and accessories.—Transits, transit circles, mural circles, zenith sectors altazimeters, equatorials, collimators, comet seekers.

Class 867. Geodetic and surveying instruments. Transits, theodolites, artificial horizons, surveyor's compasses, goniometers; instruments for surveying underground in mines, tunnels, and excavations; docket sextants, plane tables and instruments used with them; ship's compasses, sextants, quadrants, repeating circles, dip-sectors, etc.

Class 868. Leveling instruments and apparatus—hand-levels, water-levels, engineers' levels, of all patterns and varieties; cathetometers, leveling staves, targets, and accessory apparatus.

Class 869. Hydrographic surveying; deep sea sounding.
Class 870. Photometric apparatus and methods.

Class 871. Photograph apparatus and accessories. Photographs.

Class 872. Meteorological instruments and apparatus, with methods of recording, reducing and reporting observations. Thermometers—mercurial, spirit, air; ordinary or self-registering, maximum and minimum. Barometers—mercurial, aneroid; anemometers, rain gauges, etc.

Class 873. Chronometric apparatus. — Chronometers, watches of precision, astronomical clocks, church and metropolitan clocks, clepsydras, hour-glasses, sun-dials, chronographs, electrical clocks, metronomes. (For commercial clocks and watches, see also Group 99.)

Class 874. Optical and thermometric instruments and apparatus.

Class 875. Electric and magnesic apparatus. (See also Department J.)

Class 876. Acoustic apparatus.
GROUP 152.

CIVIL ENGINEERING, PUBLIC WORKS, CONSTRUCTIVE ARCHITECTURE.

Class 877. Land surveying, topographical surveying.—Surveys and and locations of towns and cities, with systems of water supply and drainage.

Class 878. Surveys of coasts, rivers, and harbors.

Class 879. Construction and maintenance of roads, streets, pavements, etc.

Class 880. Bridge engineering (illustrated by drawings and models.

Bridge designing.—Drawings and charts, showing methods of calculating stresses.

Foundations, piers, abutments and approaches of stone, wood, etc.

Arch bridges of stone, wood or iron.

Suspension bridges of fibre, iron chain, and cable.

Truss bridges of wood, iron and steel.—Pony, bow-string and plate girders, lattice girders, Fink, Bollman, Howe, Pratt, Warren, Post, Long, Whipple and other trusses of special design.

Cantilever bridges, draw-bridges, rolling and swinging machinery.

Tubular bridges.

Railway, aqueduct, and other bridges of special design not elsewhere classed.

(A chart showing date of completion, span, rise, weight, and cost of the great bridges of the world, would be of interest.)

Class 881. Subaqueous constructions.—Foundations, piers, harbors, break-waters, building of dams, water-works and canals.

Class 882. Irrigation.—Irrigating canals and systems.

Class 883. Railway engineering.—Surveying, locating and constructing railways.

Class 884. Dynamic and industrial engineering.—The construction and working of machines: examples of planning and construction of manufacturing and metallurgical establishments.

Class 885. Mine engineering.—Surveying underground, construction of tunnels, subaqueous tunnels, etc.; locating and sinking shafts, inclines, and winzes: driving levels, draining, ventilating, and lighting. (See also department E.)

Class 886. Military engineering.—Construction of earth-works, breast-works and temporary fortifications.
Class 887. Permanent works.—Fortifications, magazines, arsenals, mines.

Class 888. Roads, bridges, pontoons, etc.; movement of troops and supplies.

Class 889. Constructive architecture.—Plans of public buildings for special purposes; large and small dwelling houses.

Drawings and specifications for foundations, walls, partitions, floors, roofs, and stairways.

Estimates of amount and cost of material.

Designs and models of special contrivances for safety, comfort and convenience in the manipulation of elevators doors, windows, etc.

Working plans for the mason, carpenter and painter; designs and models of bonds, arches, coping, vaulting, etc.; plastering and construction of partitions; painting and glazing.

Plans of appliances for hoisting, handling and delivering building materials to artisans.—Scaffolding and ladders, special scaffolding for handling great weights; portable cranes and power elevators.

Illustrations of the strength of materials.

Plans and sections of special architectural forms. Metallic floor beams and girders; hollow bricks and other architectural pottery for heating and ventilation; metallic cornice and conduits, shingles and sheathing, glass roofs, floors and accessories, architectural hardware.

Methods of combining materials.

Protection of foundations, areas and walls against water.

Working plans for paving and draining.

GROUP 153.

GOVERNMENT AND LAW.

Class 890. Various systems of government illustrated.

—Government departments, legislative, executive and judicial.

Class 891. International law and relations.—Fac-similes of treaties, etc.


Class 893. Postal systems and the appliances of the postal service. Letter-boxes, pouches, mail-bags, postage stamps, etc.

Class 894. Punishment of crime.—Prisons and reformatories, prison management and discipline, transportation of criminals, penal colonies, houses of correction, reform schools,
naval or marine discipline, punishment at sea, police stations, night lock-ups, etc., dress and equipment of prisoners. examples of convict workmanship.

**GROUP 154. COMMERCE, TRADE, AND BANKING.**

- **Class 895.** History and statistics of trade and commerce.
- **Class 896.** Railway and transportation companies.
- **Class 897.** Methods and media of exchange.—Money, coins, paper money, etc.
- **Class 898.** Counting houses, stores and shops.—Arrangement, furniture, fittings, methods of management, book-keeping, devices for distributing change and goods to customers.
- **Class 899.** Warehouse and storage systems.—Grain elevators.
- **Class 900.** Boards of Trade and their functions illustrated
- **Class 901.** Exchange for produce, metals, stocks, etc.
- **Class 902.** Insurance companies.
- **Class 903.** Banks and banking.—Illustrations of buildings, interiors, methods and statistical information, clearing-houses, etc., savings and trust institutions.
- **Class 904.** Safes and vaults for storage of treasure and valuables, safe deposite companies.
- **Class 905.** Book-keeping.—Books and systems of book-keeping and accounting, commercial blank forms, etc.
- **Class 906.** Express companies, freighting, etc.

**GROUP 155. INSTITUTIONS AND ORGANIZATIONS FOR THE INCREASE AND DIFFUSION OF KNOWLEDGE.**

- **Class 907.** Institutions founded for the increase and diffusion of knowledge, such as the Smithsonian Institution, the Royal Institution, The Institute of France, British Association for the Advancement of Science and the American Associations, etc., their organization, history and results.
- **Class 908.** Academies of science and letters.—Learned and scientific associations, geological and mineralogical societies, etc., engineering, technical, and professional associations, artistic, biological, zoological, medical, astronomical societies and organizations.
- **Class 909.** Museums, collections, art galleries, exhibitions of works of art and industry, agricultural fairs, state and county exhibitions, national exhibitions, international exhibitions, international congresses.
- **Class 910.** Publication societies.
- **Class 911.** Libraries.—Public and private, statistics of operations.
GROUP 156.

SOCIAL, INDUSTRIAL, AND CO-OPERATIVE ASSOCIATIONS.

Class 912. Social organizations.—Clubs—political, military, university, travelers; press clubs, science clubs, and others.

Class 913. Political societies and organizations.

Class 914. Workingmen's unions and associations.—Their organization, statistics, and results.

Class 915. Industrial organizations.

Class 916. Co-operative trading associations.

Class 917. Secret societies.

Class 918. Miscellaneous organizations for promoting the material and moral well-being of the industrial classes.

GROUP 157.

RELIGIOUS ORGANIZATIONS AND SYSTEMS—STATISTICS AND PUBLICATIONS.

Class 919. Religious organizations and systems.—Origin, nature, growth, and extent of various religious systems and faiths. Statistical, historical and other illustrations; pictures of buildings; plans and views of interiors.


Class 921. Missionary societies, missions, and missionary work; maps, reports, statistics.

Class 922. Spreading the knowledge of religious systems by publications; Bible societies, tract societies, and their publications.

Class 923. Systems and methods of religious instruction and training, for the young; Sunday-schools, furniture, apparatus, and books.

Class 924. Associations for religious or moral improvement.

Class 925. Charities and charitable associations connected with ecclesiastical societies.

GROUP 158.

MUSIC AND MUSICAL INSTRUMENTS—THE THEATRE.


History and literature of music. Portraits of great musicians.

Class 927. Self-vibrating instruments.—Drums and tambourines; cymbals, triangles, gongs, castanets, "bones.

Bells, chimes and peals.
Bell-ringers' instruments. Musical glasses.
Glockenspiels, zylophones, marimbas.
Music boxes.
Class 928. Stringed instruments played with the fingers or plectrum.
Lutes, guitars, banjos and mandolins.
Harps and lyres.
Zithers dulcimers.
Class 929. Stringed instruments played with the bow.
The violin.
The viol, viola, viola da gamba, viola di amore.
The violincello and the bass viol.
Mechanical instruments.—Hurdy-gurdy and violin piano.
Class 930. Stringed instruments with key-board.—The piano-forte square, upright and grand.
Actions and parts of a piano.
The predecessors of the piano.—Clavicytherium, clavicymbal, clavicord, manichord, virginal spinet, harpsichord, and hammer harpsichord.
Instruments and methods of manufacture.
Street pianos.
Class 931. Wind instruments, with simple aperture or plug mouthpiece. The flute, flute-a-bec. Syrinx.
Organ pipes. Flageolet.
Class 932. Wind instruments, with mouth-piece regulated by the lips. The clarionet, oboe and saxophone.
Class 933. Wind instruments with bell mouth-piece, without keys. The trumpet (simple) and the bugle. Oliphant. Alpenhorn. The trombone (with slide and with finger-holes.) The serpent, bassoon and bagpipe.
Class 934. Wind instruments with bell mouth-piece, with keys. Key bugles, cornets, french horns, cornopeans, orphicleides.
Class 935. Wind instruments with complicated systems. The pipe organ.
Reed organs, melodeons and harmonicas.
Accordians, concertinas and mouth organs.
Hand organs and organettes. Automatic organs, orchestrions, etc.
Class 936. Accessories of musical instruments—strings, reeds, bridges.
Conductor's batons, drum-majors' staves. Mechanical devices for the orchestra.
Tuning forks, pitch-pipes, metronomes, music stands, etc.

Concerts and the concert stage.
The opera. The oratorio. Masses.
Church music and sacred music of all periods.

Class 938. The theatre and the drama. The stage. Plans and models of stages and theatres.
History of the drama, so far as can be shown by literary records. Portraits of actors. Relics of actors.
Playbills, etc. Costumes. Masks, armor. Scenery. Appliances illusion, etc. Plays of all ages and peoples.

Along the Lake front opposite the Liberal Arts Building are various music stands and restaurants. A Japanese tea house and the exhibits of Walter Baker & Co. and Van Houten & Zoon.

At the northern end of the Manufacturers Building is located the depot of the Elevated Railroad and near to the left is the Military Hospital, well worthy of inspection. In the lake to the right will be noticed the Naval Exhibit, a model of the United States Line of battleship Illinois. After an inspection of the Military Hospital the visitor next comes to United States Government Building.

Delightfully located near the lake shore, south of the main lagoon and of the area reserved for the foreign nations and the several states, and east of the Woman's Building and of Midway Plaisance, is the Government Exhibit Building. The buildings of England, Germany and Mexico are near by to the northward. The Government Building was designed by Architect Windrim, now succeeded by W. J. Edbrooke. It is classic in style, and bears a strong resemblance to the National Museum and other Government Buildings at Washington. It covers an area of 350 by 420 feet, is constructed of iron and glass, and cost $400,000. Its leading architectural features is an imposing central dome 120 feet in diameter and 150 feet high, the floor of which will be kept free from exhibits. The building fronts to the west and connects on the
north, by a bridge over the lagoon, with the buildings of the Fisheries Exhibit.

The south half of the Government Building is devoted to the exhibits of the Post Office Department, Treasury Department, War Department, and Department of Agriculture. The north half of the exhibit is devoted to the Fisheries Commission, Smithsonian Institute and Interior Department. The State Department Exhibit extends from the rotunda to the east end, and that of the Department of Justice from the rotunda to the west end of the building. The allotment of space for the several department exhibits is: War Department, 23,000 square feet; Treasury, 10,500 square feet; Agriculture, 23,250 square feet; Interior 24,000 square feet; Fisheries, 20,000 square feet, and Smithsonian Institute, balance of space.

On the Lake Front is located the Government Plaza where various military displays, reviews of troops, and exhibits of various war-like implements will form a very attractive feature of the Exposition. Going northward the visitor encounters the Life-Saving Station, the Weather Bureau, Light-House exhibit and Heliograph, four buildings in close proximity. Near the former is located the Anglers Camp. The visitor has now arrived at the United States Naval Exhibit.

Unique among the other exhibits is that made by the United States Naval Department. It is in a structure which, to all outward appearance, is a faithful, full sized model of the new coast-line battle ships. This imitation battle ship of 1893 is erected on piling on the lake front in the northeast portion of Jackson Park. It is surrounded by water and has the appearance of being moored to a wharf. The structure has all the fittings that belong to an actual ship, such as guns, turrets, torpedo tubes, torpedo nets and bombs, with boats, anchors, chain-cables, davits, awnings, deck-fittings, &c., &c., together with all appliances for working the same. Officers, seamen, mechanics and marines are detailed by the Navy Department during the Exposition, and the discipline and mode
of life on our naval vessels are completely shown. The detail of men is not, however, as great as the compliment of the actual ship. The crew gives certain drills, especially boat, torpedo, and gun drills, as in a vessel of war.

The dimensions of the structure are those of the actual battleship, to-wit: length, 348 feet, width amidships, 69 feet 3 inches, and from the water line to the top of the main deck, 12 feet. Centrally placed on this main deck is a superstructure 8 feet high with a hammock berthing on the same 7 feet high, and above these are the bridge, chart-house, and the boats.

At the forward end of the superstructure is a cone shaped tower, called the "military mast", near the top of which are placed two circular "tops" as receptacles for sharpshooters. Rapid firing guns are mounted in each of these tops. The height from the water-line to the summit of this military mast is 76 feet, and above is placed a flagstaff for signaling.

The battery mounted comprises four 13-inch breech-loading rifle cannon: eight 8-inch breech loading rifle cannon: four 6-inch breech-loading rifle cannon: twenty 6-pounder rapid firing guns: six 1-pound rapid firing guns: two gatling guns, and six torpedo tubes or torpedo guns. All of these are placed and mounted respectively as in the genuine battleship.

On the starboard side of the ship is shown the torpedo protection net, stretching the entire length of the vessel. Steam launches and cutters ride at the booms, and all the outward appearance of a real ship of war is imitated.

After landing at the pier from the steamer the visitor encounters first the buildings erected by foreign countries, the first of these being the structure devoted to Great Britain. Although the exhibits of this country are scattered through every department of the Fair, the building of Great Britain is a noticeable feature, being a reproduction on a large scale of one of the antique manor halls, adapted in its interior architecture to the uses for which it has been set apart.
U. S. COAST LINE BATTLE SHIP
The next building is that erected by Germany. It is a typical old German house enlarged, and adjoining it is a small, chapel-like annex. The building is a very attractive one.

Turning eastward the visitor comes across the Swedish Building. This building is triangular in shape and covers 12,000 square feet. It is built after the manner of an old Swedish cathedral and consists of a main floor and gallery, above the center of which rises a tower 200 feet high.

Directly opposite this structure is a group of three buildings representing Colombia, Hayti and Nicaragua. Adjoining these is the magnificent exhibit of Brazil. Surrounding the main building are several smaller structures, such as a sugar mill in operation, a coffee quinta, and several huts inhabited by natives.

Turning northward the visitor encounters in succession the exhibits of Costa Rica, Guatemala and Ecuador. To the south of the building erected by Costa Rica is the structure devoted to illustrating Turkey. This is a beautiful example of oriental architecture being a reproduction of the Kiosk of Bagdad. A street of Constantinople similar to that of the Cairo street enables the visitor to compare life in the two cities. From the minaret of the mosque five times a day the visitor can hear the muezzins called to prayer and see the Mohammedan faced toward Mecca and prostrate themselves upon the earth.

The Norwegian Building which is the next in order is built after the style of the Twelfth Century. The decorative figures on the gables represent the ornamentation seen on the bows of the Viking ships.

Directly east of the last-named structure is that of Austria. Turning northward the visitor encounters the buildings erected by Ceylon. Adjoining these is the French Building, a beautiful structure. A colonade of graceful design in three sections connects one section of the building with another composed of two large rooms. The former section is a veritable reproduction of the interior of one of the rooms of
the palace of Versailles where was concluded the first treaty between the United States and any foreign power. This building lies directly east of an annex of the Fine Art Building. The outside wall is decorated with paintings depicting views of Paris.

FINE ARTS BUILDING.

Grecian-Ionic in style, the Fine Arts Building is a pure type of the most refined classic architecture. The building is oblong and is 500 by 320 feet, intersected north, east, south and west by a great nave and transept 100 feet wide and 70 feet high, at the intersection of which is a dome 60 feet in diameter. The building is 125 feet to the top of the dome, which is surmounted by a colossal statue of the type of famous figure of Winged Victory. The transept has a clear space through the center of 60 feet, being lighted entirely from above.

On either side are galleries 20 feet wide and 24 feet above the floor. The collections of sculpture are displayed on the main floor of the nave and transept, and on the walls both of the ground floor and of the galleries are ample areas for displaying the paintings and sculptured panels in relief. The corners made by the crossing of the nave and transept are filled with small picture galleries.

Around the entire building are galleries 40 feet wide, forming a continuous promenade around the classic structure. Between the promenade and the naves are the smaller rooms devoted to private collections of paintings and the collections of the various schools. On either side of the main building, and connected with it by handsome corridors, are very large annexes, which are also utilized by various art exhibits.

The main building is entered by four great portals, richly ornamented with architectural sculpture, and approached by broad flights of steps. The walls of the loggia of the colonnades are highly decorated with mural paintings illustrating the history and progress of the arts. The frieze of the exterior walls and the pediments of the principal entrances are
ornamented with sculptures and portraits in bas-relief of the masters of ancient art.

The general tone or color is light gray stone.

The construction, although of a temporary character, is necessarily fire-proof. The main walls are of solid brick covered with "staff," architecturally ornamented, while the roof, floors and galleries are of iron.

All light is supplied through glass sky-lights in iron frames.

The building is located beautifully in the northern portion of the park, with the south front facing the lagoon. It is separated from the lagoon by beautiful terraces, ornamented with balustrades, with an immense flight of steps leading down from the main portal to the lagoon, where there is a landing for boats. The north front faces the wide lawn and the group of State buildings. The immediate neighborhood of the building is ornamented with groups of statues, replica ornaments of classic art, such as the Choragic monument, the "Cave of the Winds," and other beautiful examples of Grecian art. The ornamentation also includes statues of heroic and life-size proportions.

STATE BUILDINGS.

Next in order are the State buildings. The first one encountered being that erected by the State of

MAINE.—The constructive materials of this building illustrate the resources of the State. It is octagonal in form with a ground area of 65 feet square. It is two stories in height, the roof surmounted by a lantern in the center and four corner towers, the first story is of granite. The exterior finish of the rest of the building is of wood and staff. The roof is of slate. The main entrance of the arched doorways faces the southeast. Over it projects a boats-bow. A railed gallery extends entirely around the rotunda, which gives a complete view of the building to the visitors. The interior finishing is very handsome. Directly west is the building erected by

VERMONT.—This structure is a very striking one, on the
right and left of the steps on the facade rise two shafts, on which are figures representing the industries of agriculture and quarrying. The visitor enters through a columned portico into a courtyard on the right and left of which are covered porches. Just off these are the reception rooms in front, and committee rooms in the rear. Marble from the principal quarries of the State are used through the interior of the building which is Pompeian in style and classic in detail. Directly north of the latter building is the

New Hampshire Building.—A veritable Swiss cottage, no doubt suggested by the mountains, for which the State is famed. The exterior is pine above a foundation of New Hampshire granite. Each of the two stories is surrounded on all sides by wide piazzas, the rooms on the second floor opening to the piazza through hinged windows level with the floor. On the first floor is a reception hall containing two handsome fire places in pressed granite brick. There are also parlors for men and women. Next we come to the building constructed by

Connecticut.—This is a type of a Connecticut residence in the colonial style with circular windows on the north and south and a piazza in the rear. The exterior is painted yellow. The roof contains five dormer windows. The main entrance is off a square porch covered by the projecting pediment which is supported by heavy columns. The interior is finished in colonial style with tiled floors, paneled walls and Dutch mantels. On the first floor is a large reception hall, in the rear of which is a landing half way up. Flanking the hall are parlors. Adjoining the Vermont building on the west is the building erected by

Massachusetts.—It is in the colonial style, a reproduction of the famous John Hancock residence, which until the year 1867 stood on Beacon Hill, Boston. The building is three stories high, surmounted in the center by a cupola. The exterior is of staff in imitation of cut granite. Directly
north of the Massachusetts building is that erected by the State of

**Rhode Island.**—This structure is Greek style with columnar porticos on four sides of the building, that on the west and front side semi-circular in plan, with arched opening between the Ionic pilasters, the latter being of the full height of the two stories. The columns are surmounted by an enriched Ionic entablature with decorated moldings, modillions and dentils, and above the entablature the building is finished with balustrade surrounding the four sides of the roof, with ornamented urns over each pedestal in the balustrade. The building has a ground area of 32 by 59 feet, two stories high, in wood and staff, in imitation of granite. Entrance is had to the building from all sides from French windows opening to the floor. The main hall is 18 by 25 feet, and is open to the roof. The parlor for women and the secretary's office are on the first floor. On the second floor are two committee rooms and an alley around the main hall. The governors' room occupies what may be called the second story of the porch on the west front. All the floors are hard wood, and the interior is finished in cypress.

The main entrance opens into a very spacious hallway with a tiled floor. Facing the entrance is a broad Colonial staircase leading to the second floor. An old fashioned bull's-eye window gives light to the stairway. On the right of the hall is a large room, constituting a registration room, post office and general reception room. The fittings and furnishings of this room are unique. Its marble floor, its tiled walls, uncovered beams, and its high mantle recall the old Dutch rooms found in Western Massachusetts or New York and Pennsylvania. On the left of the front door or main entrance, are two large parlors, which when thrown together form a room 80 by 25 feet in size. A liberty pole, 85 feet high, stands in the fore-court, and a gilded cod-fish serves as a vane on top of the cupola. The design has adhered closely to the old fashioned building which it is intended to repre-
sent; and will be quite attractive, as is will give a correct idea of the old Colonial style of mansion.

Directly north of the latter structure is the New Jersey Building.

Looking toward the lake the visitor sees the Iowa Building constructed in what is known as the Jackson Park Pavilion. It is a granite structure with a slate roof, 77 by 123 feet in size. The new structure is on the west side of the pavilion and is 60 by 100 feet in size, and two stories high. It is wood and staff and the two structures combine harmoniously in the manner of a French chateau. In the new part are found reception rooms on the first floor and reading rooms etc., on the second floor. Next the visitor encounters the

Wyoming Building built in the style of a modern club house. The first story contains a large hall extending to the roof with a gallery to the second floor. The second story contains toilet and retiring rooms for the ladies and gentlemen. The veranda 12 feet wide is upon the east and west sides. West of the Massachusetts Building is

The New York Building, built according to the plans of Messrs. McKimm, Mead & White, architects, New York. The building covers an area of 14,538 feet, exclusive of terrace and porticos, which cover an additional area of 3,676 feet. The length of the building proper is 154 feet, including porticoes, 214 feet; extreme length at foundation line 214 feet, depth of main building 89 feet, greatest width 106 feet, extreme depth on foundation line including terrace and steps, 142 feet, height from grade to main cornice, 63 feet 2 inches, height to clear story cornice roof line, 77 feet 5 inches, height of deck floor, between belvederes 81 feet, height of floors of belvederes, above grade, 83 feet, apex of tower roof, 96 feet.

The building is in the style of the Italian Renaissane, a villa in character, rectangular in form, approached on the south by a flight of fourteen steps, 46 feet wide, giving access to a grand terrace, 15 by 80 feet, from which the loggia or
PENNСYLVANIA WORLD'S FAIR BUILDING
open vestibule, 46 feet by 17 feet 6 inches, is reached. In the selection of the style of the building, the architects and the Board of State Managers were guided by several conditions of climate and surroundings, and, after careful reflection, believing that in the school of the Italian Renaissance the best opportunities exist for a successful comparison with the larger buildings of the Exposition, they decided to adopt the design.

There is a roof garden composed of east and west porticos, 575 feet each, main roof, 9,840 feet, belvédères, 256 feet each, and connecting deck between belvédères, 704 feet the whole forming a triple terrace garden, decorated with orange trees set in enriched Italian terra cotta pots. The terrace is furnished with awnings, arbors, tables and chairs for hot weather use and lighted by electricity.

The entrance to the building is flanked by the Barbarine lions, recently cast in Rome, and selected in preference to the lions of the Villa Medici, which however fine, are inferior in size.

The four pedestal lamps lighting the terrace are exact copies in bronze from antique examples in the Museum of Naples.

West of the New York Building is

The Pennsylvania State Building located on a delightful site near the Fifty-seventh Street entrance of the World’s Columbian Exposition commanding a view of the lake and Art Palace. The style of the architecture is colonial, reproducing the salient features, and especially the historic clock tower of Independence Hall in Philadelphia in which visitors will find hung the old Liberty Bell which once “proclaimed liberty throughout the land” and thus fitly constitutes a landmark that will be a source of gratification to thousands of visitors.

The Pennsylvania Building is constructed by Pennsylvania mechanics exclusively of Pennsylvania material. The first and second stories are composed of Philadelphia pressed brick. The floors are of native marble and woods, and the
walls are ornamented with wainscot panelings taken from Pennsylvania forests. This resting place for the citizens of the Keystone State at the Great Fair covers an area of 9,000 square feet, while the broad and graceful piazzas by which it is surrounded will duplicate this space. The front entrance opens into a central rotunda 30 feet in diameter and 40 feet high. To the right and left are general reception rooms with toilet and dressing-room accessories. In the rear the exhibition room extends the entire width of the building. The walls are ornamented with the portraits of distinguished Pennsylvanians, and many rare documents and relics of historical interest are displayed.

Stately and imposing as the exterior of this building is, its interior recesses are crowded with objects of absorbing interest not only to Pennsylvanians, but to the people of the entire world. Broad, winding staircases lead to the second story where the waiting-room and offices of the Executive Commissioner are located. Here is also a room devoted to the use of press correspondence, and another furnished with Pennsylvania newspaper files for the use of the general public.

The doors and windows of the second floor open upon broad verandas admirably arranged for promenading and sight seeing, and outside staircases lead to the roof garden which besides furnishing a birdseye view of the grounds, is in itself a spot of floral loveliness and quiet retirement from the busy throng below. Here the sedate spinster or solemn merchant from the City of Brotherly Love can take her or his "otium cum dignitate" and put in practical force the application of the maxim "the proper study of mankind is man;" for below on the broad walks of the Exposition citizens of every clime pass wondering by.

The entire Pennsylvania Building is supplied, under special contract, with ice water from the famous Hygeia Mineral Springs, of Waukesha, Wisconsin.

Directly west of the Rhode Island Building is that furnished by the state of Delaware.
The Delaware Building constructed wholly of native wood and materials is 58 by 60 feet and a very picturesque structure, elaborately furnished. One room in the building is furnished in Colonial style, complete in every detail.

North of the Pennsylvania Building is a Colonial structure erected by the state of

West Virginia. All of the exposed material in this building is the product of the state. The main entrance is on the west on a platform porch. Above the entrance is the Coat of Arms of the state, in bas-relief. Within the entrance is a vestibule with rooms on either side. Beyond the vestibule is a large reception hall flanked by parlors. On the second floor are committee rooms and a large reception hall. North of the West Virginia Building is the edifice built by the state of Montana.

The Montana Building is in the Romanesque style of architecture, one story in height but having a ground area of 62 feet front by 113 feet deep. The structure is frame covered with staff, the interior being ornamented with heavy pilasters with Roman caps and bases and Roman arches. The building is surmounted by a glass dome 22 feet in diameter. Above the entrance arch is the figure of a gigantic elk. The interior is finised in Georgia pine.

The visitor next passes the buildings erected by the states of Arizona, New Mexico and Idaho.

The Utah Building comes next in order. It is two stories high and has an area of 46 by 82 feet. The foundation, columns, pilasters and cornices are made in imitation of the different kinds of stone in Utah. This building simple in design but attractive in its effect is a noticeable State building. Facing the West Virginia Building on the west are the structures erected by the State of Kentucky, Louisiana and Alabama.

The Missouri Building is directly north of the Alabama Building. It is two stories high and covers an area of 80 by 86 feet. In the front and over the main entrance is an elliptical dome 70 feet high, flanked by smaller
ARKANSAS BUILDING.
octagonal domes 48 feet high. The main entrance is of cut brown stone from the quarries at Warrensby, Mo. The balance of the structure is frame, covered with staff. Within the main entrance is a rotunda with a mosaic tile floor. Two flights of stairs in oak, lead to the second floor. The building contains 32 rooms and is very handsome. The interior is richly decorated.

The Minnesota Building is located adjoining the structure just described on the west. It is designed in the Italian Renaissance style and is two stories high. In the recess within the entrance is a sculptural group symbolizing the legend of Minnehaha and Hiawatha. The building erected by the State of

Arkansas is next to the Minnesota Building on the north. It is in the French Rococo style of architecture. The building has a ground area of 66 by 92 feet. From a large circular veranda, which runs the width of the building and elliptical entrance opens to the rotunda, lighted by a central dome. Opening from the rotunda, by triple arches, is the hallway with stairways on each side. The mantel work, columns and vases are of Arkansas white onyx. One of the most unique of the State buildings is that erected by

Florida.—This building is a reproduction in miniature of Fort Marion in St. Augustine in the form of a four-bastioned fortress. The frame is of pine covered with plaster and coquina shells in imitation of the original. The interior is divided into parlors and exhibit rooms and is finished in the native woods of Florida. The interior court is planted in bamboo, lemon, orange, and other tropical trees. Directly opposite the Florida Building is the

Kansas Building.—It is two stories high built of frame and staff and surmounted by an elliptical glass dome. The main exhibit occupies nearly all of the first floor. Four flights of stairs lead to the second floor where there are rooms
KANSAS BUILDING.
for the woman's exhibit, school exhibit and parlors. South of this structure is the

**North Dakota Building.**—From a court-yard in front the main assembly room is entered through a large stone arch, above which is a carved panel containing the coat of arms of the state. The main feature of the interior is the assembly hall. This room is spanned by four arched beams, between each of which is a window, reaching from near the floor to the roof. At either end of the room is a broad fire-place. The structure is two stories high.

**The Nebraska Building**—Is classical in architecture of the Corinthian order. It is immediately south of the North Dakota building. It has a ground area of 60 by 100 feet and is two stories high. On the east and west front are wide porticos, approached by flights of steps. Over the porticos are projecting gables, supported by six columns. From each portico, three doors of oak, give entrance to the exhibit hall. On the first floor are reception room, office, baggage room and post office. A wide stairway leads to the second floor where are parlors and toilet rooms.

North of the Kansas Building is the Texas Building provided entirely by the women of that state. The building contains an assembly room fifty-six feet square, twenty-eight feet high, provided with large art glass skylight in the ceiling with a mosaic Texas star in the center. The rostrum, anterooms, etc., will be finished in the natural woods of Texas.

There are rooms for a bureau of information, register, messenger, telephone, telegraph, secretary, president, directors, Texas Press Association headquarters, lady secretary, president and executive committee, lobby, historical museum and library; also toilet rooms, county collective exhibits, etc. The main entrances are through vestibules, flanked on either side by niches and colonades. The main vestibules terminate in a large auditorium, from which entrance is afforded to the various working departments above mentioned.

In the treatment of the design the architect has not deflected from the history of the Lone Star State, which from
NEBRASKA BUILDING.
the initial has been marked by a Spanish tinge whose architectural feeling and beautiful botanical effects lay down a chain of thought far too beautiful to forsake for that of this modern day. Therefore, the architect has designed the building, colonades, grounds, fountains, foliage, etc., to present a Spanish vista, a bower of beautiful Texas foliage, comprising the banana, palm, magnolia, pomegranate, Spanish dagger, orange and many rare tropical plants common to Texas.

Entering the grounds at 57th Street from the cable cars and the South Park entrance of the Illinois Central Railroad, the visitor first sees the

**Washington Building.**—This building consists of a main structure with a pitched roof, two stories high with a tower in each corner flanked by two wings. The principal architectural feature is the foundation. It is made of five tiers of logs, the lower tier are four feet in diameter and 121 feet long. The lower logs have the bark on. The four upper tiers of smaller logs are peeled. This foundation constitutes the timber exhibit from Washington. The roof is of shingles and the interior is finished in cedar and fir. South of this building is that erected by

**South Dakota.** The building has a grand area of 70 by 126 feet, and is two stories high. The structure is frame, the exterior being covered with Yankton cement in imitation of stone work. The roof is corrugated iron and the cornice and brackets are pressed zinc. The main entrance is on the east, along which front extends a wide porch with heavy columns supporting a balcony from the second story. On the left of the entrance is the women's parlor, on the right the men's reception room. In the main body of the building is the exhibition hall, 44 by 58 feet. South of the latter is the

**Colorado Building.** This building is in the Spanish Renaissance, this style of architecture being considered most suitable for the Southwestern States. The whole exterior of the building is in staff of an ivory color, and the salient features of the design are profusely ornamented, the ornamentation comparing to fine advantage with the broad plain surface
of the building. The striking feature of the design is two slender Spanish towers 98 feet high, rising from either side of the main entrance, on the east. The tower roof and the broad over-hanging roof of the building are covered with red Spanish tiles. The building is 125 feet long, including end porticos, with a depth of 45 feet, and 26 feet to the cornice line. The front vestibule opens to the main hall of the building. On either side of the entrance are stairways to the floor above. Looking in a southeasterly direction from the Colorado Building the visitor sees the

**Michigan Building.** The legislature of Michigan appropriated $20,000 for their State Exposition Building, but most of the materials were contributed so that the structure as it stands represents an outlay of $50,000. The dimensions are 100 by 140 feet. The prominent features of the exhibition will be fruits, agricultural products, iron, copper, salt and other minerals, lumber, fish, furniture and other manufactures and education. These plans the visitor will find very fully carried out. On the first floor are the administration offices, reception rooms, reading rooms and ladies parlors. On the second floor are two large exhibition halls for Michigan relics, and native curiosities, assembly halls and a room for board meetings. Adjoining the Michigan Building on the east is the

**Ohio Building.**—The building is Colonial in style, two stories high, of wood and staff with tile roof. The ground area is 100 feet front by 80 feet deep. The main entrance, on the east is within a semi-circular colonial portico, 33 feet high, the roof supported by eight great columns. The tile roof, mantles, finishing woods, and much of the visible material are gifts of the Ohio producers. The main entrance opens on a lobby, on the left of which is the woman's parlor, and on the right a committee room. Occupying the central portion of the building is the reception hall, 23 by 36 feet and 28 feet high, extending through to the roof. The coved ceiling of the hall is ornamented. Back of the reception hall is an open court 36 feet square, inclosed on three sides.
The Wisconsin Building—Is located directly south of the Ohio building. In architecture this building represents the Wisconsin home, being designed in no special style. All the visible material comes from Wisconsin. The exterior is of Ashland brown stone, Menominee pressed brick, and hard woods from various sections of the state. The roof is covered with dimension shingles. It is practically three stories high, but apparently only two, one story being in the roof. Its ground area is 80 by 90 feet, exclusive of the verandas on the east and west which are 18 feet wide. Proceeding southward the visitor sees the

Indiana Building.—The building is in French Gothic style of architecture such as is seen in the chateau in France, with two imposing towers 120 feet high and many gothic gables. The building has three stories built of pine and Bedford stone, and is covered with ornamental staff. The roof is of gray and red shingles. The floors are of tile. The main assembly hall on the first floor is elaborately finished in the baronial style. All the material used in the building comes from Indiana. Directly opposite the Indiana building on the west is the

California Building.—Next to the building for Illinois, this is the largest of the State buildings. Its dimensions are 144 by 435 feet. It is in the style of architecture of the old California mission buildings. The exterior is of plain plaster, artificially seamed and cracked, giving it the appearance of the old mission buildings, while recessed entrances give the walls that appearance of depth and solidity characteristic of the old buildings. The south front is a reproduction of the old Mission church at San Diego. The main tower is an exact reproduction of the San Diego church tower, while the remaining towers on the corner and center of the building are studied from the mission architecture. This building is not of the club-house character of most of the other State buildings. The entire first floor is open, and is devoted to the California State display, principally of fruits and canned goods. There are three fountains on the
ground floor, one in the center and one at either end. The central hall is surrounded by a wide gallery, and on the gallery floor in the north end of the building is the banquet hall, a kitchen and an assembly room. In the south end are four servants' rooms and there is a cafe in the gallery. The building is severely plain there being no interior or exterior decorations of any kind.

After the Indiana building has been viewed, the visitor next turns his attention to the


This building is by far the most pretentious of the State buildings, and can be classed as one of the great Exposition structures. The plan of the building forms a Greek cross, whose main axis is 450 feet long by 160 feet wide, and lies east and west while the shorter axis is 285 feet long with an average width of 98 feet. At the intersection of the arms of the cross rises the dome, with a diameter of 75 feet at the base, and a height of 152 feet to the top of the inner dome. This dome has, besides a gallery, 15 feet above the floor, that runs around the main hall, another 96 feet above the floor, reached by two circular stairs. At the east and west are two large public entrances, at either side of which are rooms extending the entire width of the building, and about 29 feet deep, occupying the whole height, which is divided into three stories. The rooms at the east end are chiefly used for school exhibition purposes, a large one on the ground floor being fitted up as a model kindergarten. Beyond this extends the great exhibition hall, 381 feet long, the central portion, 75 feet wide, being flanked by aisles 40 feet wide. The central division is lighted by windows and by roof lights, it being 67 feet from the floor to the roof. The hall has a continuous gallery 16 feet wide and 15 feet above the floor. The
MICHIGAN BUILDING.
aisles are lighted by large semi-circular windows on the side walls. The southern part of the short arm of the cross is 121 feet wide, and extends 75 feet beyond the walls of the main building. The lines of its cornice, being extended back across the main building, for the external base from which the dome springs. Its three stories are sub-divided into rooms, halls, corridors, etc. This is the official part of the building, where the Governor of the state and his suite and the members of the Board of Commissioners meet to transact business. Some of the rooms have been set aside for the accommodation of the Woman's Board. The northern arm of the cross is a fire-proof building, 75 feet wide and extending 50 feet beyond the main building. Its walls are brick, covered with "staff"; its roof is galvanized iron and glass, supported by steel trusses. This building is called the Memorial Hall and is intended to contain memorials of the state that are now preserved in the State Capitol at Springfield.

The design of the building is an adaption of Italian Renaissance. The exterior accentuates the plan and construction of the building; no seemingly construction feature being added for effect. Advantage has been taken of the plastic character of the outside covering in a lavish use of ornament, the solids, as a rule, being highly enriched, with here and there a severe treatment for contrast. The base of the dome rises from a series of steps, upon which is a double support to the drum, the outer one being an order of Corinthian columns, the inner being a wall pierced by windows. Above the entablature rises the drum, which is covered with galvanized iron; the trusses are accented on the outside by prominent ribs, and the intermediate spaces are paneled.

A round lantern on top, 12 feet in diameter and 35 feet high, is the crowning feature.

Leaving the Illinois Building and proceeding southward the visitor next encounters the
WOMAN'S BUILDING.—Among a great number of sketches submitted in competition for this building by women from all over the land, the President of the Board of Lady Managers quickly discovered in the sketch submitted by Miss Sophia G. Hayden that harmony of grouping and gracefulness of details which indicate the architectural scholar, and to her was awarded the first prize of a thousand dollars and also the execution of the design.

Directly in front of the building the lagoon takes the form of a bay about 400 feet in width. From the center of this bay a grand landing and staircase leads to a terrace six feet above the water. Crossing this terrace other staircases give access to the ground four feet above, on which, about 100 feet back, the building is situated. The first terrace is designed in artistic flower beds and low shrubs. The principal facade has an extreme length of 400 feet, the depth of the building being half this distance. Italian Renaissance is the style selected.

The first story is raised about ten feet from the ground line and a wide staircase leads to the center pavilion. This pavilion, forming the main triple-arched entrance, with an open colonade in the second story, is finished with a low pediment enriched with a highly elaborate bas-relief. The corner pavilions have each an open colonade added above the main cornice. Here are located the Hanging Gardens.

A lobby 40 feet wide leads into the open rotunda, 70 by 65 feet, reaching through the height of the building and protected by a richly ornamented skylight. This rotunda is surrounded by a two-story open arcade, as delicate and chaste in design as the exterior, the whole having a thoroughly Italian courtyard effect, admitting abundance of light to all rooms facing this interior space. On the first floor are located, on the left hand, a model hospital; on the right a model kindergarten; each occupying 80 by 60 feet.

The whole floor of the south pavilion is devoted to the retrospective exhibit; the one on the north end to reform work and charity organization. Each of these floors is 80 by 104.
INDIANA BUILDING.
The curtain opposite the main front contains the Library, Bureau of Information, records, etc.

In the second story are located ladies' parlors, committee rooms and dressing-rooms, all leading to the open balcony in front. The whole second floor of the north pavilion encloses the great assembly-room and club-room. The first of these is supplied with an elevated stage for the accommodation of speakers. The south pavilion contains the model kitchen, refreshment rooms, reception rooms, etc.

The building is encased with "staff;" the same material used on the rest of the buildings, and as it stands with its mellow, decorated walls bathed in the bright sunshine, the women of the country can be justly proud of the result.

Looking further southward the eye of the visitor meets the beautiful dome of the

Agricultural Building—Immediately south of the entrance to Jackson Park from the Midway Plaisance, and facing east on the lagoon, is the

Horticultural Building—In front is a flower terrace for outside exhibits including tanks for Nymphaea and the Victoria Regia. The front of the terrace, with its low parapet between large vases, borders the water, and at its center forms a boat landing.

The building is 1,000 feet long with an extreme width of 250 feet. The plan is a central pavilion with two end pavilions, each connected with the central one by front and rear curtains, forming two interior courts, each 88 by 270 feet. These courts are beautifully decorated in color and planted with ornamental shrubs and flowers. The center of the pavilion is roofed by a crystal dome 187 feet in diameter and 113 feet high, under which are exhibited the tallest palms, bamboos and tree ferns that can be procured. There are galleries in each of the pavilions. The galleries of the end pavilions are designed for cafes, the situation and surroundings being particularly adapted to recreation and refreshment. These cafes are surrounded by an arcade on three sides from which charming views of the grounds can be obtained.
In this building are exhibited all the varieties of flowers, plants, vines, seeds, horticultural implements, etc. Those exhibits requiring sunshine and light are shown in the rear curtains where the roof is entirely of glass and not too far removed from the plants. The front curtains and space under the galleries are designed for exhibits that require only the ordinary amount of light. Provision is made to heat such parts as require it.

The exterior of the building is in "staff" tinted in a soft, warm buff, color being reserved for the interior and the courts.

The cost of this building is about $300,000. W. L. B. Jenny, of Chicago, is the architect.

Midway between the Woman's and Horticultural buildings is the

White Star Line Exhibit—A magnificent showing of models of ocean greyhounds and machinery used in facilitating ocean passage. East of the latter is the

Puck Building.—This structure was erected by the proprietors of Puck, the comic newspaper, published in New York. In this building is exhibited a gallery of those celebrated cartoons which have made the paper famous. Current issues of the paper are printed on the grounds.

Directly west of the Horticultural Building and side by side are the Green Houses and the Official Photographer's Studio. Southward, and in close proximity to the latter is the

Choral Building, a beautiful structure and the Office of the Grounds and Buildings. Leaving the Choral Building and crossing the lagoon on to the Wooded Island the visitor can visit the Hunter's Camp, at the southern end of the island. Traversing the entire length of the island he arrives at the building erected by

Japan—The chief exhibit of Japan is the reproduction of the ancient Phoenix Temple of Nji. In shape the building represents a Phoenix. The centre forms the body of the bird, the rear corridor the tail and the two colonnades at the sides
the wings. It is built of wood and carved in the curious style of the Japanese. The interior is decorated with panels inlaid with the mother-of-pearl. The doors, walls and altars are gorgeously ornamented. Proceeding eastward and crossing the lagoon the visitor now finds himself at the Fisheries Building.

The Fisheries Building embraces a large central structure with two smaller polygonal buildings, connected with it on either end by arcades. The extreme length of the building is 1,100 feet and the width 200 feet. It is located to the northward of the United States Government Building.

In the central portion is the general fisheries exhibit. In one of the polygonal buildings is the Angling exhibit and in the other, the aquaria. The exterior of the building is Spanish Romansque, which contrasts agreeably in appearance with that of the other buildings.

To the close observer the exterior of the building cannot fail to be exceedingly interesting, for the architect, Henry Ives Cobb, exerted all his ingenuity in arranging innumerable forms of capitals, modillions, brackets, cornices, and other ornamental details, using only fish and other sea forms for his motive of design. The roof of the building is of old Spanish tile, and the side walls of pleasing color. The cost is about $200,000.

In the center of the polygonal building is a rotunda sixty feet in diameter, in the middle of which is a basin or pool twenty-six feet wide, from which rises a towering mass of rocks covered with moss and lichens. From clefts and crevices in the rocks, crystal streams of water gush and drop to the masses of reeds, rushes and ornamental semi-aquatic plants in the basin below. In this pool gorgeous gold fishes, golden ides, golden tench and other fishes disport. From the rotunda one side of a larger series of aquaria may be viewed. These are ten in number and have a capacity of 7,000 to 27,000 gallons of water.

Passing out of the rotunda, a great corridor or arcade is reached, where on one hand can be viewed the opposite side
of the series of great tanks, and on the other a line of tanks somewhat smaller, ranging from 750 to 1,900 gallons each in capacity. The corridor, or arcade is about 15 feet wide, the glass fronts of the Aquaria are in length about 575 feet and have 3,000 square feet of surplus.

The total water capacity of the Aquaria, exclusive of reservoirs, is 18,725 feet, or 140,000 gallons. This weighs 1,192,425 pounds, or almost 600 tons. Of this amount about 40,000 gallons is devoted to the Marine exhibit. In the entire salt water circulation, including reservoirs, there are about 80,000 gallons. The pumping and distributing plant for the Marine Aquaria is constructed of vulcanite. The pumps are in duplicate, and each has a capacity of 3,000 gallons per hour. The supply of sea water was secured by evaporating the necessary quantity at the Wood's Holl station of the United States Fish Commission to about one-fifth its bulk, thus reducing both quantity and weight for transportation about 86 per cent. The fresh water required to restore it to its proper density was supplied from Lake Michigan.

The classification of this department is intended to admit of the display in the buildings erected for the purpose, of material and collections illustrative of the commercial fisheries, fish culture, angling, and scientific investigation bearing upon the inhabitants of the seas, lakes and rivers. It is the object and purpose of this department to illustrate in the fullest and most graphic manner the present condition of the world's fisheries, and also their history, at least for the past 400 years. It is expected to show, practically side by side, the primitive methods and appliances used by un-civilized man, and the highest specialized apparatus and methods of fishing which the science and intelligence of modern nations have produced.
FISHERIES BUILDING.
IV.

MIDWAY PLAISANCE.

Instructive, as well as entertaining, are the many and varied features of Midway Plaisance. Entering the southeastern corner of the Plaisance, from the Exposition grounds, the visitor first encounters the exhibit illustrating the

IRISH COTTAGE INDUSTRIES.

Here the arts of weaving, spinning, dyeing and embroidery are shown by Irish peasants. The various processes of lace-making is another interesting feature of this exhibit, as is also the arts of glass-staining and wood-carving. It is said that the product of these arts compares favorably with those of English and Belgian workmen. There is also a model dairy, where Irish lasses are to be seen churning and making butter. Next to the Irish exhibit is that of the

ADAMS EXPRESS COMPANY.

Northward of the latter is the

BOHEMIAN GLASS FACTORY.

In this building, numbers of busy workmen, from their native country, illustrate, practically, the processes of making Bohemian glass. Adjoining this is the

FIRE AND GUARD STATION.

Passing under the elevated tracks of the Illinois Central Railroad, the visitor encounters on the north side of the covered walk, the building erected by the

LIBBEY GLASS COMPANY.

Here is illustrated the different methods of manufacturing American cut glass. The building cost $75,000 and contains a sixteen-pit furnace and appliances for cutting, etch-
ing engraving and decorating. A large display of cut glass is also to be seen. The company has a large working force constantly engaged in the practical demonstration, of making cut glass. Adjoining this exhibit are the

**Japanese Bazaars.**

These Bazaars cover a space of over 200 feet square. Here are illustrated the manners and customs of the Japanese people. Quantities of their merchandise are on exhibition and for sale. The Bazaars are directly under the management of the Imperial Japanese Commission. Directly opposite the bazaars is the

**Animal Show.**

This entertaining spectacle demonstrates the ability of man to subdue and train wild animals. It is a German enterprise, under the management of the famous trainer, Carl Hagenbach. There is a performing troupe of animals, who seem to form one happy family. Exhibitions are given during the day. Adjoining the animal show on the east is the exhibit of the

**Venice Murano Company.**

Showing the wonderful glass work done on the Venetian isle of Murano. This work is the result of the joint labors of Dr. Salviati of Venice and Lorenzo Radi, Muranese glass-blowers. These have succeeded in restoring an industry, abandoned in the eighteenth century that of producing mosaic glass. To the south of the Venice Murano Company is the station of the

**Barre Sliding Railroad.**

This is a French invention and is peculiar in the fact that the cars have no wheels. In place of wheels, a shoe sets over the rails which is water-tight. Behind each shoe is connected a pipe in which is water at a pressure of 150 pounds. The water is forced under the shoe and produces a film, which raises the train about one-sixteenth of an inch. Connected with every second car, is a turbine motor, which gets water power from a main pipe extending the entire length of the road, although application is made every fifty feet. A
speed of over 100 miles per hour is attained. Westward from the Japanese bazaars is the

**JAVANESE VILLAGE,**

Covering a large space on the northern side of the Plaisance. The Javanese Settlement sets forth, in a practical way, the habits and customs of these people. There is also on exhibition of the merchandise produced by the inhabitants of the Island of Java, much of which is on sale. Performances are also given showing the different modes of entertainment among these people. Next to the Javanese Village is the

**GERMAN VILLAGE.**

In the center of the space devoted to the German Village stands the castle, typical of the Fifteenth Century. To the left the visitor will see the Hessian town hall with its wood-carved outer staircase. Opposite this is a Black Forest peasant home and near at hand the typical Westphalian dwelling. Clustered about are houses representing the different sections of Germany all combined in one village. In the castle there is on exhibition old armor and pictures. Adjoining the castle there is a German restaurant and wine-room. To add to the general Teutonic effect concerts are given twice every day. Opposite the German Village are the Turkish Village, Panorama of the Bernese Alps and the Natatorium.

**THE TURKISH VILLAGE**

Consists of a large building of Byzantine architecture, surrounded by high walls and surmounted by hundreds of little cupolas perforated to give light to the interior. The interior presents a network of arcaded streets flanked by columns and pilasters—a genuine Turkish city with mosques, fountains and squares. Every street within the enclosure forms a bazaar. Moving about in picturesque confusion are the people of the Orient—Turkish men and women, eunuchs, dervishes, Jews, Greeks and Caucasi ans.

**PANORAMA OF THE BERMES ALPS.**

The work of painting the beautiful cyclorama of the Berenese Alps was jointly performed by three artists of Ge-
neva and completed after two years of labor. The visitor is supposed to be on the Maennlichen and looking out over peaks and valleys. Around him are ranged the famous peaks of the Jungfrau, Juna, Shreckhorn, Wetterhorn and Thun. It is a faithful reproduction of the original Alpine scene.

**NATATORIUM.**

This is a building 190x250 feet. In connection with the Natatorium is a Viennese cafe and bakery.

After leaving the Turkish Village the next spectacle that greets the eye is the beautiful

**MOORISH PALACE.**

This building is the counterpart of an ancient Moorish temple. The decorations and appointments are perfect in every detail. Among the many beauties of the interior may be mentioned the Palm garden, copied after that of the famous Alhambra at Granada. As the visitor steps into the garden he seems to see endless rows of palms shading countless figures in the Moorish garb. It is really only the result of a clever arrangement of mirrors. Opposite the Moorish Palace is

**A STREET IN CAIRO.**

This is a veritable and faithful reproduction of an Egyptian street with its attendant bazaars and shops. There are also mosques and dancing halls which will give the visitor a perfect idea of the religious and social habits of these people. Here is also erected a counterpart of the original Temple of Luxor. To make this feature more complete the mummies, historically correct, representing the ancient Kings of Egypt, are to be seen. Under the temple are two tombs one representing the tomb of Ti, of the eighth dynasty, about 5,000 years ago; the other is one of the sarcophagi of "Sacred Bulls."

There are curiosities from Arabia and the Soudan as well as from Cairo and Alexandria. Immediately in front of the Cairo street is the

**PERSIAN CONCESSION.**
And adjoining the former is the section devoted to
Tunis and Algiers.

Here are introduced the features peculiar to these countries. Directly in front rises the stupendous
Ferris Wheel.

This attraction is a wheel 250 feet in diameter. Hung from the wheel, at different points, on the perimeter are cars for passengers. When the wheel turns on its axis, it carries the passengers in the cars, up within a foot of the height of the dome of the Administration Building. From the windows of the cars the whole panorama of the Exposition grounds can be seen. The structure weighs 4,300 tons and is capable of carrying 2,160 persons. On the opposite side of the passageway, the visitor comes across another of the many fire and guard stations and directly behind it a

Chinese Tea House.

Where he can have genuine cup of tea, after the manner of the inhabitants, of the Flowery Kingdom. Next comes the
French Cider Press.

Then a wonderful and most interesting model of
St. Peters Cathedral.

Directly in the rear of the latter the visitor will find the
Ice railway.

A genuine winter attraction maintained through the heat of summer. This will be done artificially by means of ice machinery, which will keep up a constant accumulation of ice. On the same side of the Plaisance and directly West of the of the fire and guard station, just passed, is the

Austrian Village.

This exhibit is a representation of a well known section of a street in Vienna, called Der Graben. A large number of pretty Austrian girls have been imported for the express purpose of selling the leather and metal wares, meerschaum and amber goods, manufactured in the village. Across the covered walk the visitor can view the mammoth panorama of the
Volcano of Kilauea.

Anyone viewing this panorama, does so apparently, from an island, within what is supposed to be the greatest crater in the world, that of the volcano of Kilauea, at Hawaii. By means of the painting aided by electrical appliances and effects, the visitor will be made to easily imagine, that boiling lava, smoke and flame are about him on every hand. Immediately adjoining the panorama is the

Morocco Exhibit.

This section will simply represent Morocco, after the manner of the exhibits of other countries. Immediately west of the Morocco exhibit is the

Chinese Village and Theatre.

Illustrating Chinese customs and manners and especially the way in which a play is produced, with all the dramatic realism of the celestial playwright. The

Captive Balloon

Next claims the visitors attention, on the same side of Plaisance and immediately adjoining the Chinese Village. Directly opposite is the

Dahomey Village.

Consisting of a settlement of about fifty natives, ruled over by a King and several chiefs. These Natives will keep up the customs of their native land, omitting, however, human sacrifices, out of respect to our own institutions. They will also sell native merchandise, such as weapons, carvings and utensils. Next to the Dahomey Village, on the West, is an exact reproduction of an old

Pompeian House.

Exactly as one might have appeared, before the destruction of the city. There will be on exhibition works of art, etc., peculiar to the place and time. Opposite the visitor will come across a veritable

Village of American Indians.

A certain romance still clings to the noble red man, in spite of years of gradual subjugation by force of arms and
frontier whiskey. Even the average American finds something to interest him in these aborigines. Directly west of the latter attraction, is the exhibit illustrative of the people, manners and costumes of

**EAST INDIA.**

This will include jugglers, snake-charmers and astrologers. A number of skilled workmen will produce the engraved work, for which the country is noted. Directly opposite this last exhibit is the

**NATIONAL HUNGARIAN ORPHEUM.**

Finally the visitor arrives at the

**NURSERY EXHIBIT.**

This is really a garden for which five acres have been set apart for a complete display of the flowers and fruits of all nations. This is instructive, as well as merely beautiful, as it enables the people of different states and countries to get new ideas on the higher cultivation of fruits and flowers. The visitor has now arrived at the western extremity of the Plaisance.
V.
RANDOM NOTES.

In 1892 a patent was issued to Jeremiah Bailey, of Pennsylvania, for a mining machine, and he constructed two machines the same year. It is believed that these were the first ever made. Only two were ever made and one of them is still in existence, owned by Samuel Worth, of Marshallton, Pa. The knife of the machine is circular and has a combined rotary and forward motion. This exhibit will be found in the Agricultural Building.

Spain sends one of the most interesting exhibits of the fair, comprising many articles and relics intimately associated with the life and voyages of the great discoverer. Some of the native arms sent by this exhibit go back several centuries in age. There is also a rare display of ancient Spanish arms.

"The mills of the gods grind slowly," but the modern milling machinery grinds exceeding fast. The visitor who passes the exhibits of this class of machinery will notice that the speed attained is often 900 revolutions a minute. The Nordyke & Marmon Company, of Indianapolis, Ind., builders of flouring and corn milling machinery, have a complete and model exhibit in the northwest section of Machinery Hall annex. Those who desire to see the latest and most approved patterns of flouring and milling machinery had better investigate those manufactured by the above company. Bran dusters, sieve scalpers, flour dressers, purifiers and all other machines necessary for milling can there be seen on exhibition.
Commissioner Simonds of the Patent Office gave his personal attention to the supervision of the exhibit of his office. Patent Office exhibits illustrate the marvelous rate of progress in invention of the present age and the fostering influence of the American patent system. There is a display of models in series, showing by comparison the types of all leading improvements in certain selected lines, from the germ to the perfect instrument or device.

A. A. Kellogg of Clinton, Mo., has perfected an air ship as an exhibit at the fair. The machine will be 60 feet long and 20 feet wide; and in appearance will be much like a side-wheel steamer and will carry three persons.

The forestry exhibit of Massachusetts comprises forty-seven varieties of trees found in that state. Each section of wood is three feet long and cut so as to show cross, oblique and longitudinal sections.

Almost every state in the union has contributed a tree trunk for the colonnade of the Forestry building.

One of the exhibits in the Forestry Building is an immense walnut log, weighing 30,000 pounds. This is 15 feet long, seven feet in diameter at the base and 64 inches in diameter at the top and was grown in Kansas.

The American Bible Society have an exhibit in which appear copies of Bibles in more than 200 different languages.

The Daily Columbian is the title of the only official bulletin of the Columbian exposition. It is an eight page morning paper unlike anything seen before, five pages consisting of a first page of The Times, Tribune, Inter-Ocean, Herald and Record, the other three pages containing the official orders and other matters of interest to the world’s fair visitor. The first number of the Daily Columbian appeared May 1, 1893.
The Philadelphia & Reading Co., has in their exhibit 163 boxes of coal, made up of all varieties of coal mined. Also a complete collection of all tools used by miners in digging coal.

An exhibit in the Department of Agriculture creates no little amount of interest among visitors. This is a complete distillery for the manufacture of bourbon whiskey on the grounds. It is a composite affair installed by a dozen firms, each of which manufactures apparatus for such plants. It is one story and a half high, the total installation costing approximately $100,000. The still is to be operated during the exposition and the entire product put in bond under arrangement with the several authorities.

In the United States Government exhibit there are 640 samples, each one distinct and separate, of every piece of paper money ever issued by the United States Government.

The Edison tower of light is not only the central figure of the Electricity building, but one of the most attractive features of the fair.

One hundred dummy horses and fifty manikins are used to illustrate the operations of the quartermaster's department of the United States. Each one of the model soldiers is fitted up in the regulation army uniform worn by every grade of soldier in the service of the United States.

The General Electric company have a contract for the most extensive storage battery charging plant in America. It will be used in running the electric launches on the lagoons and the electric fountain.

An extraordinary piece of tapestry work is to be found in the Woman's building. It is four feet seven inches long by three feet ten inches wide and required five hundred and
seventy-six stitches to the square inch. It represents a scene from Henry Eighth and the faces are from historic paintings. It is the work of Mrs. H. J. Kimball, of New York and required twenty years to complete it.

The ladies of Spain, organized under the presidency of Her Majesty, the Queen, prepared a very representative exhibit. They have collected the greatest number of objects that are the result of intellectual, artistic and industrial work of Spanish women. They have sent specimens of books, pamphlets, journalistic collections, articles and manuscript written or published by women either in Castilian or any other dialect spoken in the peninsula or in its possessions; also the musical compositions, original paintings in oil, pastel, water color, drawings, sculpture, carvings, engravings, plans, maps, and scientific instruments and apparatus that are the invention of women.

More than one-tenth of the space allotted to women in the Illinois state building will be devoted to needle work, plain and decorative. There will be shown infants wardrobes of all nationalities and of ancient and modern times.

The chief motive power for the machinery at the Exposition is supplied by a gigantic engine furnished free, by the E. P. Allis Co., of Milwaukee. The engine was furnished as a part of the company's exhibit upon the special contract provided it shall be used for the motive power and that no other engine of equal size shall be exhibited. It is an engine of the quadruple expansion type, of four thousand horse power. Compared with this engine the big Corliss exhibited at the Centennial is almost a dwarf, although it was then considered a great wonder, notwithstanding the fact it was only fourteen hundred horse power. The Allis exhibit represents an outlay of $175,000.

Dolls and toys of every description are much desired by the committee of women interested in the children's building
at Jackson Park. It is in this home that little ones are cared for while their mothers visit the grounds and buildings.

The Reeves Pulley Co., exhibit the largest pulley in the world. It is 18 feet in diameter and required one-half keg of nails, 100 pounds of glue and 2,800 pieces of wood to construct it.

A unique exhibit is that sent by Baron Burdett Coutts of his famous breeding farm at Highgate. The model is 26 feet long by 21 feet high and shows the stables, a covered yard, the riding school, ladies gallery, the granary and a wide expanse of turf surrounded by a broad gravel track.

A mammoth whale measuring 60 feet long and weighing 75 tons is to be seen at the Fisheries building. It is the largest whale ever captured off the American coast.

Roads and roadmaking, from the earliest to modern times, both in foreign lands and the United States, form an interesting exhibit at Jackson Park.

Some idea of the extent in bulk of the German exhibit may be gathered from the fact that it has taken eighty-two railroad cars to bring to Chicago the contents of one single entry made in Baltimore for shipment to the World's Fair.

At the Exposition there are restaurants and dining rooms in nearly all the main buildings. A dairy lunch is in the Dairy Building and a railroad lunch counter in the Transportation Building. There are six restaurants on the esplanade facing the Manufacturer's Building on the lake shore. The capacity of the restaurants is about 30,000 persons per hour.

Russia is making a fine exhibit in nearly all departments of the World's Fair. In the Woman's Department the national costumes and picturesque dresses of the peasants will be shown.
The Santa Maria, a reproduction of the flagship of Columbus' fleet, will remain in the United States after the Exposition. The Spanish Government has officially tendered the reproduction to the Government of the United States.

Models of the express steamships Normania, Fuerst, Bismarck, Augusta, Victoria and Columbia form part of the Hamburg-American Packet company's exhibit.

The exhibit of an English salt concern will be a model in salt of Bartholdi's statue, "Liberty Enlightening the World."

The Government Department of Agriculture certainly has a marvelous agricultural exhibit. It includes full illustrations of various insect depredations, a mammoth globe representing graphically the history of pleuro-pneumonia and its remarkable extermination in America; a model of the famous Death Valley with its strange fauna and flora, and a working set of a modern weather station's outfit. There is also a complete and comprehensive collection of grains from Peace River in northern Canada, to Patagonia; from Russia to India. Every seed picked by hand and the varieties arranged in tasteful glass compartments with labels indicating the name, place, weight and effects of the soil and climatic conditions. There are about 2,000 samples of wheat, 1,000 of oats, 5,000 of rye, 3,000 of barley, 300 of buckwheat, 1,500 of corn (besides the exhibits of corn in the ear) and proportionate numbers of the various other grains and garden products.