

THE INTERNATIONAL FLEET AT JAMESTOWN.

VISITING SHIPS.

Great Britain.

Name.	Type.	Tons Displacement.	Knots Speed.	Guns.	Armor.
Good Hope..	Armored cruiser	14,100	24.5	29.2-in.; 16 6-in.	Belt 6 in.; tbc. 6 in.
Hampshire...	"	10,850	22.4	47.5-in.; 6 6-in.	"
Roxburgh.....	"	10,850	23 6	"	"
Argyll.....	"	10,850	22 3	"	"

France.

Victor Hugo..	Armored cruiser	12,416	22.00	47.6-in.; 16 6.4-in.	Belt 6 1/2 in.; tur. 8 in.
Kleber.....	"	7,700	21.27	8 6.4-in.; 4 4-in.	Belt 4 in.; tur. 4 in.
Jean Bart*	"				

* Designated, but wrecked, another cruiser to be sent.

Germany.

Roon.....	Armored cruiser	9,050	21.00	48.2-in.; 10 6-in.	Belt 4 in.; tur. 6 in.
Yorck.....	"	9,050	21.4	"	"
Bremen.....	Protected cruiser	3,250	23 2	104.1-in.; 10 1-pdr	Deck 2 in.
Niobe.....	"	2,650	21 6	104.1-in.; 14 1-pdr	Deck 2 in.
Panther.....	Gunboat.	977	13.5	2 4.1-in.; 6 1-pdr.	

Japan.

Tsukuba.....	Cruiser	14,000	21 00/4	12-in.; 12 6-in.	Belt 7 in.; tur. 9 in.
Chitose.....	Protected cruiser	4,760	22.5	2 8-in.; 10 4.7-in.	Deck 4 1/2 in.

Italy.

Varese.....	Armored cruiser	7,400	20.2	1 10-in.; 2 8-in.; 14 6-in.	Belt 6 in.; tbc. 6 in.
Etruria.....	Protected cruiser.	2,280	19 8	2 6-in.; 8 4.7-in.	Deck 1 in.
Pieramosca...	"	3,600	17.5	2 10-in.; 6 6-in.	Deck 2 in.

Austria.

Sankt Georg..	Armored cruiser	7,400	21.00	2 9.4-in.; 5 7.5-in.; 4 6-in.	Belt 6 1/2 in.; tur. 8 in.
Kaiser Karl VI	"	6,325	20.8	2 9.4-in.; 8 6-in.	Belt 8 in.; tbc. 8 in.
Aspern.....	Protected cruiser	2,437	20.0	8 4.7-in.; 12 3-pdr	Deck 2 in.

Sweden.

Fylgja.....	Armored cruiser	4,060	21 5	8 6-in.; 14 6-pdr	Belt 4 in.; tur. 5 in.
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Chile.

Baquebano...	Training ship	2,330	13.7	4 4.7-in.; 2 12-pdr	
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Argentina.

Buenos Ayres.	Protected cruiser	4,500	24.0	2 8-in.; 4 6-in.; 6 4.7-in.	Deck 5 in.; sh'lds 4 1/2 in.
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Portugal.

Dom Carlos...	Protected cruiser	4,100	22.0	4 6-in.; 8 4.7-in.	Deck 4 1/2 in.
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Brazil.

Riacheulo...	Battleship	5,700	16.5	4 9.4-in.; 6 4.7-in.	Belt 11 in.; tur. 10 in.
Barroso.....	Protected cruiser	3,450	20.5	6 6-in.; 4 4.7-in.	Deck 3 1/2 in.
Tamoyo.....	Gunboat	1,030	23.0	2 4.7-in.; 6 6-pdr.	Deck 1 in.

UNITED STATES BATTLESHIP FLEET.

Minnesota....	Battleship	16,000	18.8	4 12-in.; 8 8-in.; 12 7-in.	Belt 9 in.; tur. 12 in. and 8 in.
Vermont.....	"	16,000	18.3	"	"
Louisiana....	"	16,000	18 8	"	Belt 11 in.; tur. 12 in. and 8 in.
Connecticut..	"	16,000	18 5	"	"
Georgia.....	"	14,948	19 2	4 12-in.; 8 8-in.; 12 6-in.	"
Nebraska.....	"	14,948	19.0	"	"
New Jersey...	"	14,948	19.2	"	"
Rhode Island..	"	14,948	19.0	"	"
Virginia.....	"	14,948	19.0	"	"
Maine.....	"	12,500	18.0	4 12-in.; 16 6-in.	Belt 11 in.; tur. 12 in.
Missouri.....	"	12,500	18.1	"	"
Ohio.....	"	12,500	17.8	"	"
Alabama.....	"	11,552	17.0	4 13-in.; 14 6-in.	Belt 13 1/2 in.; tur. 13 in.
Illinois.....	"	11,552	17 4	"	"
Kearsarge....	"	11,520	16.8	4 13-in.; 4 8-in.; 14 5-in.	Belt 13 1/2 in.; tur. 13 in. and 8 in.
Kentucky.....	"	11,520	16 9	"	"
Iowa.....	"	11,346	17.1	4 12-in.; 8 8-in.; 4 4-in.	Belt 14 in.; tur. 12 in. and 8 in.
Indiana.....	"	10,288	15.6	4 13-in.; 8 8-in.; 4 6-in.	Belt 13 in.; tur. 13 in. and 8 in.
Washington..	Armored cruiser	14,500	22.3	4 10-in.; 16 6-in.	Belt 5 in.; tur. 10 in.
Tennessee....	"	14,500	22 1	"	"

turrets protected by 5 inches of armor. Chile sends the training ship "Baquebano," and Argentina the protected cruiser "Buenos Ayres," of 4,500 tons, 24 knots, and battery of two 8-inch, four 6-inch, and six 4.7-inch guns. Portugal is represented by the "Dom Carlos," a protected cruiser of 4,100 tons and 22 knots and a battery of four 6-inch and eight 4.7-inch guns. Brazil sends the old-time battleship "Riacheulo," of 5,700 tons and 16.5 knots, carrying four 9.4-inch and six 4.7-inch guns. She also is represented by the "Barroso," a protected cruiser of 3,450 tons and 20.5 knots, mounting six 6-inch and four 4.7-inch guns, and the gunboat "Tamoyo," of 1,030 tons and 23 knots and a battery of two 4.7 and six 6-pounder guns.

UNITED STATES FLEET.

The United States fleet assembled at Hampton Roads to receive the visiting squadrons is one of the strongest aggregations of naval power ever drawn up for review. In the fact that of the forty ships or more twenty are armored, and that eighteen of them are battleships, the composition of the fleet is strictly representative of the United States navy, especially in its later development. Ours is essentially a battleship navy; and our naval constructors have been careful to maintain the national reputation for mounting exceedingly heavy batteries—a fact which is at once evident from a study of the number and caliber of the guns given in the accompanying table. Another satisfactory feature evident in this table is that, since the period of the Spanish war, we have built our ships strictly in classes. There is no instance of the construction

of an individual ship, whose design differs widely on some point or other from every existing class.

The most modern and formidable vessels of the fleet are the four battleships of the "Minnesota" class, all of 16,000 tons, 18.5 knots, and mounting four 12-inch, eight 8-inch, and twelve 7-inch. In the "Connecticut" and "Louisiana" the belt is 11 inches, in the "Minnesota" and "Vermont" 9 inches; otherwise, the ships are practically identical. The 12-inch guns have 12 inches and the 8-inch guns 8 inches of protection, all of them being mounted in pairs in turrets. Of the world's battleships designed before the late war, these are the most powerful and best protected—with the possible exception of the Japanese "Kashima" and "Katori," whose four 10-inch guns will by some authorities be preferred to eight 8-inch.

The five battleships of the "Georgia" class (see table) are about 1,000 tons smaller than the "Minnesota," but have a knot more speed. The main armament is identical; the intermediate battery consisting of 6-inch in place of 7-inch guns. The only objection that can be urged against these ships is that they carry the superposed turret—whereby a heavier all-round 8-inch fire is obtained at the expense of undesirable complication of mechanism and no little interference of gun fire. Nevertheless, these are most powerful ships, with good freeboard, high speed, generous coal supply, and a battery heavier than that of any foreign vessels of their date.

The nine battleships above mentioned are by far the most formidable portion of the fleet at Hampton Roads. In the "Maine," "Missouri," and "Ohio," of 12,500 tons and 18 knots, we have ships of excellent protection but considerably less battery power, 8-inch guns being excluded. The "Alabama" and "Illinois," of a knot less speed and 1,000 tons less displacement, carry the 13-inch gun in their main battery, and like the "Maine" class have no intermediate 8-inch guns; but all of these five ships are heavier armed than battleships of the same date built for foreign navies. The "Kearsarge" and "Kentucky," of the same displacement, and about the same speed as the "Alabama," carry four 8-inch guns in superposed turrets above the 13-inch guns, and they have a numerous broadside battery of 5-inch. The "Iowa," of about the same displacement and speed as the "Kentucky," is an improved "Indiana," being about 1,000 tons larger with a knot and a half more speed, and a similar disposition of the battery, the 12-inch taking the place of the 13-inch gun.

In the armored cruisers "Washington" and "Tennessee," of 14,500 tons displacement, the United States navy possesses two ships which but for the overlight waterline armor could be reckoned as of the cruiser-battleship type which promises to have something of a vogue during the next few years. They carry a battery of four 10-inch guns in turrets protected with 10 inches of armor, and they have a broadside battery of sixteen 50-caliber 6-inch guns. Limitation of space prevents any detailed reference to the less important United States ships at the review.

Taken altogether, the United States fleet at Hampton Roads is a subject for just pride on the part of American citizens; and when the President steams down the lines and receives the salvos of the visiting and home fleets, it will be a subject of well-earned gratification to him that his efforts for a long period of years should have contributed to the production of so many and such formidable warships as will fly the American flag on that day.

OPENING OF THE JAMESTOWN EXPOSITION.

BY JOHN T. MAGINNIS.

What has been described as a "Colonial city beautiful" has sprung up at Sewell's Point, on the shores of Hampton Roads, and Norfolk and the towns that nestle about this historic body of water are prepared to receive the throngs of visitors to the Jamestown Exposition, which will be formally opened by President Roosevelt April 26. The exposition is in celebration of the tercentenary of the establishment of the first permanent English settlement in the new world at Jamestown.

Jamestown, a peninsula when Capt. John Smith landed there May 13, 1607, now an island cut off by the currents of the James River, is some thirty-odd miles up the river, above Hampton Roads. The town as such ceased to exist two hundred years ago and the island now is partly used for farming purposes. The historic portion is owned by the Association for the Preservation of Virginia Antiquities, which tends it with reverent care and has made valuable research through excavation. The government has built a retaining wall about part of the island to protect it from further encroachments of the river and has erected on the island a monument to the first House of Burgesses—the first representative body of the people assembled on this continent. The Colonial Dames have restored the Old Church, the dismantled tower of which alone remained, and the Daughters of the American Revolution have erected a copy of Hays Barton, the home in Devon, England, of Sir Walter Raleigh. The Pocahontas Memorial Society has been engaged in raising a subscription of \$10,000 for a

monument to the Indian princess whose interposition gave to the English their lasting foothold. The A. P. V. A. has erected a statue of Capt. John Smith.

The opening date of the exposition commemorates that on which Capt. Newport's little fleet, consisting of the "Susan Constant," the "Discovery," and the "Godspeed" anchored off Cape Henry, named after the then Prince of Wales, when Capt. John Smith, going ashore, planted a cross near where is now the Cape Henry lighthouse.

The ceremonies incident to the formal opening on April 26, 1907, will be under the direction of Mr. G. T. Shepperd, secretary of the Jamestown Exposition Company, assisted by Lieut. P. H. Bagby, Sixth United States Infantry, military attaché to the department of the secretary. At sunrise on April 26 the Norfolk Light Infantry Blues, stationed at the exposition grounds, will fire a salute of 300 guns to usher in the commencement of the day opening the Jamestown Tercentennial Exposition in commemoration of the 300th anniversary of the first English settlement of America.

Upon the arrival of President Roosevelt on the "Mayflower" in Hampton Roads, a salute will be fired by the United States and foreign warships there assembled. When the President arrives at the exposition grounds, he will be met at the end of the government pier by a military escort, and will be saluted by the United States artillery stationed on the exposition grounds. Promptly at the hour of 11:30 the President will be escorted to the reviewing stand, on Lee's Parade in the rear of the auditorium building, where appropriate exercises will take place. When the President presses the gold button, putting the machinery of the exposition in motion, it will at the same time be a signal for a salute to the Union by the United States and foreign ships assembled in Hampton Roads and by the garrison at Fort Monroe. At the conclusion of the salute all of the bands on the exposition grounds will play "The Star-Spangled Banner," at which time all the troops will salute the national anthem by presenting arms, and the entire concourse will be expected to uncover during the rendition of this ceremonial.

Immediately thereafter the President of the United States will review the parade, of which Major-General Frederick D. Grant, of the United States Army, will be grand marshal, which will be participated in by the soldiers and sailors of the United States and foreign governments and the National Guard. The governors of the different States of the Union having military representation in the parade will participate therein, together with their staffs. Boxes on the reviewing stand will be assigned to those governors who do not participate in the parade.

On the reviewing stand, besides the President of the United States and his cabinet, will be the diplomatic corps, officers and directors of the Jamestown Exposition Company, members of Congress, the general assembly of Virginia, United States and State commissioners to the Jamestown Tercentennial Exposition, official representatives from the different States of the Union, officers of the various historical societies and the mayors and municipal officers of the cities surrounding Hampton Roads.

The various States have responded liberally to calls for appropriations and some twenty-five have buildings on the grounds, nearly all permanent structures of Colonial design, aligned along the waterfront, where they will remain to form the nucleus of Norfolk's prospective new suburb, which may become known as Colonial Park.

The resources of the States will be shown by exhibits in what is known as the States Building.

The principal exposition buildings are: Hall of Congresses, 236 feet long and 160 feet wide, with wings 62 feet wide; auditorium, 150 x 250 feet; Mining and Metallurgy, 100 x 250 feet; Manufactures and Liberal Arts, 280 x 550; Machinery and Transportation, 280 x 550 feet; States Exhibits Palace, 300 x 500; Food Products, 300 x 250 feet; History and Historic Arts, 100 x 300 feet; Education Buildings, two, connected by colonnades with wings of Hall of Congresses, each 124 x 129; Marine Appliances, 26,000 square feet; Palace of Commerce, 11,500 square feet.

The grounds of the Jamestown Exposition are ideally located. Sewell's Point has historic interest of its own and overlooks the scene of the great marine duel between the "Merrimac" or "Virginia" and the "Monitor." Topographically the exposition site was particularly adapted to its purpose and susceptible to the adornment and general treatment that adds so much to the attractiveness of an exposition. Its marine frontage made possible the naval display, and its beach adds the delight of sea bathing. It extends along Hampton Roads two and a half miles, and Boush's Creek skirts it for a mile and a half. Covering 600 acres, more than the World's Fair at Chicago had, the grounds offer ample room for the buildings, broad boulevards, lawns, groves, and rambles, and the Lee Parade of thirty acres. Near this is the military camp with sloping ground, giving natural drainage.

More than a million plants have been set out and

are now enjoying healthy growth, and these with shrubs and trees have been so selected as to give perpetual bloom. Hundreds of apple trees of large growth, some a foot thick, have been transplanted from the neighboring country, while many other trees of great variety have been brought from afar. The arboriculture of the grounds is in itself an interesting and attractive exhibit. Along the two and a half miles of water front a quadruple row of trees has been planted, and similar work has been done lavishly in all parts of the grounds, while grassed places have been adorned with innumerable flower beds. The roads are of macadam and the walks, all broad, are concrete. A canoe trail winds for two miles through the grounds, passing through bits of picturesque woodland.

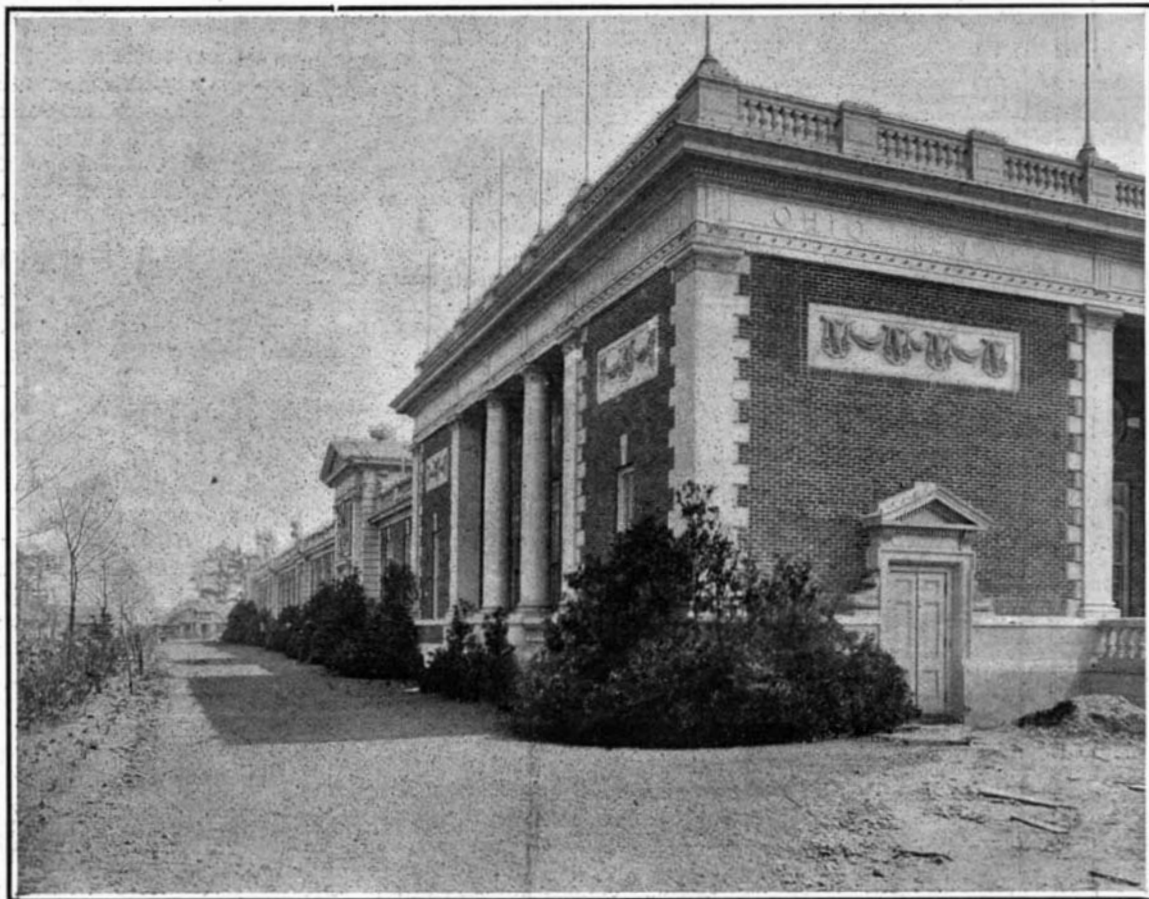
To comprehend the plan of the grounds, the best method is to go directly across the middle from the main entrance at the south to the water basin formed by the great double pier erected by the government. The piers are 800 feet long and 200 feet wide and are connected at the outer ends by extended bulkheads and an arched bridge beneath which the naval launches and small craft from the fleet may enter. At the head of the basin called Smith Harbor is Discovery Landing, named for one of Newport's fleet, while the piers are similarly named for the other vessels of the fleet, the "Susan Constant" and the "Godspeed." From the landing extends the broad Raleigh Square back to a similarly broad expanse, in which are the lagoons.

The piers with their towers for wireless telegraphy and searchlights, the Square and the lagoons, the gardens and buildings on either hand, the innermost at the back of the Square connected with those nearer the water by peristyles, make this central feature decidedly imposing.

On either side of the Square are the United States government buildings—to the right the Smithsonian Institution exhibits and another exhibits building, while to the left are the Fisheries Building and those devoted to other exhibits, including the displays from Porto Rico and Alaska, and the officers' club. Within the Square on either side is, on the one hand, the re-

production in topographical verity of the Panama isthmus and canal; on the other, a large tank for the larger marine specimens, seals, etc.

To the right of the lagoons is the Manufactures and Liberal Arts palace, and to the left the building of Machinery and Transportation. At the head of the lagoons is the Auditorium, a handsome structure, with its classic dome, lofty portico, and wide-stretching wings.



States Exhibits.

The Auditorium will be the scene of daily conventions. Some 150 conventions are scheduled for the exposition. To meet the hall requirements another building has been erected near the entrance, while a citizens' committee has provided for many of the gatherings in Norfolk.

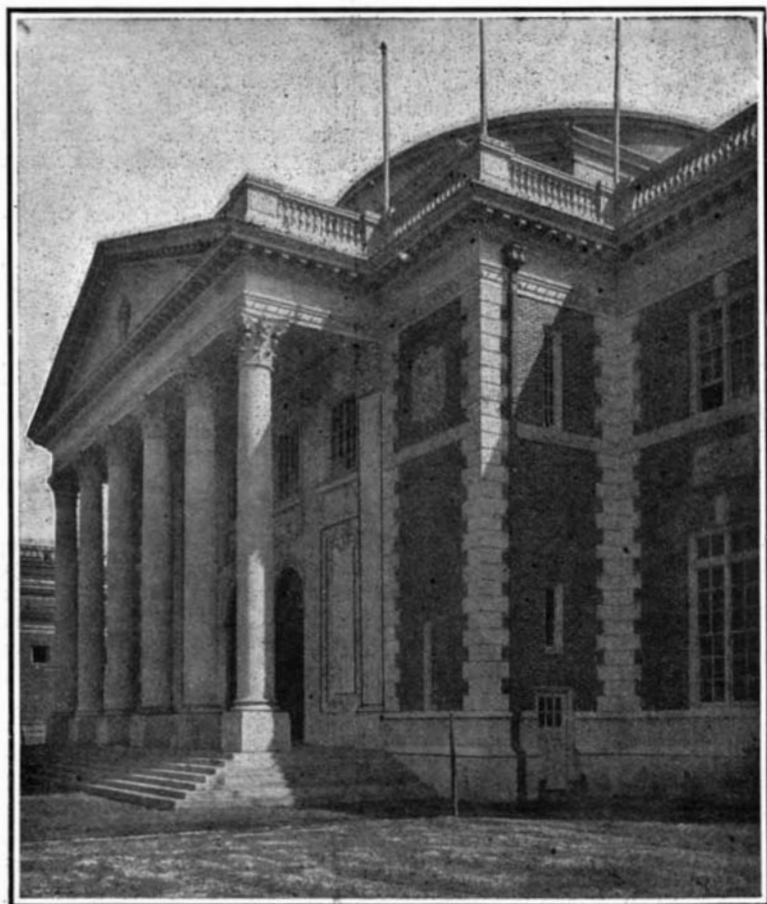
Willoughby Boulevard skirts the water front, and along it, flanking the central government buildings, are the beautiful State buildings. Kentucky, at the extreme right in a pine grove and next the Inside, a hotel accommodating 3,000 guests, has reproduced Daniel Boone's fort. Virginia has given a fine example of the type of Georgian Renaissance such as is seen in such old homes as Monticello, Jefferson's mansion at Charlottesville, Va., and Montpelier, the home of Madi-

son. Maryland has copied the home of Charles Carroll, of Carrollton; Pennsylvania has the Independence Hall, and Massachusetts the old State House. New York has a conspicuous structure with an elliptical dome, a high Colonial portico and wings; New Jersey has a copy of Washington's headquarters at Morristown; Delaware has a Colonial dwelling; Connecticut reproduces the home of Col. Talmadge, of Washington's staff; Rhode Island copies her first State house;

Georgia reproduces Bulloch Hall, the home of President Roosevelt's mother, where on June 10 the President will deliver an address on the occasion of the building's dedication; Ohio has "Adena," the first stone house erected by English-speaking people west of the Alleghenies, which was the executive mansion when Chillicothe was the State capital; New Hampshire reproduces the home of John Langdon, and Maine the home of Longfellow. North Carolina, Illinois, and Missouri have handsome Colonial buildings. Still other States with buildings are Florida, North Dakota, Vermont, Alabama, Tennessee, Arkansas, Louisiana, West Virginia (which also is erecting a huge coal monument), Michigan, and California. Oklahoma provides for her exhibits in her building, while the other State buildings are for social purposes and display of only things of art and historic interest.

These buildings are in the main of brick with white trimmings. In appearance they harmonize with the exhibit palaces, which have brick veneer instead of stucco, which is used only in the trimmings. This gives an appearance of permanency, and relieves the aspect of that garishness and newness common to most exposition architecture.

In the Auditorium group of buildings are, to the right, the concrete and fireproof History and Historic Art and Fine Arts Buildings, and the Food Products Building, while to the left of the Auditorium are the Marine Appliance Building, and next it the Minerals, Mines and Metallurgy triple building. Farther to the left and east is the Graphic Arts Building, which is shared in part by the Social Economy department. The Boston Printers' Society has arranged the plan of



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Main Entrance of Auditorium Palace.



Transportation Building.



Manufactures Building.

the Graphic Arts exhibit and it will duly impress the visitor with the conspicuous part printing has played in the advance made by humanity in civilization in the last three hundred years.

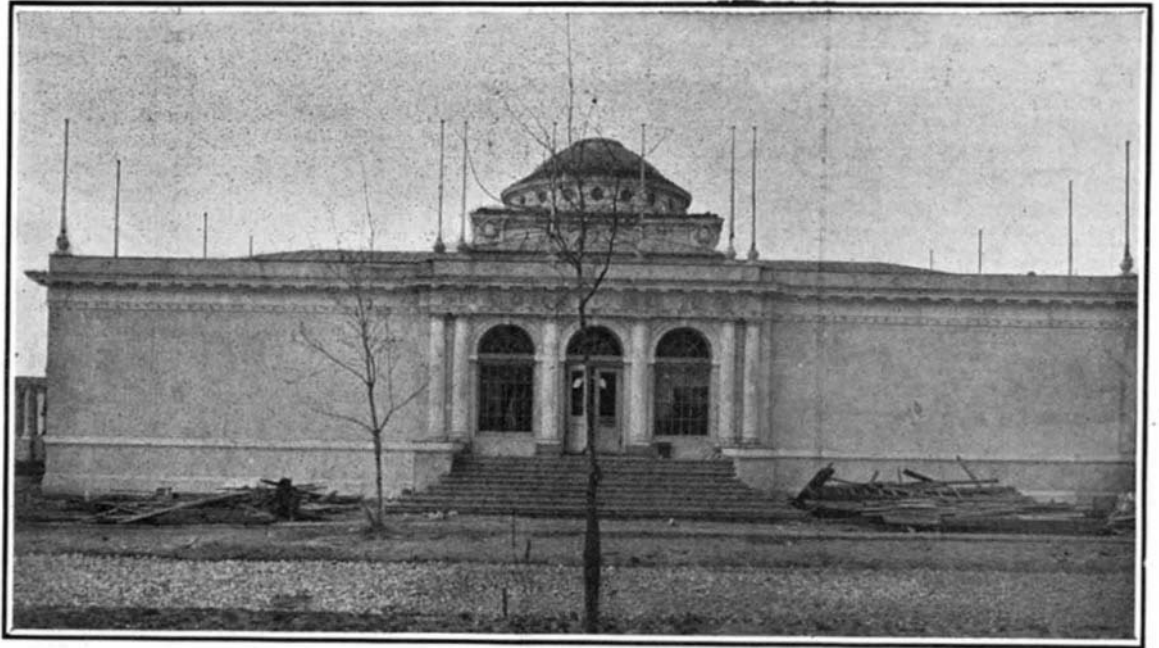
At the eastern end of the grounds are the Canoe Trail, the Philippine Reservation and Athletic Field, and the Life Saving Station. On the extreme west are the War Path, which corresponds to the Midway at Chicago; the Negro exhibit and the Palace of Commerce, which will be devoted to display of wares, domestic and foreign.

Perhaps no exhibit will attract more attention than that of Power and Alcohol. The government will conduct tests, experiments, and demonstrations, and the agriculturist will learn how many things about him may be converted into alcohol, and profitably so, under the denatured alcohol act of Congress. Experiments will be made to determine how inexpensively denatured alcohol can be manufactured, and show its qualities as a fuel compared with coal and gasoline.

Officials of the United States Geological Survey have in charge the Mines and Metallurgy exhibits, and processes will be shown. The Building Material exhibits will be large and much attention will be paid to cement and to concrete work.

Farmers will find the States Exhibits palace devoted mainly to agriculture, and in it, besides the great staples from all parts of the country, fresh fruits and green vegetables and berries, everything in season, together with work in soils, fertilizers, and seeds. The exhibit of farming implements will be extensive.

In the Machinery and Transportation Building the Pennsylvania Railway will show a section of its East



Government Museum Building.

this year of the Glidden tours, which will include the Virginia battlefields and reach to Virginia Beach, at which point will be found a beach course for racing of 80 miles extending to Hatteras.

Aeronautical devices are likewise to be shown.

airship construction and in relation to the elements.

The exposition will be the rendezvous of athletes, and the field events will bring together a large number of champions in their respective lines. The auto-boat will be much in evidence and Hampton Roads will witness a series of yacht races for craft of varied design and racing length. Five cups are offered for the international races—the President Roosevelt, the Kaiser Wilhelm, the King Edward, the Sir Thomas Lipton, and the Exposition cup. Other cups are offered for special regattas and for free-for-all racing. The National Rowing Association goes to Philadelphia for its annual championships, but comes to Jamestown afterward and an interesting series of boat races is promised, off Sewell's Point.

One of the most instructive features of the Exposition will be the Negro exhibit, for which Congress appropriated \$100,000. A building has been erected on the grounds from a design made by a colored architect, W. S. Pittman, of Washington. It is 125 x 250 feet area, two stories, and in the Colonial style. The life of the race on American soil began at Jamestown twelve years after the landing of the English, and the exhibits will represent the stages of negro life and progress. A striking exhibit will be a series of model groups with appropriate scenic accessories illustrating in chronological order the various stages of the negro's history. This is the work of Meta Vaux Warrick, a young colored sculptor of Philadelphia, graduate of the Drexel School of Fine Arts. There will be exhibits from the several colored schools, such as Hampton, Tuskegee, Fisk, Livingstone, and Normal.

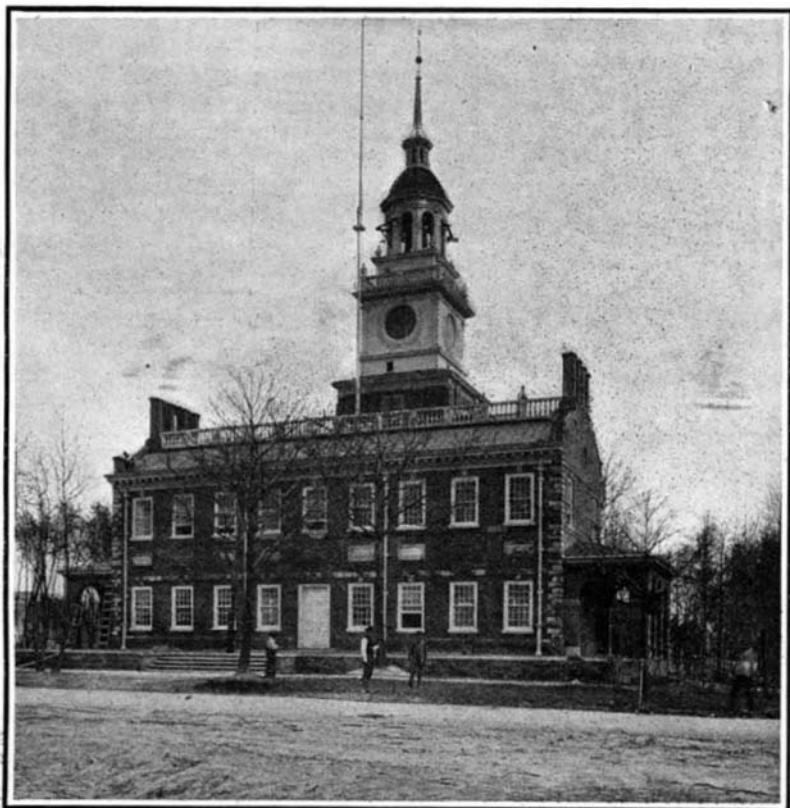
Collections have been made of the products of negro labor in all branches—agricultural, horticultural, mechanical, and in the liberal arts—and furthermore will be shown exhibits representing his activities in the professions, in art, music, and literature.



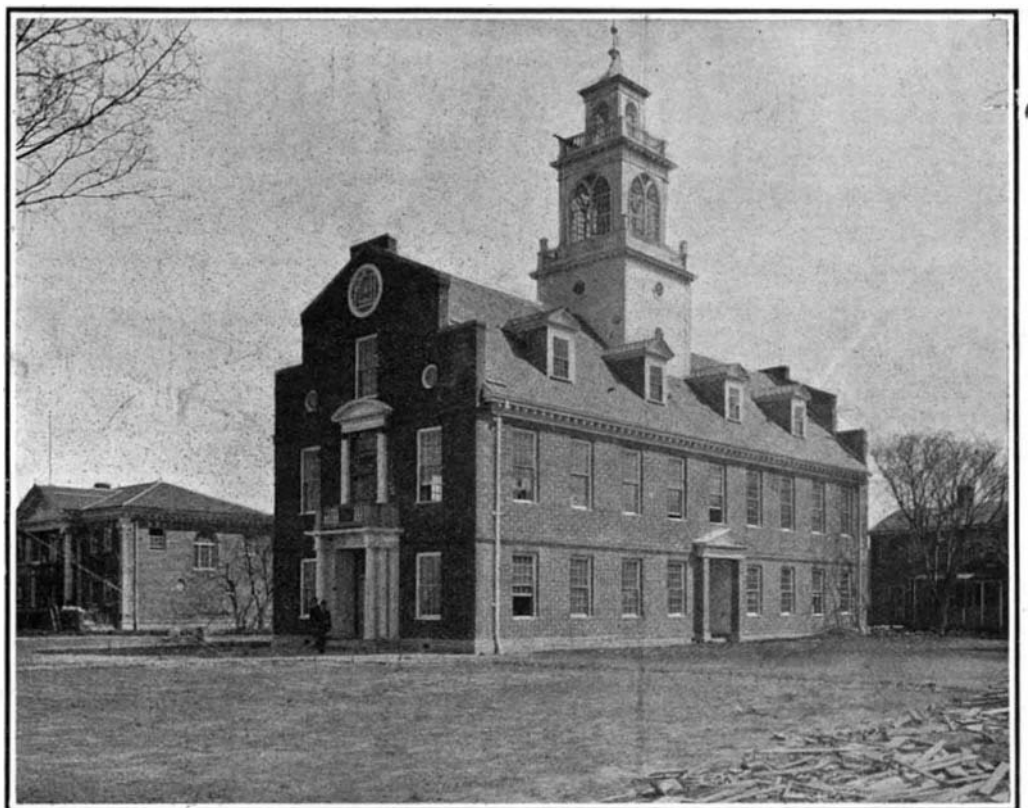
Maryland State Building.

River tunnel tube, 23 feet in diameter, and within the tube will be one of the company's new steel cars. The Baldwin firm will show four types of locomotives, and of these two will be so installed as to have their machinery in motion. Automobiles will be shown in great variety and the exposition will be the objective

A special building has been erected and in it will be placed aeronautical paraphernalia, models, charts, etc. There are to be contests between balloons, dirigibles, aeroplanes, and various characters of flying machines, kites, etc. The contests will be not only of the sporting kind, but scientific both in reference to



Pennsylvania State Building.



Massachusetts State Building.

Reproduction of Old State House, Boston. Boston massacre occurred on the square in front of this building.

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BUILDINGS OF THE JAMESTOWN EXPOSITION.