

**THE NEW HOME OF THE AUTOMOBILE CLUB OF AMERICA.**

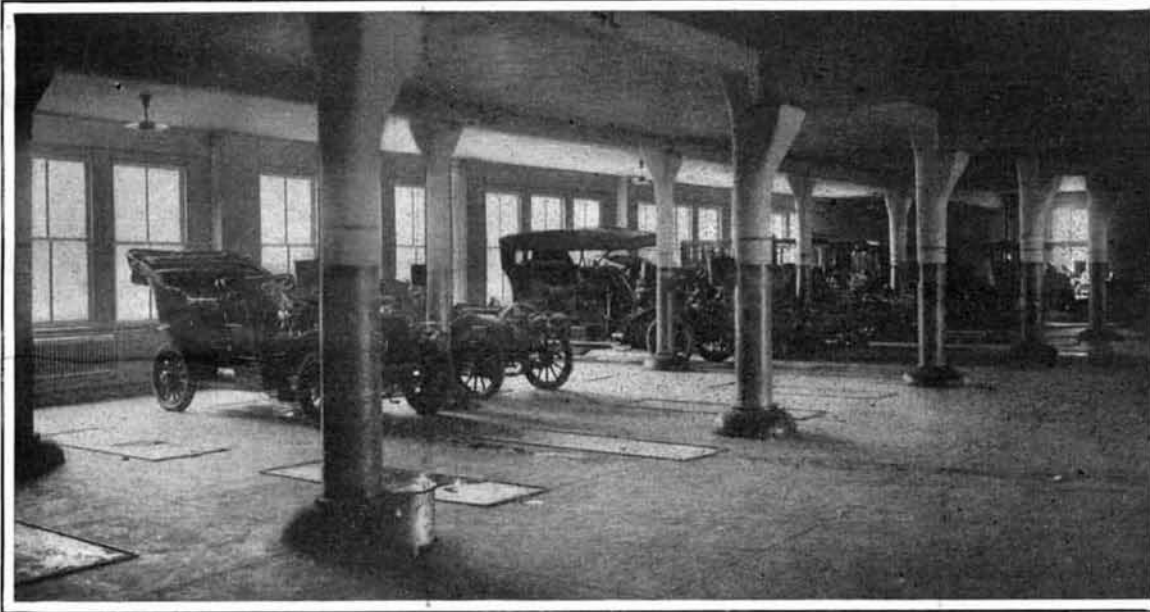
BY HARRY W. PERRY.

Formal opening of the new \$500,000 club house of the Automobile Club of America was held April 18, when the final work of interior finishing and furnishing of the magnificent structure had just been com-

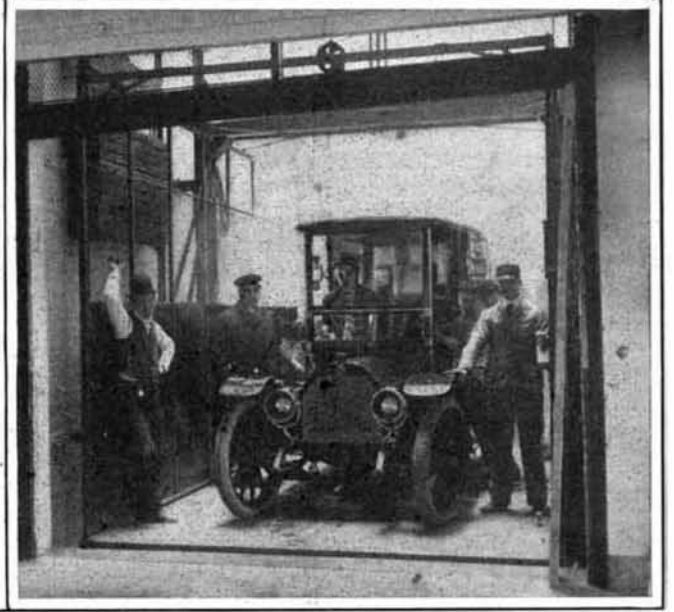
pleted. This new club house is of interest, not alone because it is the largest and most costly building in the world especially designed and constructed for use by an automobile club, but because it combines in an ingenious way the club quarters of a wealthy semi-social organization with garage and storage accommodations for three hundred motor cars owned by the

members. Still another claim to interest is the fact that it is one of the first large structures erected in New York by the reinforced concrete process.

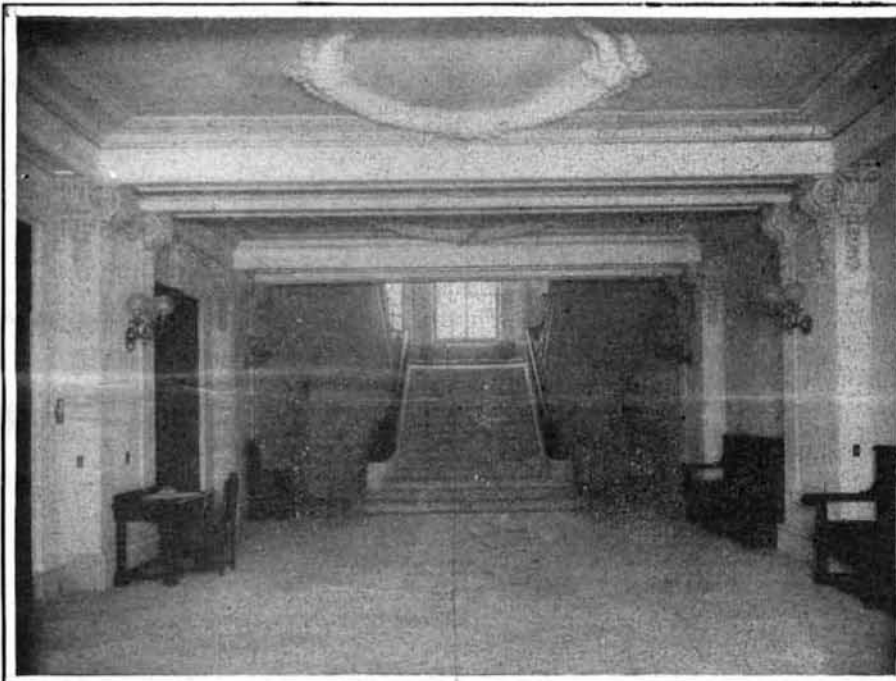
The building stands on West 54th Street, between Broadway and Eighth Avenue. It has a frontage of 131 feet and rises to a height of eight stories, towering prominently above the four-story brown-stone



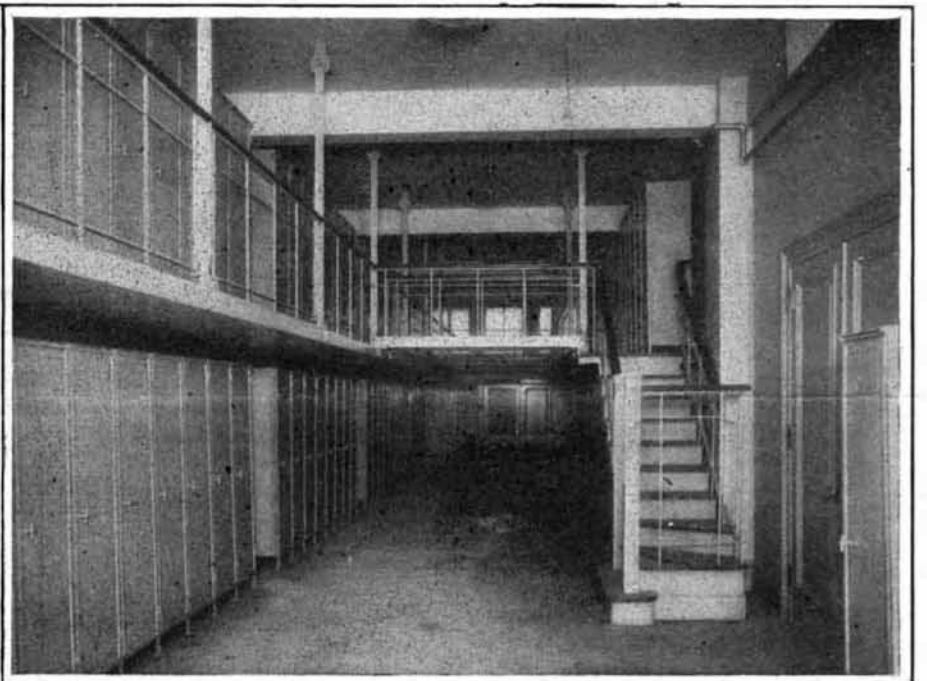
One of the Four Storage Floors.



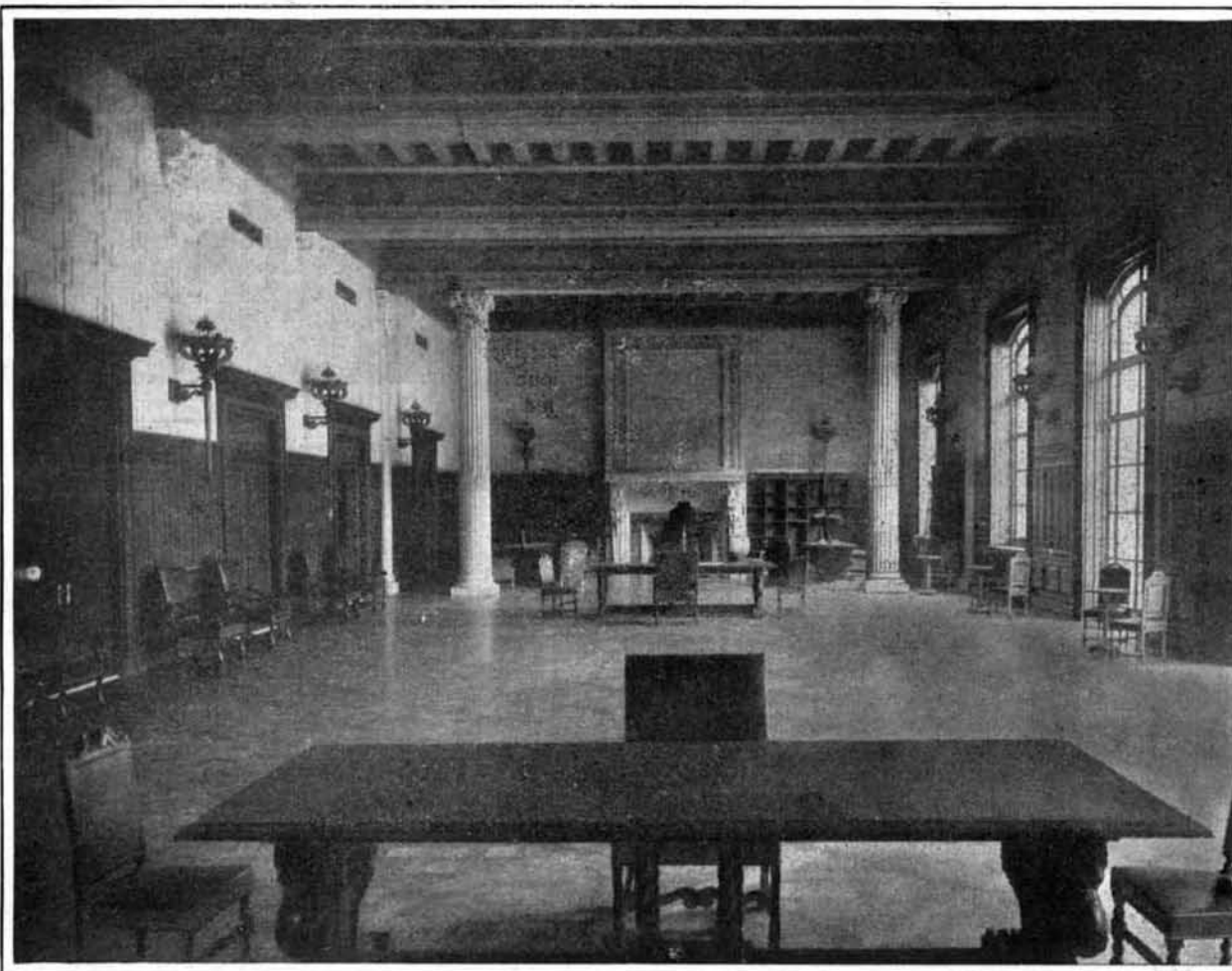
The Automobile Elevator.



The Main Entrance to the Club House.



The Members' Lockers on the Ground Floor.



The Main Assembly Hall, Modeled After That of a Famous French Castle.



The Façade of the Club House.

houses of this former rather exclusive residential section. The location is convenient to the many large new garages erected within the last two years in Broadway above Times Square and is handy to various lines of transportation, including the subway and elevated systems. The front of the building is of white granite and glazed with white brick with ornamental relief of green and white terra-cotta, offering a strong contrast to surrounding buildings.

The novel problem of combining luxurious club quarters with ample garage facilities was happily solved by architect Ernest Flagg, of New York, with the result that the new home of the club offers its members ample quarters for business and social gatherings and unsurpassed facilities for the storage and care and repair of their cars under the same roof. The total cost of the new home is approximately \$750,000, of which \$250,000 was paid for the plot of eight city building lots, \$350,000 for the building, and about \$150,000 for furnishings. Every precaution has been taken to guard against destruction or damage by fire. The building has a steel skeleton sheathed with concrete, and all the floors are of tile and cement. No wood or inflammable material is used, with the exception of a limited quantity for wainscoting, doors, and windows. Fire doors sheathed with steel close automatically by gravity in case of fire, shutting off the garage floors from the club rooms and the stairways and elevator shafts. All the gasoline used is stored in an underground tank outside of the building, and no cars are allowed to have their tanks filled on any floor but the first or ground floor garage. Lubricating oil is stored in a brick vault on this floor and kept under lock. Small portable tanks mounted on wheels and fitted with self-registering pumps are used for filling the fuel tanks of the cars, thereby avoiding the carrying of gasoline about in open buckets. On every column in the five garage floors is hung a pail of sand, and chemical fire extinguishers are liberally disposed about the garage, to be used in case of emergency.

Describing in detail the interior arrangement and furnishing of the club house, it is most natural to begin with the ground floor, which opens directly off the sidewalk and has three runways for cars into the garage. The first door on the east is the members' entrance, of chiseled white granite. Through a double set of heavy oak doors this gives into a lobby extending the full depth of the building, with a grand stairway of white marble at the rear. The lobby is finished in white, with marble floor, and is furnished with carved oak settees and chairs upholstered in red leather. Several doors open from the lobby on the left, the first one communicating with the garage superintendent's office and the garage. The second admits to the members' locker room, where there are one hundred private fireproof metal lockers where clothing and other articles can be kept under lock and key. This room has a mezzanine gallery all of steel, and there is not a thing in it that can burn.

Back of the grand stairway and beneath the first landing is a new departure with the club—the ladies' room. This is small, but is exquisitely finished with white enamel and gray silk-covered walls and furnished in polished French walnut.

Extending almost the full length of the front of the second floor is the great assembly hall rising through two floors. The walls are white, wainscoted to a height of eight feet with dark oak. Six great windows admit floods of southern sunlight, and opposite the windows an equal number of great double oak doors open into the big grill room and onto the stair landing. Parquetry is laid on the cement floor, and massive carved oak tables and chairs upholstered in red leather furnish the assembly room. At the east end a huge marble fireplace is flanked by black oak bookcases with adjustable shelves, in which are found bound volumes of the leading motoring periodicals of the world, and automobile literature. At the opposite end of the hall is a carved oak balcony for an orchestra, with a door behind opening onto a rear stairway.

The grill room has a cement floor in terra-cotta and white, white columns and ceiling, and the walls are covered with neutral-toned green wall paper. The tables and chairs are of black-stained weathered oak. As at present furnished, the room seats one hundred. On the north side are five large leaded glass windows, while there are three big skylights. The directors' room opens from one side of the grill room, while the butler's serving room and kitchen are on the other side.

On the mezzanine floor above is the secretary's office and the general office, where the large volume of clerical work is done and where the touring and road-map department is quartered. A richly furnished pool and billiard room is also located on this same floor, having an entrance from the head of a flight of stairs rising from the landing at the top of the grand stairway. The ceiling is enameled white, while the walls are papered in dark red, and a rich, red carpet covers the floor. The tables and chairs are of mahogany.

Four of the floors above this are devoted to the storage of cars. They are admirably lighted by im-

mense windows by day and electric lights at night. Although the city Edison current is at present employed, the plans contemplate the generation of current by steam-turbine-driven dynamos in the basement as soon as the machinery can be set up. Communication between all of the storage floors and the basement and roof is established by two electric elevators at the west end of the building, each 10 by 18 feet and having a lifting capacity of four tons. Flanking these are cement stairways for chauffeurs and servants. On each of the storage floors is a small room for chauffeurs, fitted with clock, telephone, tables, and chairs.

An interesting feature of the garage on the main floor is the three huge doors that admit cars. Instead of swinging back into the garage, where they would always be in the way and obstruct the light, they rise, folding inward horizontally at the middle. Directly back of one of these doors is a Fairbanks scales for weighing cars. To the east of the entrances is the superintendent's office, from which a small window looks into the garage, and on the west is the checker's room, where there are wire pigeonholes for letters and messages for the chauffeurs. The two big automobile elevator shafts are located also on the east end of the room, and in front of them is a large iron turntable for turning cars with their backs toward the elevators. On this floor are also washing stands and running water for cleaning the bodies and running gears of the machines.

The top floor is reserved for a repair department and testing room. Here is to be provided every facility for making repairs that can be found in the most up-to-date metropolitan garage. Delays in securing shipments have prevented installation of the necessary machinery as yet, but the purchases include one small and three large lathes, one milling machine, universal grinder, shaper, radial drill press, portable crane, and emery grinders, buffers, and similar small machine tools, all driven by individual electric motors. When complete, the repair shop will provide employment for a score of machinists, with space for any reasonable expansion.

In the center of the floor, cut off by wire screens reaching to the ceiling, is the testing department. This is to be equipped with a dynamometer and everything needed for measuring the power developed by motors and that delivered at the wheels of a machine, showing efficiency, friction losses, fuel consumption per horse-power-hour, taking indicator diagrams, etc. Of necessity an adequate description of this plant, to which the technical committee of the club is giving considerable attention, must be postponed to some future time.

The growth of the Automobile Club of America has been rapid since its organization in 1899, eight years ago. The active membership limit has been raised a number of times until it stands at one thousand. This limit has now been reached, and besides three hundred additional associate members, there is always a waiting list of applicants for membership. Among the members are many wealthy and socially prominent men. The club has international relations with all the national automobile clubs of Europe, and occupies the position of a national organization in this country, conducting national motor car exhibitions and technical contests, such as endurance, consumption, and commercial vehicle trials. It takes an active and influential part in affairs, having been in large measure instrumental in securing the passage of the \$50,000,000 road improvement act in the New York legislature, in promoting touring at home and abroad, and in securing reasonable and just laws affecting the use of motor cars on the public streets and roads.

#### THE INTERNATIONAL FLEET AT JAMESTOWN.

Unquestionably, the most imposing feature connected with the opening of the Jamestown Exposition will be the long lines of battleships and cruisers which have gathered from all parts of the world to do honor to the occasion. Of the sixty-seven ships of importance there assembled, twenty-seven fly the flags of friendly foreign nations, and the balance that of the United States. The visiting ships, including those of the larger size, are mainly of the armored-cruiser type, the remainder consisting of protected cruisers and a few gunboats. To be exact, there are fourteen armored vessels, nine protected cruisers, two gunboats, and one training ship. In the main, the foreign ships are representative of the latest ideas of the powers in the various types that are represented, up to the close of what might be called the ante-bellum period, or the period which closed with the Russo-Japanese war. There is, however, one important exception, which is furnished by the Japanese themselves, who have sent over, in that splendid ship the "Tsukuba," the first of a new type—the cruiser-battleship—to make its appearance on the high seas.

In dispatching the "Tsukuba" to Jamestown, the Japanese have at once paid us the compliment of sending their latest and finest ship of its class, and, incidentally, they present to the United States concrete

evidence of the fact that they are now entirely independent of foreign ship-builders, and are capable of turning out in two years a first-class warship—hull, engines, guns, and equipment—completely of Japanese manufacture.

The "Tsukuba" is of about the same displacement as the British "Good Hope" and the United States "Washington." But she has one inch more belt armor than the British, and two inches more than the American ship. She carries twenty-eight guns, as against eighteen on the "Good Hope" and twenty on the "Washington." Of these, the main armament consists of four 12-inch guns, as against two 9.2-inch on the "Good Hope," and four 10-inch on the "Washington." The intermediate battery on the Japanese ship consists of twelve 6-inch and twelve 4.7-inch guns, while the British and American cruisers carry each sixteen 6-inch guns. The "Tsukuba," therefore, shows a great superiority of gun power, even over the "Washington"; but her speed of 21 knots is a knot and a third less than that of the "Washington," and  $3\frac{1}{2}$  knots less than the maximum speed of the "Good Hope." The next in importance of the foreign cruisers is the armored cruiser "Victor Hugo," representing the French republic, an exceedingly handsome vessel of 12,416 tons and 22 knots speed. She carries a  $6\frac{3}{4}$ -inch belt, and her battery of four 7.6-inch and sixteen 6.4-inch guns is carried mainly in turrets with a high command of from 26 to 34 feet above the sea. The 7.6's are protected by 8 inches of armor, and twelve of the 6.4's are mounted in pairs on the broadside in double turrets protected by  $5\frac{1}{2}$  inches of armor; the other 6.4's are mounted on the main deck in four casemates with four inches of protection.

In point of size and speed, though not of gun power, the next largest ships are the three armored cruisers "Hampshire," "Roxburgh," and "Argyll" of the British squadron, vessels of 10,850 tons displacement, and from  $22\frac{1}{2}$  to  $23\frac{1}{2}$  knots speed, carrying four 7.5-inch guns in single turrets with 6 inches protection, and six 6-inch guns in casemates. The belt protection is 6 inches in thickness.

Next in importance are the twin armored cruisers "Roon" and "Yorck" of the German navy, each of 9,050 tons displacement and over 21 knots speed. The armament, which is much heavier than that of the "Hampshire" class above mentioned, consists of four 8.2-inch guns carried in two turrets with 6 inches of armor protection, and ten 6-inch guns mounted in a central redoubt of 4-inch armor, and so placed that four of them can be fired dead ahead and four dead astern. The only point in these fine ships which can be criticised is the belt, which has a maximum thickness of only 4 inches.

France, Italy, and Austria each contribute an armored cruiser of between 7,000 and 8,000 tons displacement, France sending the "Kleber" of 7,700 tons and 21.27 knots, carrying eight 6.4-inch in 4-inch armor turrets and four 4-inch guns in casemates. The "Kleber" has the characteristic high freeboard of the French cruisers; but like the German "Roon" and "Yorck" her armor is over-light, the belt being but 4 inches in thickness. Of about the same displacement is the Italian "Varese," of 20.2 knots, mounting one 10-inch and two 8-inch in 6-inch-armor turrets, and fourteen 6-inch in 6-inch casemates or behind shields. The belt armor is 6 inches in thickness. The "Varese" is a type of cruiser designed and built in Italy, which combines, if we except the "Tsukuba" and "Indomitable," more fighting efficiency on a given displacement than any armored cruiser that we know of. Two of this type went successfully through the Japanese war as part of the Japanese armored cruiser division. Another armored cruiser of the same displacement is the "Sankt Georg," of the Austrian navy, mounting two 9.4-inch guns, five 7.6-inch, and four 6-inch. The belt is  $6\frac{1}{2}$  inches in thickness, the barbets have 8 inches, and the side of the lower deck has  $8\frac{1}{4}$  inches of Krupp armor protection. These features, combined with a speed of 21 knots, render this vessel an exceedingly fine example of the armored cruiser class. A little smaller than the "Sankt Georg" is the "Kaiser Karl VI.," also of the Austrian navy. Her speed is 20.8 knots, and she mounts two 9.4-inch and eight 6-inch guns; the belt being  $8\frac{1}{2}$  inches, and the barbet armor 8 inches in thickness.

The protected cruiser class is represented by the two German ships "Bremen," of 3,250 tons and 23.2 knots speed, and "Niobe," of 2,650 tons and 21.6 knots speed, each vessel mounting ten 4.1-inch guns and several 1-pounders. Japan has the "Chitose," a protected cruiser of 4,760 tons and 22.5 knots, mounting two 8-inch and ten 4.7-inch guns. Italy sends the protected cruisers "Etruria" and "Fieramosca," the former of 2,280 tons and 19.8 knots, carrying two 6-inch and eight 4.7-inch guns, and the latter of 3,600 tons and 17.5 knots, mounting a somewhat out-of-date battery of two 10-inch and six 6-inch guns. Austria sends the protected cruiser "Aspern," of 2,437 tons and 20 knots, and a battery of eight 4.7-inch guns. Sweden is represented by the armored cruiser "Fylgja," of 4,060 tons and 21.5 knots, mounting eight 6-inch guns in