



The question of union or non-union labor has been a very sensitive one with the World's Columbian Exposition from the time of the inception of work. When the decision was finally made that the Exposition should be held in Chicago an agreement was entered into between the Building Trades Council and the Exposition management to the effect that the Exposition would acknowledge an eight-hour day, minimum rate of wages, and the arbitration of all differences. The trades council endeavored to induce the Exposition to recognize only union labor, but failed in this, and matters were left with the distinct understanding that the Exposition management should be at liberty to employ competent labor of any kind, regardless of its union affiliations.

Since the first of April there have been several strikes and threats of striking on the part of several organizations represented in the building operations at the Exposition. Considerable time has been lost by these strikes, but the Exposition management has lived up to its agreement at all times, and whenever there has been any question of doubt the workmen have been given the benefit of it. In all cases where a demand for increased wages has been made and there has been any excuse within reason for making the increase, it has been given. When the painters struck they demanded forty cents an hour, and rather than have any further differences, and in order to give the men every inducement to continue work without any break, their wages were made forty-five cents, or five cents an hour more than they asked for. At the same time that the painters asked for more pay, the carpenters presented similar demands, and coupled with their demands the request that only union labor be employed. The contractors who were working on contracts taken from the Exposition management made satisfactory arrangements with the trades council. The Exposition management, however, had no reason to make any different arrangement from the one it had with

the trades council, although it acceded to the demand for increased wages. The president of the Carpenters' Union, regarding the situation as most opportune for drawing into the union all non-union men employed in the Exposition grounds, and desiring that the union should be formally recognized by the Exposition management, presented a demand that all non-union men be discharged. The Exposition officials declined to accede to this demand, and the carpenters struck. This strike did not seriously cripple the Exposition, because nearly every one of the strikers took his tools and went to another part of the grounds and hired himself out to some contractor. When making the demand that all non-union men be discharged, the union did not offer to supply the places of the non-union men with union men, although it was known that the Exposition was engaging all the carpenters that it could find. Had it not been for walking delegates, it is probable that the trouble would have ended here, and the places of the striking carpenters would have been filled from outside sources. During the latter part of one week walking delegates stirred up discontent among union men of all kinds within the Exposition grounds, claiming that a great principle was at stake because the Exposition would not acknowledge the unions and discharge all non-union men. Saturday night, April 8, after a lengthy meeting, the trades council sent formal notification to the

World's Fair Council of Administration informing them that if the demands of the union were not acceded to by 8 o'clock Monday morning and non-union men discharged, all union men employed in the Exposition grounds would strike. Monday morning, as the thousands of workmen went to the Exposition grounds prepared to continue in their work, they were met at the gates by walking delegates and other union representatives, who persuaded them from going to work, and some six or seven thousand men either did not go to work at all or quit work during the day.

The Council of Administration, serious as the situation was, declined to discharge the non-union men, and went on with the work with what men remained faithful and what more it could employ.

During the afternoon a conference was held between representatives of the trades council and the Council of Administration and an agreement drawn up and signed, by which the labor organizations agreed to see the work of completing the Exposition carried out without further striking. The point at issue, that of discharging non-union men, was left as it had been before, not figuring in the agreement by which the strike was declared off.

It was fortunate for the Exposition that the strike did not last longer, yet a large amount of work was

work in the Leather and Shoe Trades building, giving the interior a very attractive effect. Meantime, while the painting has been going on, exhibitors have been placing pavilions and show cases. The offices in this building will be an attractive feature that visitors should not neglect to see. Leather will be used very extensively in decorating and ornamenting them; the furniture is to be leather covered, and in every way possible leather will be used to show its value for decorative and ornamental purposes.

The Krupp building is nearing completion. The installing of exhibits has been going on at the same time that the workmen have been completing the structure, and this work is nearly completed, except the placing of the 250,000 pound cannon.

Workmen have nearly completed berths in which the electric launches are to be placed when charging their storage batteries. This storage station is situated under the platform surrounding the southeastern corner of the Agricultural building in what is called the South Pond. The electric energy for use in storing these batteries will be supplied by Edison generators, which form part of the electrical equipment of the power plant in the Palace of Mechanic Arts. The General Electric Company has immediate charge of this work of charging the launches.

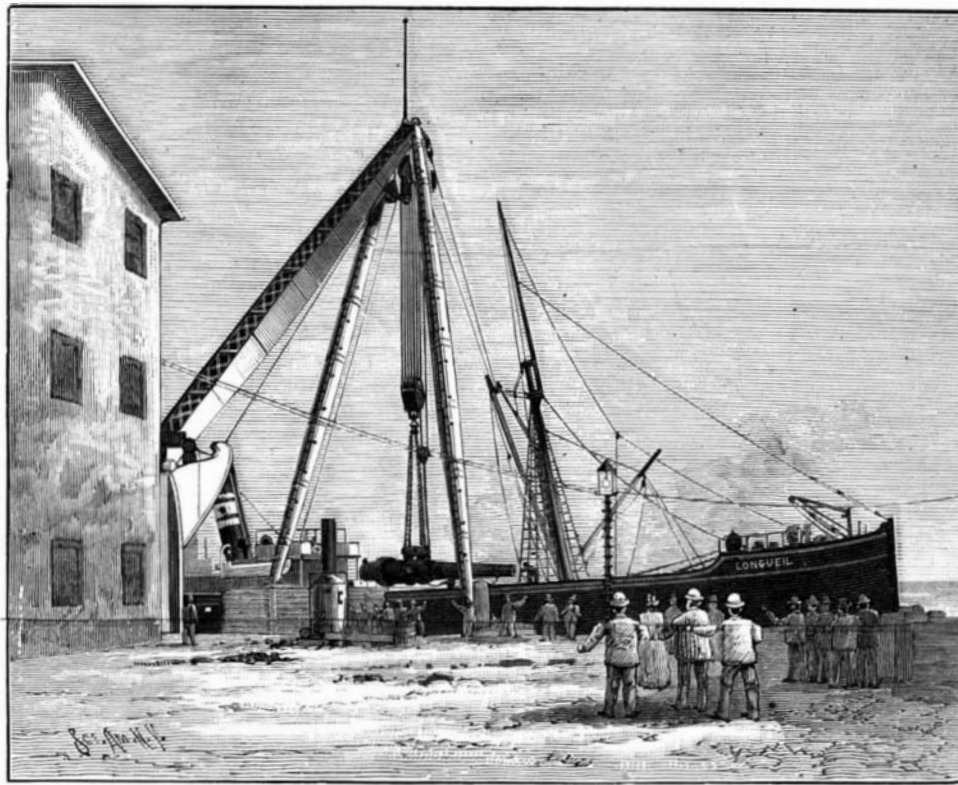
On the pier at which the steamboats will land their passengers will be a movable sidewalk for the purpose of carrying passengers to the head of the pier, landing them near the Casino and Peristyle. This sidewalk is 2,500 feet long and is completed except in a few minor parts. The substructure is raised about three feet above the level of the pier, and there is a loop at each end of the road for the continuous movement of the cars. Much of the rolling stock is on hand ready to be set in operation as soon as power is provided. There will be a small charge for riding on this novelty.

South of the Agricultural building is a large display of windmills, and what will add interest to this display will be the fact that one of the mills is a model of a famous Dutch windmill erected at Amsterdam, Holland, in 1806. Near by there will be sixteen windmills of the modern American type, varying in height from fifty feet or so to one hundred and thirty. Nearly all of the manufacturers of these mills will be represented. One of the largest mills will be one hundred and twenty feet high, and will have four small mills raised a little distance above the building at the base of the structure. In this building will be a full display of the machinery used in connection with windmills.

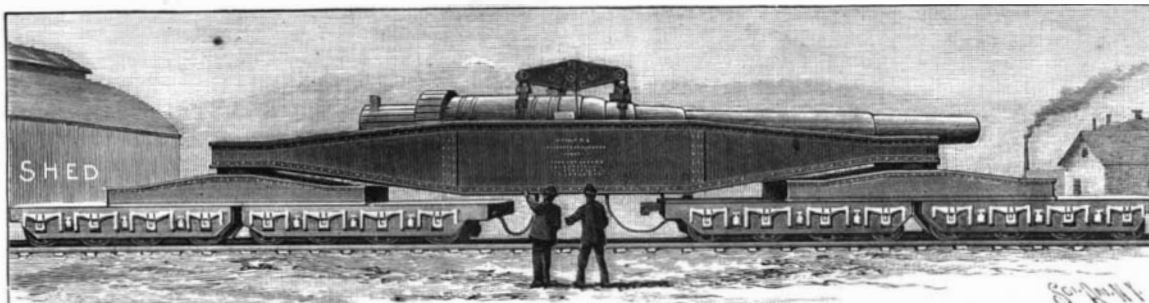
The effort to reduce the number of visitors at the Exposition grounds, by increasing the admission fee from 25 cents to 50 cents, seems to have had the opposite effect from what it was intended to have. With the beginning of

spring people flock to the grounds by thousands, especially on Sundays. The first Sunday of April it was estimated there were at least 15,000 people in the grounds, while the Sunday following there were about 30,000. This attendance, at fifty cents a head, gave the Exposition a snug amount of gate receipts. On week days the crowd proved to be a great inconvenience, and, in order to prevent any interference with rushing the work of installing exhibits, visitors have been prohibited from admission to the buildings, and all passes granting such admission that have been issued, have been called in. This action will materially aid the Exposition, as passes were at one time given with much freedom, and the more important buildings were continually crowded with sight-seers.

A severe wind storm on Friday, April 7, caused considerable damage in and near the Exposition grounds. Two hotels that had been growing at a mushroom rate succumbed, and were completely demolished. Another building, outside the grounds, which was designed for a cyclorama, was also completely demolished. The most damage done by this storm inside the Exposition grounds was to the Marine Cafe, or French restaurant, as it is usually called. This was an attractive structure, which was being pushed ahead with much rapidity. The wind twisted it all out of shape, so that the building will require largely rebuilding. Accompanying this storm was quite a fall of rain, the first rainfall



THE WORLD'S COLUMBIAN EXPOSITION—LIFTING THE 120-TON KRUPP GUN FROM THE SHIP.



THE 120-TON KRUPP GUN AS PLACED ON THE SPECIAL CAR.—[See page 244.]

lost, as the services of 7,000 men were lost for one day. Among the men that struck were the carpenters, painters, iron workers of several kinds, hod carriers, cornice workers, steam fitters, gas fitters, electrical workers, tile layers, mosaic workers, lathers, fresco painters, marble cutters, gravel roofers and several other unions. Most of the men were back at work Tuesday morning, and by noon very few places were vacant.

Work has progressed in the Forestry building in installing exhibits so as to give some idea of how attractive the display in this building will be. New South Wales, Australia, is making an extensive exhibit, showing sections of tree trunks finished in such a manner as to show effectively the grain and color of the wood. Some of these pieces of wood are enormous, being three feet or more wide. Near by Brazil is arranging a fine exhibit. The space is surrounded with trees which are about twenty-five feet high, and the tips of the branches are cut off in such a manner as to give them symmetry. This exhibit will be very rustic in effect. The Ohio exhibit adjoins that of Brazil, and is about completed. It is arranged for a complete display of samples of wood in a neat pavilion, the pillars of which are tree trunks about twelve inches in diameter, with the bark intact. This exhibit promises to be a very attractive one.

The painting machines have just completed their

since the one when so much damage was done, two weeks before that. This rain was opportune, as it gave the Exposition management a chance to test the roofs, which had leaked badly. Those roofs that had been completed were found to be water-tight. In a few isolated instances more or less damage was caused by this rain, but these were in cases where the work of repairing the roofs had not been completed.

Much embarrassment has been caused the transportation department of the Exposition because exhibitors, in shipping their exhibits, have been negligent in marking the cases, stating where each one belonged. In order to prevent such embarrassment, the Exposition sent out, months ago, instructions as to how exhibits should be sent, with blanks to be attached to each package of exhibits. In instances where these instructions have been followed, exhibits are at once transferred from the cars and placed in the building and on the location, or as near to it as possible, where they belong. So many exhibits have come unmarked, and there has been so much negligence in this respect, that whole carloads of exhibits are delayed. As a consequence, there is a congestive condition of affairs in the transportation department. Were it not for these cargoes that cannot well be discharged, the tracks for handling exhibits would be nearly freed from cars each day. With from 200 to 300 cars of exhibits arriving every twenty-four hours, delays like these seriously hinder and lessen the likelihood of the Exposition opening in good shape on May 1.

Manitoba was not able to secure as much space as it wished from the allotment made to the Canadian government, and consequently has constructed a building of its own just outside the Exposition grounds. This building is now completed and is being fitted up with the exhibits of this province, and includes a large variety of displays, such as agricultural products, woods, polished and unpolished, fauna, educational exhibits, and a large variety of specimens of the handiwork of the Northwest Indians.

A model post office has been established by the Post Office Department in the southwest corner of the Government building. This post office is designed not only to be an exhibit of what a model post office should be, but it is also to serve as the postal substation for the Exposition grounds.

The annual meeting of the stockholders of the Exposition Company was held last week, and the old board was re-elected with a few minor changes. This insures the re-election of the more important of the old officers. What little opposition there was to the re-election of the old board came from two or three men who sought to become members of the board themselves for whatever honor there might be in it, rather than because of any inefficiency of the old board.

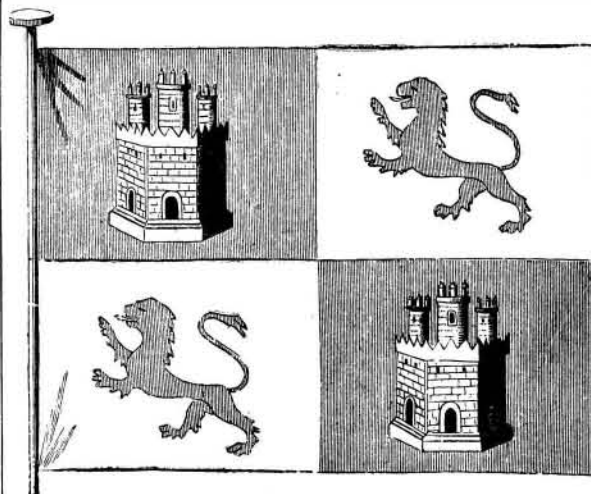
The deceased artists of America have been remembered, their names being given on the ceiling border in the Art Gallery. Among the names are the following: Fuller, Wylie, Brown, Kensett, Gifford, Audubon, Malbone, Pratt, West, Mount, Hunt, Lentz, Mignot, Hicks, Quartley, Jouett, Allston, Smibert, Copley, Lambden, Baker, Rossiter, Gray, Bellows, Jarvis, Waldo, Pine, Peale, Freeman, and Weir.

The holders of the concession for the Esquimaux village have a serious embarrassment on hand in the fact that the Esquimaux are not inclined to wear their fur clothing during the hot spring days, preferring in their place suits of blue jeans. As this is not a typical Esquimaux costume it detracts somewhat from the interest in the concession. The matter has been taken into the courts and the Esquimaux have won their case.

A MAMMOTH tusk was recently found in a mine at Schoningen, Brunswick, which, although broken off at the point, measures twelve feet in length and two feet in circumference, and weighs 224 pounds.

THE KRUPP EXHIBITS FOR THE COLUMBIAN EXPOSITION.

The steamship Longueil, which arrived at Baltimore March 18, brought the principal part of the contribution of the great German gun factory at Essen to the Columbian Exposition. By far the most noticeable portion of this exhibit is a great 120 ton gun, although the display includes several smaller guns and other war material, as well as some heavy steel productions for railway use. In last week's SCIENTIFIC AMERICAN was a picture, from a photograph, showing the guns as



The Standard of Castile, displayed by Columbus when he landed on Guanahani, or Watling Island.

they arrived in the ship's hold, and in the accompanying illustration the large gun is shown suspended from the big hydraulic hoisting shears as it is being moved from the ship to the railway car. The shears are the largest and most powerful in the country. They are designed to lift 150 tons, have an overhang of 57 feet, and are 120 feet high. The gun is the largest piece of freight ever handled by any railroad, and was conveyed to Chicago by the Pennsylvania Railroad, on a car specially built for the purpose at their Altoona shops, from drawings furnished by Mr. Fried. Krupp, the car being similar to one built for the transport of the gun over German railways.

The car has a capacity of 285,000 pounds and is built entirely of boiler steel, the center plates and center

bearings being steel castings. It consists of a major bridge, two minor bridges and four eight-wheel cars. The gun rests in the major bridge on two supports, designed to closely fit its perimeter. In addition to these two supports, to avoid any vibration while in transport, the muzzle is secured by wedge-shaped oak blocks set in cast iron shoes and drawn up to the muzzle by means of right and left hand screws. The major bridge is 50 feet from center to center of supports, and rests directly on the side bearings, while, on the other hand, the minor bridges are supported by their respective center plates.

The cars have been designed so as to combine strength with flexibility, and are equipped with Janney couplers and draught rigging specially constructed for strength. The journals are $4\frac{1}{2}$ by 9 inches; $37\frac{1}{2}$ inch wheels, with wrought iron centers and steel tires are used. Each car has a 14 inch Westinghouse air brake cylinder, with brake on all wheels, and National hollow brake beams with Christie brake heads and shoes.

The load on cars is thoroughly equalized by 32 elliptic springs of 36 inch span, each spring having 18 leaves $3\frac{1}{2}$ inches wide and $\frac{3}{8}$ inch thick.

The extreme length of the car is 90 feet 9 inches; extreme width, 9 feet 10 inches; extreme height to top of bridge, 9 feet $9\frac{1}{4}$ inches.

For the foregoing particulars of construction of this great gun car we are indebted to Mr. Theo. N. Ely, chief of motive power of the Pennsylvania Railroad.

CRISTOBAL COLON DE LA CERDA, DUKE OF VERAGUA, MARQUIS OF JAMAICA.

Among the distinguished personages from foreign lands who are visitors to the World's Columbian Exposition is a direct descendant of the great admiral, the Duke of Veragua. For a pedigree and titles and the accompanying portrait we are indebted to *La Ilustracion Espanola*.

The present Duke of Veragua and Marquis of Jamaica, His Exc. Don Cristóbal Colón de la Cerda, is the direct descendant of the celebrated discoverer of the new world. He is the possessor of the titles "honorable and commemorative, of Admiral of the Oceanic Sea and Governor in Chief of the Indies," with the right to use the corresponding uniforms." We give his portrait. The Duke of Veragua was born in Madrid in 1837. He took the course of jurisprudence in the Universidad Central, receiving the title of advocate; he did not figure in politics until after the revolution of 1868, when he fraternized with the liberal group, that defended the alliance of the democracy with the representative monarchy. He was elected a deputy to the Cortes by the district of Arévalo in the legislatures of 1871 and 1873, and in the following year he was a member of the Municipal Board of Madrid.

When the legitimate monarchy was restored, he represented a district of Puerto Rico in the Congress, and he adhered to the liberal party. A senator by his own right since the year 1876, he was Vice-President of the Alta Camara (Upper House) in 1890, when he was made Minister of the Interior in the cabinet over which Sagasta then presided.

He was President of the Congress of Americans that met in Madrid in 1881, President of the Superior Court of Agriculture, Royal Delegate of the "Instituto Agrícola" of Alfonso XII., and Vice-President of the Board of Administration of the *Monte de Piedad* (a money-lending establishment under government control) and the Savings Banks of Madrid, and on July 21, 1887, he was decorated with the Great Cross of Charles III., possessing the diploma of Gentleman in Waiting, Grandee of Spain, since July 24, 1882.

The government of H. M. the Queen Regent, offering honorable testimony of consideration to the descendant of the illustrious admiral, appointed the Duke of Veragua President of the Central

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CRISTOBAL COLON DE LA CERDA—LINEAL DESCENDANT OF COLUMBUS.