Scientific American

PROGRESSIVE-MOTION ORE-CONVEYER.

A form of ore-conveyer that has met with considerable success in Germany is manufactured by Maschinenfabrik und Mühlenbauanstalt G. Luther, of Brunswick, Germany. The conveyer is made of sheet metal and moves horizontally on roller-bearings. Angle irons are used wherever required. The material to be transported is discharged at one end or at any desired portion of the conveyer, and is moved along in one direction until the point of discharge is reached. The speed of transportation is constantly accelerated, until

finally the load is discharged at the turn of the conveyer. Experience has shown that the operation is well nigh faultless, and that during the forward travel of the first period of the return, all the material is thrown off. An amount of material varying from 30 to 150 tons per hour can be conveyed with an expenditure of 4 to 25 horse power. The length of the conveyer is dependent only on the particular cross-sectional form selected. The conveyer is intended for the transportation of coal, ashes, sand, ores, beets, sugar, produce and the like. If coke is to be transported, or some similar material that wears away the metal, a glass

bottom is employed. The speed of rotation of the driving-shaft is dependent entirely upon the character of the material to be conveyed, and varies from 60 to 100 revolutions per minute, or about one-third of that of ordinary progressive motion conveyers.

THE UNVEILING OF THE ROCHAMBEAU STATUE.

BY EDWARD W. BYRN.

On Saturday, May 24, 1902, the two great republics of the world joined in the celebration of an international event which carries the thought of the American patriot back to the struggles of his ancestors for independent existence.

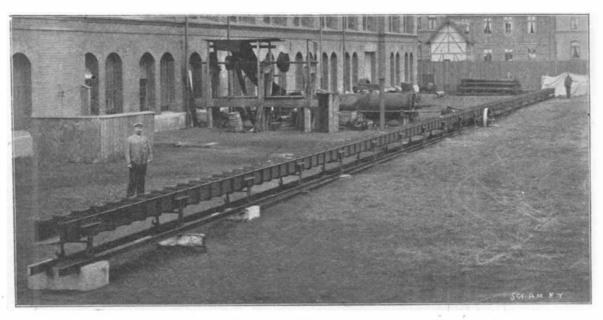
The unveiling of the statue of Jean Baptiste Donatien de Vimeur, Count de Rochambeau, was something more than an ordinary function. It was the occasion of a remarkable gathering of representative men of the United States and France, and one in which the armies, the navies and

the civil governments both nations united to do honor to the soldier who was the official representative of the French g o v e r n. ment, a n d who with French money and French a·r m s a n d French men extended the helping hand to the Colonies. The story of Lafayette's generously voluteered services is already known every t o schoolboy, but it remained for the first Congress of the twentieth century to do substantial honor to Rochambeau. The credit for the initiative in this worthy tribute is due to Mr. Jules Boeufve, the French Consul and Chancel-

of the

French Embassy, who as early as 1899 first suggested it. A year later the first bill was introduced in the United States Congress, and on March 3, 1901, a bill was passed and approved appropriating \$7,500, and in the following year a second appropriation of \$15,000 was secured, which amounts have since been further supplemented by other sums for the entertainment of guests sent by France to our shores to celebrate the

Immediately in front of the White House at Washington, and facing its grounds and closer than any



A PROGRESSIVE MOTION ORE-CONVEYER.

other public reservation, is Lafayette Square, so called for many years after the French general who gave his services to the cause of the American Colonies in their struggle for independence. At the southeast corner of this square stands the Lafayette monument. At the southwest corner stands the statue just erected to the memory of Rochambeau. It is a significant circumstance that of all the many statues that now adorn the capital city of the United States, there are none, not even of domestic heroes, which are so closely positioned to the home of the Chief Executive of the United States.

Count Rochambeau was born in Vendome, July 1, 1725, and died at Thore, near that city, May 10, 1807. He entered the French army in 1742 and distinguished himself in various campaigns, reaching the rank of lieutenant-general. In 1780 he was placed in command of the French army sent to America. He embarked at Brest, May 2, 1780, under the escort of

Chevalier de Ternay with five ships of the line, and in 1781 he actively co-operated with Washington in the movements which led to the capitulation of Cornwallis at Yorktown. It is said to be an authenticated fact that just before the surrender of Cornwallis at Yorktown, Rochambeau advanced to Robert Morris, the financier of the Colonies, the sum of \$20,000 out of the French war chest to pay the men under Washington and relieve their pressing necessities. In recognition of Rochambeau's services, Congress gave him a vote of thanks and presented him with two pieces of

cannon captured from the English. On his return to France, in 1783, he was made Governor of Picardy and Artois, and in 1791 was made Marshal of France. Bonaparte also named him grand officer of the newly-created Legion of Honor and pensioned him. During the reign of terror Rochambeau was imprisoned, and only escaped the guillotine by the death of Robespierre.

The statue, which is in bronze and of heroic proportions, is the work of Ferdinand Hamar, the deaf-mute French sculptor, and is a replica of the one erected in France. L. Parent is the architect, and the stonework of the pedestal, which is of French

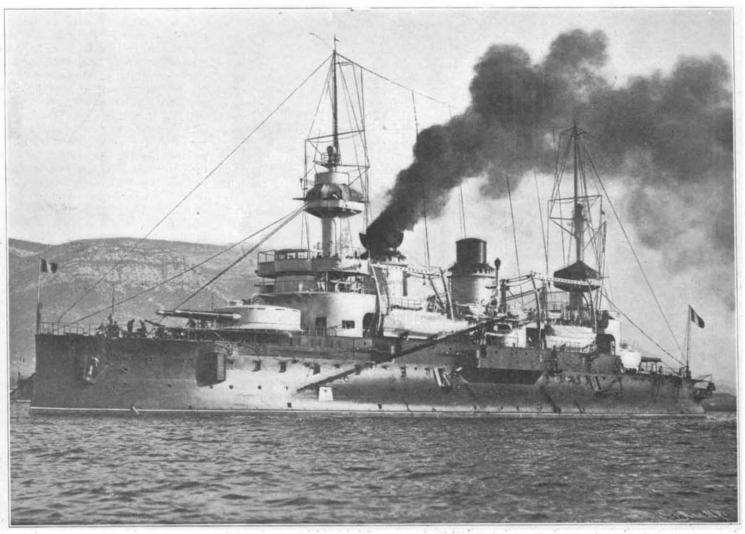
limestone, is by Ferdinand Gaussen. Besides typifying the happy relation of the two peoples, it is a handsome addition to the statuary of the United States capital, graceful in design, artistically executed, and well placed. Its most salient feature is the figure of the general in the uniform of his rank and with arm outstretched in the attitude of command. A symbolic figure below typifies the sentiment and meaning of the monument. A female figure representing liberty, with drawn sword in one hand, extends protection over the American eagle, which as a young fledgling is posed in an attitude of defiance against attack. The left hand of the figure bears aloft the entwined flags of France and of the United States, and the prow of a ship in the background suggests the help from over the sea. Lower on the pedestal is displayed the shield of the United States, bearing the thirteen stars of the original Colonies.

In recognition of the dignity and importance of the

has sent her splendid battleship, the "Gaulois," whose formidable proportions and equipment are so well shown in the illustration. It is an interesting fact that this fine specimen of a modern warship was built at Brest, the very port from which Rochambeau embarked for Americain 1780, and she is also the first French battleship the first class to cross the Atlantic. This ship brought with her, as representatives of the army and navy of France, Vice-Admiral Fournier, Inspector-General of the Navy; Lieutenant - Colonel Meaux Saint Marc, orderly officer and personal repre-

sentative of

event, France



Turret ship (steel). 3 screws. Displacement, 11,275 tons. Length, 385 feet 6 inches. Beam, 66 feet 6 inches. Draught, 27 feet 6 inches. Indicated Horse Power, 14,500. Built at Brest. Launched 1896. Cost \$5,300,000. Armor: Belt, 15¾ inches; gun positions, 15¾ inches; deck plating, 3½ to 1½ inches. Armament: Four 12-inch guns; ten 5.5 R. F.; eight 3.9; sixteen 1.8; ten 1.4; eight machine guns. Torpedo Tubes, 6 (2 submerged). Speed, 18 knots. Normal Coal Supply, 680 tons. Complement, officers and men, 632.