

The Volta Centenary.

Information regarding the electrical exhibition at Como and the Volta Centenary is of rather mournful interest after the recent fire which destroyed the entire exhibition. The site chosen for the buildings was picturesque in the extreme, being located near the southeastern corner of the beautiful lake, says a correspondent of the English Electrical Review, and was easy of access by rail or water. The exhibition building proper consisted of a crescent-shaped galley with façade, the extremities of the towers being constructed in imitation of the well known Voltaic pile. From the back of this construction opened three extensive galleries, the center one terminating in a circular building. Running parallel with the face of the building, and intersecting the center of the circular gallery, were other galleries devoted to electrical exhibits. A very large part of the exhibit consisted of ingenious electrical domestic appliances. Our English contemporary says, "We were surprised to find that in nearly every instance an inspection proved these appliances to be of American manufacture." This paper is of the opinion that as an electrical exhibition it was of little or no importance. At the southern end of the galleries was the exhibit of relics of Volta and Galvani, which we have already illustrated and which were unfortunately nearly all destroyed by the fire.

A TRANSCONTINENTAL AUTOMOBILE VEHICLE.

Our engraving represents Mr. and Mrs. J. D. Davis starting on what will probably be the longest automobile trip on record, the goal being San Francisco. In this country we have not as yet had any very long runs, Cleveland to New York (708 miles) being, we believe, the longest on record. There is no more delightful way of seeing the country than to view it from the comfortably cushioned seats of an automobile vehicle, which is never tired, and knows neither hunger nor thirst. After the industry becomes better established, we would not be at all surprised if automobile trips from New York to Boston or New York to Lake George were of almost daily occurrence during the season when the roads are in good condition.

With a strongly constructed touring car made especially for the purpose there would be no difficulty in making sixty to seventy miles a day over ordinary roads and probably few travelers would care about doing more than forty miles a day. At present carriages using some of the products of petroleum as fuel are the best adapted for touring purposes, but undoubtedly, in time, along all important roads there will be charging stations, so that the electric vehicles will be on the same plane as those driven with the aid of gasoline or benzine.

We understand from press accounts that Mr. and Mrs. Davis are making satisfactory progress in their trip, notwithstanding a few mishaps which are apt to occur in running a vehicle of this kind. The start was made at about eleven o'clock on Thursday morning, July 13, from the front of the New York Herald building, Thirty-fifth Street and Broadway, New York. Crowds witnessed the start and cheered the venturesome tourists as they began their long journey. Owners and manufacturers of motor carriages united in giving Mr. and Mrs. Davis an escort up Fifth Avenue as far as the Harlem River. The horseshoe which is suspended in front of the carriage seems to indicate that the riders have not enmity toward horses, and it is hoped the omen of good luck will prevent horses from being frightened along the country roads of the 3,700 mile journey. The touring car used by Mr. Davis is of the well-known Duryea type which we have illustrated and described on a number of other occasions.

The route of the Davis party is up the valley of the Hudson River to Albany, then along the banks of the Mohawk, passing through Utica, Syracuse and Rochester to Buffalo, then skirting the shore of Lake Erie to Toledo, and then finally to Chicago. We believe that the route beyond this point has not been definitely decided as yet.

MANY people are apt to consider that corporations are grasping and soulless. Of course, no one will deny that this is sometimes the case, but the Montreal Street Railway Company is certainly generous. It has set apart \$25,000 a year for the benefit of its employees. They will be insured in an accident insurance company of good standing, and the premium will be paid by the Street Railway Company. This insurance will amount to \$1,000 in the event of an accident by any cause, one-half this amount for total disablement, and \$5 per week for time

lost for injuries specified in the policy. Motormen and conductors who have been in the service of the company for two years will receive an increase of pay, and motormen and conductors who have been regularly in the company's service for five years and over will receive their uniforms free of cost.

AN ITALIAN PRINCE BOUND FOR THE NORTH POLE.

Prince Luigi of Savoy, Duke of Abruzzi and nephew of King Humbert, is about to attempt, as others have attempted before him, the pacific conquest of the North Pole.

The prince is the third son of the late Amadeo, ex-King of Spain. He is a captain in the navy, has twice made the tour of the world, and will be remembered



PRINCE LUIGI OF SAVOY.

for his bold ascent of Mount Saint Elias, in Alaska. He is twenty-six years of age and does not, at first sight, appear to be blessed with the strongest of constitutions; but energy and decision are read in his juvenile countenance.

The principal companions of the duke in his expedition will be his aide de camp, Capt. Umberto Cagni, an officer who is as intelligent as he is courageous, and who accompanied him to Alaska; Dr. Cavalli, of the royal navy; and Lieut. Count Quarini, a linguist, belonging to an old Venetian family. Count Quarini, during the Cretan insurrection, distinguished himself by his bravery and coolness, and received the silver medal awarded for military valor.

The Duke personally directed all the preparations for the expedition with scrupulous care.

He took on board of his ship, the "Stella Polare,"

two Italian sailors, four mountain guides, ten Norwegian sailors who have had experience in the Northern seas, and an Esquimo who knows how to drive dogs harnessed to sledges. At Archangel more than a hundred dogs will be embarked. The duke's equipment will include fifteen hundred oak cases containing clothing, food, scientific material, two balloons constructed at Paris, and apparatus for the manufacture of hydrogen.

The "Stella Polare," which was fitted out at Christiania, weighed anchor Monday, June 12. After touching at Franz Josef's Land, the duke intends to proceed by easy stages, marking his route by stations that will show his progress and assure his retreat in case of necessity. The duration of his exploration will be about three years.

For the above particulars and the engraving, we are indebted to L'illustration.

The Coloring Matter of Blue Coral.

Prof. Liversidge has made a series of experiments on the blue pigment of *Heliopora cœrulea* on material obtained by the Funafuti Expedition. His results are interesting, although they do not, unfortunately, throw much light upon the nature or relations of this very curious pigment. He finds that "dead" coral after treatment with hydrochloric acid yields a black pigment which dissolves in formic, acetic, and lactic acids to form a bright blue solution. The pigment is slightly soluble in absolute alcohol, but quite insoluble in ether. The residue after ignition is bulky, and contains much phosphoric acid, iron, lime, and magnesia. Curiously enough Prof. Liversidge found that pieces of "live" coral, or coral which had been gathered while growing, although of a distinct slaty blue color, did not yield blue solutions, but merely pale green ones. The pigment itself was also of a pale chlorophyll green tint. The paper concludes with a list of other blue or green coloring matters in animals. In connection with these we would draw the author's attention to the asserted occurrence of the mineral vivianite in the skeleton of *Belone* and some other forms.—Natural Science.

The Wyoming Exploring Party.

The expedition to the fossil fields of Wyoming left Omaha on July 18. It numbered three hundred scientific gentlemen representing nearly every university and college in the United States. The Union Pacific Railroad Company pays all the expenses of the trip, and it is hoped that the expedition will result in developing the possibilities of this great region which is so rich in fossils of the Dinosaur period. After reaching Laramie the party will go directly into the fossil fields. They will be organized into messes of ten men, each group being provided with two wagons for riding and another wagon for carrying tents, provisions and other supplies. A dark room and complete photographic outfit will be provided. Prof. Wilbur C. Knight, of the University of Wyoming, will have charge of the party. It will take one course to the Grand Cañon of the Platte and will return by another course, giving an opportunity for viewing some of the finest scenery in the West and also giving a chance to collect great quantities of vertebrate fossils.

Antique Safety Pins.

The Metropolitan Museum of Art has some interesting examples of antique safety pins, although they were not called by that name. The antique fibula is really a safety pin, and is constructed on the same principle, consisting of a pin with a coiled spring to keep the point pressed against the sheath to insure a safe fastening and to prevent injury from being stabbed by the point. The manner of using the pin may be seen by reference to many antique statues, notably the Apollo Belvidere. These bronze fibulae vary from two to seven inches in length. Some have a guard to protect the point of the pin; others simply have a catch of bent wire. The backs of the fibulae are of all shapes. In some cases the wire is twisted into odd forms, but usually the back is broadened out so as to admit of ornamentation. Some of the large ones have their backs hollowed, making a mere shell of bronze, on the outer surface of which are cut wavy lines and zigzag decorations. The group of buckles are also very interesting and resemble the ones in use to-day. Several of them were illustrated in a recent number of *The New York Sun*. In beauty of design the ancient buckles were more than the equal of anything of the kind which is being made at the present time.



THE START FOR THE 3,700-MILE TRIP ACROSS THE CONTINENT.