Scientific American

THOMAS A. EDISON AUTOMOBILING TO THE SOUTH.

It is undoubtedly true that the average person evinces as great an interest in the private lives and doings of prominent men as in their public labors and successes. For, naturally enough, a knowledge of the more intimate personal characteristics and a closer view of the life at home, at work, or at leisure appears to bring the celebrity closer to us and to make his achievements appeal the more strongly to the individual

The accompanying photographs of Thomas A. Edison

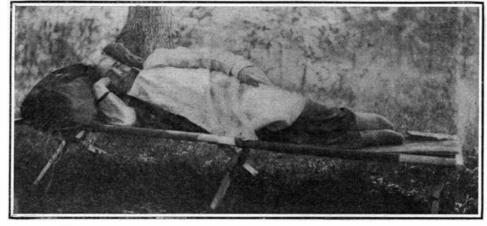
show the dean of the inventors of America, if not of the world, in situations that are as interesting as they are unconventional. They were taken during a vacation trip planned some time ago and carried out recently. It is not strictly correct to designate this automobile trip as a vacation, for the word vacation is almost unknown to the great electrician whose working days often last for eighteen or twenty hours. And even in this instance the vacation tour was undertaken with a view to study and investigation, and the causes that gave rise to it were these: For the last few years Edison has been working steadily and enthusiastically at his alkaline storage battery, and while he has succeeded in developing a cell that is decidedly superior to the lead accumulator for many purposes, a great deal still remains to be accomplished before his success can be called complete. In the course of his investigations Edison has employed and tested a great variety of different metals, and among these recently was cobalt. As this metal is comparatively rare, and consequently expensive, the inventor has been on the lookout for possible sources of cobalt-bearing minerals which would make it better available for his purposes,

It was reported that cobalt existed in considerable quantities in the neighborhood of Charlotte, N. C., and thereupon Edison dispatched three prospectors to search through this region for the metal. Favorable reports having been received from these investigators, Edison determined to see for himself whether or not the reports were warranted, and so undertook this trip. For several years past the in-

ventor has been an enthusiastic automobilist, and he decided to make the journey from his home in Orange to Charlotte by means of his two White steam cars with which he last year accomplished the Glidden tour, though in a reverse direction from that taken by the various contestants. He strongly favors the steam machine for long and rough trips, and declares that it is far superior to the gasoline car for such purposes.

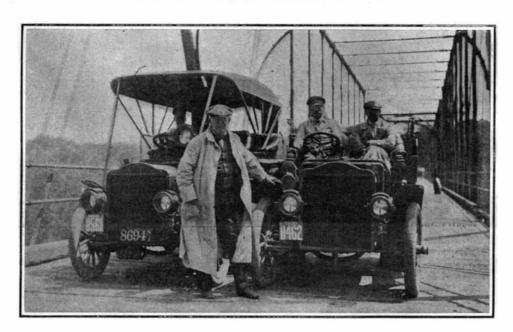
The party consisted of Edison, his son Charles, and a Mr. Miller, in one car, and two laboratory assistants in the second car. The machine driven by Edison was in the usual condition for touring with tonneau and Cape cart top. The tonneau of the second machine, however, was removed and replaced by a box-like structure in which was packed a complete camping outfit,

baggage, provisions, and a small amount of laboratory apparatus for use in mineralogical investigations. Needless to say, provision was made for the repair of almost all possible injury to mechanism or tires. The tourists, of course, encountered tire troubles, but there were practically no difficulties with the engines. That the trip was rather strenuous will be understood by all those familiar with the roads in that section of the South traversed by the tourists. The departure from Orange was made on May 16 and from there the route lay through Philadelphia, Baltimore, Washington,



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Mr. Edison Taking a Nap During a Noon Halt.



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Leaving Washington by the Chain Bridge

through the Shenandoah Valley, over the mountains across Virginia, into North Carolina to Charlotte. The Shenandoah Valley and mountain trip is one that is not often undertaken, for the roads are usually unspeakable. Edison, however, revels in a tour of this kind and thoroughly enjoyed even the most difficult portions of the journey. Fortunately the weather was uniformly good, and rain and mud were not added difficulties. Gasoline was easily procurable along the route, and no trouble was encountered in supplying the engines with the water available.

Edison is unquestionably one of the most unassuming and democratic of our great men and he makes a splendid companion for such a trip. He sturdily objects to posing for pictures however, and the accom-

panying photograph of the inventor asleep was taken during a noon rest near Leesburg, Va. It is probably the first of Edison taken under such circumstances. The idea appeals to us as rather novel; our conceptions of Edison are usually of the inventor as very "wide awake." Wherever necessary the tourists camped alongside the road and only availed themselves of hotels or inns where such were reached without trouble. It is not the intent of the party to return in the same manner. The machines will be shipped north, and after a stay of several weeks in the region around

Charlotte the party will return by rail.

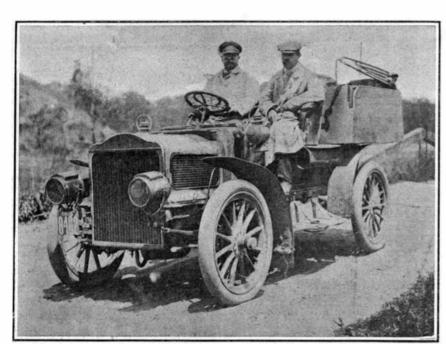
Fresh Air for Miners.

L'Illustration thus describes a new implement for securing this desideratum:

The Society of Mines at Courrières has just undertaken in shaft. No. 4 a series of experiments with a new respiratory apparatus called pneumatogen. Every apparatus designed for allowing the stay in a deleterious environment must fulfill three essential conditions: exclusive communication of the respiratory organs with a reservoir of respirable gas; together with a light weight, sufficient capacity of this reservoir to supply a man for a certain time; elimination of the expired carbonic acid, which would poison the pure air. The pneumatogen, which seems happily to realize these three conditions, is based upon the method of the renewal of vitiated air devised several years ago by Mons. George F. Joubert. It consists of an India-rubber bag, worn in front, about waisthigh, and supported by a strap passing up one side of the miner's chest, round his neck, and down the other side. Into this bag by means of a mouthpiece he "sends the products of respiration, which are compelled to go through two tubes containing grains of oxylith. The oxylith, or 'stone of oxygen,' has the property of retaining steam and carbonic acid, while setting free a corresponding quantity of oxygen. The vitiated air therefore finds itself renewed when it becomes stored in the bag. The experiments made at Courrières have given excellent results. The miners furnished with the new apparatus have been able

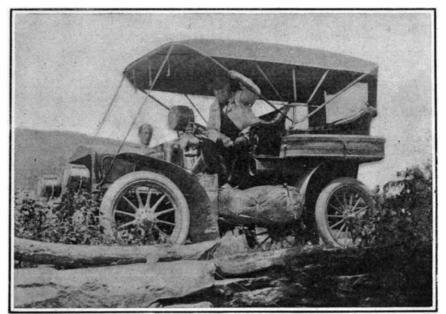
to work more than two consecutive hours in shafts where the air was absolutely unrespirable."

Concrete piles of an unusual form have recently been tested in New York. According to the Iron Age they are made by spreading a layer of concrete on wire fabric to which longitudinal rods are attached at intervals. The fabric is immediately rolled up in a special machine of simple construction, and the pile then laid aside to harden. It thus contains, in addition to the fabric, any desired number of vertical rods. In a cross section of the pile the fabric lies spirally from the inside to the exterior of the concrete. If so desired any one of the rods may be made a hollow tube, thus allowing for the use of the water jet.



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The Second Car Carrying the Luggage.



A Stop Near Leesburg, Va.

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