

**A DAIMLER HORSELESS CARRIAGE.**

The horseless carriage shown in the accompanying illustration formed part of the exhibit of the Daimler Motor Company at the recent exhibition of the American Institute. It is arranged to carry four persons, and it is driven by a Daimler motor at speeds of six, ten, fourteen, and eighteen miles an hour. The motor is carried in the casing which is seen at the rear of the carriage, and is completely inclosed. The tanks are arranged one on each side of the motor, and as this work is painted with the same high finish which characterizes the whole carriage, it harmonizes with the general design.

**The French Horseless Carriage Race.**

The third annual horseless carriage race from Paris to Marseilles and back—a total distance of 1,073 miles—was started on the 24th of September. In pursuance of the programme, all the competing autocars started at nine o'clock from the Arc de Triomphe, and proceeded in company to Versailles, from which the final start took place at eleven. Thirty-two autocars put in appearance, of which only two had steam power, the rest using petroleum. The race was finished on the 3d of October. The first vehicle to arrive was the motor tricycle of M. Michelin, the time being seventy-two hours. In the SCIENTIFIC AMERICAN SUPPLEMENT for the current week will be found a full account of the race reported by the Engineer, of London.

**A GASOLINE INSPECTION CAR.**

Railroad men, who have been accustomed to do their inspection in the common type of inspection car, will appreciate the appearance of a light, portable car that is driven by a motor and will save the hard labor of "pumping" by hand and foot. The inspection car shown in our engraving is mounted on a light iron frame, which has a roller bearing upon the axles. The front seat, which is large enough to carry three inspectors, is mounted on easy springs and is provided with a foot rest, which is bolted to the bottom of the seat. The seat for the driver is placed above the rear wheels, and beneath it, one on each side, are the two tanks for fuel and water. The motor, which is of two horse power, is carried in a box casing behind the rear seat. The car is regulated for two speeds, seven and fifteen miles an hour. The car and motor are built by the Daimler Motor Company.

A DISPATCH from Zermatt, Switzerland, dated September 11, states that Prof. Grunert, while ascending the Lyskamm with two guides, fell from a glacier and was killed.

**The Free Determination of Minerals.**

The Colliery Engineer, with commendable enterprise, offers to name minerals for its subscribers. The SCIENTIFIC AMERICAN has been doing this for many years. Correspondents have not, however, used sufficient care in selecting and marking specimens. The following excellent rules, which must be observed by those send-

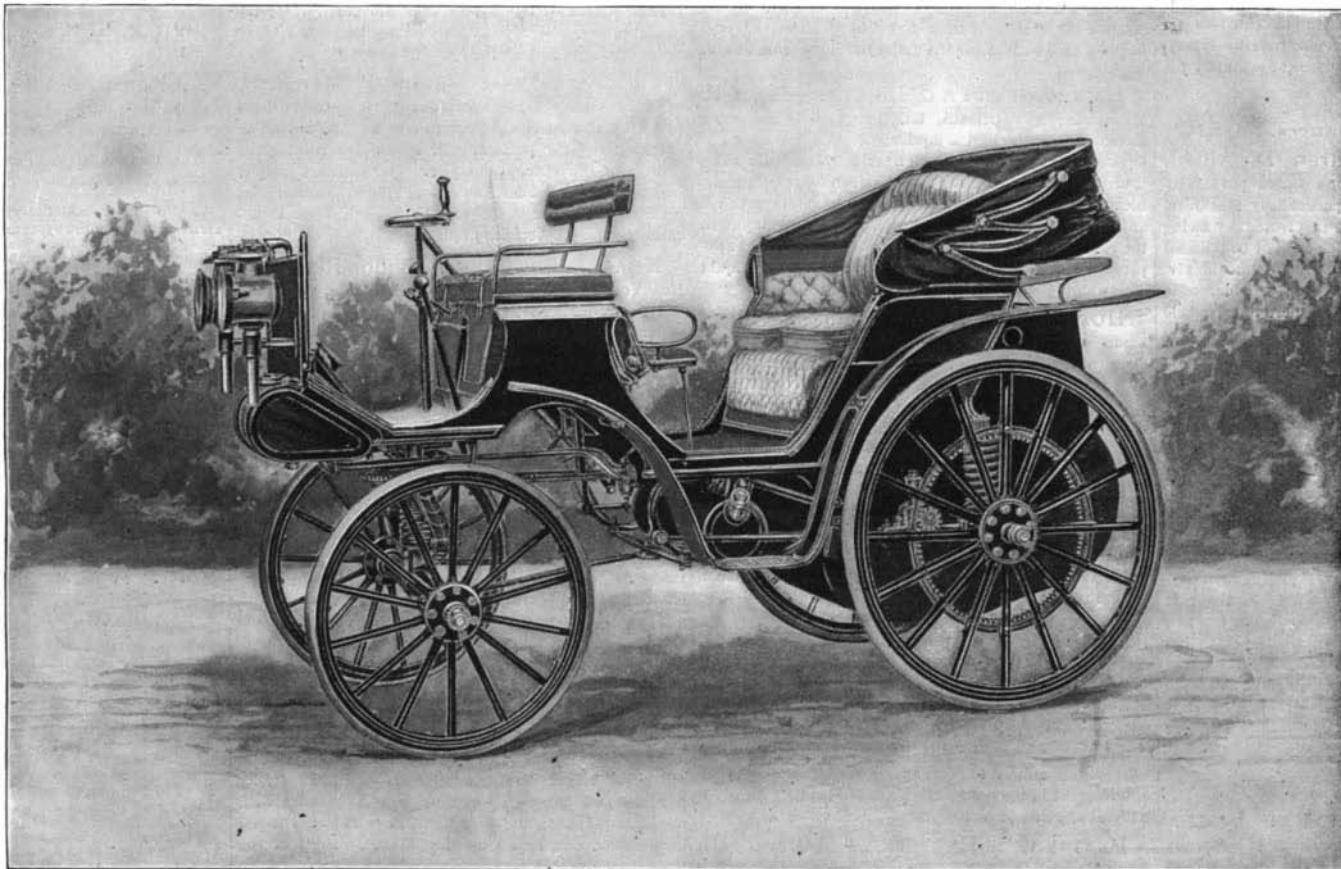
tions. Samples will not be returned, unless request is made to do so and stamps are inclosed to cover the postage or expressage and cost of packing therefor. Duplicates of the samples, correspondingly numbered, should be kept by the senders. Specimens must be numbered and have a label attached containing the name of the sender, locality, etc. The answers to questions and the determination of the specimens received will be printed with the initials of the sender as follows:

J. S.—Specimen No. 1, from Georgetown, Colorado. Gray granite, composed of mica, quartz, and feldspar. A metamorphic rock.

No. 2, from Mount Lincoln, Colorado. Quartz-porphry, composed of distinct, perfect crystals of gray quartz, pink feldspar and some black hornblende, set distinctly in a finer grained paste or ground mass of the same minerals. An igneous and eruptive rock occurring in dikes and sheets.

No. 3, from Denver, Colorado. Red sandstone, composed of

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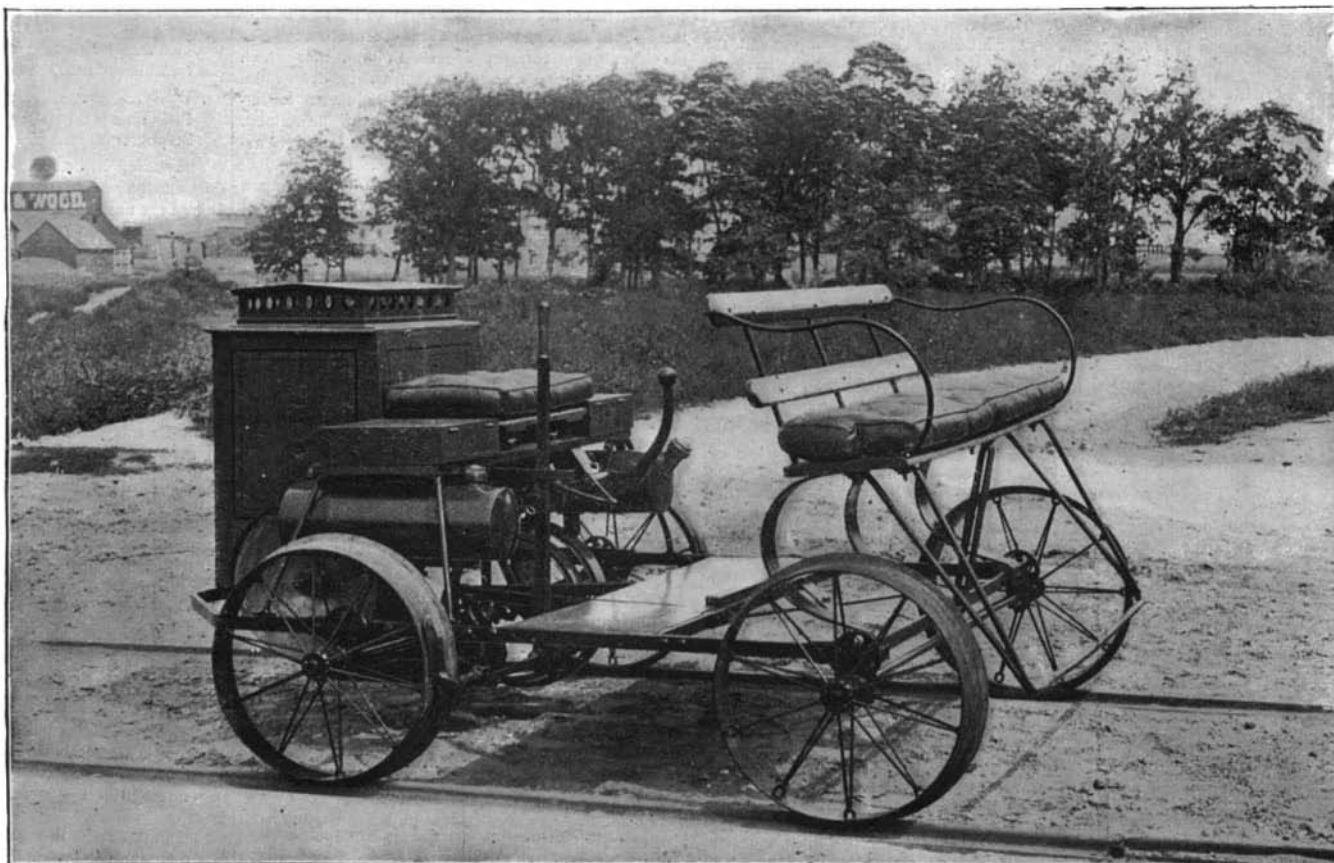
ing minerals for determination to the editor of the Metal Mining Department of the Colliery Engineer, apply with equal force to the correspondents of the SCIENTIFIC AMERICAN.

"Specimens of rock must not be less than one inch in diameter. Smaller pieces are generally hard to determine. Fresh specimens of rock are more determinable than rusty, oxidized, or weathered samples; as a rule, therefore, it is well to chip off a fragment a few inches or even a foot or more below the weathered surfaces, where the rock appears fresh, and the crystals composing it are sharply defined. There are some cases, however, where a weathered surface shows the constituent crystals better than the interior of the rock. The sender should accompany the specimens with a letter

quartz grains cemented together by red oxide of iron. A sedimentary water formed rock. Occurs stratified. The editor only undertakes to name average rocks such as can be fairly determined at sight. Obscure and rare specimens involving elaborate microscopic sections or chemical analysis will not be attempted. Neither is it always possible to determine with absolute precision and certainty a small fragment of rock perhaps more or less weathered or decomposed. In such cases, the sender must be content with the provisional determination that it appears like such and such a rock. As to whether the rock is likely to be orebearing or a good or poor feature in a mine, the editor may sometimes be able to give an opinion. Long descriptions of mines or properties are rarely intelligible and we are

often compelled to answer such communications by saying that we can give no opinion without personally visiting the locality. Questions involving an expert opinion on mining property, for which an expert would be entitled to a fee, will not be answered."

THE most stubborn cases of neuralgia are apt to yield to a hot water treatment. Wherever the pain is located, there a hot water bag should be applied. The suffering part should be wrapped in a blanket, and the unfortunate patient should be put to bed and covered with more blankets and induced to drink at least three cups of



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describing the locality, the mode of occurrence of the rock and other facts. For example, he should state whether the sample came from a dike cutting through other rocks and apparently of igneous and eruptive origin; whether from a series of sedimentary strata or whether from an overflow of lava capping certain rocks. Rough sketches might accompany such descrip-

water as hot as the palate can stand. This treatment may seem severe, but it is sure to bring relief.

It was announced at a banquet given to Dr. Nansen at Christiania that a Nansen fund had been formed for the advancement of science. Subscriptions to the amount of 210,000 kroners had already been received.