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Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as Agricultural inventions, Mechanical appliances, Atlantic, the race across, Bicycle railway, etc.

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SCIENTIFIC AMERICAN SUPPLEMENT

No. 850.

For the Week Ending April 16, 1892.

Price 10 cents. For sale by all newsdealers.

Table listing sections I through X, including Architecture, Chemistry, Civil Engineering, Metallurgy, Mining, Miscellaneous, Naval Engineering, Ordnance and Engineering, Photography, and Technology.

A REMARKABLE CHEMICAL COMPOUND—NICKEL CARBON OXIDE.

A most curious and interesting chemical compound, one which may yet be the basis of important industrial processes, is the newly discovered nickel carbon oxide.

This very extraordinary phenomenon was investigated. The gas before reaching the burner was passed through a glass tube which was heated, as in the well known Marsh test for arsenic.

In short, a discovery was fairly stumbled upon, that the hard, difficultly expansible, iron-like metal, nickel, could be carried off at ordinary temperatures by carbon monoxide gas.

By special care the substance was produced in quantity, and was condensed by cold into a liquid of high refracting power, expanding very much with heat, and very volatile.

The compound is decomposed by heat without explosion, when the heat is properly applied. This was what took place in the first experiment with the Bunsen burner.

In the above there are suggestions of the possibilities of this reaction. It now seems practicable to plate with nickel by this process.

When the possibilities of the process in the extraction of nickel from its ores is considered, the subject assumes new importance. It is suggested that nickel may be separated by carbon monoxide gas.

The chemist sees in it a basis for the analytical separation of nickel and cobalt. The method, if practicable, would be a most elegant and neat one.

In experimenting with it the highly poisonous nature of carbon monoxide gas should be kept in view. None should be allowed to escape into the room.

For fuller accounts of this substance, Prof. Mond's paper given in a recent SCIENTIFIC AMERICAN SUPPLEMENT (No. 823) should be consulted.

MRS. MARIA LOUISA PIKE.

Mrs. Maria Louisa Pike, wife of Col. Nicolas Pike, died at her residence in Brooklyn, N. Y., on March 23. She was a lady of many scientific accomplishments.

his station as British Commissioner to South Africa, acted as his secretary for a number of years, and employed her leisure hours in acquiring knowledge of South African flora and kindred subjects.

In 1870 she resided in the island of Mauritius, which is in the Indian Ocean, at least a thousand miles from the mainland. Col. Nicolas Pike, her future husband, was the United States Consul there.

Mrs. Pike came to this country about seventeen years ago and here married Col. Pike. Since then she has written voluminously, contributing many interesting articles on various subjects to the SCIENTIFIC AMERICAN.

Mrs. Pike was a member of the Brooklyn Institute of Arts and Sciences, and took special interest in the department of botany, where her wide experience and store of knowledge were of great service to her associates.

The Pogonip Fog.

The city of Carson, Nev., experienced the other evening the thickest and coldest pogonip fog "in the memory of the oldest inhabitant," says a writer in a recent issue of the Evening Post.

"In the White Pine Mountains, the Toyabi, the Hyko, and the Pahrangat ranges it is quite common to see the trees, houses, and everything out in the open gradually become white without any apparent cause.

The Best Mosquito Remedy.

Mr. C. H. Russel, of Bridgeport, Conn., has recently communicated to us the following interesting fact: A very high tide recently broke away the dike and flooded the salt meadows of Stratford, Conn.

An English gentleman living on the Riviera, according to a correspondent of Nature, having been troubled by mosquitoes, discovered that they bred in the large tanks kept for the purpose of storing fresh water.

The utilization of fish in this way is an old suggestion, and a very practical one under some circumstances. Many people suffer from the mosquito plague when the insect breeds in a circumscribed and easily accessible place.