

Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, NEW YORK.

O. D. MUNN.

A. E. BEACH.

TERMS FOR THE SCIENTIFIC AMERICAN.

One copy, one year, for the U. S., Canada or Mexico, \$3.00...

The Scientific American Supplement

is a distinct paper from the SCIENTIFIC AMERICAN. THE SUPPLEMENT is issued weekly. Every number contains 16 octavo pages...

Building Edition.

THE ARCHITECTS AND BUILDERS EDITION OF THE SCIENTIFIC AMERICAN is a large and splendid illustrated periodical, issued monthly...

Spanish Edition of the Scientific American.

LA AMERICA (CENTIFICA E INDUSTRIAL (Spanish trade edition of the SCIENTIFIC AMERICAN) is published monthly, uniform in size and typography...

The safest way to remit is by postal order, express money order, draft or bank check.

NEW YORK, SATURDAY, JULY 12, 1890.

Contents.

Table listing articles such as Ammonia, Log loading machine, Beech-brenner's, etc., with page numbers.

TABLE OF CONTENTS OF SCIENTIFIC AMERICAN SUPPLEMENT No. 758.

For the Week Ending July 12, 1890.

Price 10 cents. For sale by all newsdealers.

Detailed table of contents for the supplement, listing various scientific and technical articles.

AMMONIA.

The wholesale price of concentrated liquid ammonia has recently advanced from 5 1/4 cents a pound to 9 cents...

The ammonia which is used in ice making is obtained from what is known as gas liquor, and is produced in the process of carbonization of coal...

Very ingenious machinery is used in extracting the ammoniacal liquor from the gas, and the former is then disposed of to chemical companies...

Sulphate of ammonia is produced by the carbonization of bone and animal matter, but this product is generally employed as a fertilizer...

Ice manufacturers say that some other source of supply must be found for crude ammonia, as the demand from the producers of artificial ice will greatly increase...

A SUMMER SCHOOL OF BIOLOGY.

On Monday, July 7, the summer school of biology connected with the Brooklyn Institute will hold its opening session at Cold Spring Harbor, L. I.

Cold Spring Harbor is on the north shore of Long Island, thirty-two miles from New York, and has many features which are specially favorable for the student in natural history.

The surrounding country is high and rolling, having abundant forest glens and small streams, which abound in attractive subjects for the student.

There have been provided several row boats, a sail boat, and a steam launch, together with nets, hooks, and dredges for use in collecting and dredging.

extended excursions on this vessel, when they will have the benefit of the dredging and other operations.

The following announcement is made regarding the course of study: "Students who pursue the general course of instruction during the summer and who have time for extra work will be given the facilities necessary to enable them to carry on courses of special investigation..."

There will be an expert photographer provided, an expert in photomicrography, an artist for making drawings, and an expert in coloring drawings and photographs. The laboratory will be provided with compound microscopes, two Baker microtomes, a Minot microtome, photomicrographic apparatus, a general photographic outfit, together with other appliances and instruments.

Professor Albert R. Leeds, of the Stevens Institute, and four assistants will carry on a series of investigations into the causes of the diseases of fresh water fishes, and also as to the origin of the odors arising from standing water.

THE CHICAGO WORLD'S FAIR.

A splendid site chosen. The long contest in respect to the site for the great exhibition has been definitely settled. On the 2d inst. the World's Fair National Commission formally accepted the joint site, consisting of the lake front and Jackson Park...

Raised Figures on Soft Wood.

Ordinary moulding and stamped work and the papier mache and pressed sawdust embossed work have been on the market for a long time, and but few people mistake them now for hand work. Basswood can be compressed to a very large extent, and will swell out again to its original proportions upon being steamed.

A NEW method of obtaining stained glass is done by a process of printing. The design is embossed on an iron plate, on which a lump of hot glass is rolled until it takes the form of the plate on which the pattern is cast.