

Yacht Squadron regatta, open to all nations, beating," after which follow the names of all the vessels which started in the race.

The programme for the races was as follows: Sept. 7, outside Sandy Hook, twenty miles to windward and return; Sept. 9, over the regular New York Club course, when, if a third race should become necessary to decide the contest, it was to be sailed over a forty mile triangular course outside Sandy Hook.

A Good Suggestion.

In giving estimates, says one of our contemporaries, do not make your calculations on loose scraps of paper and then throw them away, keeping only a memorandum of the amount.

The Longest Single Span Girder.

The new railroad bridge over the Ohio between Evansville, Ind., and Henderson, Ky., which was formally opened for traffic in the early part of August, enjoys the distinction of having the longest single span girder of any bridge yet constructed.

The bridge at Cincinnati, built several years ago, has a clear span of 515 feet, and was at the time of building the longest railway girder known.

The Effects of Lightning Stroke.

At a recent meeting of the Berlin "Verein fur Innere Medicin," Dr. Liman described the changes present in the bodies of two men who had been killed by lightning when taking shelter under the trees of the Thiergarten.

Decision in Regard to Patent Harrows.

Justice Stanley Matthews has decided in favor of the plaintiffs in the now celebrated case of D. C. and H. C. Reed and Co., patentees of the spring tooth harrow, vs. Chase, Taylor & Co. et al., for infringement of patent, which was tried in the United States Court at Grand Rapids, Mich.

Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, NEW YORK.

O. D. MUNN.

A. E. BEACH.

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NEW YORK, SATURDAY, SEPTEMBER 12, 1885.

Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as American Association, meeting, Heat consumed in a blast furnace, and others with their respective page numbers.

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THE SCIENTIFIC AMERICAN SUPPLEMENT

No. 506,

For the Week Ending September 12, 1885.

Price 10 cents. For sale by all newsdealers.

Detailed table of contents for the supplement, listing sections like CHEMISTRY, ENGINEERING, TECHNOLOGY, ARCHITECTURE, MEDICINE, METEOROLOGY, and MISCELLANEOUS with page numbers.

NEW YORK CABLE ROAD.

New York is now about to have its experience with a surface cable road, and having been a little behind other cities in this respect, it starts out with the advantage of their blunders as a warning.

The Third Avenue Railroad Company has completed its cable line on Tenth Avenue from 125th to 186th Street, and formally opened it to the public on the 29th of August. The constructing engineer, Mr. D. J. Miller, was an assistant on the Chicago Cable Railway, and his experience there suggested several novel features for the New York road.

More specific objections are due to the fact that often they work anything but satisfactorily, and are not always subject to that immediate control which should be an absolute requisite on any road passing through crowded thoroughfares.

The Tenth Avenue Road has therefore removed the essential fault of the system by providing for the contingency of a broken cable. Throughout its entire length, the road is constructed with a double cable. Both are contained in the same tube, so that in case of accident to one, it will be a matter of but a few minutes to put the other in operation.

The motive power plant is located at 128th Street and Tenth Avenue, where a handsome building of iron and moulded brick, 100 by 200 feet, has been erected, and furnishes ample and well arranged accommodation. The engines and cable gearing are placed in the basement.

A considerable speed is claimed for the new road. The round trip of 6 1/4 miles, it is stated, can be made in 40 minutes.

SUBMARINE WARFARE.

The probability that the not distant future will see the perfection of the submarine torpedo boat and ram furnishes still another argument against the construction of great forts for harbor defense.