

from the upper deck, are then brought into position, and the vessel is thus secured. Pumping is then continued until the vessel is raised clear of the water.

The special feature of this dock, from which it has been named, is seen in the next operation, viz., that of depositing the vessel on the staging. Fig. 3 shows an end elevation or section of the staging, which is formed of parallel rows of vertical piles of iron or timber, capped by horizontal timbers.

It will be seen that the depositing dock is specially suitable for large commercial ports where many vessels have to be docked, as one dock can serve any number of vessels; the number of vessels that can be accommodated is, in fact, limited only by the length of staging provided. The dock is very economical in its working, and requires much less pumping to be done than an ordinary stone dock.

We may add that in 1876 Messrs. Clark & Standfield constructed for the Russian government a large depositing dock. The firm have also constructed a depositing dock at Barrow, to dock vessels up to about 3,200 tons displacement, and also another dock for the Russian government, to dock vessels up to about 8,000 tons displacement.—Iron.

THE following is a good remedy for burns: Mix 4 ounces of the yolk of eggs with 5 ounces of pure glycerine. This forms a kind of varnish.

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, postage included.....\$3 20
One copy, six months, postage included..... 1 60

Clubs.—One extra copy of THE SCIENTIFIC AMERICAN will be supplied gratis for every club of five subscribers at \$3.20 each; additional copies at same proportionate rate. Postage prepaid.

Remit by postal order. Address

MUNN & CO., 361 Broadway, corner of Franklin Street, New York.

The Scientific American Supplement

is a distinct paper from the SCIENTIFIC AMERICAN. THE SUPPLEMENT is issued weekly. Every number contains 16 octavo pages, uniform in size with SCIENTIFIC AMERICAN. Terms of subscription for SUPPLEMENT, \$5.00 a year, postage paid, to subscribers. Single copies, 10 cents. Sold by all newsdealers throughout the country.

Combined Rates.—THE SCIENTIFIC AMERICAN and SUPPLEMENT will be sent for one year, postage free, on receipt of seven dollars. Both papers to one address or different addresses as desired.

The safest way to remit is by draft, postal order, or registered letter. Address MUNN & CO., 361 Broadway, corner of Franklin Street, New York.

Scientific American Export Edition.

THE SCIENTIFIC AMERICAN Export Edition is a large and splendid periodical, issued once a month. Each number contains about one hundred large quarto pages, profusely illustrated, embracing: (1.) Most of the plates and pages of the four preceding weekly issues of the SCIENTIFIC AMERICAN, with its splendid engravings and valuable information; (2.) Commercial, trade, and manufacturing announcements of leading houses.

Terms for Export Edition, \$5.00 a year, sent prepaid to any part of the world. Single copies, 50 cents. Manufacturers and others who desire to secure foreign trade may have large and handsomely displayed announcements published in this edition at a very moderate cost.

THE SCIENTIFIC AMERICAN Export Edition has a large guaranteed circulation in all commercial places throughout the world. Address MUNN & CO., 361 Broadway, corner of Franklin Street, New York.

NEW YORK, SATURDAY, OCTOBER 3, 1885.

Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as Air bladder in fishes, Boats, torpedoes, Business and personal, Cranes, steam crane, 15-ton, Electricity and dust, Fishes, constructive ability of, Floating depositing dock, Gas, natural, mechanical uses of, Grate bars, improvement in, Hair and frockles, removing by electricity, Hammers, Vulcan, for Sweden, Heat, solar, utilization of for the elevation of water, Horse, hobby, improved, Horses, training, apparatus for, Ice, contraction of, Inventions, agricultural, Inventions, engineering, Inventions, index of, Inventions, miscellaneous, Lamp, extinguisher, automatic, Mirror pivot, spring friction, New books and publications, Nose, drum drainer's, why it is red, Notes and queries, Photographic notes, Planets, aspects for October, Plants, to grow from cuttings, Pneumonia and ozone, Railway leads, increased, Seal fishery, the, Skates, roller, stop attachment for, Solder for glass, porcelain, and metals, Stiletto and Atalanta, Supporting and end thrust anti-friction pads for shafts, Telephone litigations, new phase in, Temperature, lowest known, Trout killed by mosquitoes.

TABLE OF CONTENTS OF

THE SCIENTIFIC AMERICAN SUPPLEMENT

No. 509,

For the Week Ending October 3, 1885.

Price 10 cents. For sale by all newsdealers.

Table listing contents of the supplement including: CHEMISTRY AND METALLURGY, ENGINEERING, ETC., TECHNOLOGY, ELECTRICITY, ETC., ARCHITECTURE, ARCHÆOLOGY, ETC., MISCELLANEOUS.

A NEW PHASE IN THE TELEPHONE LITIGATIONS.

It will be seen from an interesting article, with details, given in our this week's SUPPLEMENT, that a new and peculiar form of attack has been commenced against the Bell Telephone Company, being a suit brought in the name and at the cost of the Government of the United States to break and annul the original Bell patent.

We are among those who regard the Bell patent as an illegal monopoly. We believe the lower court, through some misinterpretation of evidence or failure in its presentation, awarded to Bell a discovery that, in truth and justice, belonged to another man.

The manner of its accomplishment is about as follows: In the first suit judge number one, on the meager evidence then presented, concluded Reis' telephone to be good for nothing, and held Bell's patent to be valid. In the second case, judge number two would not hear additional evidence concerning Reis, as the subject had been already decided.

Unsatisfactory as this state of things appears, it is, nevertheless, strictly in accordance with legal forms and precedents, and affords no shadow of justification for the scandalous spectacle which the Department of Justice is now making of itself.

Patentees are interested in this matter without regard to what they may think of this particular patent of Graham Bell. If the United States will lend its wealth and influence to carry on litigation and encourage infringement of a patent sustained by all the circuit courts, and do this upon alleged defenses which have been passed upon, and in favor of those who can avail of them in actually pending suits, but who happen to have special personal relations with the Attorney-General, and do this on ex parte presentation of the case, invention and a patent will no longer confer rights, and decisions of the courts can no longer, sustain nor protect them.

STILETTO AND ATALANTA.

It will be remembered that early in July it was announced that the Stiletto had won the race over the ninety mile course from Larchmont to New London. The race was very close, but it was supposed that she had beaten the Atalanta by several minutes.

This decision has called forth a challenge from Mr. Herreshoff for another race between the two steam yachts, over a hundred mile course on the Hudson, from New York fifty miles up river and back again. The proposed stake is a new championship cup, to be held by the winning boat until her record is surpassed.