

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. or Canada. \$3 00
One copy, six months, for the U. S. or Canada. 1 50
One copy, one year, to any foreign country belonging to Postal Union. 4 00

Australia and New Zealand.—Those who desire to receive the SCIENTIFIC AMERICAN, for a little over one year, may remit £1 in current Colonial bank notes. 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, for U. S. and Canada. \$6.00 a year for foreign countries belonging to the Postal Union. Single copies, 10 cents. Sold by all newsdealers throughout the country.

Combined Rates.—The SCIENTIFIC AMERICAN and SUPPLEMENT will be sent for one year, to any address in U. S. or Canada, on receipt of seven dollars.

The safest way to remit is by draft, postal order, express money order, or registered letter.

Australia and New Zealand.—The SCIENTIFIC AMERICAN and SUPPLEMENT will be sent for a little over one year on receipt of £2 current Colonial bank notes.

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

NEW YORK, SATURDAY, MAY 19, 1888.

Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as African expedition, Alcoholism, Anchor, storm, novel, Bed, invalid, the Crosby, etc., with corresponding page numbers.

TABLE OF CONTENTS OF SCIENTIFIC AMERICAN SUPPLEMENT No. 646.

For the Week Ending May 19, 1888.

Price 10 cents. For sale by all newsdealers.

Table listing sections I through XIV, including ARBORICULTURE, ARCHITECTURE, BIOGRAPHY, CHEMISTRY, CIVIL ENGINEERING, ELECTRICITY, MISCELLANEOUS, MICROSCOPY, NAVAL ENGINEERING, ORDONANCE, PHYSICS, PHYSIOLOGY AND HYGIENE, TECHNOLOGY, and GEOLOGY, with page numbers.

THE NEW COPYRIGHT BILL NOW BEFORE CONGRESS.

A bill is now before Congress, and has been passed by the Senate, having for its ostensible motive the grant of copyright protection to foreign authors; but it is well understood the real object of the bill is to bring about, by aid of Congress, a sort of book trust, by which the prices of books will be advanced throughout the country, the rich publishers made richer and the printers of cheap literature driven out of business.

Probably there are few who will dispute the propriety of granting copyright patents, in some form, for a limited period, to foreign authors; but in doing so every care should be taken to preserve existing advantages and to prevent injury to established industries.

The bill in substance provides that on and after July 1, 1888, copyright patents shall be granted to foreigners; they may hold these monopolies for forty-two years; the assigns of foreigners may also obtain copyrights; all postmasters and customs officers throughout the United States are constituted pimps and ferrets for these foreigners; it is made the duty of postmasters to spy out and seize all books going through the mails that infringe the copyrights of foreigners; if an American citizen coming home from abroad brings with him a purchased book, it is to be seized on landing unless he can produce the written consent of the man who owns the copyright, signed by two witnesses.

These are some of the strange provisions of the Senate bill, which, it is obvious, needs amendment.

Again, the period allowed for these foreign monopolies, namely, forty-two years, is altogether too long. The ordinary patent for an industrial improvement, such as the sewing machine, the planing machine, the telegraph, the telephone, or any other invention, however wonderful or vast its benefits to the people, is only granted for seventeen years.

It would be much more satisfactory to the public if the term of the foreign copyright were reduced to five or ten years; and we trust an amendment to this effect will prevail when the bill comes before the House.

In considering the question of changing the statute, we ought not to overlook the benefits that have accrued to the country from the law as it now stands, and which has worked satisfactorily for more than fifty years.

Under the influence of the present copyright laws, our home publishers have for years been enabled to fill the country with the choicest books and periodicals at the lowest prices. The educative effects of this vast supply of standard literary matter have been astonishing. We have become the greatest reading people in the world.

Says Mr. Andrew Carnegie in his "Triumphant Democracy": "It is estimated there are twenty-three thousand school libraries in America, containing forty-five million books—twelve million more than all the public libraries of Europe combined." Other educational establishments increase this number by two and a half million volumes, and thirty-eight State libraries contribute over a million more.

"The universal propensity of the American, young and old, for reading and writing has sometimes seemed to me to lend countenance to Dogberry's dictum that while a good name was the gift of God, 'reading and writing came by nature.' These do seem to be part of the nature of the American. Triumphant Democracy is triumphant in nothing more than in this, that her members are readers and buyers of books and reading matter beyond the members of any government of a class, but in this particular each system is only seen

to be true to its nature. The monarchist boasts more bayonets, the republican more books."

It is not unreasonable to assume that the greatest impulses toward the attainment of our present position in respect to popular education, intelligence, and native authorship have been derived, directly or indirectly, from the existing copyright law, which excludes foreigners and encourages American citizens. Independently of these advantages, the law has helped to develop some of the largest industries. It has created enormous establishments for the manufacture of paper, chemicals, types, printing presses, and engines.

Upon the American author the copyright law, as it stands, confers important benefits. It secures to him the exclusive right to his writings for forty-two years. No citizen who can produce anything worth reading lacks for employment or emolument. It is agreed on all sides that no country was ever blessed with so many able authors as the United States.

It would be easy to give many examples; a few must suffice. Of "Uncle Tom's Cabin," by Mrs. Stowe, some two millions of copies have been sold; of "Ben Hur," by General Wallace, 250,000 copies; of Roe's works, hundreds of thousands of copies. Some of the story papers, filled with copyrighted tales, sell four hundred thousand copies of each issue, aggregating many millions per year. Mark Twain is said to have made five hundred thousand dollars clear profit within five years from his copyright patents. He receives a handsome royalty on every volume sold. Mr. Blaine has derived a great fortune in the same manner. Mrs. Grant is reported to have received three-quarters of a million dollars as her share of proceeds from the sale of the great General's book, and the copyright patent has forty years still to run.

The money paid to American authors remains within the country. The extension of copyright monopoly to foreigners will enable them to draw millions out of the country.

To this it may properly be answered, if we grant copyright to foreigners, then foreign nations will in duty be bound to allow similar rights to Americans; and so the money will come back. But we fear there is little equality in the matter. American readers and book buyers are as five to one, the world over. The financial result of the patent copyright extension would be, in the same ratio, adverse to the United States.

PASSAGE OF THE COPYRIGHT BILL IN THE SENATE.

The copyright bill, to which allusion is made in the preceding article, appears to have received less attention and less discussion in the Senate than its important nature demanded. Only three or four Senators spoke upon the merits of the subject, and their remarks were quite brief. We fear the votes of the majority by which the bill was passed were cast without a full appreciation of the real crudity of the enactment.

"Mr. President, the proposed measure of copyright is intended to create a monopoly and enhance the price of the product, making literature and knowledge dear to the people. Almost all nations, I believe, grant a national copyright on the supposition that the disadvantage of monopoly, bad as it is, would be compensated to some extent by the benefit arising from the encouragement of literature and the stimulation of those who write for the people.

"Of course we have the ancient and venerable chestnut brought up, which is always made to do duty in behalf of any proposition to put money into individuals' pockets, that this copyright law would operate to cheapen literature. Life is too short to waste time in arguing that as an abstract proposition. If it did not increase the price of literature, there would be no demand for it here. It could not possibly stimulate the genius of a man to write and publish books and matter in magazines unless the price of that matter was increased to him."

"The whole scheme is evidently one whose basis is what is known as protection, or taxing the people to make a few persons rich. That is the object of the whole thing, and that underlies it. It is an effort to extend monopoly extra-territorially, beyond the jurisdiction of the laws of our country, by a grand international conspiracy between publishers, printers, and book-makers everywhere in the civilized world to make literature and knowledge for the people dear."

"It is not worth while for any Senator, as I have known some to do in the course of this debate, to go off into grand heroic and literary eloquence about the