

IMPROVED PORTABLE IRON RAILING.

Of all the numerous plans for the construction of iron fences, we have never seen any before that impressed us so favorably as the one we now illustrate.

Fig. 1 is a perspective view of one panel with the posts; Fig. 2, a front view of two pieces; and Fig. 3 a

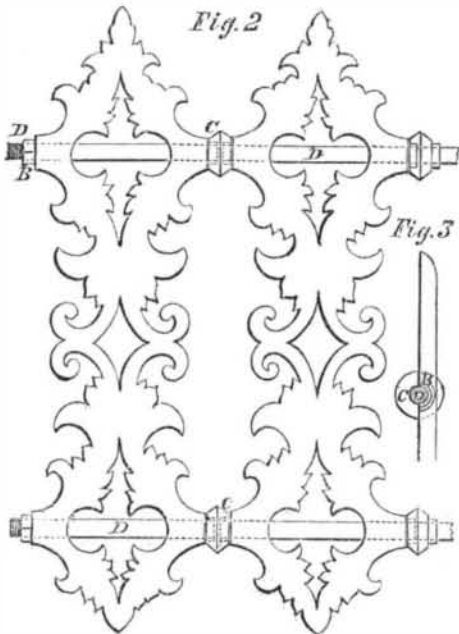
the company owning it, who will be happy to furnish a pamphlet of specimens on application by mail.

The patent for this invention was granted (April 7, 1857) to William S. Fuller, of Millbury, Mass., and has been assigned to the Fuller Railing Company, 426 Broadway, New York, (M. A. Myers, agent,) to whom



FULLER'S PATENT PORTABLE RAILING.

vertical transverse section. The panels are supported between the posts by two round wrought-iron rods, D D, which are fitted with nuts at their ends. These panels are cast in separate pieces, A A, which have each two semi-circular grooves, into which the wrought-iron rods fit, and two lugs, B B, to receive the rings, C C C C. The rods being placed in the grooves of the panels, and the rings slipped upon the lugs, the nuts are screwed on,



applications for State or County rights, with sets of patterns, or for any further information, may be addressed.

LAND LEECHES.

The island of Ceylon is celebrated for its tropical luxuriance of animal and vegetable life. Huge elephants roam its forests in large droves, and the richest spices impart fragrance to every breeze. Yet with all its abundance it does not seem to be a very inviting country for a residence. There appears to be a bitter for very sweet; poisonous serpents and noxious insects are very numerous, but the greatest pest of the whole country is the land leech. These plagues are most detested by travelers. In size they are about an inch in length and as fine as a knitting-needle, but they are capable of swelling out and distending until they are about two inches long and as thick as a writing-quill. They are so flexible that they can insinuate themselves through the meshes of the finest stocking, and ascend up the back to fasten upon the most tender parts of the body. They are never found in ponds and moist places, but lie among the grass and fallen leaves, and such is their vigilance and instinct, that they hear a man or horse at a considerable distance, when they prepare for attack with great alacrity. They advance by some circular strides and lay hold of the traveler's foot, raise themselves from the ground, and ascend his dress in search of an aperture to enter for a feast. Mosquitoes, spiders, and centipedes are very troublesome pests, but they are all "gentlemen" in comparison with the land leeches of Ceylon.

A NEW WINANS STEAMER.—The Baltimore *Sun* says the Messrs. Winans, the builders of the cigar steamer, are preparing materials for another of the same model, on a more extended scale, and combining all the improvements suggested by the frequent experiments made with the present vessel, which is looked upon by her builders more in the light of a model to be improved upon than a perfect specimen of marine architecture. We infer from this that the model is not considered perfect by its projectors.

and all the parts are held very firmly together. The rods project sufficiently beyond the nuts to enter the posts, and thus support the fence. The advantages claimed for this fence are strength, simplicity, elegance, and extraordinary cheapness. A large variety of very handsome designs are manufactured under this patent by



INVENTORS, MACHINISTS, MILLWRIGHTS, AND MANUFACTURERS.

The **SCIENTIFIC AMERICAN** is a paper peculiarly adapted to all persons engaged in these pursuits, while to the Farmer, House-keeper, and Man-of-Science, it will be found of equal interest and use.

The **SCIENTIFIC AMERICAN** has been published **FOURTEEN YEARS**, and has the largest circulation of any journal of its class in the world. It is indispensable to the Inventor and Patentee; each number containing a complete official list of the claims of all the patents issued each week at the United States Patent Office, besides elaborate notices of the most important inventions, many of which are accompanied with engravings executed in the highest degree of perfection.

To the Mechanic and Manufacturer the **SCIENTIFIC AMERICAN** is important, as every number treats of matters pertaining to their business, and as often as may be deemed necessary a column or two on the metal and lumber markets will be given; thus comprising, in a useful, practical, scientific paper, a Price Current which can be relied upon.

The **SCIENTIFIC AMERICAN** is published weekly in a form suitable for binding, each number containing sixteen pages of letter-press, with numerous illustrations, making a yearly volume of 832 pages of useful matter not contained in any other paper.

Terms.

Two volumes will be issued each year; but there will be **NO CHANGE IN THE TERMS OF SUBSCRIPTION**, as the two yearly volumes together will be Two Dollars a Year, or One Dollar for Six Months.

Club Rates.

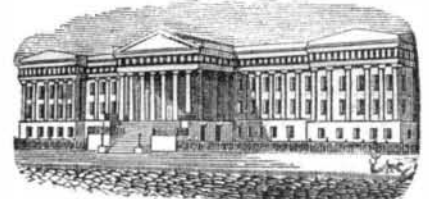
- Five Copies, for Six Months.....\$4
- Ten Copies, for Six Months.....\$8
- Ten Copies, for Twelve Months.....\$15
- Fifteen Copies, for Twelve Months.....\$22
- Twenty Copies, for Twelve Months.....\$28

For all clubs of Twenty and over, the yearly subscription is only \$1. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

Southern, Western, and Canadian money or Post-office stamps taken at par for subscriptions. Canadian subscribers will please to remit twenty-six cents extra on each year's subscription to pre-pay postage.

When persons order the **SCIENTIFIC AMERICAN** they should be careful to give the name of the Post-office, County, and State to which they wish the paper sent. And when they change their residence, and wish their paper changed accordingly, they should state the name of the Post-office where they have been receiving it, and that where they wish it sent in future.

IMPORTANT TO INVENTORS.



AMERICAN AND FOREIGN PATENT SOLICITORS.—Messrs. MUNN & CO., Proprietors of the **SCIENTIFIC AMERICAN**, continue to procure Patents for Inventors in the United States and all foreign countries on the most liberal terms. Our experience is of thirteen years' standing, and our facilities are unequalled by any other Agency in the world. The long experience we have had in preparing Specifications and Drawings has rendered us perfectly conversant with the mode of doing business at the United States Patent Office, and with most of the inventions which have been patented. Information concerning the patentability of inventions is freely given, without charge, on sending a model or drawing and description to this office.

Consultation may be had with the firm, between **NINE and FOUR o'clock, daily**, at their **PRINCIPAL OFFICE**, No. 37 PARK ROW, NEW YORK. We have also established a **BRANCH OFFICE** in the CITY OF WASHINGTON, on the CORNER OF F AND SEVENTH-STREETS, opposite the United States Patent Office. This office is under the general superintendence of one of the firm, and is in daily communication with the Principal Office in New York, and persons' attention will be given at the Patent Office to all such cases as may require it. Inventors and others who may visit Washington, having business at the Patent Office, are cordially invited to call at our office.

We are very extensively engaged in the preparation and securing of Patents in the various European countries. For the transaction of this business we have Offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris, and 26 Rue des Eperonniers, Brussels. We think we may safely say that three-fourths of all the European Patents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of Patents to Inventors. Any one can take out a Patent there.

A pamphlet of information concerning the proper course to be pursued in obtaining Patents through our Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the Principal Office or either of the Branches. We also furnish a Circular of information about Foreign Patents.

The annexed letters from the last two Commissioners of Patents we commend to the perusal of all persons interested in obtaining Patents:—

Messrs. MUNN & Co.:—I take pleasure in stating that while I held the office of Commissioner of Patents, **MORE THAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE** came through your hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours, very truly,

CHAS. MASON.

Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, he addressed to us the subjoined very gratifying testimonial:—

Messrs. MUNN & Co.:—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as Solicitors of Patents while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and, I doubt not, justly deserved) the reputation of energy, marked ability, and uncompromising fidelity in performing your professional engagements. Very respectfully,

Your obedient servant, J. HOLT.

Communications and remittances should be addressed to

MUNN & CO
Publishers, No. 37 Park-row, New York.