



**Our Prize Essay.**  
SCIENTIFIC AMERICAN OFFICE,  
April 14, 1849.

EDMUND MAHER, Esq.

Dear Sir.—The Committee to whom the Essays on the Patent Laws, for which we offered one hundred dollars as a prize, were submitted, have this day decided in favor of No. 9, as the meritorious applicant, which upon referring to our index we find placed opposite your name.

Enclosed we send you a check for one hundred dollars, which please acknowledge by return of mail.

Respectfully your obdt. serv'ts.,  
MUNN & Co.

Messrs. MUNN & Co.

Gentlemen.—I have received yours of the 14th inst. with its enclosure, informing me that the prize of \$100, offered by your firm for the best Essay on the Patent Laws, has been awarded to me by the Committee of Examination.

Gratified at this marked evidence of approval of my views and suggestions on the subject, from such a distinguished source. I shall at some future period, after the publication of my Essay, follow them up with additional suggestions of alterations in the minor details of the existing Patent Laws, through the columns of your widely circulated and useful paper.

Very respectfully, yours, &c.

EDMUND MAHER.

April 17th, 1849.

It will be observed from the above letters that the hundred dollar prize has been awarded to Edmund Maher, Esq. of Washington, D. C.

We have received 19 Essays from different parts of the country, many of which are exceedingly well written, but none of which the Committee considered so practical and so tending to advance the interest of the poor inventor as the one selected.

We shall print several thousand extra copies of each of those numbers of the Scientific American, in which the Essay will appear and those of our readers who desire to be supplied with extra copies for distribution among their friends can be furnished at the low price of \$2.75 per hundred. It is our design to furnish every paper published in the United States with copies of the Scientific American containing the Essay, and we hope those who feel an interest for the inventor and desire to enhance the progression of the Arts and Sciences and thereby promote the interests of all, will find space in their several papers to publish it. The series will commence with our next number.

**E. G. Allen's and J. P. Woodbury's Planning Machines.**

We have received communications from each of the above gentlemen respecting their Planning Machines. From their tone it is evident to us that there is a personal feeling between them, which has led us to decide against publishing anything more about the matter, (in a controversial manner,) or publishing any communication on the subject. We have no doubt but what both inventions are good, but it is not in our power to judge of the merits of either at present, as the features of distinction between them are unknown to us.—We are willing to publish an engraving and description of both inventions and this is all. It is the only honest way to decide the matter, the only way whereby the public will now be satisfied,—the only way they can judge of the matter. Our columns are not open for personal controversies, as they are of no benefit to the public and certainly of far less benefit to the parties concerned. Discussions on scientific questions—if brief and in good spirit and language, are acceptable, not otherwise. See Mr. Woodberry's advertisement on another page.

#### Silk.

"The quantity of Silk used in England alone amounts each year to more than four millions of pounds in weight—for the production of which myriads upon myriads of insects are required. Fourteen thousand millions of animated creatures annually live and die to supply this corner of the world with an article of luxury. If astonishment be excited at this fact, let us extend our view to China and survey the dense population of that widely spread region, whose inhabitants from the Emperor on his throne to the peasant in his lonely hut, are indebted for their clothing to the labors of the Silk Worm. It is truly remarked by Scott's excellent paper, that imagination fatigued with the flight, is lost and bewildered in contemplating the countless numbers which every successive year spin their slender threads for the service of man."

It is perhaps as astonishing to reflect that the manufacture of silk in this country has as yet obtained no particular importance, when compared with Cotton and Woolen fabrics.—The value of silk imported from Europe and Asia exceeds \$20,000,000 annually, and no one presumes to doubt the fact that our climate is as well adapted to the production of the raw material as that of any other. The only trouble heretofore has been in producing a color equal to the Italian Silk. We are pleased to observe from some samples recently shown us, that these objections are fast being overcome, and we sincerely hope that our enterprising manufacturers will turn their attention more particularly to this important business. There is no reason why we should depend wholly upon foreign countries for supplies which annually drain so large an amount of money from us. We believe that American broadcloths are equal in point of color and finish to French. We speak more particularly of the finer qualities, such as we have examined from the manufactories of the Slater Mills at Webster, the Northampton Mills, and some other Eastern mills, which it is not necessary to mention. We introduce this subject merely to show the importance of larger experiment in branches, which claim comparatively little attention. The manufacture of silk is very much neglected, in proportion to its immense demands. In some portions of the Western country, this business is gradually increasing; not however in proportion to the advance of cotton, woolen, &c. which is spreading rapidly throughout the South and West—a cheering evidence of the enterprise and resources of this rapidly growing country. We have called attention to this subject before, and will frequently do so again, as we consider ourselves to be preachers to the people on the texts of *improvements in Science, Art and Manufactures.*

#### Patent Cases.

On Monday the 16th inst. before Judge Nelson, in the U. S. Circuit Court in this city, a verdict of 6 cents was given for infringement of a patent, Alfred J. Serrill against George Crawford. The patent is for making carpenter's mouldings. This sustained the patent.

Another case of some interest decided on the same day, was that of Charles Goodwin and others against George Waring for alleged infringement of patent for design of stove ornaments. For defence it was contended that the patent was invalid, having been granted for fourteen years, whereas a patent for designs cannot be granted for more than seven years. The Court sustained the position and a nonsuit was entered.

Here was a mistake committed by the Patent Office, but the parties themselves are to blame and more so the counsel who would come into Court with such a document. There should be some reform in the law to allow other counsel than attorneys to practice in the U. S. Circuit Court, at least in Patent cases.

#### Another Case.

On the 11th inst. in Philadelphia, before Judges Grier and Kane the old case of Richard S. Childs vs. Charles Lennig was brought up. This is an action for the alleged violation of a patent to J. G. Mint, for a method of burning lampblack in a confined room, without the necessity of a draft or chimney. The letters patent were assigned to plaintiff. The

plaintiff alleges that in 1845 and '48, lampblack was burned in a confined room, according to Mint's method, at a factory near Bush Hill, and at another in Callowhill street, near Fairmount; that those factories turn out from twenty to sixty barrels of lampblack a week; and that the lampblack thus turned out went to the establishment of Charles Lennig. The factories were not conducted in Mr. Lennig's name, but in that of a person who subscribed himself agent. The plaintiffs say, that the factories being conducted by an agent, who did not disclose his principal, and the proceeds having been conveyed, as they allege, to Mr. Lennig's store, that the presumption was that the latter was the principal, he being a man of substance, and, it is alleged, furnished the means.

The Plaintiffs suffered a nonsuit.

#### Percussion Cap Manufactory, Frankford Philadelphia County.

The Frankford Herald says "a purchase is about to be made by the General Government of land in the vicinity of the Frankford Arsenal, for the purpose of erecting suitable buildings for the manufactory of percussion caps. An appropriation was made at the last session of Congress, for the purchase of the land and erection of the buildings and our State Legislature have just passed an act consenting to the purchase. This purchase, we understand embraces the "Ashmead Place," adjoining the Frankford Arsenal, on the River road, about a mile from Frankford, and buildings are expected to be put up during the present season. We learn that percussion caps for the United States service will be manufactured at this place, and that it will bring into our vicinity about two hundred workmen. If this information be correct, the demand for dwelling houses in White Hall will be greatly increased and improvements accelerated. A more direct communication between the northeastern portion of this borough and White Hall in that event will be required. Meadow, Foulkred and Harrison streets, will have to be extended to meet the streets of White Hall, and this will have a direct tendency to build up and permanently advance the interests of both places.

#### Cook's American Condensing Steam Engine.

This is the title of a very handsome Chart of Explanatory Drawings of the Steam Engine, such as are used on the Hudson River and Sound Boats, representing the machine with all its internal parts laid open to the eye, each part colored to represent the metal of which it is made. References are on the Chart to a neat book of notes explaining its various pieces: the explanations are so plain that any one, although entirely ignorant of its structure beforehand, can become perfectly acquainted with the machine in half an hour. The plate is very large, being 28 by 38 inches in size, and the best adapted for machine shops, engineers, colleges, academies and steamboats we have ever seen offered to the public. Having received the approbation and praise of our first engineers and scientific professors, and being the production of a well-known draftsman of our City, it will, without doubt, become a standard work.—Published by Munn & Co. Scientific American, 128 Fulton-st. Single copies complete, \$3; Map Form mounted, \$3.50.

The above we copy from the New York Tribune of Saturday, April 14th. The charts above alluded to we have constantly on hand and can furnish at the price therein named.

#### Errata.

Our readers will be pleased to overlook the phonography of a letter on the second page of our last number. In future we will try and not forget what old Dominie Brown used to drill into our noddle with the soft side of the ruler, "positive good, comparative better you rascal."

#### New Species of Squirrels.

A correspondent of the Southern Planter says that on the Cold Mountain in Virginia, he has seen two species of squirrels not known in Eastern Virginia, nor perhaps any where further South. One is about the size of a large grey rat, of a dirty red color, and the other about two thirds the size of the grey squirrel, and of a scarlet red color all over.

#### A Phenomena in a Hurricane.

There is a curiosity in the possession of Dr. Beck, Professor of Chemistry in Rutgers College, New Brunswick, consisting of a pane of glass with a hole in the centre, making a circle as perfect as if drawn on mathematical principles. It was, perforated by the extraordinary hurricane which passed over New Brunswick about 16 years ago, levelling in its path a streak of houses the whole length of the town. In one of the windows this pane was discovered with a hole in it, and what is remarkable about it, is, that the perimeter of the whole is as smooth as a polished gem, so that the finger may be rubbed around it with impunity. It has the appearance of being forced out while the glass was in fusion, hence the theory to explain it, namely, that the current of air had a spiral motion in the centre of the column, the astonishing velocity of which had collected a nucleus of electricity equivalent to a voltaic pile of gigantic construction, this heat being opposed by the glass sufficiently absorbed it to prevent the communication of fire to other elements in its path, while the suddenness of contact with this amazing heat caused the perforation of a cavity so perfectly circular, and smooth. The pane was taken from the window, and now occupies a place in the Doctor's cabinet.

#### Scientific Discoveries.

Mr. E. Merriam, of N. Y. claims to have arrived at the following conclusions, which may be regarded as new in the catalogue of scientific of the present age, to wit: The connection of earthquakes with the aurora; the collapsing of steam boilers by the peculiar state of the atmosphere surrounding them; the absorption of electricity by hot iron; the regular movement of the cold in cycles; and the accumulation of saline deposits in the interior of continents where three rivers run form one centre, east, north and south to the ocean.

Wonderful if true, but as they are not fully established, we will await with calmness the climax of the discovery.

#### The Mutilated Balloon.

The Flying Machine refused to fly in Boston. What a stubborn animal. We are afraid that it has got a touch of the mule in it, and peradventure the unfortunate wights that mount her to go to California, may find that she is neither to be coaxed nor drove. It was positively asserted in hand bills that it was to depart for San Francisco on the 15th inst.

"But that day has come and gone,  
Not so Porter and Robjohn."

#### Disastrous Conflagration.

News from Toronto states, that city has been visited by a terrible fire which has destroyed a large part of the town. The loss is estimated by some as high as six hundred thousand dollars!

The magnificent Cathedral of St. James, erected a few years since, on the same spot where stood the former Cathedral, which was destroyed by fire ten years ago, is included in the conflagration.

#### Death of Captain Pennoyer.

The Charleston Courier announces the death of Captain James Pennoyer, at New Orleans of cholera. It will be recollected that Capt. Pennoyer was the pioneer in the enterprise of establishing steam communication between New York and Charleston. The first through trip ever made by steam between the two cities, and in fact the first steam service accomplished, was performed in the little steamer David Brown, commanded by Capt Pennoyer.

#### The Debt of England.

The National Debt of England, says Mr. Rigely Watson, in his revised arithmetic, is £772,000,000, and the aggregate capital of England and Ireland £7,750,000,000; so that ten per cent. of the capital will easily pay off the debt. It is as if a man with a capital of £7,750 was indebted only to the amount of £772. Mr. W. would propose ten years as the time for paying the debt, and thinks it would be very easy for the owners of realized property to do it.

#### To Stop the Bleeding at the Nose.

Dr. Negrier, a French surgeon, says that the simple elevation of a person's arm will always stop bleeding at the nose. He explains the fact physiologically, and declares it a positive remedy. It is certainly easy of trial.