

PRIZE ESSAY.

Essay on the Patent Laws.

WITH SUGGESTIONS OF ALTERATIONS AND ADDITIONS FOR THEIR IMPROVEMENT.

By Edmund Maher, Civil and Mechanical Engineer, Washington, D. C.

(Concluded.)

Lastly—I propose that the 12th section of Act 1836, shall be so amended as to require a person to make oath to his Caveat, for an alleged invention or discovery, and in default of so doing, to be deprived of all benefit of examination of the same, when an application for a patent for an invention or discovery, on an analogous subject is under adjudication before the Examining Board. This amendment would not be objectionable to persons having really made an invention or discovery, and would in a great degree, prevent mischievous and dishonest persons from entering Caveats for machines, or other articles, containing the essential features of pending applications for patents, for similar machines, or other articles to which they have no rightful claim; merely for the purpose of delaying the issue of the patents to the real inventors, to the extent of the period allowed a caveator to convert his caveat into an application for a patent, in cases of interference, in order that they may use such machines or other articles, to the fullest extent with impunity, and finally, decline complying with the oath prescribed for an application. Whereas, if this requirement were exacted in the first instance, of all persons entering caveats, few, other than those believing themselves to be the original inventors of an article, would be willing to subject themselves to the charge and penalty of perjury, involved in making a false oath and thus much delay might, in many cases, be avoided.

In the foregoing suggestions, I have merely given an outline of the alterations proposed to the present Patent Laws, without giving in detail, the advantages likely to accrue from their adoption. These I think will be apparent to those of my readers acquainted with the subject, and will to some extent, remove the evils under which the poor inventor is now laboring. If the proposed alterations should be engrafted in proper form into the present code of laws, and should in their operation produce beneficial results, toward improvements in the various elements of the arts, and tend to remove the obstacles in the way of inventors to a just and fair reward of their genius and toil, then, the main object of my design will have been accomplished. But if otherwise, I shall have at least the proud consciousness of knowing, that in making the attempt, I have performed a duty toward a harshly dealt with class of meritorious and useful citizens, who will fully appreciate my labors and motives, and in so doing, have in a manner, acknowledged my obligation to them for the many benefits developed by their genius with which I, in common with the rest of mankind, have been favored.

Let us in conclusion glance at the spirit of improvement and invention exhibited in our countrymen and indulge in a few suggestive reflections.

The progress of science and mechanical development in our country for the last fifty years, has been rapid. Improvements and inventions have not, it is true, sprung up at once into luxuriant maturity, but slowly, surely, like the acorn to a tree, and the rivulet to a river, they have gone on enlarging, widening, expanding into beauty and magnificence, until their tremendous influence is now recognized, not only fertilizing and sheltering the land which gave them birth, but penetrating into the remotest corner of the habitable earth.

The nineteenth century stands out in basso relieve upon the rock of Time, as the epoch of discovery and fruition—as the inceptive period of mighty truths, such as the world knew not before, and which in their culminating progress, are destined to embrace the universal family of humanity in the circle of their immense results. The key with which our immortal Franklin unlocked the mysteries of the storm, was also the talisman which may in aftertimes reveal the secret machinery

of life itself. Already have the "sightless couriers of the air" woven their web of lightning over the face of creation, realizing, aye and surpassing the ambition of him, who would have "put a girdle round the earth in forty minutes." Already have the mountains bowed, and the "little hills skipped like lambs" before the track of the iron horse, whose limbs are tireless, and whose breath fails not in the race.

The popular mind of our country is essentially inventive. Almost as soon as the American child can think, he enquires—demands illustrations, and suggests changes. The Anglo Saxon superiority of intellect requires independent and individual development,—which, under a republican form of government is almost certainly obtained; for each man born into the community, feels, that in himself lies his destiny, and that equally with another he may aspire to all the rewards of enterprise. The North American mind seldom dreams—seldom indulges in vague or chimerical speculations; it must have a tangible foothold, a solid standing point, and thence it will upbuild the loftiest structures, that intellect can conceive or action execute. It never stagnates, and seldom is at rest; for in viewing a mountain torrent, the American plans a water power that shall perform the work of a thousand men, and in examining a pebble he may divine the locality of untold treasures hid in the bowels of the earth.

It is this national trait of observation and application, that gives our countrymen a peculiar proclivity, if I may use the term, towards invention and improvement. Nothing is passed by them without enquiry and examination; and errors are detected, mistakes rectified, and crude hints reduced to practice, with a facility that is truly wonderful.—Throughout all classes this trait is noticeable, its development, perhaps but partial and incomplete, yet still marked and recognizable, as a feature of our national physiognomy.

It is this which sweeps away every vestige of the ruined past, and replaces it with solid monuments of the present. It is this which diverts our rivers, hundreds of miles from their natural courses, to tap the resources of inland commerce. It is this which crosses and recrosses our fertile plains with a woof of perpetual traffic, over which fly continually those mighty shuttles, the steam engines, weaving yet closer and denser, the fabric of our prosperity. It is this which builds ships in the backwoods, launches them upon canals and inland lakes, or transports them piecemeal to the mighty ocean—to assume their place among the navies of the world. It is this which paints our glowing scenery on miles of canvass, revealing our natural and national life to millions beyond the Atlantic, who thus behold, as it were, face to face, a people who exist four thousand miles away.—Our flails thresh the corn which grows around the tomb of Pharaoh; our saws sever the cedars of Lebanon; our steam whistle startles the echoes of the Black Forest and the Baltic; our cotton forms the Moslem's turban; our palm leaf shelters the Sumatra planter.—We cool the nabobs' sherbet with our ices—and we heat the Creole's sugar boiler with our coals.

No nation in the history of the world has illustrated the spirit of improvement to the extent of ours; and this, because every man has been a self acting motive power in the grand machinery of progression. We exhibit the ideality of materialism in every thing—grounding on the smallest foundation, a superstructure of practicable theory. A churn, a lock, a door knob, a plough, these are not objects merely, to a Yankee's mind, but are problems, which he endeavors at once to resolve into an "improved" churn or lock, or door knob, or plough. And the problem presents itself, and must be solved throughout all the handiwork of man.

With this universal genius, then, for invention, the American mind requires but two things to make its influence effective, and constant in its great results; and these are education, and governmental protection in its offspring. Our rambling, luxuriant, eccentric inventive talent, must be controlled and directed by a wise system of scientific instruction, as well as protected by law in its results.

A Bureau of Arts, supervised by practical men, should be as distinct a department of our national government as that of the Treasury, or of State. It should ever be the policy of a far-seeing statesman to encourage these manifestations of popular intellect which result in practical fruits, which exhibit new modes and means of producing tangible good, whether it be in the perfection of mechanics, agriculture, or the fine arts: for all these things directly advance a nation, and of course create wealth, prosperity, and social honor for all the integrals of that nation.

The institution of a National Academy under the patronage of government, where mechanics, manufactures, and agriculture, should have their appropriate Professorships; where the children of the people might be instructed in all the great truths which form the educated workman; where the cumbrous details of patenteeism should be reduced to a simple codification; where premiums and honorable prizes should be awarded to successful inventors, discoveries, or improvers; where lectures upon all the branches of art should be given by the great scientific men of our country; where a gallery of models and catalogues of all the inventions and discoveries of ancient and modern times should be accessible to all; such an Institute as this would do more to elevate our national character, and ennoble our countrymen, than all the victories of a thousand wars, or the acquisition of all the mines of the universe.

With such a fostering Institution, the American mechanic could lead the world, in all that adorns and benefits mankind. He could hold up to the gaze of nations a model and a standard of scientific development, that would fire all men with emulation. Then could he grasp and guide the awful elements of nature, curb the ocean and the sky, and overcome the forces of evil throughout creation. Then could he banish miasma from the face of earth, disarm pestilence, avert famine, regulate climates, and make deserts "blossom as the rose." This power exerted for the good of mankind, and encouraged to its utmost capacity, would be equal to all labors, and superior to all obstacles. Then indeed could we address to him the apostrophe of the Poet—

"Lift, then, thy hand to heaven!
Spread thy Toil-sceptre o'er the sea and land!
Thou hast the world entrusted to thy hand—
Earth to thy charge is given!"

Useful Problems.

PROBLEM 1. The quantity of timber being the same, a beam will be stronger in proportion as the depth is greater; but there is a certain proportion between the depth and the breadth, which, if it be exceeded, the beam would be liable to overturn and break sideways. To avoid this, what should be the least breadth of a beam 20 feet long and 9 inches deep?

2. There is a cylindrical tree one foot in diameter, which is to be formed into a prismatic beam by flattening its sides; of what dimensions shall we make it to gain the greatest stiffness and also the greatest strength?

3. Suppose an observer to be elevated two miles from the earth; what part of its surface would be visible to him?

4. There are two certain bodies, in which, although containing the same elements in the same proportions, and presenting the very same crystalline form, the relative order of the elements is not the same. Required their names?

Razor Paper.

This a subject not intended for our Turks, or Long Beards, as these gentlemen prefer to live and trim their beards after their own fierce looking fashion. But for gentlemen who choose to keep a decent yankee chin like ourselves, we have just lighted on the following paragraph in a London Paper.

Mr. Frederic Barker of Dorcas Terrace, Hammersmith has put forth a new kind of razor paper, which is introduced for wiping the razor while shaving, the finest edge that can be produced by any other means is greatly improved and constantly preserved in the most perfect order, without the loss of time, labor and uncertainty attending the use of the hone and strop. By wiping the operative razor o

this paper, it is sharp-set, as well as clean-set; thus contriving a double debt to pay.

There are many who know how to shave with paper a little better than Mr. Frederic Barker of Dorcas Terrace, Hammersmith.

LITERARY NOTICES.

The Pictorial National Library. Wm. Simonds, Boston. G. W. Adriaance, 177 Bowery, N. Y.

We have always warmly recommended this beautiful Magazine for its intrinsic merits as a useful publication for family reading. The May number is before us, splendidly illustrated with a portrait of John C. Calhoun, and biography; "View of the State Reform School at Westboro, Mass.;" Portraits of John Langdon and Edmund Burke, with many other illustrated scenes. 12 numbers of this work cost only \$2, and when bound, will make a book of nearly 600 pages. Any person wishing the 12 numbers in our possession can have them for \$5, but the publisher will supply them for \$2. We don't wish to sell.

Agricultural Document.

We have received from the Editor of that excellent periodical, the Ohio Cultivator, the "Third Annual Report of the Board of Agriculture of the State of Ohio, 1849." We are much obliged to our respected brother in the field of useful information, for this document, as it is one of no ordinary value, and is highly creditable to the first Agricultural State in the Union.

The Water Cure Manual, is the title of a very excellent publication just issued by Messrs. Fowlers & Wells, 131 Nassau st. It embraces description of the various modes of bathing, the hygienic and curative effects of air, exercise, clothing, occupation, diet, water, drinking, &c. together with descriptions of disease and the hydropathic means to be employed therein. The subject is treated in Dr. Shew's usual able manner, and should meet with an extensive sale. Price 50 cents, with 280 pages.

The American Railroad Journal has wonderfully improved lately. It is an excellent paper and we see that Mr. J. T. Hodge, an eminent mineralogist, is now associated with Mr. Poor, as Editor.

We return our thanks to Richard M. Young Commissioner of the General Land Office, for his able and useful Report for 1848.

The Phrenological Journal for May is an excellent number, published by Fowlers & Wells, N. Y. It contains a likeness and phrenological dissertation on the Rev. Henry W. Beecher, the popular preacher.



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