



For the Scientific American.  
Patent Laws and Business.

After what we have said in previous articles respecting the action of the Patent Office, we would now state one unanswerable argument as a friendly hint to the Patent Office to be liberal in decisions. An Examiner may be too apt to assume the office of a Judge, forgetting that at best, a Patent is but a mere opinion of the Patent Office, in respect to originality and usefulness. The Patent Laws were framed by a lawyer and he took good care to engraft upon them the old English proviso of business for the trade. The 12th section of the law of 1836, says, "Provided, however, That no opinion or decision of any Board of Examiners, under the provisions of this act, shall preclude any person interested in favor or against the validity of any patent, which has been or may hereafter be granted, from the right to contest the same in any judicial court, in any action in which the validity may come in question." Thus the law is plain that a patent is but an opinion of the Patent Office, subject to be reversed or confirmed by action at law.

The grand point then is to have good Patent Laws—laws whereby the patentee will be fully protected in his rights until his patent is set aside for want of originality, and then it should at once be rendered void—annulled, so that there would be no more trouble on the subject, either to the patentee or the public. It would be well when a patent was to be contested, to publish the claim and state the nature of the patent, for a month or more before the trial, in two or more public periodicals, to give all due warning of the event, so that a fair trial may be had, to establish the patent upon an impregnable rock—no second trial being allowed—or to prove its want of originality, and then annul it. A defeated patent should then go back to a particular file in the Patent Office, and two thirds of the Patent fee be returned. A law of this kind would save much litigation. The only difficulty to be apprehended in settling the validity of a patent by a single trial, would be in cases of infringement—not in the originality, but we will make this the subject of a future article. We want to see a patent worth something without the expense of a continual suing, battling and fighting in every District Court in the States to establish its validity, as can now be done under the present Patent Laws.

No doubt the lawyers like the system generally, but the writer of this thinks it is a system, which although it does well in England, under the central sweep of King's Bench, and the giant influence of the scientific Brougham to see justice done to inventors, is altogether a different affair for the United States and is not suited to our institutions, nor the nature of our country. There was certainly a great want of mental perception, in engraving that system upon our Patent Laws.

The late Convention of Inventors which met at Baltimore on the 8th of last March appointed Judge Phillips and Judge Rand, of Boston, and Geo. Gifford, Esq. of New York, a committee to prepare a draft of a new Patent Law, to be presented before the assembling of the next Congress. The appointment of that Committee, without a single inventor among the number, was an unfortunate affair—it does not promise much to the inventor. The legal gentlemen are men of uncommon ability, and they will no doubt dispose of their draft of Patent Laws, for the benefit of counsel, as Sout used to dispose of his army, by always providing a good door of retreat, before engaging his enemy. As that committee is somewhat distinguished for skill in opposing patents, many inventors will have anxious forebodings of that philanthropy which quartered their enemy in their camp. But there are disinterested friends of inventors, and lovers of

science who will exert all their influence to see that justice will not administer law with her eyes bandaged.

JUNIUS REDIVIVUS.

#### To make Domestic Vinegar.

Many families purchase their vinegar at a very considerable annual expense: some "make do" with a very different article; and others, for want of a little knowledge and less industry, go without. It is an easy matter however, to be at all times supplied with good vinegar, and that too without much expense. The juice of one bushel of sugar beets, worth

twenty-five cents, and which any farmer can raise without cost, will make from five to six gallons of vinegar, equal to the best made of cider or wine. Grate the beets, having first washed them, and press the juice in a cheese press, or in many other ways, which a little ingenuity can suggest, and put the liquor into an empty vinegar barrel; cover the bung with gauze, and set it in the sun, and in 12 or fifteen days it will be fit for use.

Sweet oil occasionally rubbed over bedsteads, &c. is said to be a sure preventative of bed bugs.

#### Manufacture of Glass.

(Continued from page 336.)

As explained in our last, the blower has now completed his portion of the work, and the cylinder is transferred to the splitter, who by holding it vertically in two V's, attached to an upright rod fast in a flat board, cuts the ends more true by means of a pair of spring pincers mounted on wheels, having a glazier's diamond fastened to one of the jaws. Fig. 5 shows more clearly how this is effected, the diamond describes a plane parallel to the board, so that the end is made perfectly square with the axis; the cylinder is laid in

Fig. 5.

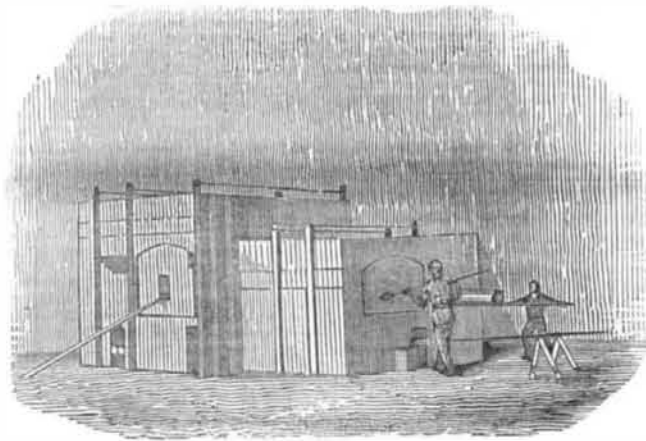


a kind of cradle, and a straight rule being held inside by the workman parallel to the axis, he draws a diamond along the edge,

which accordingly splits the cylinder from end to end; as his arm is not long enough to reach through, he inserts the diamond into a cleft stick, in nearly the same manner that painters set their brushes when wishing to paint sideways at a great height.

For the purpose of being opened or spread out flat, the split cylinder is passed to the "flattener," who completes the process at a reverberatory furnace or kiln, consisting of two chambers of unequal dimensions, with floors of stone or very large bricks made quite level and flat. The smaller of the chambers or the "spreading kiln," is heated to bright redness, and is separated from the larger and cooler chamber, or "annealing kiln," by a brick partition, at the bottom of which on a level with the floor, is a long slot about an inch high, forming the only communication between the kilns. In order to heat the glass gradually, it is introduced on a carriage by degrees into the "spreading kiln" through a sort of tunnel, which terminates in one side of the kiln where the heat is less than in the centre. By putting an iron lever inside and lifting the cylinder up on the end of it, it is taken off the carriage and brought more into the heat; the aperture in the kiln through

Figure 6.



which the lever is introduced opens directly into the hottest part, and is left open for the insertion of the necessary tools used during the process; in a short time the cylinder is removed and placed in the hottest part of the furnace, not however resting on the bare stone floor, but on an intermediate sheet of glass called a "largre," whose office is to prevent the cylinder whilst soft from being scratched by the stone or the dust from the fires. At the red heat of the furnace the

glass soon becomes flexible, and the flattener so regulates the heat that the glass may be easily bent, but is not melted nor even soft enough to stick together; the cylinder is now as it were, unrolled, and being carefully spread open, all puckers and wrinkles are rubbed down by a piece of wood the same shape and size as a common brick, with a long iron rod handle struck at right angles into one side of it.

(To be continued.)

#### White Printing Paper.

Those who are not acquainted with the manufacture of paper will scarcely believe that the paper of which most our newspapers are composed is made from the rags of old calico, but such is the case. The rags are first reduced to a coarse paste, technically termed half paste, then in a suitable vat, from four to eight pounds of chloride of lime, dissolved in sufficient water to cover the paste, is poured on the colored mass; it is now acidified with with half a pound of sulphuric acid for every pound of the chloride of lime employed. The mixture is then agitated for a short time by machinery suited to the purpose; when the rags appear quite white, water is made to flow through the mass, still continuing the agitation until all the lime has been washed out of the pulp. A little free hydrochloric acid added to the last portions of water would tend more perfectly to remove the lime from the pulp, and thereby prevent its turning brown by age. In most of the paper manufactories in France, instead of using chloride of lime, chlorine gas is passed through the pulp; this

is a better process if carefully carried out, for as no lime is used in the process, none can remain on the paper.

#### Disinfectant Liquid.

One of the best disinfectants is the chloride of zinc. This is just pieces of common zinc dissolved in muriatic acid. Any person can make this liquid. To use it for sewers and sinks, about 1 pint of it for a common sink diluted with a gallon of water will perform wonders. It is an excellent disinfectant for purifying the bilge water of ships, and its value cannot be too highly extolled. Along with its qualities as a disinfectant, it is an excellent wood preservative. The process of doing this is to introduce a solution of zinc into the pores of the wood by pressure, in cylinders or vessels for that purpose. It also preserves canvass for a long time, and some of our store keepers should substitute this for lime, the article now used for this purpose.—From experiments which have been made with the chloride of zinc upon pine wood it would appear that it combines chemically

with the ligneous matter of the wood, and that although this salt is soluble in water to an enormous degree, the compound which it forms with the wood is insoluble.

#### To Make a Stove as Bright as a Coach Body by two Applications a Year.

Make a weak alum water and mix your British lustre with it, perhaps two teaspoonsful to a gill of alum water. Let the stove be cold—brush it with the mixture—then take a dry brush and lustre and rub the stove till it is perfectly dry. Should any part, before polishing, become so dry as to look gray, moisten it with a wet brush and proceed as before.

[The above can easily be tried for the purpose stated. One thing we know about it, from its nature, that it is perfectly plausible, alum being a bad conductor of heat. In that case there is an advantage and a disadvantage. In the one case you keep your polish, but lose your heat.]

#### LITERARY NOTICES.

##### Linear Perspective.

Number 3 of this valuable and cheap publication, edited by Mr. E. Jones and published by C. M. Saxton, No. 121 Fulton st. this city, is a very excellent number. This is a good work for schools and is a text book to the amateur artist and mechanic.

Wilson's Business Directory for 1849 and '50. is now published and for sale. It is an invaluable work for business men generally, and more especially to strangers having business to transact here. It contains a map of New York and a complete list of the Banks, Merchants, Newspapers, Machinists, Hotels, and in fact every respectable trade done in the city. We cheerfully commend it to public attention. Price 50 cents. Published by John F. Trow, 47 Ann st.

##### New Novel.

Grace Dudley, or Arnold at Saratoga, is the title of a very interesting historical romance from the pen of C. J. Peterson. For sale by Berford & Co Astor House. Price 25 cents.

##### Gothic Architecture.

This is a new work published by D. Appleton & Co., No. 200 Broadway, and edited by D. H. Arnott, architect. It is published in numbers, price 25 cents each, six of which have already been issued. The object of this work, is not to introduce a new style of architecture into the country, but it is to bring that beautiful style before the public in a prominent manner, by showing its direct and suitable applications to the scenery and character of our country. This work is the best one of the kind ever published here before. Each number contains four excellent plates and a number of small illustrative cuts. It is a work which we commend to the architects of our country. If they wish to keep up with the spirit of progress, they will not neglect our advice, which is unbiassed by any other consideration but the merits of the work.



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