# Scientific American.



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### The Patent Laws.

It is our intention to make a few remarks on the views thrown out by Junius Redivivus in the articles which have appeared in our columns. Our views differ from some of those expressed by him in more than one point .-We cannot speak, as he has done, so fiercely against the powers vested in the Patent Of fice of rejecting applications for patents. We believe that much good has been done to inventors in denying patents for things that had been invented before. There are many things invented every year, which to our knowledge are old. The inventors of them think they are new, and in making applications for patents, they would be perfectly correct in pressing their claims as " new and useful improvements." Were patents granted for such alleged improvements, there would be a never ceasing turmoil of law suits, and the fewer of them for the pocket's sake, so much the better, for every mechanical arrangement and combination that is old, and has been in public use for more than two years, is public property-one man has no more a right to it than another. The Patent Laws, are not intended in spirit to create or protect monopolies, but to " encourage improvements in the Arts," by giving the first inventor the exclusive right to make and use his invention for 14 years. Some pretended friends of inventors have advocated the exclusive right to their inventions, and their heirs in perpetuo, upon the same principle as that on which the right of private property, is established. No man possessing the least amount of the reasoning faculty, would advocate such claims.

At the present moment, the inventors o Britain are endeavoring to get Patent Law enacted in that country like those of the United States. This speaks volumes for our advancement in correct legislation. We agree with Junius Redivivus, in advocating the policy of previous adverse claims to applications for patents, being sent to applicants whose claims are rejected. We also agree with him in recommending a reform in our Patent Laws, to grant patents to citizens, for the introduction of new inventions and discoveries. We believe that such a reform would do our country " some service " It could at least do no harm. We also agree with him, in advocating a method to annul patents that may have been wrongly granted, through mistake or otherwise. But we are not prepared to say in what manner this should be done-it is a delicate subject. In our opinion it would not require much amendment to our present Pa tent Laws, to make them perfect. We want the fullest protection to inventors. We want to see their just patents sustained by law against infringements, at very little cost to them. This cannot be done at present. We want to see Judges on the Bench too, of undoubted knowledge in scientific matters, and mechanical combinations, so that they will not succumb, nor be influenced by the ability of counsel.

We have been informed that the present Commissioner of Patents intends to recommend the publishing of brevet specifications of patents. This if well managed, would be the means of doing a great deal of good. We are the advocates of any reasonable reform in the Patent Laws whereby, inventors' rights will be more easily sustained, than by our present laws. and whereby improvements in Science and Art may be advanced and encouraged.

what we could publish the same amount of matter for here. We stick to that statement The Olive Branch is correct in the reason it adduces for the higher price of British in comparison with American newspapers. The difference in value is not much. The tax of one penny on every British paper is about 1 cent of our money, for they are sent postage free to subscribers. We tax one way, they another. All news papers are taxed one penny, but all popers are not taxed. The London Family Herald published weekly, orly 2 cents, the London Journal only two cents (one penny.) Papers and newspapers are two different things in the eye of British Law. The tax on English newspapers, until within a few years, was four pence, yet Chambers Edinburg Journal was then published every week for one and a half pence. A paper in Britain can be published every week without being taxed for stamp. We believe that the majority of our people are not acquainted with this fact, that papers may be published in London every day without being liable to the stamp tax. They may contain essays, stories, receipts and such matter, as in the eye of the law is not news less than a month old. The London Journal for one penny, \$1 per year, is illustrated with wood engravings and contains sixteen pages, (each 10 inches by 7) of closely printed matter, nearly astlarge as the old form of the Edinburg Journal. We could not attempt to produce such a literary work for double the price.

## The Telegraph Controversy.

It would seem as if this controversy was never to have an end. We perceive that Mr. A. Kendall has published a long communication in the Louisville Journal in which he distinctly intimates by publishing the claims of Professor Morse for his Electro Chemical Telegraph, that the instrument used by Mr. O'Reilly on the Western Line, is an infringement, to use his own language, " if possible, more flagrant than in the Barnes & Zook instrument." We confess that we have never seen so many attempts to gull the public by certain telegraphic cliques. It is our dy foundation on which their claims rest, and to show unto the American people, that they have the perfect right to use a Chemical Telegraph without fear We will publish drawings and a description of the Free Chemical Telegraph in a short time, one given to the public before Mr. Morse filed his Caveat-a single circuit telegraph too, and the account of which will place some people in a most ridiculous attitude.

#### Poison in Eggs.

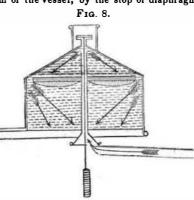
The editor of the Salem Gazette, in publishing an account of the death of Mr. Bassett's children, or Brooklyn, says :

A friend, on reading the above statement, gives us the following extract from a Cyclopedia: " The white of an egg, boiled hard in the shell and suspended in the air afterwards, a liquid drops from it which will dissolve myrrh, which is more than either water, oil, spirits, or even fire itself can effect. A little putrid white of an egg taken into the stomach occasions nausea, horror, fainting, vomiting, diarrhœa, and gripes. It inflames the bile, excites heat, thirst, fever, and dissolves the humors like the plague."

[The liquid that drops from the hard boiled egg is an oil and no more. This can be obtained by distillation. Any putrid animal matter will cause nausea, &c. as well as the putrid white of an egg. The white of an egg is composed of albumen. There is one thing singular about albumen, viz. " nitric acid at disengages from it an abundance of azo tic gas, and if the heat be increased prussic acid is tormed after which carbonic acid and carburetted hydrogen are evolved."

#### Manufacture of Glass .--- Annealing. (Continued from page 352.)

Sheet Plate," is German sheet ground flat and then polished, these processes being conducted in the same manner as if the glass were cast instead of blown. There are some little particulars about the mode of separating the fine and coarse emery used for grinding the surfaces. The principle followed is that a stream of water will carry away fine powder but leave the coarse, and that a diminution of the velocity causes some of the suspended particles to subside; this is turned to account by having a number of copper vessels, or emery cvlinders ranged in succession, each being arger in diameter and lower than its predecessors-the stream of water flows into the smallest vessel first, and is there mixed with the powdered emery stone : leaving the coarsest particles at the bottom, the stream flows into the next vessel, carrying with it all the finer portions of the powder. As the same quantity of water enters both vessels, it pases through the second with diminished velocity on account of the increased diameter; another portion of the powder is therefore deposited, and so on in succession through the various vessels, eight being the usual number employed. In the larger vessels the emery at length becomesso fine that the stream of water, though reduced to a very feeble current indeed, would carry away a portion of the powder that should be deposited, if recourse were not ingeniously had to the inclination of matter always to maintain its state whether of motion or of rest. The accompanying sketch, fig. 6, represents a section of one of the copper emery vessels-the stream of water loaded with emery powder enters by the spout to the left and falls into the funnel in the centre, the spout of which descends nearly to the bottom; the upward current of water is prevented from pervading the bottom of the vessel, by the stop or diaphragm



placed there. The stream, therefore, passes round its circumference, between it and the sides of the vessel, and only diminishes in velocity to the full extent at the top of the cylinder, as shown by the arrows; the top of the board serves as a harbor to some of the vagrant particles of emery, the coarser soon quitting the ascending current, and the still finer particles passing off by the spout to the right to the vessel next in succession. When sufficient emery has accumulated, the water and emery are let out into a tub underneath, by pressing down the central wire, thus opening the valve at the bottom which is usually retained in its seat by the spring at the top ; when the emery has subsided, the water is run off by a syphon and the powder dried for use.

The sheets of glass being ground to a flat surface by the aid of the emery so carefully prepared, are polished by the friction of wooden blocks covered with felt, and kept saturated with a mixture of water and the red oxide of iron, prepared by calcining copperas. The iction is increased by loading the blocks by neavy weights, or by forcing them down by powerful springs; the power necessary to move these rubbing blocks is so enormous as to require the aid of the strongest and most expensive machinery, which is continually out of repair, not only on account of the great strain on the parts, but because the oxide of iron insinuates itself everywhere, quick ly cutting away all the moving parts from which it is impossible to exclude it, as it iso fine as to float in the atmosphere, the very dust of the room being red.

lightness is prepared for framing, either as mirrors, or for prints ; indeed for prints it is esteemed infinitely superior to cast plate, as its thinness ensures absence of color, and does not cause the paper to appear dirty. In order that sheet glass may be able to withstand the various knockings about with which it meets during its manufacture, it is necessary to make it of much harder and tougher materials than are used in making the soft glassfor casting ; it therefore not only takes a higher polish, but retains it longer, and does not attract moisture so soon as common plate; and being altogether an article superior to common plate glass, it is no wonder that it is much in demand : but the great expense of production. as well in enormous wages and extensive machinery, as in the l'ss arising from the brittleness of this beautiful substance, reduce the profits so much as to prevent the branch being much extended.

Next week we will describe the substances used for making and coloring glass.

#### Visit of the President to the Patent Office.

The following is an extract from a letter published in the N. Y. Tribune, describing a visitof the President to the Patent Office.

On Saturday morning an elderly and plainly dressed gentleman (accompanied by a young one of twenty-two or three) stepped into this museum of natural and artificial mechanisms, and, after spending a little time in the Commissioner's room, was attended through the various apartments. The port-folios of drawings were opened before him, and among them some splendid plates of a rotary steam engine invented by Mr. Thompson, of New York; next, models of pending applications in the offices of the Machinist and Examiners were shown him, and of these he anticipated the value of some and the defects of others .-Thence his attention was invited to the saloon of models, wherein is embodied, in visible and tangible forms, a mass of mental creations whose value no superficial observer can even begin to appreciate. Glancing over the cases, (months might be spent over one,) in which every profession of civilized society is represented by one or more devices, he every now and then paused to remark on such as related to the arts of peace-industrial and ornate-passed furtively by those connected with war, and closed his enquiries by asking "Where's your best Cultivator ?" Three or four were withdrawn and on them he commented in a manner that showed him quite at home in agricultural matters ; this was farther confirmed by remarks on the cereals, of which he observed by the way, that maize was his favorite, for " he could live on corn bread."

He now ascended to the upper saloon and inspected, with much interest, the collection of natural and other rarities brought home by the Exploring expedition ; the statuary, paintings, Indian arms and antiquities; Washington's sword, coat and camp equipage ; Franklin's cane, Smithson's domestic and chemical utensils, &c., &c , and what will one day be held as the World's charter of independence the original Declaration. After thus spending a couple of hours, this singularly affable and unostentatious visiter took leave of the officers of the institution with a promise to call again. Now, who do you suppose he was ? Why, no other than the President of the United States. This was Gen. Taylor's and his son's first visit to the Patent Office.

A warmer friend of Inventors than President Taylor does not live. He is with you heart and soul, and if you and your brethren do not realize under his Administration all that you can reasonably ask for, it will not be his fault. I will not repeat, at this time, an emphatic declaration of his in favor of the mechanics and inventors of our country, nor what he said of his readiness to urge upon Congress their just rights, but will merely add, that, amid the weighty matters pressing upon him, their interests are, in his estimation neither the least nor the last to be looked to.

#### European Newspapers.

Our worthy contemporary, the Boston Olive Branch, has been illuminating our whole Yankee Nation and ourself among the rest-correcting our mistakes and setting us right up. on the subject of the caption above. We said in an article in our columns, published two weeks ago, that some literary papers were published in London at a price far below lers-one not to be neglected.

## Indian Cobait.

A new field of cobalt has been discovered in the East Indies, in the mountainous country of Rajpoolanah. It is found lying in the state of a sulphate of great purity. It consists of pyrites of cobalt 65 64, sulphur 35.36 The Indian jewellers use it to color gold of a rose tint of great delicacy.

Here is a useful hint to some of our jewel-

The glass thus perfected is generally thinner than cast plate, but from its consequent and obtained pure in the state of a powder.

To Reduce Chioride of Silver. If the chloride of silver is placed in a solution of caustic potash in which some sugar is dissolved and the whole boiled. the silver is quickly reduced, when it is easily washed