



NEW YORK, AUGUST 12, 1848.

An English Patent.

Reader, did you ever see an English Patent? If not, you should try and get a sight of one as soon as possible. It is a curiosity, a standing evidence of monarchical adherence to an old custom, foolish though it be. An American patent can be rolled up in a sheet of paper and carried about wherever the owner listeth. Not so with the Patent missile of Sovereignty. An English patent has to be secured in a box under a lock and key. This is owing to the danger of appropriation by tailors and wax candle makers, for the royal seal is attached to the document. Well some may ask, "and what of that, has not an American Patent the seal of the Republic attached to it, as well as a British Patent that of the Crown?" True enough friend, but there is a great difference in seals, and just as much between the seal of the Republic and the seal of the Crown as between a button and a turnip. If you were to walk up Broadway some sunny day and meet two gentlemen with seals to their Repeaters—the one a neat gold ornament of common size, the other of genuine stuff but about the size of a turnip, what could you think of the exhibition? Would you not consider the man with the ponderous dangle a shallow pedant and the other possessing at least some common sense? Well friend, the pumpkin seal is Uncle John's Patent. Each patent has a huge lump of stamped wax attached to it, so large that it is no small weight to carry about. The first one we saw brought to our recollection the nursery story of "the old woman wandering about with a yard of black pudding hanging to her nose." It is a matter of surprise to us that the British government should hang on to these nonsensical and foolish old customs. They are fifty years behind us in this respect. We believe they feel that there is much foolery in their lump of wax, but they hate innovation—they would rather, in their adherence to old associations, put up with an old evil than a modern good. Every one has his own notion about these things, and we find no fault with every man suiting his own taste, but it would answer just as well for those patents to be less cumbersome and certainly far more common sense like.

Wooden Pavements.

A correspondent of the London Mechanics Magazine, in a late number of that excellent work, recommends what he calls an "Improved Compound Pavement." It consists in combining wooden and stone blocks together, "so as to make a noiseless pavement and afford a safe footing for horses." The wooden blocks are to be made of an octagon form and the granite blocks of a rectangular form.

We do not know what plans have been taken to render the wooden pavements in London durable and firm, but speaking from the experience we have had on this side of the Atlantic, and especially in this city, we consider "the wooden pavements to be a dead failure." A few years ago wooden pavements were all the rage here and a number of our streets were blessed with its silent qualities, but it was at the expense of keeping the peace truly. The wooden pavements that were laid down in this city, lasted about eighteen months on an average, and were a nuisance before they were lifted. They have all nearly disappeared and been supplanted by the cobblestone, a poor pavement also. We see that the wooden block pavement that was laid down in Nassau street at the Custom House, a little over a year ago, is lifted high and ~~try this week to give place to some more durable stuff.~~ There is no kind of pavement equal to the square granite block. If laid well, it is very durable and is easy on horses

and carriages. The greatest part of New York city is paved with cobble, or hard water stones. They are all of a spherical form and make poor pavements. Lately the spirit of improvement has added section after section of "Russ Pavement" to our city, at great expense to be sure, but it will be found we believe to be not an expensive pavement in the end. Our predilections, however, are for a well beetled pavement of granite square blocks, not laid in concrete or cement. This would render the pavement not very expensive at first, easily relaid and not very difficult to remove to get at pipes or drains below.

Speaking of pavements, we have a word to say in reference to plank roads. These roads are excellent, but our people must not dream of them lasting long without repairs. They will have to be repaired often, and the old proverb "a stitch in time saves nine," should not be forgot. If carefully and attentively repaired they will all yield a handsome return.

Nitre in City Wells.

The Magistrates of the City of Glasgow, Scotland, having appointed Drs. Thompson and Penny to analyse the water of various wells in that city and report on the same, have done no small service to science and honor to themselves. The following table gives the amount of nitric acid in grains, per imperial gallon, which they have succeeded in separating from the following wells:—

	Nitric acid grs. per gall.
St. David's Well, :	2.629
Glassford street, :	1.844
George street, :	0.884
Gorbals, Norfolk street, :	2.574
Infirmity Well, :	0.219
Cheapside, Anderston, :	3.64
Orr street, Calton, :	2.48

These numbers are not given as absolutely correct but only as approximations. Imperfect as they are, however, they are of great importance, as throwing light on the surface of certain impurities in these waters, as bearing upon the general question of sanatory measures adapted for large towns, and as pointing at the enormous waste of valuable fertilizing matter with which the strata under cities are literally saturated. From the large amount of salts contained in these waters it is obvious that they would be exceedingly valuable for the purpose of irrigation.

It was shown as far back as the year 1751, by Margraff, that the wells situated in the town of Berlin, in Prussia, contained a salt resembling nitre which could not be detected in the wells at some distance from that city; and in the last twenty five years it was demonstrated with great precision by Liebig that in the wells even of a small country town containing 8000 souls, nitric acid could be easily detected, while in wells at a distance from human habitations, no trace of such an acid was appreciable by the most delicate chemical tests. Ever since these valuable experiments it has been admitted as an established fact that nitric acid enters into the compositions of the salts contained in the city wells; but not before has any attempt been made to determine the actual weight of nitric acid which is present in these salts.

We have various grounds for drawing conclusions with reference to the influence of the foreign substances in well water upon human health. If a substance is not necessary to the human system, its omission from the food is a judicious if not an imperative proceeding.—In these wells sulphate of lime is an abundant constituent, but it is not required by the animal economy; and this form of lime is an objectionable one, upon the ground that it is not very soluble in water. Lime in all forms when used in excess in the food, is highly objectionable, as it is very frequently the cause of gravel and stone, and enters into the composition of many concretions which gather in the human system. So powerful is its influence, that when a person has recovered from this painful disorder a recurrence of the disease in all its violence has been occasioned by the presence of even a small quantity of lime in the water used to drink. It follows then, that the less the proportion of lime there is in the water, the better it is fitted for

such cases: but although the disease, in its most aggravated form, is fortunately not common, the deposition of minute concretions of lime is far from being a rare occurrence. In country situations in the lowlands the wells often contain much lime in solution, and the inhabitants do not appear to be liable to gravel, but they are placed in totally distinct circumstances from the dwellers in a large and populous city.

The fact that nitric acid exists in city wells, affords evidence that foreign matter, from the most impure sources, has free access into their waters; and although none of these substances are direct poisons when taken in minute quantities, yet we know that they do not exist in our food, and are rather opposed than favorable to health. The minute nature of an impurity is not, however, calculated to fortify us with security against its possible danger, when we call to mind that an imperceptible portion of small pox matter on the lancet point is sufficient to subject to mortality an entire nation.

Improving the Condition of the Laborer.

There is a great deal of mock philanthropy on this subject, which ought not to pass for more than it is worth—Men talk fluently about the education of the working-classes, the melioration of their physical circumstances, and the like, and often wind up with some highflown phrases about the dignity of labor, and the equal rights of man. At the same time, these very men are devoting all their energies to the support of a system, which must necessarily depress the laborer, and defraud him of his inherent rights. They are perfectly willing to pocket the avails of the poor man's labor, but shudder at the thought of being obliged themselves to take part in his toil; they would as lief go to the funeral of a daughter or a sister as to see her at household drudge or a factory girl, but they are eloquent apostles of progressive democracy, and no doubt, gain many votes, by their loud talk in favor of the rights of labor. But so long as labor is toilsome and repulsive as it now is every body who can do so, will get rid of it, and of course, must be supported by the industry of another. Labor, must be so organized that it will be attractive to all, that all will engage in it, and that all will reap the fruits of their endeavors. Nature has made physical existence a necessity, and under congenial circumstances a pleasure—She has always made a pair of hands, where she has made a human stomach and brain. A man might as well be all stomach, all brain, as to think of living without the use of his hands. And what better use of the hands, than productive industry,—industry that will feed the mouth, clothe the back, and provide the eye and ear with all the delights which they crave?

Securing Patents.

Patents for several very valuable inventions having lately been refused at Washington in consequence of some deficiency in the necessary papers, we are admonished again to inform inventors and others who desire to take out Patents, that they will greatly consult their interests by having their business transacted through the *Scientific American* office. Our arrangements for securing Patents are probably the most complete of any concern in the United States. A long experience in Patent Office matters, together with constant dealings among inventors and inventions, enables us to say that anything entrusted to our care will be *properly attended to*. Letters from the country should be directed (post paid) to the publishers of this paper.

Vegetable Ivory.

A new curiosity and a valuable one, has just been brought into use in Europe and specimens sent over to the National Institute at Washington. It is a nut, and called the "vegetable ivory, or nut of the ivory plant." The shell, or outer covering of the nut, is scarcely thicker than that of the common hazel, and of a similar color, and is so extremely hard that no instrument can readily make an impression on it. It is classed among the family of palms, and is common in the Mascareen islands, where it is called tagna plant. It is about half as large again as the horse chestnut. The kernel, in its early state, exudes a

limpid liquor, which becomes milky and sweet, and at length acquires the solidity of ivory, which it very much resembles in color, polish and consistency. The English are manufacturing a variety of fancy articles out of the nut, which is said to be superseding the elephant ivory. One quality of this nut is said to be, that its shavings may be boiled into a milky liquor, and not at all gelatinous; and we should not be astonished if some of our ingenious countrymen were to find out some method of reducing large masses of it to the liquid form, and then moulding it into beautiful ornaments of a size much larger than those which are made of the animal ivory. For Piano Keys it will be a most excellent and cheap substitute for the African ivory and will be welcomed by the makers of these instruments. No importation, but specimens, have yet been made.

Electricity and Hydrophathy.

The human blood, in a normal and healthy condition of the system, is in a positive state, which is constantly maintained by the activity of the generating sources within—an excess generally passing off in silence from the cuticular surfaces so that out of 356 experiments made by Mr. Hemmer, of England, upon the "uncovered skin" 322 indicate the presence of positive electricity. This surplusage of the fluid upon the surface we believe to be indispensable to the healthful condition of the whole animal economy, and that, when, from any cause, it is diminished or ceases, diseased action ensues.

Dr. Means is of opinion that the state of the surface in inflammatory rheumatism is electro-positive, and the reverse in chronic rheumatism. Dr. Ruggles, as quoted from the Hampshire Herald of January 4, says of the electric action which he is enabled to perceive, "in chronic rheumatism, it is quiescent. In inflammatory rheumatism, it is tremulous, and appears confined to the cuticle."

Letters for Europe.

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