NEW YORK, SEPTEMBER 8, 1849.

Inventions of the Day.

There are many who wonder, and enquire, "What becomes of the inventions that are now so numerous, and for which so many patents are obtained? Surely," they say, "they cannot be of much worth or we should hear more about them." It is true that many things are patented which are of minor importance compared with other things, but there is not a single article patented but must show some decisive proofs of originality and usefulness. The Patent Office marks "*useful*" a part of its creed in deciding upon applications for patents. We have no doubt but that many good patented inventions are slumbering in silence—inventions about which our country knows nothing, except those readers of the Scientific American who may have noticed, and no more, the inventors' names and the character of their inventions, on our patent list; unless the inventors let the world know someting about the results of their genius, by advertising, or some other suitable way, how can they expect the public to obtain a knowledge of their patents. Many good inventions, we have no doubt, have but to be known to be appreciated.

The public must not judge lightly of the value of patents, because their virtues are not blazoned abroad continually with trumpet tongue. Let any person of experience pass in review before his mind, the advancement made in the improvement of things really useful, and the value of such improvements will be felt and acknowledged. It is only by encouraging invention, that we can expect a continuance of improvement in those things useful to man. We are too prone to neglect the worthy, and be ungrateful to inventors above all others. Does the merchant who is whirled over the railroad in one tenth of the time which it once required him to travel from this to that place, ever offer up a heartfelt tribute to the inventor of the locomotive—to him who has saved him so much time and expense in performing his journey? We will answer in the negative. What man among us offers a tribute of heartfelt thankfulness to our inventor—him who, by his wonderful genius, sends a message of life fraught importance, over a thousand miles of space, in a few seconds, bringing back on the lightning's wings, words of hope and gladness, relieving a dreadful suspense, which not long ago, would have had to endure for days and weeks? We will answer: No one. We might go on piling up name upon name of those men who have benefitted every individual, by the works of their genius; but we believe that we have said enough to impress the mind of every person with the importance and value of *the inventions of the day*.

Jacob Perkins.

The London papers of a late date, inform us that "Jacob Perkins" died on the 30th of July, at the residence of his son, Regent Square, London, at the advanced age of eigbty three. This event, in other cases, would have been passed over without a single word from us, for what is the name of Jacob Perkins more than the name of John Smith. But it is not the name, it is "the man."

This Jacob Perkins was an American, born at Newburyport, Mass., we believe. He must have been born about 1766, consequently he was one of the olden Colonial time. In his younger days, it is stated, that he invented the machine for cutting and heading nails. Whether he was the first inventor of the nail machine or not, we cannot tell at present, the evidence before us is adverse to his claims for priority in this invention. Mr. Perkins was but little known in the world until he went to London, when his experiments with high pressure steam at once made him a conspicuous person, as his ingenuity, daring and perseverance proclaimed him to be no ordinary man. In 1819 his steam gun was patented in America, and in 1823, we think, he introduced it to the notice of the British Government. He made experiments before the Duke of Wellington and a numerous party of officers, and at a distance of 35 yards he shattered iron targets to pieces, and sent his balls through eleven planks, one inch thick each, and placed an inch apart from one another. His gun was very ingenious, and could discharge about 1000 balls per minute. His steam gun, however, was not purchased by the British Government, and we believe that although he was employed to build one by the French, yet it somehow or other ended in disappointment.

Within the past two years there have been reported accounts of two great French discoveries for generating steam. One to raise it to an astonishing pressure, by suddenly letting in a small quantity of water into a heated vessel, and the other relating (but the same thing) to the spherical property of water. These discoveries belong to Perkins. No man, until the daring Perkins did it, investigated the property of steam at extraordinary high pressures, he even employed it more than once at 65 atmospheres, 975 pounds on the square inch. The artistic and literary world is more indebted to Mr. Perkins, that perhaps one in a million is aware of. He it was who first discovered the method of softening steel plates for mezotinto engraving; this was in 1821. Although the name of Mr. Perkins, has for a long time ceased to be heard as connected with inventions and discoveries, and although his steam gun and his high pressure steam boiler have long laid as low as he now lies, yet his fame cannot depart. His extraordinary inventive powers were highly appreciated in London, both by high and low. One well qualified to judge, says of him, regarding his experiments in high pressure steam: "Viewing his exertions from first to last, no other mechanic of the day has done more to illustrate an obscure branch of philosophy by a series of dangerous, difficult and expensive experiments." From all those experiments in practical mechanics, (and what subject is more harrowing to the mental faculties) Jacob Perkins, the American Inventor, is now set free. He sleeps far from his native Newburyport, his nome by the side of the sea, and he reposes in the City of the World—the wilderness of myriad homes. His hammer is silent in the workshop, he has ceased from his labors, but "although dead he yet speaketh.'

Camels for the Western Prairies.

Mr. F. G. Skinner, of the Patent Office, is preparing an Essay for the next Patent Office Report, on the adaptation of Bactrian Camels to the prairies of the Great West. We should like to see a fair trial made with them, although we have strong doubts of their success. It is our opinion that during the period it will require to introduce and acclimate the camel, our go ahead people will have a railroad made to the Pacific. Our country is altogether different from Asia in the requirements of the camel. In that ancient continent we find it studded with large and rich cities, separated from one another by mountains, deserts or lonely wastes. A trade can always be carried on between two cities, to exchange the products of one for the products of another, but a country without cities, is a country without a commerce or trade, and therefore no trading caravans are required. Our Great West is a primitive country, in respect to cities. We must first make them before we require to established lines of canals, railroads, or it may be *ships of the desert*, to bring the products of the East to the West, and the West to the East. When we have made Anglo Saxon cities in the West, the world will then discover that the Rocky Mountains will form no impassable barrier to our locomotives, the disc feet of which will roll along our western prairies, with a speed as much greater than that of the camel, as the camel is to that of the donkey.

Singular Case of Hydrophobia.

A Mr. W. Willett recently died in Philadelphia of hydrophobia, and there was no evidence that he had been bitten, except that, it was stated, he had received a scratch of a bite from a dog about a year ago. The Doctors that attended him believe that it was a case of spontaneous hydrophobia,—which is more than a doubtful conclusion, we think.

Cochineal.

This beautiful dye drug, is an insect, the *Coccus Cacti* of Linæus. When first introduced into Europe, it was thought to be a vegetable seed. It lives upon the cactus, and the greatest quantity of it used to be raised in Mexico. Two kinds of it are gathered, the one wild the other cultivated; the wild is inferior to the cultivated kind. The males of the insect have wings and are seldom found in the cochineal of commerce. The female insect has no wings; she is of a reddish brown color, with a hemispherical wrinkled back. The species of cactus on which the cochineal insect attains to the greatest perfection, is named the cactus cochenillifer. It has red and crimson colored fruits. When the Spaniards arrived in Mexico, they found the natives well acquainted with the use of cochineal as a coloring drug. In 1759, John Ellis, F.R.S., of London, received from Dr. A. Garden, of Charleston, S. C., some joints of the cactus with the nests of the insects upon it, which were laid before the royal society, and along with the plant and insects, Dr. Garden sent a very minute description of his investigations into the habits and form of the insect. There are two varieties of the true *nopal cacti* in Mexico, on which the insect is raised, but the wild kind when cultivated and raised upon the special kind (Castilian Nopal), becomes about half as good as the other. The nopals or cacti on which the cochineal insects are raised, are not covered with hard thorns like most of the cacti or prickly pear—the name by which it is generally known,—the thorns at least are quite soft, rendering them accessible to collect the cochineal.

There is one male for about 3000 females, it is supposed; great care is taken to destroy those that are to be used as a drug, at the time they are about to bring forth their young. The insects are stripped from the plants by laying down cloths and drawing the dull blade of a knife between the under surface of a branch of the *nopal* and the clusters of the insects on it. They are then killed by steaming them in the cloth, or dipped in scalding water, and then spread out to dry in the sun To preserve the stock of cochineal insects, they are secured on the plant from wind and rain in the wet seasons, by covering them up with matting; but the wild insects need no such care, and they propagate quicker, giving six crops in one year, while the cultivated superior gives only three. Where the wild and cultivated are raised on one plantation, the two kinds are kept separate, so that the one kind may not amalgamate with the other. The delicate superior cochineal has attained to its present perfection by long care, through many generations, both by the Indians and Spaniards. It is generally allowed that the color of the cactus has nothing to do with the color of the insect, as it feeds not on the red fruit, but upon the branches. There has always been a very great demand for cochineal, yet from 1790 to 1835, the increase of importations by Europe only amounted to 18,320 lbs. In 1791, 400,000 pounds were imported, and in 1835, 418,320. The cochineal sold in London is often adulterated with what is called the East India cochineal, a worthless insect; but we are not troubled with such adulterations in the United States, although a great deal of very inferior stuff is sold. The best cochineal is a full and plump insect of a crimson brown color, having a whitish color in the wrinkles on its back, which run across the same and are intersected with a central longitudinal furrow.

In Clavigero's History of Mexico it is stated that the ancient inhabitants of Mexico obtained a purple color from cochineal. This was doubted for a long time in Europe, but with a mordaunt of alum and a small portion of iron, it can produce a purple; this, however, is not the common way to produce this color, cochineal is used to dye the most brilliant of all colors, the scarlet on silk and wool. It is used to impart the ruby blush to the cheek of the vain one, who dreams not, while she flaunts her borrowed beauty, that she is indebted for it to an humble insect. Red can be dyed on silk and wool with ground cochineal, by first impregnating the fabric with a solution of alum. A more brilliant color is produced by a mordaunt of the chloride of tin and cream of tartar. The beautiful pigment, carmine, is made from cochineal, and a very chaste pink is dyed upon cotton, by first impregnating the cotton with a solution of sugar of lead. Owing to the high price of cochineal, another drug named *lac* is much used as a substitute for it. It is imported from India and is much cheaper, although far inferior in point of brilliancy of color. Were it possible, and we think it is, to raise cochineal for one dollar per pound, we would not depend upon India for her lac as a dye drug. The cultivation of cochineal is something which should arrest the attention of our people, especially, since we have recently extended our sway over some territory, which, no doubt, can yield it in perfection. As far back as 1793, the sale of it, exported from the Spanish colonies to Europe, amounted to $3,000,000. It may be said that every pound of it that could be raised, would add $1,25 at least, to the wealth of our country. This subject, then, is certainly worthy of much attention.

Distinctions in Society.

In America we have no national aristocracy, we have no laws of entail. The rich of to-day are among the poor of another generation, in their descendants. The majority of our wealthy citizens have battled poverty at some period of their lives. If wealth is *honestly* obtained, is there one who can consistently revile its possessor, with the stigma "codfish aristocracy," &c. No intelligent man, however poor, will do it. Those who are continually stigmatising and ridiculing one class, acting as demagogues to get the favor of another class, should be looked upon with jealousy, for assuredly they cannot be honest men. There should be no distinctional feeling of classes in our country. Every man, be he rich or poor, should be estimated by the worth of his moral character alone. It is often the case that working people look with envy and talk with ill-will against those who have become rich, and who once labored hard with the horny hands; and those who become rich often forget the rock from whence they were hewn. These things should not be; we are all Uncle Sam's "bairn's," and the true way to live happy is for every one of us to "do justly and love mercy," on all occasions.

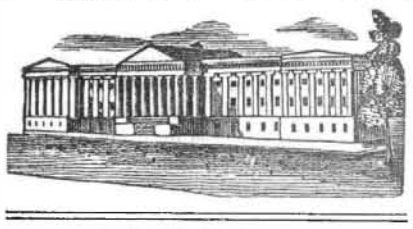
Victor Vardalle's Perilous Ascent in a Balloon.

On the 30th of Aug., Victor Vardalle, the celebrated French Balloonist, who made a number of ascents at New Orleans, head downward and feet up, was to make an ascention from Vauxhall Gardens, New York, on the day stated above, and to perform some pantomime tricks in his airy flight. Shortly before six o'clock the inflation was completed, when the car was attached, and on the signal to let go the ropes being given, the excitement became very great. This part of the business being managed very unskillfully, the balloon struck against a tree, and then went a short distance in a slanting direction, tearing up a pole which had been several feet in the ground, and to which was still fastened one of the ropes. By the effort of the aeronaut himself and the exertions of one or two in the gardens, this difficulty was surmounted, and the balloon ascended amidst the cheers of those on *terra firma*, but it had not proceeded far before it came in violent contact with Dr. Gray's house, in Lafayette place, the car lodging on the front, and the main part of the balloon hanging from the chimney top. Vardalle displayed great courage and self possession while in his perilous situation. He tried to open the blinds of the window, which he was unable to do, but he held on until he was relieved by those inside. At first it was thought that he could not, by any possibility, escape with his life. Thousands surrounded Dr. Gray's house to see the man, who in a short time made his appearance, and seemed quite unconcerned at what had occurred, and only regretted the serious injury which his stock in trade had suffered.

Blake's Fire Proof Paint.

We would call attention to the advertisement of this article in another column. We will speak of its nature, use, &c. next week.

Thirty-four Fire Engines are now building in this city.



LIST OF PATENTS.

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending August 28, 1849.

To Edwin B. White, Nashua, N. H., for improvements in Rotarv Spike Machines. Patented August 28, 1849.

To Reid R. Throckmorton, of Brooklyn, N. Y., for improvement in Planing Machines. Patented August 28, 1849.

To Joseph Garside and Henry J. Betjemann, of Harrison, Ohio, for improvement in machinery for Cutting Screws in Bedsteads. Patented August 28, 1849.

To Jesse Fitzgerald, of New York, N. Y., for improvement in machinery for Dressing Treenails. Patented August 28, 1849.

To Alfred Stillman, of New York, N. Y., for improvement in Sugar Pans. Patented August 28, 1849.

To David O. Macomber, of New York, N. Y., for improvement in Fountain Pens. Patented August 28, 1849.

To R. F. Loper, of Philadelphia, Pa., for method of working the Air Pump and using a condensing as a non-densing engine. Patented August 28, 1849.

To Simeon Hovey, of Painesville, Ohio, for improvement in Bedstead Fastenings. Patented August 28, 1849.

To G. N. of Millerstown, Pa., for combined construction and operation of the Drill in Rock-Drilling Machines. Patented August 28, 1849.

To Michael English, of Lagro, Ind., for Gold Washer. Patented August 28, 1849.

To John W. Thurman, of Buchanan, Va., for improvement in Hill-side Plows. Patented August 28, 1849.

To Lewis Tupper, of Auburn, N. Y., for improvement in Straw Cutter. Patented August 28, 1849.

To Abram Bloom, of Newville, Pa., for improvement in Threshing Machines. Patented August 28, 1849.

To Henry G. Davis, of Millbury, Mass., for improvement in Spinal Supporters. Patented August 28, 1849.

To J. W. Martin & E. Perry, of Northern Liberties, Pa., for improvement in Chucks. Patented August 28, 1849.

To Robert Smith of Leesburg, Pa., for improvement in Spring-seat Saddles. Patented August 28, 1849.

To Matthias P. Sawyer & John W. Hall, of Boston, Mass., (Assignees of Samuel A. Cox, of Malden, Mass.,) for machines for Bending the Lips of Wrought-iron Railway Chairs. Patented August 28, 1849.

To D. J. George & N. Millington, of South Shaftsbury, Vt., for improvement in Graduating Carpenters' Squares. Patented August 28, 1849.

To Samuel Jones, of Moundsville, Va., for improvement in machinery for Jointing Staves. Patented August 28, 1849.

Planing Machines.

JUDGE KANE'S OPINIONS ON PATENTS.

There is no profession which requires more sound sense, sagacity and knowledge than that of law. Our superior courts should embody the wisdom and erudition of the law. We are happy to believe that this is the case; yet, peradventure, all our judges are not perfect men, or there would be no revision of their opinions, whereas we know that such things as revisions do not unfrequently happen. In the month of March last Mr. D. Barnum, of this city, received a patent for improvements on the Bramah Disc Planing Machine, a description of which will be found in No. 18, this volume (4) Sci. Am. After receiving his patent he set up his machine in Philadelphia, when Mr. J. Wilson applied for an interlocutory injunction, to restrain him from using it, as being an infringement of his rights, he being owner of the Woodworth Patent, in that District. Judge Kane granted the injunction in the month of May last, and we hereby give some extracts from bis opinions expressed on that occasion

"The grant of a patent to the defendant can have no other effect on the present discussion than as it indicates the opinion which highly respectable and skilful officers have formed on an *ex parte* examination of the case."

No great compliment, we think, to the officers of the Patent Office, and one that does not please us. The Judgethen goes on to explain the difference between the Woodworth's Machine and Gays and McGregor's, and also those of Bentham, Bramah and Muir. Relating to Woodworth as differing from them, he says:—'He affixed his cutters to the periphery of a revolving cylinder, and advanced the plank towards them, under strong pressure, in a plane tangential to their motion; thus making the cutters describe a curve upwards, from the finished through the rough surface of the plank, and preventing the plank from vibrating sensibly during the operation. The *plank moving firmly along the tangent plane of the rotating cylinder, beyond the reach of the cutters, and was disengaged from the action of the machine at the moment the work was perfected.*"

"The machine of the defendant, Barnum has the Brahmah disc, with its two sets of rough and finishing cutters; but the plank is made by a very ingenious contrivance to advance along a metallic guide, either in a straight or slightly curved line, till it comes beneath the axis of the disc, when by a turn in the guide it is bent outward over a small roller, and thence passes from the machine in a line similar to that by which it appro ached it. The finishing cutters begin to act upon the plank in a line very nearly parallel to its surface, and complete their work as the plank turns over the roller.

We have thus a machine that cuts in a right plane upon a curved surface; the revolving disc, at the moment of finishing the work, forming a tangent plane to the curve of the advancing plank. We have too, a roller, over which the plank is forcibly bent, and which by its resisting pressure to the elasticity of the plank holds it steady under the action of the cutters. That is to say, we have a machine, just the converse, as well as the equivalent, of that invented by Woodworth. One general expression may include them both: A planing machine, in which the cutters and the material move against each other in a curve, and in its tangent plane respectively; the material being kept from vibrating by by roller pressure. It is true, that in one machine, it is the cutter which follows the curved path, while the material moves along the plane, and that in the other the cutter moves in a plane, and the material is acted on in the curve—but there is no other difference.

My only embarrassment in arriving at this conclusion has been owing to the fact, that of the highly educated mechanics whose affidavits have been taken in the cause, the grea ter number have expressed a different opinion."

At the time the judge granted the injunction it was urged by the defendant to send the case to a jury trial. This the judge refused to do, but since that, before Judge Grier, a trial of Jury was ordered for the 5th of next October. It is our desire, sincere and honest, to see justice done to all. We therefore set tbis matter before our readers for their information, in order that they might obtain as much legal patent knowledge as possible. Tne question was an infringement, and the operation of the two machines is here set forth in Judge Kane's own language. We request attention to the words in Italics.

As for ourselves, we can see no similarity in the inventions, and we think that the respected judge has given a wrong construction to the roller in the defendant's machine. It is not a pressure roller, it does not keep the board from springing up to the cutters, (the essence of Woodworth's claim) for it is under the board, acting a totally different part from a pressure roller—it is a mere friction roller, surely the judge did not calmly turn this point over in his mind. The idea of construing the board into the *cylinder*, we had thought would never be advanced by any scientific man, for it is simply impossible,, and we venture to say that whoever constructs a planing machine with a series of revolving cutters on disc, cone, or cylinder and feeds in his board as a cylinder, will assu redly present a different invention from eith er Bentham's Bramah's Woodworth 's or Barnum's. Talking about geometrical lines in some inventions, is like a revival of the old hobby of the schoolmen's disputes, "wh ether or not, two spirits could occupy the same space at the same instant of time." If light from an opposite view can be thrown on this subject we are willing to receive it.

Hemp.

Mr. James Anderson, in a letter to the Louisville Journal gives, some valuable information relating to the rotting of hemp. He says, it has been, and still is, the practice of hemp-growers to allow their hemp (after spreading in the fall of the year) to remain exposed to the action of the atmosphere until a decomposition of the fibre has progressed fo far as to enable them to brake it with facility on the hand-brake; the quality is thereby rendered unequal, the original strength much impaired, its texture destroyed, and its weight much reduced. In consequence of the undue exposure of this article to the blighting influences of the atmosphere, a decomposition of the fibre has commenced, and its destruction is accordingly hastened, whenever exposed to ordinary heat and moisture; hence its want of durability, in comparison with water-rotted hemp.

This detect can be obviated. Let the hemp remain in the swarth, on the field where it grew and was cut; a few rains will suffice to cure it for the brake; or after sufficient exposure to the sun, it may be stacked for all spreading; when, after a few rains' or when half rotted, it may be shocked, preparatory to *breaking*. Either of these processes would be at present objected to by the practical farmer in consequence, as he would say, of the impossibility of breaking and cleaning it. But by the aid of a Milling Machine, half rotted hemp can be broken with great rapidity; it does not impare the quality or strength of the fibre, but has a tendency to loosen the wood, by a milling process; when the wood is so severed, it is an easy matter for one hand to clean 500 to 600 pounds per day, on the hand-brake, or by scutching, or by whipping and shaking. The quality of the article so produced is bright, soft, and lustrous.

The method employed by farmers in water-rotting hemp, is to let it remain immersed in water until the glutinous matter is completely dissolved; the consequence is a perfect impairation of the strength of the fibre; for a complete solution of the gummy matter could not take place without fermentation, and fermentation is the beginning of decay. To produce an article of hemp suited to the consumption of the Navy Department, it is only necessary to immerse the hemp for a period of twenty-four hours, then withdraw the water, and let the hemp remain in bulk until the generation of natural heat takes place; that will be observed in the course of ten to twenty hours, after a thorough impregnation by the heat; then inundate a second time, and let it remain until you are prepared for its convenient removal. It may, after the process of heating, remain in the water for months without any disposition toward fermentation; and surely, if it does not ferment in water, there is no danger of its doing so in cordage.

With the aid of the Improved Milling Machine, I am sure, that a good hand could clean 500 pounds per day on the hand-brake, or hemp prepared as above. Hemp so prepared is remarkable for its weight and oily appearance, and just the article that would make the superintendent of the United States rope-walk exclain, "America can beat the world."

The Manufacture of Pot and Pearl Ash

The processes of manufacturing the pot and pearl-ashes in the United States and in the Canadas, is very simple, but by no means so economical as they might be. In general, the clearing the land of wood, is the primary, and the manufacture of these articles only a secondary, object. The wood is usually cut into lengths of eight or nine feet and thrown into piles of one, two, or more cords, and, when partly seasoned, set on fire. The woods which are cut in summer are said to be the most productive in alkali. The ashes resulting from the combustion are, when cold, gathered up and put into large tubs, the bottoms of which are covered to the depth of 6 or 8 inches with brushwood, and over that with a layer of three or four inches of straw. Water is then poured upon the top, and suffered to filter through till all the soluble matter of the ashes is extracted. The ley runs off through an aperture near the bottom of the tub designed for that purpose. It is then boiled in large cast iron kettles till the water is all evaporated, and the matters, which were held in solution, obtained in a sold ferm: this product is familiarly known to the workmen by the term of brown salts, or salts, simply; it is of a very dark,—almost black color, and a very strong alkaline and acid taste, and consists of a very large proportion of potash, mixed with more or less carbonaceous matters, vegetable salts of potash, and small portions of silex and other earths. To convert these brown salts into potash they are again thrown into a cast iron kettle of considerable thickness, fused and subjected for an hour or two to a full red heat after the mass is perfectly liquid. By this means the carbonaceous matters are for the most part decomposed and burned out. The remaining product is, when cold, broken up and packed in tight casks, and constitutes the American potash of commerce. It contains from five to twenty per cent. of pure potash, combined or mixed with variable proportions of carbonic acid, and compound carbonaceous matters, silex and other earths, the proportions and quantities of the latter depending very much upon the care which may have been used in collecting the wood ashes after the combustion. The potash of commerce is usually divided into four sorts, according to the degrees of purity of each.

If the salts obtained by the evaporation of the ley in the first instance are re-dissolved in a small quantity of water, there will be a considerable deposite of less soluble earthy substances, and the clear liquor, when evaporated, will afford a much purer product than that obtained in the common way, and the potash resulting from it will be proportionally purer. This plan is indeed adopted by many potash makers. Unskilful manufacturers of potash are sometimes much troubled with the presence of nitrate of potash in melting down the brown salts; this difficulty is remedied by mixing with the brown salts, previous to melting, a small quantity of powdered charcoal. It is probable that nitric acid, (and, of consequence, nitrate of potash,) is always a product of the combustion of wood in the open air; but the quantity varies with the circumstances of the combustion, and in ordinary cases, the carbonaceous matter in the brown salts are sufficient to decompose it without the addition of charcoal.

In the manufacture of pearl ash the process is the same up to the production of the brown salts. They are then thrown into a reverberatory, and calcined till the whiteness of the product indicates the entire dissipation of all carbonaceous and volatile matters. The salts are, of course, stirred or raked frequently, during this process, which is called pearling. The product is the pearl ash of commerce, a sub-carbonate of potash, uncontaminated by vegetable matter, but containing more or less of earthy impurities, derived principally from the bed upon which the wood was burned. Particular care is taken that the temperature do not rise so high in the pearling as to cause the salt to melt, as upon this circumstance the superior purity of the pearl-ash in regard to carbonaceous substances, depends.

The immense supplies of pot and pearl-ashes for the arts and for exportation, are in this country, derived exclusively from the combustion of forest timber. Owing to the great abundance of wood no attempt has been yet made on an extensive scale to procure them from the smaller tribes of the vegetable kingdom.

Two-shilling pieces, called florins, are now coined at the English mint. A proclamation has been issued by the Queen, declaring them legal tender.

Men of thought and men of action, are not often men of great tongue. The most profound thinkers. [illegible]e been indifferent speakers.