Scientific American.



Reported expressly for the Scientific Amerisan, from the Patent Office Records. Patentees will find it for their interest to have their inventions illustrated in the Scientific American, as it has by far a larger circulationthan anyother journal of its class in America, and is the only source to which the public are accustomed to refer for the latest improvements. No charge is made except for the execution of the engravings, which belong to the patentee after publication.

LIST OF PATENT CLAIMS Issued from the United States Patent Office

FOR THE WEEK ENDING FEBRUARY 12, 1851. To Charles Scofield & G. J. Johns, of Albion, Ill., for improved Scraper.

We claim the combination and arrangement of the scoop, standard, beam, arm, and handles, in such a manner, that when the scoop is tipped it will revolve sufficiently far to allow the earth to slide off, and then remain in such a position as that the operator, by a slight movement of the handles, can level down the earth with the scoop, and without the aid of another hand or another scraper, as herein de-

To Samuel & Morton Pennock, of Kennett Square, Pa., for improvement in Seeding Apparatus of a

We claim the employment of the ring or cylinder, having projections on its periphery, in combination with the notched and toothed cylindrical gauge caps, constructed, arranged, and operated substantially in the manner herein set forth, for increasing and diminishing the size and number of the distributing receptacles, as represented.

We likewise claim the combination of the helical spring, screw shaft, flanged nut, and clamp nut, with the notched and toothed cylindrical gauge caps, to which the ends of the spring are attached, for turning the gaugecap, in order to change the relationship of the teeth or projections of one of the caps, with the teeth or projections on the adjacent cap, for enlarging the distributing receptacles as described in the foregoing.

We also claim the combination of the screw shaft, clutch nut, clutch washer, and clamp nut, with the toothed cylinder caps for enlarging or diminishing the distributing receptacles, as described.

We likewise claim the modifications of the distributing apparatus in their simplified forms, as represented, the several parts being operated in the manner herein set forth.

To Wm. O. Grover, of Boston, Mass., & Wm. B. ing Machines.

We claim the use of two needles, operating alternately, one working vertically and the other horizontally, substantially as above described, and uniting two pieces of cloth, or forming the searc, by means of the double loop stitch, as set forth.

To John Osborn, of Hamden, Conn., for improve ments in operating the Water Gate in Hydraulic

I claim the use of the regulating slide and nut, or other similar arrangement, in combination with the levers, wires, springs, rods, weights, or other devices, substantially similar to those described, for adjusting the waste valve, and operated on and in connection with a float at the spring or source, which float rises and falls with the water.

I also claim the use of the hammer, resting or falling on a springing piece for opening the waste valve, or starting the hydraulic ram, and worked as described, or in any other similar manner.

To J. E. Ware, of St. Louis, Mo., for method of securing ranges of shortplank in pavements.

I claim the method above described, of securing ranges of short pieces of planking of a street or road, in longitudinal lines, over water or gas pipes, by means of screws or keys with staples, aided by the double bevel of the short planks, severally holding and permitting of the easy removal of such short piece.

RE-ISSUES.
To Harmon Hubbard, of Harrietta, N. Y., (assignor to Wm. W. Reid, of Rochester, N.Y.,) for improve ment in Tanning Leather by tanning and acids, previously patented Oct. 16, 1849.

I claim the process of removing hair and wool from skins and hides, and of liming them, so called, preparatory to tanning, by the use of a composition of lime, wood ashes, or potash, and of salt, called Composition No. 1, in the manner above described.

I also claim the use of a composition of lime and wood ashes or potash, without the salt, but I do not claim either of these materials separately by itself.

Second, I claim the process of tanning hides and skins, by the use of any kind of tannin, in combination either with the muriatic acid of commerce, or with muriatic acid, generated by a mixture of sulphuric acid and salt in water, with the tannin, in the manner substantially as described.

Mr. Burke and the Reform of the Patent

The Washington Republic, of the 13th inst. contains an able letter from the Hon. Edmund Burke, Ex-Commissioner of Patents, defining his position on the Bill now before Congress, for reforming the Patent Laws, from which we select a few extracts. He savs :-

"I express myself in very decided terms against that class of persons technically denominated "pirates," who knowingly and wilfully appropriate the inventions of others to their own use; and I also recommended a modification of the patent laws, introducing, among other reforms, the process of scire facies, by which good patents may be established. and void and fraudulent ones vacated and set

I am in favor of all proper legislation to reach the wilful infringer, and also set aside and avoid all patents, original or re-issued, fraudulently, surreptitiously, or illegally obtained, which are a nuisance to the public, a detriment to the true inventor, and which bring disoredit upon the patent system, threatening, in the revulsion of public opinion against it, to sweep it entirely from existence. And with these views I am in favor of Mr. Turney's bill, with the modifications proposed by the Hon. Mr. Norris, from New Hampshire, which will, in my judgement, amply secure both the meritorious patentee and the public in the enjoyment of their mutual rights.

I am aware that from certain sources, by no means including the class of meritorious inventors, but from persons unjustly holding old patents that have been extended or re-issued with enlarged claims, much opposition is made to Mr. Turney's bill. There are some sections in it which merely confirm by legislation reforms in the mode of keeping records in the Patent office, which were introduced while I was Commissioner. It does no harm to confirm those reforms by legislation, nor is it essentially necessary. But they are, indeed, unimportant parts of the bill, and may, without much detriment to the public, be stricken out.

But there are provisions in that bill, and in the amendment proposed by Mr. Norris, which, in my judgement, should be passed as well for the protection of the patentee and the patent system itself as the public; for I hold to the opinion that the public has rights to be protected as well as the patentee.

Section 4 of the new bill provides that, in surrenders for re-issue, the new patent shall embrace only those matters contained in the original specification, drawings, This is certainly right. To go beyond it person, as in England and France, to sue out would open the door to innumerable frauds the scire facias to repeal a patent. It gives upon the public and upon individuals.

It also provides that all machines or articles of manufacture, made or begun before such re-issue, may be used and sold.

This feature is violently attacked. But is it not just? Who is to be blamed, and who is to suffer, if the patentee, by negligence, or by the incompetency of his agent, shall have failed to notify the public, in his claim, of the extent of his rights-the innocent individual unplanks and the ends of the permanent interval conscious of wrong, who invests his capital and his labor in a manufacture which is claimed by mobody, or the negligent patentee who equity, are pending in any court of the United crease the intensity of the light.

has failed to give notice to the public, in his States against the person suing out the scire patentee must suffer, if any one."

[This is very true, but Mr. Burke knows that many patentees have had their claims unjustly curtailed by the Patent Office. We know of

"Section 8 of the bill provides that, when applications are made for re-issues, additions to, or extensions of patents, notice shall be given, and that persons interested may come in and oppose such applications.

When the fact is brought to mind that there is but little responsibility in the examining branch of the Patent Office; and that reissues may be made, if they have not already been, improperly not to say surreptitiously, in spite of the vigilance of the Commissioner, notice to the public, and the privilege of opposing re-issues, (as the public are now permitted to oppose extensions,) seem to me to be eminently just and reasonable.

If such notice had been required when I was Commissioner, a certain well known patent, which has caused much excitement in the country, would never have been re-issued, particularly in the form in which it now exists, and which in my judgement, covers what the original patentee never invented nor claimed. It was done in my absence, and under circumstances which throw very dark suspicions over the propriety of the transaction, so far as the party, the agent, and examiner are concerned. Notice to the public, with the privilege to any person to come in and oppose, would put an end to all such proceedings in the Patent Of-

[The remark about the re-issue relates to the Woodworth patent, we believe. Due notice is now given for extensions, but not re-issues and additions. It is no use to embrace additions. Why? Because they will be applied for as new improvements, and it is just as necessary for public notice to be given for new applications. No harm however can result from inserting the clause.

"Sec. 9 provides that all re-issues and ex tensions obtained either of the Commissioner of Patents or Congress, surreptitiously or fraudulently, shall be subject to examination in courts of justice, and vacated, if justice re-

This provision is rendered necessary by the conflicting decisions of the courts. In the northern circuit the judges have decided that, in matters of re-issue, the Commissioner is the sole judge, and his decision is binding on courts as well as individuals, unless fraud has been practised on him. Such an interpretation of the law gives no opportunity to correct the errors of that officer founded on mistake or misconduct, if the latter may be supposed ever to occur.

On the other hand, in the Maryland district, a doctrine conflicting with the one just stated is held, and the defendant has been permitted to try before a jury the question whether or not the re-issued patent is for the same invention as that covered by the original patent. Should not these conflicting decisions be reconciled? And should not the official acts of the Commissioner of Patents in any case be subject to revision in courts of justice? I can hardly see how an objection can be raised against a proposition so reasonable.

It remains now to consider the scire facias for the repeal of a fraudulent or illegal patent, provided for in section 5. The section, asproposed to be amended, gives the right to am the right to a prior patentee to repeal a subsequent patent which infringes his, as well as to any individual interested in any trade or manufacture to repeal a patent, interfering with his business, which he believes to have been unjustly or fraudulently granted. It requires security for costs in the proceeding, and notice to all parties interested in sustaining the pa tent to appear and defend the same. If the proceeding is not sued out and prosecuted in good faith, it authorizes the court to order a

claim, of the extent of his invention. That | facias, it suspends them until the fate of the sense of justice existing in the bosom of every patent is decided. On the other hand, it comhonest man will respond that the negligent pels the person contesting the patent to keep a true account of all profits accruing from the invention in dispute, in whatever part of the United States he may be using the same, and to give ample security that he will pay them over to the patentee, if the latter shall ultimately prevail. In short, it confines the great battle between the parties to a single district, and thus tends to put an end to litigation. Can provisions be more just and equitable between the parties? I think not.

It also provides that, in a second proceeding of scire facias, the party suing out the same shall give bonds to respond both costs and damages, in both the scire facias and action of infringement, if one may be pending, thus preventing infringement by irresponsible per-

In my reports I expressed the opinion that one trial in a scire facias should perpetually establish the patent. I think, on mature reflection, that such a provision would be too stringent upon public right. Every lawyer, at all acquainted with the practice under the patent laws, well knows that matters avoiding a patent may not come to light for years after it has been issued. Therefore they should always be available, to vacate and set it aside.

I have now given a true view of the bill as it will stand with the amendments offered by Mr. Norris. And, if I am capable of judging the matter, I think they will guard the rights of both the patentee and the public; and they conform mainly to the views expressed in my reports.

[These views of Mr. Burke are well worthy of attention; they impress us with a feeling that the Bill will pass. We would direct at tention again to the views we have expressed in Nos. 18 and 19.

Patent Case--- Planing Machine.

In the U. S. Circuit Court, Boston, on the 8th inst., before Judge Sprague, in the case of Joseph P. Woodbury vs. E. G. Allen and Joseph G. Russell, the Jury returned a verdict in favor of Russell, there being no proof that he was concerned with Allen in the manufacture of the machine alleged to be an infringement of the plaintiff's patent, but disagreed as to Allen, and were excused. R. Choate and J. Giles for the plaintiff; Wm. Whiting for the defendants. The Court adjourned until Friday, Feb. 21, at 10 A. M.

Iron of the United States.

The most valuable mine is one in Salisbury. Connecticut, which yields 3,000 tons annually. The mines in Dutchess and Columbia counties, in the State of New York, produce annually 20,000 tons of ore, Essex county, 1,500 tons; Clinton, 3,000; Franklin, 600; St. Lawrence, 2,000; amounting in all to more than \$500,000. The value of iron produced in the United States in 1835 was \$6,000,000, in 1837, \$7,700,000.

In Ohio 1,200 square miles are underlaid with iron. A region explored in 1838 would farnish iron sixty-one miles long and sixty wide; a square mile would yield 3,000,000 tons of pig iron; so that this district would contain 1,000,000,000 tons; by taking from this region 400,000 tons annually, (a larger quantity than England produced previous to 1826,) it would last 2,700 years, as long a distance certainly as any man looks ahead! The States of Kentucky, Tennessee, Illinois, Maryland and Virginia possess inexhaustible quantities of iron ore. In Tennessee 100,000 tons are annually manufactured. Notwithstanding our resources, more than one half of our cutlery hardware, railroad iron, &c., is still imported from Great Britain. It is supposed by geologists that the weekly supply of gold from our own mines will be equal to the demand, and that our own mines will yet be more profitable than the mines of Brazil and Columbia.

Russian Candles.

In Russia the candles used in the mines are made of tallow mixed with charcosl dust non-suit. If suits, or proceedings in law or (or powdered charcoal,) which is found to in-