



Reported Officially for the Scientific American

LIST OF PATENT CLAIMS

Issued from the United States Patent Office FOR THE WEEK ENDING JUNE 8, 1852.

RETORTS FOR CHEMICAL FURNACES—By John Akrit, of Williamsburgh, N. Y.: I disclaim the processes to which these retorts are applicable, and all chemical compounds, and mode of working the same, which are described; and I disclaim all the apparatus shown, as follows: I claim the retorts formed by the arch and bed, with the sides and perforated with the cross flues below the bed and above the arch of each retort, said retorts being formed and operated as set forth, and being used for any purpose for which they may be available.

PLATE AND WINDOW GLASS—By Terence Clark, of Pittsburgh, Pa.: I claim, first, the use of hollow chilled iron rollers in the manufacture of window and plate glass, in connection with the mode of heating them with charcoal or other combustible placed inside.

Second, the combination of the grooves with the strips and guides, and the set screws, for the purpose of regulating the width and thickness of the sheet of glass.

Third, the use of trucks for carrying off the sheets of glass as they pass from the rollers as aforesaid.

Fourth, the combination and arrangement of the gates, flues, and furnace, in the construction of the polishing oven.

OAKUM—By J. A. & Geo. Cormack, of New York City: We claim the treatment of junk by steeping or rinsing it in acidulous liquor, as described, for the purpose set forth.

COW CATCHERS—By Cook Darling, of Utica, N. Y.: I claim the wheel and the guard, connected and arranged substantially as described, and for the purpose described.

TOP SPINNING FRAMES—By Geo. H. Dodge of Attleborough, Mass.: I claim the toothed quadrant, the pinion and its shaft, in combination with the scroll cam, their chain, tubular shaft, and the clutch contrivance, made with the spring click, and one single detent or opening, the whole being applied to the scroll shaft and spur gear, and made to operate substantially in the manner and for the purpose stated.

I also claim the ratchet wheel, the arm, and retaining pawl or click, or any mechanical equivalent thereof, in combination with the balance-wheel apparatus (viz. the arm, the fly-wheel, its shaft and pinion), and the spur gear, having a positive motion as described, the whole being for the purpose as specified.

And in combination with the scroll shaft and its mechanism, for effecting the upward and downward movement of the ring rail, I claim the mechanism for effecting the change of the downward to the upward motion of the said rail, in an easy manner, and so as to prevent injurious strain, when the spring click strikes into the recess of the clutch flanch, the said mechanism consisting of the arm, roll, spring, tube, rod, cam, curved lever, and spring, or their mechanical equivalents, combined and operating together, substantially as described.

I also claim the improvement of so applying or combining the thread guide, or the guide bar or rail, to or with the ring rail and the frame, that the said guide or guide bar shall be movable, or made to move upwards and downwards, while the ring rail so moves, and this with a movement either equal to or in accordance with that of the ring rail, or a variable, as circumstances may require, the same being for the purpose as specified.

And in combination with the scroll, its chain, and connections with the ring rail, I claim a compensation mechanism, or apparatus, for regulating the action of the coping rail or rails on the said scroll, according to the leverage, or, in other words, for providing a compensation for the difference of leverage produced by the swell, as described, the mechanism employed by me, and the combination of which I also claim, consisting of the two cams, the pulleys, the chain, and weight, as applied together and to the frame, and operating substantially as specified.

And I claim the bent arm and its projection, or other equivalent contrivance, in combination with the driving belt, shifting lever, or contrivance, the same being for the purpose set forth.

And I also claim my improvement in the construction of the thread guide, the same consisting in making the opening of it straight, on its rear side, substantially as shown, the same being for the purpose explained.

And I also claim my improved or new combination of mechanism, by which a sudden or very quick rise of the coping rail is effected, in order to finish each upward movement, and this so as to wind as little yarn as possible, at the nose or upper end of each conic layer composing the cop, the said combination consisting of the arm upon the scroll shaft, the levers, the arm, and the rollers, as applied and operated together, essentially as specified.

SMOKE AND SPARK DEFLECTOR—By Albert Eames, of Springfield, Mass.: I do not wish to limit myself to the special form or position of the deflecting tubes, so long as the same end is attained by analogous means.

I claim the method of directing the discharge of smoke and sparks, or either, from the chimney of a locomotive, by combining therewith deflectors, substantially as described, the aperture thereof being governed by a valve or shutter, substantially as specified.

MACHINERY FOR MAKING SPOONS, FORKS, ETC.—By Alfred Krupp, of Essen, Prussia (assignor to Thos. Prosser, of New York City; patented in England Aug. 26, 1846): I claim the employment, for trimming the edges and giving the ornaments to the blanks, of a pair of rollers, each of which is furnished with a cutting edge, and a device engraved within the same, and a space outside of said cutters, for the reception of the waste, said rollers being so worked and applied to each other, that the cutting edges of the one comes in contact with and cuts against the cutting edges of the other.

I do not claim simply a movable die, but what I do claim, is a movable die located within the pattern dies, so that spoons or forks, having various crests, names or initials thereon, may be made by the same contour or device and edge pattern.

AXES—By John Orelup, of Ballston Spa, N. Y. (assignor to Isaiah Blood, A. J. Goffe, and G. R. Thomas): I claim the method of manufacturing axe poles by a process of which the following are its

successive steps, in combination with others, as they are applied to the metal bar, when heated and prepared for manufacture, viz.:

First, Spreading the iron bar at four points on its edges by strokes of a peculiar tool, made for the purpose.

Second, forming half eyes across the bar at spaces equi-distant from its centre, by strokes of a narrow and round-edged hammer.

Third, finishing the half eyes and making them equal and similar on a swaging tool.

Fourth, cutting the bar partly through across its centre, and doubling together the halves of the bar, so that the half eyes shall unite in correspondence with each other, and form the eye of the axe, completing the whole, ready for welding the two halves of the pole together, substantially as the process is set forth.

REFLECTOR LAMPS—By J. H. Pease, of Reading, Pa.: I claim a reflector lamp, constructed substantially as set forth, with a case containing a cooling liquid for the protection of the reflector from injury, as described.

WHEEL CULTIVATORS—By F. P. Root, of Sweden, N. Y.: I am aware that there are other modes of raising and lowering the frame containing the teeth of cultivators in use, particularly that patented to D. B. Rogers, Jan. 10, 1849, which consists mainly of a combination of a crank axle-tree, extending across the centre of the frame, on the ends or cranks whereof are mounted the sustaining wheels, while I acknowledge the similarity of the lifting action of the cranks of the axle-tree to that of the pivoted segment levers used by me, and which I disclaim, yet I am not aware that Mr. Rogers is entitled to claim all means for effecting the same result, and I conceive that my improvements differ in material points from his, and which form the object of my claims, as follows:

Mounting the carriage wheels upon axles, only when said axles are made to project from pivoted segment-shaped levers at each side of the frame, in the manner and for the purpose specified.

SEED PLANTERS—By J. P. Ross, of Lewisburgh, Pa.: I claim, first, the seeding apparatus, constructed substantially in the manner and for the purposes set forth, consisting of the cup and receivers, the plate, gate, and their attachments.

I also claim the mode of putting the cups into motion and stopping them, by shifting the pitman, as described, on to or from the eccentric of the windlass, in the manner set forth.

I also claim raising and holding the teeth by the employment of the apparatus for turning and holding the windlass, consisting of a crank and bevel wheels, as described, so that one man can easily raise the teeth to any desired height, and to a much greater range than can be done conveniently by levers, or similar devices, and attach it in that position by the revolving clutch which meets, when at the proper height, with the crank which it fastens.

HARVESTERS—By G. M. Rugg, of South Ottawa, Ill.: I claim the curved figures, in combination with the rivets, projections below the sickle, by which means the sickle is prevented from being clogged or bound, substantially as described.

SEED PLANTERS—By B. D. Sanders, of Holliday's Cove, Va.: I claim the construction of the serpentine driving cam, the cam being formed of two parts and placed on the axle, one part of the cam being fixed firmly to the axle, and the other moving freely thereon, and secured at the desired point to the axle by a set screw, each part of the cam being formed of a collar, having a zig-zag or serpentine thread or projection upon it, the friction roller or bulb, at the lower end of the lever, fitting between the threads or projections which act against it, as the cam revolves, and give a reciprocating motion to the shove rod, substantially as described.

(An engraving of the above invention will be published in the Scientific American next week.)

HAY RAKES—By Zenas Sanders, of West Windsor, Vt.: I claim the construction of the axle and rake head, with hinges connecting it with the platform, in combination with the draft strap, to raise and depress the rake teeth, in the manner and for the purpose set forth.

SOAP BOILERS—By J. R. St. John, of New York City; patented in England June 6, 1851: Having thus described the construction and operation of my apparatus for heating, boiling, and mixing by steam, I desire it to be understood that I do not claim to be the original inventor of the application of steam to heating, boiling, and mixing; but I claim the combination of the steam jacket, tubes, and agitating rods, for transmitting and equally diffusing heat through soaps and other similar substances, where it is difficult to keep up a uniform heat throughout the mass, substantially in the manner set forth.

(Mr. St. John's English claims, we believe, were more extensive than the above.)

RAT TRAP—By John J. Vedder, of Schoenectady, N. Y.: I claim the employment of the pulley, cords, and inclined tilting passage, the whole being arranged as described, and operating in combination with the tooth, having a tilting door arranged on the top of the same, and a guard placed round the door, in the manner and for the purpose specified.

GREASE COOKS—By R. M. Wade, of Wadesville, Va.: I claim the inclined discharge passage, of varying area, constructed, arranged, and operating with respect to and in combination with the hollow cylinder and its aperture, in the manner and for the purpose set forth.

DESIGN.

PORTABLE GRATE—By David Thomson (assignor to the New Market Iron Foundry), of Boston, Mass.

NOTE—We call especial attention to the singular information announced in the preamble to Mr. Root's claim on Cultivators. The argument is forcible, the language unmistakable, and is certainly very creditable to the accommodating spirit of the Examiner. Mr. Rogers will please to consider his claim as not embracing "all means for effecting the same result."

Valley of the Amazon.

About a twelve month since, Lieutenant Herndon, of the United States Navy, was deputed by the Department to make an exploration of the great river Amazon, from its sources in the mountains of Peru to its junction with the Atlantic at Para, Brazil. This duty has since been performed, Lieut. H. having reached Para, and joined there the U. S. brig Dolphin. He made the voyage down the Amazon in a bark canoe and almost entirely alone. A large collection of specimens were gathered during the exploration.

For the Scientific American
The Reformation of the United States
Judiciary System.

Virginia and Pennsylvania have just emerged from one of the relics of despotism, in the judicial branch of their governments; that is, from the appointment of judges for life or during good behavior; and having adopted the Republican or Democratic doctrine, of electing the judges by the people for a limited number of years, it behooves the people to remove the same dangerous feature from the Federal as well as the State Government.

Judges for life, like all other men similarly situated, such as monarchs, emperors, and individuals in whom power for life is entrusted, soon become usurpers and despots, in the consciousness that none but a very grievous overt act, amounting to misdemeanor, could result in a successful impeachment and removal from office. The consequence is, that the province of the jury-box is trodden under foot: important questions of fact are decided by a "single man" clothed with the legal phrase of a "court;" decided too often on vainly assumed hypothetical fancies, amounting to speculation—possessing no solid practical capacity either for usefulness or for reliance as a true basis; and when the decree or the one-man goes forth, and injunctions issue, without security to indemnify the parties, in case they ultimately show them to have been wrongfully issued,—they spread a desolation through the business and property of the citizens of the States, worse than the pall of death, for there is no hope of salvation or redress for the injury done by the one-man called the court, and no opportunity to recover themselves in the case before a jury of their country, ere total ruin has been their lot.

Attempts have been made, under the Constitution, to prevent the Federal judge from assuming such omniscient and oppressive powers; but all seems to be of no avail against the natural tendency of man's nature, when intrusted with too much power, to become exclusive or despotic, and oppress his fellow man, under the assumed mask of superior discernment, or great learning in sciences or arts, or other subject matter to which the question of fact at issue in the case belongs; the truth being, that nine times in ten the power, and a real ignorance of the matter, begets an assumption of knowledge; because the Chancellor or Judge, having no practical experience in the new art or matter of fact, cannot see how much he really knows nothing about, and hence, in the absence of time, intense study, opportunity, and capacity to learn, he assumes that he knows everything; for he cannot see the extent of the field of knowledge both explored and unexplored, that is before him. This is all quite natural; but it is repugnant to the spirit of our government and oppressive to the people.

The Act of 1789, section 16, "that suits in equity shall not be sustained in either of the Courts of the United States, in any case where plain, adequate, and complete remedy may be had at law," is left discretionary with the Judge, and therefore becomes a nullity on the statute book.

The Act of February 13, 1807, which declares—"nor shall an injunction be issued by a district judge in any case where a party has had a reasonable time to apply to the Circuit Court for the writ," becomes also a nullity on the statute book, as it is left discretionary with the district judge to say what constitutes a reasonable time; and where parties complainant have waited a whole year, when the district judge is known to be predisposed on general impressions and in general temperament in their favor, finally, in the absence of the circuit judge, who is known to have no such temperament, the district judge is moved for interlocutory injunctions, and they are granted, no matter how greatly in error or ignorance the judge may be,—they are granted without security, and the citizens of the States—and all their freehold and personal property, and contracts inseparably connected with the subject matter, if it be a machine or otherwise, are laid prostrate in the dust before this Federal power, and they have no redress, although they may be in the right, and no fate before them other than overwhelming ruin.

Before this Republic was established, it was a maxim that the Crown (consisting of one

man) could do no wrong. Now it is, that the Court (consisting of one man) can do no wrong. The principle of the one-man power is the same in both, disguise it as we may, whether in the word Crown or in the word Court. Our ancestors did not believe the former then; we do not, and ought not to believe the latter now.

Already the voice of New York, in a resolution to Congress, has gone up protesting against and denouncing such oppression. The Key Stone State, Pennsylvania, ever true to a Democratic Government, has declared that her Judges shall be elected for a limited period by the people, and put upon her statute book the law of May 6, 1844, declaring "No injunctions shall be issued by any court or judge, until the party applying for the same shall have given bond, with sufficient sureties to be approved by said court or judge, conditional to indemnify the other party for all damages that may be sustained by reason of such injunction." And it is quite time that similar features had been grafted upon the Judiciary System of the United States.

The many wrongs heretofore inflicted, by Federal Judges assuming too large a jurisdiction and knowledge over facts, have awakened the people to a full sense of the insecurity of their situation; for no man knows where such doctrines and decrees will fall next, and blast all his credit and prospects, without a trial by Jury, and without security, or opportunity for redress—and have compelled many of the citizens to raise their voice, in the following petition to Congress, in which we trust every State in the Union will join, as it is purely republican, in accordance with the nature of our Government, and already impressed upon the statute book of Pennsylvania and several other States:

"TO THE HON., THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES IN CONGRESS ASSEMBLED:—

The Petition of the undersigned, Citizens of the State of —, respectfully represent to your Honorable Bodies, the necessity of a change in the Judiciary System of the United States, respecting the appointment of Judges, and the power they have assumed over both law and facts, in granting injunctions without trial by Jury, and without adequate security to the party enjoined, all of which is contrary to the spirit and true character of our government, is of despotic origin, contrary to the spirit of the government of this State, destructive of business security, and oppressive to the citizens,—

And pray Congress to propose an amendment to the Constitution, providing that the Judges of the United States Courts shall be elected by the people, for a limited number of years.

Also to pass a law prohibiting the issue of a writ of injunction, unless the complainant shall first give security to indemnify the defendant for all loss and damage; and providing that the defendant may stay or raise the injunction on giving like security. And that all issues of fact both in equity and at law shall be tried by Jury."

REPUBLICAN JUSTICE.

The Country for the Consumptive.

A correspondent of the Philadelphia Ledger, a medical man, writing from Rock Harbor, Lake Superior, says it is the country for those laboring under consumption, who are not too far gone with the disease. The air is so pure and dry, that it imparts elasticity to the spirits, and infuses new vigor in the system. He has had the charge of a small community of 100 souls, not one, during the past winter, has had a cough. From November to April not a drop of rain had fallen, and although the temperature is much lower than in the Atlantic States, the people do not suffer so much from the cold as they do where the climate is more moist and the temperature higher.

The "N. H. Statesman" says it is understood that the daughter of the late Benjamin Thompson, (Count Rumford) who has been residing for several years in the Rolfe Mansion, now her property, on the interval near the lower end of Main street, in Concord, N. H., is proposing to re-cross the Atlantic.—The Countess," as she is called, is more than 70 years of age; and has several times encountered the perils of the ocean.