



[Reported Officially for the Scientific American.]

**LIST OF PATENT CLAIMS**  
Issued from the United States Patent Office  
FOR THE WEEK ENDING SEPTEMBER 25, 1853.

**LOOMS FOR WEAVING HAIR CLOTH**—By Halvor Halverson, of Hartford, Conn.: I claim the combination of the trough or troughs, one or two depressors, one or two sets of pincers applied to the shuttle and mechanism, for opening and closing the pincers, the whole being applied to one or both ends of the lay, and to the shuttle, and made to operate together, for the purpose of carrying hair or hairs or like matters, into the shed of warps, as specified.  
And, I also claim the arrangement of each or both troughs, with respect to the depressor or depressors thereof, and to the shuttle boxes and the lay, the trough in such arrangement being made to extend from the depressor towards the middle of the lay, substantially, as specified.

**SASH FASTENER**—By Henry Hochstrasser, of Philadelphia, Pa.: I claim the self-acting catch, made and operating substantially as described.

**COOKING RANGES**—By Nicholas Mason, of Roxbury, Mass.: I am aware that hot air chambers have been applied to ranges for the purpose of heating meats, dishes, &c., and also, that hot water spaces have been applied to the sides of the grates instead of at the back. I, therefore, lay no claim to such devices.  
But I claim the employment of two ovens in combination with the peculiar arrangement of the flues around their top, bottom, back, and sides, by which I am enabled to heat five sides of either one or both of them at a time, as set forth.

**MANUFACTURE OF SHEET IRON**—By Henry McCarty, of Pittsburgh, Pa.: I do not claim the use of rollers generally, but I claim imparting to the surface of sheet iron, the peculiar mottled appearance of Russia sheet iron, by passing the sheet between a pair of polished or hammer dressed rollers, in the manner set forth.

**COOKING STOVES**—By Jordan L. Mott, of New York City: I do not claim as my invention any particular mode of securing the top plate of the bottom flue to the series of flue tubes; this may be done in various ways. But I claim connecting the top plate of the bottom flue with the lower part of the series of flue tubes, so that in taking out the series of flue tubes, for cleaning the said top plate of the flue below, it shall be removed at the same time, and thereby exposit to view the lower flue space, greatly facilitating the operation of cleaning.  
Second, I do not claim hanging the grate irrespective of the combination, as my invention.  
What I claim is the combination of a swinging grate, as described, with the self-acting weighted latch, connected with the plate below the grate, as specified, whereby the contents of the grate can be readily discharged, and the grate readjusted by a slight use of a poker.

**BATH TUBS**—By Jordan L. Mott, of New York City: I do not limit myself to any particular form for the projection a or to its locality, nor to the forms of the channels therein, as these may be varied at pleasure, although I prefer to make the whole as described.  
Nor do I wish to limit myself to the making of the two channels in one and the same projection, as they may be made each in a separate projection, and located at different parts of the tub.  
Nor, finally, do I wish to limit myself to the use of the channels in combination, as the use of either one of them will greatly improve the bathing tub.

I do not claim broadly as of my invention the connection of the hot and cold water pipes of a bath tub, so as to discharge hot and cold water together, as this has before been done by a pipe or pipes, coupled with the bottom of the tub, and discharging upwards.  
Nor, do I claim broadly, the use of an overflow pipe, for carrying off the water, and preventing the water in the tub from overflowing, as a separate device has before been used for this purpose, but when so used, it was so connected with the waste and supply pipes, as to necessitate the use of a valve within the waste pipe, with all its attendant disadvantages.  
What I claim is, the before-described mode of combining with a bathing tub, either one or both of the channels, substantially as described, and making when constructed, part of the tub, one of which channel-ways connect the overflow, and the waste or discharge holes with the waste pipe, and the other channel-way is adapted to the insertion of the hot and cold water pipes, and discharging the hot and cold water together at or near the bottom of the tub, and in a horizontal or nearly horizontal position, substantially in the manner specified.

**MAKING CHAINS**—By Christian Sleppy, of Newport, Pa.: I claim the forging and making chains out of a solid bar without the welding process; and which is done instantly, as the bar passes between four rollers, with dies on the edges of the same, moulding the links into form, and which may be done of iron, brass, or any substance suitable to be used as a chain, from the size of a cable to a watch guard.

**A NEALING HOLLOW IRON WARE**—By David Stuart, of Philadelphia, Pa.: I claim the process substantially as described; the same consisting in coating the articles in the manner set forth, with the same composition that will resist heat and exclude air from the surface, and heating the articles so coated in an oven about the length of time specified.

**SMUT MACHINES**—By Robert Waskey, of Mill Creek, Va.: I claim the construction of the diaphragm, the central part being solid, and that near the periphery made in several oblique vabular passages to check and throw back the kernels of grain, as represented.

**SMUT MACHINES**—By Wm. Zimmerman, of Quincy, Ill.: I claim the machinedescribed, for cleaning and scouring grain, hulling rice, pearling barley, hulling buckwheat, or otherwise operating upon grain, seed, etc., with a series of two or more stationary cones with one, two, or three, or more revolving cones placed and operated alternately between the stationary cones; the insides or outsides of part, or both sides of part, or all the cones being furnished with roughened surfaces, of such a form or kind, as will perform the service required, substantially, as described.

**STEAM FOR ACTUATING ENGINES**—By Charles E. John and Samuel Wether, of Baltimore, Md. Patented in England, M y 25, 1853: We claim the combining steam or superheated or surcharged steam for actuating engines, when generated, the elasticity increased and operated as set forth.

**PREPARING PARAFFINE OIL**—By Wm. Brown, of Glasgow, Scotland: I claim first, the use of superheated steam as indicated, for the purpose indicated.  
Second, I claim the mode of separating and purifying eupione lubricating oil and paraffine, obtained by previous process.

**METHOD OF VENEERING**—By Caleb B. Burnap, (assignor to Lucius F. Robinson), of Hartford, Conn.: I claim the method of pressing veneers on to the surface to which they are to be glued or cemented by means of a fluid hot or cold, acting on an interposed flexible substance, such as an Indian rubber cloth or its equivalent, which will adapt itself to the surface, substantially as described.

**CAR WHEELS**—By Daniel P. Fales, of West Poughkeepsie, N. Y.: I am aware that car wheels composed of two side plates of different shape, cast in one piece with the hub and rim in which the rear plate is made to combine the inner end of the hub with the face plate, and with alternate portions of the inner edge of the rim, have been made by Bristol and Jackson, and, therefore, I do not claim to be the inventor of this description of car wheels.  
But I claim by my improved car wheel, composed of the face plate E, which curves first inwards and then outwards, and expands into the rim, and the rear plate,

B, which by the series of curves combines the inner end of the hub with the face plate, and with alternate portions of the inner edge of the rim, substantially as set forth.

**RAIL ROAD SWITCHES**—By James M. Dick, of Buffalo, N. Y.: I do not claim the levers, springs, bolts, or connecting rods. Neither do I claim of itself the employment of a sliding bar connected to the switch.  
But I claim the construction of the slide with the depending flanges or side plates, which enclose the slide and crosspiece upon which it works, and afford a certain and effective protection against gravel, dirt, snow, sleet, ice, and other foreign substances, which might otherwise enter between them, and derange the operation of the switch.

**SHIPS BLOCKS**—By Charles H. Platt, of New York City: I do not claim the plates F, G, for the purpose of securing the cheeks the proper distance apart, for they have been previously used.  
But I claim the employment or use of the rods E, passing through the cheeks in a direction transversely of their fibre for the purpose of preventing the splitting of the cheeks; said rods also securing the plates F, G, to the cheeks, and forming a staple for the block as described.  
I also claim the rods placed underneath the ends of the shaft, for the purpose of preventing the wearing of the cheeks, and thereby forming durable bearings for the shaft, as set forth.

**CENTRIFUGAL DRAINING MACHINES**—By Wm. Richardson, of New Orleans, La.: I claim the arrangement in the tub, Y, of the inductor tube, A, supply bulb, B, and annular tube or ring, D, D, placed below the water line exterior of the tub in combination with the ascending tubes, E and F, and a second annular tube, G, having discharges, H, H, for the purpose of self-priming, protecting the machine from the resistance of water exterior thereto, and giving steadiness to the ascending column of water discharged by the machine.

**CLAMP FOR LAYING FLOORS**—By Stephen E. Parrish, of New York City: I claim the use of the brace having clamped ends for acting at opposite sides of a beam, in combination with a screw working at right angles to the same, substantially in principle of construction and operation, as set forth.

[For the Scientific American.]

**Patent Laws of New Brunswick.**

[Synopsis of an Act of the Legislature of the Province of New Brunswick, passed in the Legislative Session of 1853, entitled "An Act to Regulate the Granting of Patents for Useful Inventions." By PETER STUBBS, Barrister at Law, St. Johns, N. B.]

SEC. 1. The Lieutenant-Governor empowered to issue Letters Patent for a period not exceeding ten years, which are available to applicant and his representatives.

SEC. 2. Applicant to state, in his petition, "that he has invented or discovered a new and useful art, machine, manufacture, or composition of matter; or a new and useful improvement in some art, machine, manufacture, or composition of matter, not known or used by others, before his discovery or invention thereof, and at the time of the application, not in public or common use in this Province, to which petition an affidavit is annexed, setting forth that the same is just and true, to the best of applicant's knowledge and belief.

SEC. 3. With petition, a written description of the invention is to be given, signed by applicant and attested by two witnesses, setting forth the manner of making and using the invention, so as to enable any skilled person to make and use it; the principle of the invention is to be stated, and the several modes of applying it; a model is to accompany the application when necessary. Specimens of ingredients are to be forwarded, where the invention is a composition of matter, sufficient for the purpose of experiments.

SEC. 4. Applicant having obtained a patent for his discovery in another country, can obtain one here for the same, if it has not been previously introduced into the Province and in common use therein.

SEC. 5. Applicant for a patent dying before Letters are granted, his legal representatives are entitled to the same on petition.

SEC. 6. Letters Patent may issue to any assignee of a person entitled to a patent for any invention not previously patented, upon affidavit of assignor, that assignment is based on good consideration, and by assignor, as required by second section.

SEC. 7. Letters Patent may issue to the assignee of any person who has taken out Letters Patent for an invention in any other country, but not for an invention made abroad, for which no patent has been granted; Provided, the invention assigned has not been in common use in this Province, prior to the application for a patent: the assignee to file with his application the assignment duly proved, and an affidavit setting forth the date of the patent abroad, and that the patented invention has not been in common use here, and that he is assignee for a good consideration.

SEC. 8. Patents are assignable and fractional parts thereof, when granted here; and assignments are to be recorded in the Provincial Secretary's office, within three months of execution, being first duly proved on oath of subscribing witness.

SEC. 9. Persons pirating patents, to pay three times the amount of damage, which patentee or his representatives may have sustained, recoverable in the Supreme Court.

SEC. 10. Copies of specifications, depositions, assignments, &c., filed with the Provincial Secretary, when authenticated by him, to be received as competent evidence in all Courts, where any matter concerning the patent comes in question.

SEC. 11. Any person desiring the same shall be entitled to such copies.

SEC. 12. When the Attorney General decides that an application for a patent interferes with another application then pending, or with an unexpired patent, the Provincial Secretary shall give notice of such decision to the several applicants, or patentees, and if any of them are dissatisfied with such decision, he may appeal to the Lieutenant-Governor in Council.

SEC. 13. On such appeal the Lieutenant-Governor in Council may appoint three disinterested persons as a board of examiners, one of whom, if practicable, to have knowledge and skill in the matter, to which the alleged invention applies. Examiners to be sworn before a Justice of the Peace, and to be furnished with the Attorney General's decision and ground thereof, and they are to give notice to the Attorney General and parties interested, of the time and place of their meeting.

SEC. 14. This Board has power to examine all parties under oath, which either of the Examiners can administer. The examiners or a majority of them, can reverse or affirm the Attorney General's decision. Before a board of examiners is appointed, the party applying for the same shall lodge £25 with the Provincial Secretary, for the purpose of paying reasonable expenses.

SEC. 15. Where the Attorney General entertains doubts as to an applicant's right to a patent, the Lieutenant-Governor may appoint a board of examiners, who shall have the same power as given to them in other cases. Before the board enter upon their duties, the applicant is to lodge £20 in the Provincial Secretary's office, for the purpose mentioned in last section.

SEC. 16. In case of appeal from the decision of the Attorney General, it is optional with the appellant to apply for a board of examiners or to appeal to a Judge of the Supreme Court. Appellant to a Judge to file the reasons of his appeal in the Secretary's office.

SEC. 17. The Judge shall determine the matter in a summary way, and the future proceedings of the Attorney General are to be regulated by the Judge's decision. The decision of the Judge not to preclude any person interested from the right of contesting the same in any Court where it may come in question. Appellant to lodge £20 before appealing to a Judge, to defray expenses.

SEC. 18. Any person making a discovery or invention, and being desirous of further time to mature the same, may file a caveat, setting forth its design and purpose, &c., and such caveat shall be in force for a year, and placed in the confidential archives of the Provincial Secretary. If application for apparently the same thing is made, such application to be deposited in like manner, and notice given to the person who filed the caveat, who, within three months, is to file his specification and drawings. If the Attorney General is of opinion that the specifications interfere with each other, the like proceedings are to take place by appeal, as before described. The decision of the examiners, however, may be contested in a Court of Justice.

[Remainder next week.]

**METEORS.**—We have received a letter from David F. Pattee, of South Dedham, Mass., wherein he states that at about the same hour, on the same night, in the month of September, last year, when a bright meteor was seen in Texas, he saw it at North Enfield, N. H. It was as large in appearance as the full moon, and for a moment made night appear like day. It swept across the heavens from west to east with great velocity. In less than three seconds from the time it was first seen by him, it burst without the least noise into splendid streams of many colors, and disappeared. He has been often importuned to send us an account of this phenomenon, but has not done so until now. It is indeed a remarkable thing that he should see this meteor at the same time it was seen in Texas, as described in the Scientific American, page 18 last volume.

**To Prevent Incrustations in Boilers.**

At Ems, in Germany, it was recently found that no incrustation was formed in the boiler of a steam engine, which had been in use for two years, and although the water with which it was supplied contained 21,899 grains of solid matters in every pound. These were:

	Grains
Carbonate of soda	11,35488
Sulphate of soda	0.10790
Chloride of sodium	7.27020
Sulphate of potash	0.43653
Carbonate of lime	1.24370
Carbonate of iron	0.01728
Carbonate of baryta	1.06890
Carbonate of manganese	0.00868
Carbonate of baryta and strontian	0.00215
Phosphate of alumina	0.01090
Silica	0.37839

21,89961

From this Fresenius, the celebrated German chemist, concludes that it is not carbonate of lime, but only sulphate of lime which causes the formation of crust, and that in the present case this is prevented by the quantity of soda contained in the water. This has given occasion to investigations, in which soda was added to water containing sulphate of lime, which hitherto had always deposited incrustations. In these cases the action was always found successful, so that Fresenius regards the addition of soda as the simplest means for the prevention of incrustation.

He gives the following rule to prevent the addition of soda in excess:—100 parts of anhydrous sulphate of lime are decomposed by 78 parts of pure calcined soda. The discovery of the correct quantity is so simple and easy, that this circumstance does not present the least difficulty. Care must be taken that there be always a slight excess of soda present, and the water in the boiler must therefore be tested from time to time. This is better and more accurately effected than with test paper, by dividing a sample (filtered if necessary) of the water of the boiler into two parts, and by adding to one part a solution of soda, to the other lime water. If the former remains clear, whilst the other is rendered slightly turbid, the proportion is correct. If the reverse is the case, soda must be added, whilst its quantity can be diminished if the turbidity with lime water be very great.

**Preserving Dried Fruit.**

A correspondent directs our attention to the preservation of dried fruit, such as apples, peaches, plums, &c. As our's is a great fruit country, he considers it a matter of great importance that those who prepare and those who buy dried fruits for sale, should have them effectually insured against the attacks of worms. He thinks that if there are any persons in our country who can suggest a remedy for worms in dried fruits, especially peaches, they are to be found among the intelligent readers of the "Scientific American." We have no doubt but many of our readers can suggest a remedy; but first of all, we will suggest one ourselves, and that is to dry the fruits by high pressure steam heat, or by a current of hot air above 212°. Or after these fruits are dried in the usual manner, to subject them in an oven to heat at about 250° Fah., for about one hour. Those who dry fruit on a large scale, will find it to their advantage to dry it by steam heat, such as by Bulkley's patent plan. We suppose there are but few who are aware that sugars which remain proof against worm corruption in our climate, are treated with a curling heat, after evaporation. That is, they are heated for a short period above the temperature, at which the moisture is evaporated, and for the very purpose of preserving them from the evils spoken of by our correspondent, namely worms.

By the latest news from Europe it would appear that in many places of France and Italy, the people were suffering from a want of food consequent on a failure of crops.

Niagara river, at the Suspension Bridge, below the Falls, is 125 feet deep.

The Fair of the American Institute, opened this week at Castle Garden.