



Reported Officially for the Scientific American

LIST OF PATENT CLAIMS

Issued from the United States Patent Office
FOR THE WEEK ENDING APRIL 5, 1853

FORMING YARN BY FELTING—By J. H. Bloodgood, of Rahway, N. J.: I claim the formation of thread or yarn from woolen rovings, by the process of felting, instead of twisting or spinning, substantially as set forth.

GRAIN HARVESTERS—By T. D. Burrall, of Geneva, N. Y.: I claim, first, the additional apron, to convert the usual rear discharge into a side discharge of the cut grain, constructed and arranged as set forth.

Second, the combination of the curved supports and the adjustable journal box piece, to preserve the relative positions of the cogs in the mitre gearing, and at the same time allow of raising and depressing the driving wheel, the gearing, &c., being constructed and arranged as described.

PLOWS—By Solomon Horney, Jr., of Richmond, Ind.: I claim constructing the shank hollow in a single piece, with two closed ends, as described, and securing the same to and with the share and beam, by means of the master bolts, and the short bolt for passing through the slot in the top end of the hollow shank, for varying the position of the shank with the beam, and for giving additional security to the fastening of the same, as set forth.

WATER METERS—By Wm. H. Lindsay, of New York City: I do not claim operating the valves of the main engine or cylinders, by means of a secondary or independent engine, the valves of which are actuated through the medium of the primary engine, the same being well known in the construction and operation of hydraulic engines, &c.

But what I claim is, first, operating, as described, the valves of a secondary engine, by the main engine, through a portion of their movement, and completing the same through the medium of the secondary engine.

Second, connecting the cross-head of the main cylinder with its valves, in the manner described, so that said valves will close the ports of the main cylinder, in case the working parts of the secondary engine should fail to do their duty.

Third, I do not claim the balancing of slide valves, as such has heretofore been done in various ways; but I claim forming a recess or recesses, in the under or working side of the slide valve, in combination with the secondary opening or openings, through the seat, or in the side of the port or ports, for the purpose and in the manner, substantially as described.

Fourth, I do not claim making a connection between opposite sides of the plunger piston at a certain portion of its travel, as that has heretofore been done; but I claim the combination of the bridge in the cylinder, in combination with the openings in the plunger, for the purpose as described.

FEEDING BLANKS TO SCREW MACHINES—By Thompson Newbury, of Taunton, Mass.: I claim the slide, substantially as described, passing up through the bottom of the hopper, in the manner set forth.

SASH FASTENERS—By Henry R. Nott, of Lewisburgh, Pa.: I claim, first, arranging the spring catch fastenings for the upper and lower sash, about the middle of the frame, in such manner that the upper sash can be managed or fastened and unfastened without interference from the lower sash, as set forth.

Second, the particular arrangement of the attachments on the one plate of the two spring fastenings, said arrangement consisting in the swing bar (through which the spring bolt of the upper sash is operated) with its hinge joint in the rear of the spring bolt and the bar, and the bolt of the lower sash, by which I gain economy of room and a cheap and efficient action upon the two sashes, in the manner set forth.

PREPARING VEGETABLE FIBRE—By Charles J. Pownall, of Addison Road, England. Patented in England for Ireland Aug. 11, 1852: I claim the mode of subjecting fibrous vegetable substances to repeated mechanical pressure, and the action of a stream of water for the purpose of depriving them of resinous or gummy matters, and also resolving them into their ultimate or finer fibre, as described.

SECTOR PRESSERS—By Samuel Rust, of New York City: I claim, first, one or more bearing pieces at the sides or in front of the eccentric sector, acting upon any fixed point or rest on the press frame, for the purpose of raising or withdrawing the punch or pressing appendage, by power applied to the sector, in the reverse direction to that by which the pressure is given, as specified.

Second, allowing to the eccentric sector a sufficient amount of motion directly in the line of the pressure, to enable it to follow and always keep in contact, and in proper relation to the eccentric sector, as set forth.

THREADS OF WOOD SCREWS—By Elliott Sawyer, of Berlin, Ct.: I do not claim the combination of mechanism for holding and rotating a screw blank, and mechanism for carrying a cutter or chisel, against the blank, and regulating the movements of that cutter by a screw; but I claim the endless elongated chaser, as constructed and made to turn and move on a pin, or its equivalent, and to act against a screw blank while in rotation and movement, as specified.

And in combination with the elongated endless chaser, and the screw blank holder, I claim the feeding cam or apparatus as applied, so as to be operated by the chaser, and feed it forwards against the screw blank, as specified.

And in combination with the elongated endless chaser and its sustaining carriage, I claim the movable rail and groove, together with mechanism for elevating and depressing the rail, as stated, the mechanism, as described for such purpose, being the two grooves and their inclined planes, and the studs and the springs of the rails.

And in combination with the elongated endless chaser and its operating screw and elongated endless wormgear, and the feeding apparatus of the chaser, I claim mechanism for withdrawing the driver from the head of the screw, or releasing the screw from the machinery, by which it is put in rotation, mechanism for removing the cut screw from the endless chaser, and presenting another screw blank to the operation of it, as described, and me-

chanism for restoring the driver and other parts to their correct positions, to again set in motion the screw cutting machinery; the machinery as described for actuating the driver being the cam, pitman, rocker shaft, bent arm and forked lever, that for removing the cut screw from the chaser, and presenting to it a fresh screw blank, being the rotary blank holder, gear wheel, and arms; that for restoring the driver and other parts to their correct positions, to again set in motion the screw cutting machinery, being the pitman and the spring, the whole being applied and made to operate together, as specified.

WEAVING CORDED FABRICS—By Wm. Smith, of New York City: I do not claim two shuttles, as two or more have been used in various kinds of weaving; but I claim the process of forming a fabric by the combination of stationary movable warps, with two weft threads passed simultaneously through the two sheds formed above, and below said stationary warps by the movable warps.

MIXING AIR AND STEAM FOR ACTUATING ENGINES—By Wm. M. Storm, of New York City: I claim generating the steam for intermixture with the air, or other gaseous body, in direct contact with the latter; the same (the air or gas) not being the hot product of combustion, nor to arrive at the place of admixture from direct contact with any body of fuel undergoing combustion, for the reasons stated.

I also claim the plan of generating the steam for such purpose in some comparatively dry vessel or heater, for the reason given, the water from which such steam is so generated being mainly held while vaporizing, in suspension in the air, for the objects specified, the air and water, to that end being caused by some adequate means, to meet with an extensive surface of mutual contact, as explained.

BRAKES FOR RAILROAD CARS—By Gregor Frinks of Jersey City, N. J.: I claim so combining the shoe frame with the ordinary truck or car, as that it may be raised and lowered, by the operation of the brake lever, so as to be carried by the truck or to receive the weight of the car, to aid in applying the brakes, and so that the wheels shall not come in contact with the shoes, but be free to turn, as described.

Also giving the truck or car a motion independent of the shoe or brake frame, by means of the curved inclined planes or their equivalents, on the shoe frame, up which the axles of the trucks may roll by an easy swinging motion whilst its entire weight continues to aid in applying the shoe or brake, to the surface of the rails, as described.

STOVES—By J. J. Updegraff, of Selin's Grove, Pa.: I claim, first, the combination of the central hot air passage, the annular fire chamber, and tubular fire pot for the full economy of heat, as set forth.

Second, the combination of the outer casing, tubular fire pot, and central hot-air passage, as described, so that the currents from each may all unite and co-operate, as set forth.

Withdrawals from the Patent Office.

In the last number of the "Scientific American" you commented justly on the attempt made by the Patent Office, to retain the whole fee of a rejected applicant, who withdraws his claims and relinquishes his model. No other views than those you have taken can, in sober earnest, be entertained of the plain meaning of the law as you have quoted it. How it ever entered into the mind of the late able Commissioner of Patents, to change the established policy of the Patent Office, and to retain the \$20, which has been returned by every previous Commissioner of Patents, according to the plain and simple meaning of the law, is more than I can comprehend. He surely consulted some person, who advised the change, and suggested the new policy. As you have pointed out the conflict of the new order with the law, let me endeavor to show, by a few brief arguments, that the new decision is illogical, so far as it regards the correct mode of reasoning, to find out the meaning of what is obscure in some laws; in other words, to arrive by reasoning at what was the intent of the law makers who enacted the laws. It certainly never entered the mind of a single Senator, nor member of Congress, who constructed, revised, or voted for the new Patent Law of 1836, to charge, incongruously, only \$10 for the examination of an application for a rejected patent, and no less than \$20 for that of a simple caveat; yet this is what the new order of the Patent Office does. Reasoning in this manner to discover the intent of the enactors of that Act, a mind possessed of but a very small amount of logical acumen would at once conclude that the new policy of the Patent Office was wrong, for the examination of the application for a patent, upon which a caveat had been filed, is no more difficult nor troublesome than one upon which no caveat papers had been filed.

By no rule of logic or reason could we conclude that it ever was the intent—that it ever entered the mind of the makers of the Act of 1836—that \$30 should be charged for examining and rejecting an application for a patent upon which a caveat had been previously filed. The letter of the law, therefore, the rules of logic, and the reflections of the mind, lead us to conclude, that, as the patent law says "in every case," when an application for a patent is rejected, twenty dollars are returnable to

him who withdraws his application and relinquishes his model.

JUNIUS REDIVIVUS.

New York.

The Labor Movement.

Our country is at various periods visited with certain epidemics, which run like wildfire through the veins of the mass of our population, and are propagated from class to class with destructive intensity. These epidemics are of a social character, and are generally known among the working classes as "strikes" or combinations of particular trades to raise their wages. Their effects are generally disastrous to all concerned, both employers and employed, and always more hurtful to the latter than the former. Indeed, instances are not rare, if we look to history, in which flourishing communities, and large commercial and trading cities have been irremediably ruined by the insensate conduct of combinations of this kind. An epidemic of this description is now raging in our midst, and "strikes" of all the trades in New York City are now going on. From them we augur no essential benefit, as their proceedings are of too irregular a nature to meet with general success. The ostensible cause put forth is the rise in rent and provisions, which require, it is maintained, a corresponding advance in workmen's wages, and to obtain this end some trades have already struck and others are threatening to do the same. In nearly all cases an indiscriminate rise of 10 or 15 or 20 per cent. has been required, irrespective of the worth of each workman or of the profits of the employer; such demands have been, in many instances, resisted, and taking every thing into consideration, it appears to us with much justice. This manner of redressing supposed grievances has doubtless been adopted by the leaders of the movement as the most taking with the mass, who, they naturally suppose, will be tickled by such a scheme, where all are confounded together, the good, bad, and indifferent. Indeed, the fact of such being the case gives the present movement rather the appearance of that of a disorderly multitude than of organized societies. Trade movements, when carried on in a proper peaceful manner, may be profitable to all concerned, and where there are evils that require to be redressed, no one can complain if the members of a trade unite for that purpose. We have no doubt that such is the case with many trades, and that they labor under grievances in many instances that require remedying. But to succeed in doing so employers must be met in a friendly spirit, and mutual forbearance be manifested on both sides. An indiscriminate rise of 15 or 20 per cent. is not likely to be acceded to by employers which would place workmen of different calibre on the same footing, elevating the industrious and the idle, the skilled and the ignorant artizan by the same standard. Such a demand, we are quite sure, will never be acceded to by employers generally, for it takes away their right of free choice, and of giving to every one according to his supposed merit. A demand of this kind is equally tyrannical on the workman, for it puts all upon the same footing, and compels the industrious, by striking, to injure himself for the idle—such a system can only end in confusion and defeat. An advance, if such is to be the case, in workmen's wages, ought to be commensurate with their abilities, and of this the employer is the best judge; any plan of so much per cent. is mere fustian, for it is founded upon injustice, and will not, we surmise, be acceded to.

We would, therefore, counsel our mechanics and others to listen to their better reason, and not to be led away by artful demagogues, who will only use them for their own selfish purposes. Let our workmen organize into "Trade Societies," if they like, and if they labor under any grievances, let them try to remedy them in a sensible manner; but as to mass meetings and holiday processions, they will only end in nothing. "A fair day's wages for a fair day's work," is no doubt a good motto, but the two must be proportioned, and no man has a right to a fair day's wages for a bad day's work, and vice versa. On the other hand we would advise employers to consider the demands of their workmen in a friendly manner, and to show them the inconsistency of what they ask. If they do this, and make it a rule, as is their interest, to mark out the deserving and raise wages according as workmen show skill and industry, there will be no danger of strikes. But then an employer should not be above his business, he must not trust the management of his shop entirely to any foreman, or expect that another will be as watchful in finding out the deserving as he would himself. Strict justice and even-handed impartiality in giving to every man according to his worth, will be more effectual in preventing strikes than any rise of so much per cent. No workman is entirely a creature of dollars and cents, and although he works for his daily bread, he most often has a higher feeling of honor than a prince or an emperor, and any outrage upon justice by the employer, in favoring some more than others, is more conducive to strikes than the rate of wages. An ill-governed shop will always be the hot-bed of strikes, whatever be the rate of wages, whether much or little, and the best plan that the employers can adopt to counteract the efforts of would-be demagogues, is to head the movement themselves. Let them meet their workmen in a fair spirit, treat them all with equal justice, frown down all cabals and intrigues, and they will find that their right influence will be able to render nugatory every attempt to excite disaffection or a disproportionate rise of wages. A contrary course will only serve to engender a hostile feeling, and to draw a line of demarcation that ought never to be seen in a free country between the employer and the employed.

The New Silver Coinage.

The officers of the Mint at Philadelphia are now closely engaged in coining the new silver pieces of the denomination of three, five, ten, and twenty-five cents. In order to meet the want of small silver change, the work at the Mint now goes on both at night and by day. The new quarter of a dollar weighs precisely four pennyweights, and is 7½ grains less than the former piece. As compared with the current Spanish quarters, the new coin is decidedly heavier and somewhat finer. None of the new dimes or half-dimes have yet been struck. The moulds for the gold bars are intended to make bars of the value of \$200, \$1,000, and \$4,000 each.

A Railroad Well Watched.

The Hudson River Railroad, 150 miles in length, employs 225 "flag men," stationed at intervals along the whole length of the line. Just before a train is to pass, each one walks over his "beat," and looks to see that every track and tie, every tunnel, switch, rail, clamp and rivet is in good order and free from obstruction. If so, he takes his stand with a white flag and waves it to the approaching train, as a signal to "come on"—and come on it does, at full speed. If there is anything wrong he waves a red flag, or at night a red lamp, and the engineer on seeing it promptly shuts off the steam, and sound the whistle to "put down the brakes." Every inch of the road is carefully examined after the passage of each train.

Important Patent Case—Hay and Cotton Press.

On last Saturday, the 9th, a very important patent case was decided before Judge Nelson, in this city. The plaintiffs were Tyler & Pendleton, vs. F. Hyde and others, for an infringement of the patent for Tyler's Cotton Press. A verdict of \$11,125 was given for the plaintiffs.

Plaintiff T. obtained a patent for a machine for pressing cotton, the principle of which was two levers acting by means of the segments of a circle immediately on the top of the cylinder and the platen. It was contended that defendants infringed the patent by making some machines on the same principle, and sending them to Mobile, where they are in operation, to the injury of plaintiffs. The machines made by defendants have two sets of levers, the rods, in each case, being half the lengths of plaintiffs.

How to Make Corn Bread.

One quart of sour milk; two table spoonsfull of saleratus; four oz. butter; three eggs; three table spoonsfull of flour; and corn meal sufficient to make a stiff batter.