

SEED PLANTER.—John H. Dancy, of Dancyville, Tenn.—This invention relates to the class of seed planters in which the amount of seed required for a hill is elevated within the seed hopper and discharged through a hole in the upper part of the hopper into the drop tube. The object of the invention is to insure the planting of the requisite amount of seed at proper intervals and without injury to the seed. The invention consists in the use and new arrangement, with the vertical slide which elevates the seed to be dropped to the hole in the upper part of the hopper, of a cut-off, and other appurtenances which are necessary in order to make the slide effective.

SASH HOLDER.—William Wilson Amos, of Olathe, Kansas.—This invention has for its object to improve the construction of the sash holder and lock, for which letters patent No. 125,161 were issued April 2, 1872. The invention consists in a hinged box made inclined or tapering, and in it is placed loosely a small box, in which is placed a tapering rubber block. The box and its contents are held out against the casing by the spring. With this construction, when the sash is being lowered, the friction of the window casing upon the rubber block forces the said rubber block and its sliding box or case upward into the shallower part of the tapering box so that the rubber block will hug the casing and thus support the sash by friction.

STEAM EXHAUST FOR LOCOMOTIVES.—Thomas Davies, of Cleveland, Ohio.—This invention relates to an improvement in the means for supporting the ring jet pipes through which the steam is exhausted in certain marine boilers. An upright pipe, which is tapered and open at each end, forms a support for the ring exhaust pipe at any point in its height, according to the predetermined size of the said ring and the point of its insertion in the smoke box.

SAWING MACHINE.—William C. Daniel, of Point Pleasant, Mo.—This invention relates to a new reciprocating buck saw, in which the saw frame and carriage are vertically adjustable and suspended from a windlass which unwinds automatically by means of an escapement attachment, so that the downward feed of the saw will be regular and gradual.

FORM FOR LAYING BRICK PAVEMENTS.—Samuel C. Brewer, of Water Valley, Miss.—This invention is embodied in a device for gaging the bricks for laying "herring-bone" pavement, calculated to insure regularity in the work. It consists of a brick paving gage, having right angled notches in one edge as deep as the longest bricks, and whose sides are arranged on angles of forty-five degrees with the long axis.

ELEVATED WIRE WAY.—George Killam, of Fort Dodge, Iowa.—This invention has for its object to furnish an improved construction for elevated railroads. The track is supported by two rows of posts, at a distance apart equal to the width of the track. The upper ends of the posts are fitted into and secured to castings which are made heavy and strong, and grooved transversely in the middle part of their upper sides with a deep and wide groove. The upper sides of the castings have grooves formed in them, of such a depth and breadth as to receive the flanges of the wheels of the car. The tops of the ribs between the longitudinal grooves of the castings are grooved sufficiently to bed the wires which form the track and are secured to the castings. The axles pass beneath the bottom of the car up along its sides, and project to receive the wheels at such a point that the center of gravity of the car may be considerably below the point of support. Directly beneath the upper wires are placed a second set of wires, the ends of which pass through the body of the castings. The shoulder upon the inner side of the castings, through which the inner wire passes, is made wide and is grooved longitudinally to receive the flange of the lower wheel. The lower wheels revolve upon the journals of arms which are formed upon the axles and project into such a position that the wheels may roll along the lower side of the inner wire and thus effectually prevent the upper wheels from leaving the wires.

ORE CLEANER AND SEPARATOR.—John H. Hillman, of Trigg Furnace, Ky.—This invention has for its object to furnish an improved machine for separating or cleaning ore by a current or blast of air. The ore after being crushed to the desired fineness is delivered into the hopper by any suitable means, and is fed into a cylinder which, by its motion, keeps the ore rolling and sliding about, causing it to pass down to the lower end of said cylinder. This movement of the ore rubs off the dirt and dust, which is carried out through the cylinder, pipes, and fan by and with the current of air. The smaller particles of ore will pass through the holes of the cylinder while the larger particles will be carried down to the ore receiving box. When the ore has sufficiently accumulated in the box, it will be discharged into any suitable receptacle provided for that purpose. A jacket is made to fit the cylinder at its ends and at its side edges, to prevent a current of air from passing in through the holes in the upper part of the said cylinder, thus making the current of air strong in the lower part of the cylinder where the small particles of ore must pass through.

ADJUSTABLE SCAFFOLD.—William A. Jester, of Holliday's Cove, W. Va.—The object of this invention is to furnish a safe and convenient means for supporting house builders and painters with their materials and implements by the sides of buildings. It consists of a scaffold made of two uprights on which slides a triangular bracket. The platform upon which the workmen stand is supported by the bracket. In the top of the upright is a pulley. A clamp consisting of two or more jaws is attached to a horizontal bar. This bar is confined to the upright, so that it can slide up and down. One jaw (or pair of jaws) is rigidly fastened to the bar. The other jaw (or pair of jaws) operates as a lever, and the two are pivoted together and act much like a pair of pinchers. A rope is connected with the lower end of the jaw. This clamp, it will be seen, can be raised or lowered so as to be grappled on to roofs or projections of different heights from the ground. Two or more of the uprights with bracket and clamp attached are employed in supporting the platform.

LAST.—Joseph Anzer, of Ashtabula, Ohio.—The invention consists in providing means for locking the two parts of a last against lateral as well as vertical displacement.

PACKING BOARD FOR PENCILS.—Orestes Cleveland, of Jersey City, N. J.—This invention has for its object to produce a compact and symmetrical package of lead pencils, pen holders, crayons, or similar articles. A piece of wood or other material is inserted between the pencils that constitute a package, the inserted piece being grooved for each pencil to hold it firm independent of the other pencils. The inserted piece also serves to enlarge the package so as to produce a large surface for the admission of a showy label. This device is so constructed that it enables the retailer to withdraw several pencils from a package without losing the use of the label, the package still retaining its shape.

MACHINE FOR TURNING LOGS IN SAW MILLS.—George W. Baker, Elizabeth City, N. C.—This invention consists in the provision of a sliding carriage moving horizontally in ways or guides beneath the log deck and carrying a vertically reciprocating toothed turning bar, so as to enable the same to be horizontally adjusted for action upon logs of various lengths. The invention further consists in the combination with the movable carriage of a sliding self-adjusting weighted block for exerting a constant pressure upon the turning bar to hold the same in contact with the log.

MANUFACTURE OF SALT.—John McGrew, Ravenswood, W. Va.—The invention consists in providing the inside of a furnace with an air jacket and discharging the heated air into the bottom of a vessel of brine or salt water; in passing the unconsumed products of combustion through vessels of brine or salt water, thereby abstracting the heat and utilizing it for the general purpose of the apparatus; and finally, in a drying apparatus of such construction and so connected with the furnace that the salt is conveniently as well as effectually dried before it leaves the apparatus.

MEDICAL COMPOUND FOR THE CURE OF DIARRHŒA.—Mrs. A. B. Dorman, Cape Girardeau, Mo.—The invention consists in red oak bark, cinnamon, cloves, dandelion root, and brandy mixed in certain proportions with boiling water. This compound has been applied to the most obstinate cases with a prompt and marked effect, the diarrhœa yielding to the treatment in a very short time.

CAR COUPLING.—Darius Sutherland, Milo, Ill.—The invention relates to that special class of car couplings which are made to couple the cars automatically or by impact, and it consists in attaching the pin to a lever and weighted lift bar, arranged outside of the draw head and above the platform of car; whereby a projection from the top of one car is made to strike the lift-bar, whose weight turns the lever on its fulcrum and carries down the pin into the link.

WHIFFLETREE FOR DETACHING HORSES FROM VEHICLES.—Albert H. McAlister, Cotton Plant, Miss.—This invention has for its object to furnish an improved whiffletree, which shall be so constructed that should the horse or horses become frightened or otherwise unmanageable, or should other cause or causes render it advisable, they may be readily detached from the carriage and allowed to go free.

TUBING TONGS.—George A. Holden, Ruggville, Pa., assignor to himself and J. R. Holden, of same place.—This invention has for its object to furnish an improved tubing tongs or pipe wrench, designed especially for taking tubing out of and putting it into wells, and which shall be so constructed as to take a prompt and firm hold upon the pipe, and so as to enable two men to operate with the same tongs, thus avoiding the necessity of using two ordinary tongs, and the consequent risk of injury to the tubing.

ADDRESS PLATE FOR TRUNKS.—James E. Kirk, Marlborough, Mass.—This invention relates to a new construction of address plates for trunks, boxes, etc., in which the paper, slate, or other substance upon which the address is written is held beneath a small pane of glass by a hinged frame, said frame being locked by notched disks, to be unlocked and swung open whenever the address is to be changed. The plate in which the hinged frame and the notched disks are arranged is rigidly fastened to the trunk or box, and may further serve as a support for a handle.

CHECK PUNCH.—José R. Mesa, Brooklyn, N. Y.—This invention has for its object to produce an instrument for punching the number or amount to which checks or similar documents of value are drawn through the same and feeding the same forward to obtain the necessary spaces between the figures punched. It consists in a rotary cylinder with a series of vertical punches that represent the several figures and characters to be punched through the paper. The cylinder can be turned so as to bring any one of the punches under a knob or button, which, when struck by hand, forces the punch under it against the paper to perforate the same in the desired manner. Each punch is provided with a pendant by which, in its descent, it will work a pawl and ratchet, and thereby turn one of the rollers between which the paper is held to feed the paper in the requisite ratio.

BOTTLE RINSE.—James Roue, St. John, Canada.—The object of this invention is to provide convenient and efficient means for rinsing soda water and other bottles, tumblers, and similar vessels. It consists in the valve chamber or shell, consisting of a vertical tube with one or more branches, for attaching a supply pipe from the water fountain. The riser is supported in any suitable manner in a sink. The lower end of the valve rod is connected with a paddle, by means of which the valve is lowered. The valve is held in position (or closed) by the spiral springs which surround the valve rod, with one end bearing against the valve and the other on the bottom of the valve chamber. With the water supply pipe connected with either of the branches and with a sufficient head of water, when the valve is pressed down the water will rush into the tube and be discharged from a rose head with a force proportioned to the height of the head of water. This will effectually rinse the insides of bottles, tumblers and all similar vessels, when the tube is inserted therein.

TOOL REST FOR LATHES.—Charles F. Hadley, Chicopee, Mass.—The invention consists in the combination of a horizontal screw and nut with an inclined lever, which supports the tool rest, and which determines the height of the same by its greater or less inclination. By this means the rest can be adjusted with great ease, and will set the tool to suitable height without disturbing it otherwise. Heretofore the tools had usually to be loosened in their holders before they could be vertically adjusted, and were thereby often disturbed after their positions otherwise had been ascertained with care, thus causing much loss of time and labor. This invention may be found illustrated on page 274, present volume SCIENTIFIC AMERICAN.

TONGUEING AND GROOVING KNIFE.—William B. McClain, Sandusky, Ohio.—This invention has for its object to make tongueing and grooving knives adjustable, so as to enable their use for larger or smaller tongues, deeper or shallower grooves, without requiring their removal from the cutter head. This invention consists in making each cutter in three parts, the middle projecting or receding part being lengthwise adjustable between the others.

[OFFICIAL.]

Index of Inventions

For which Letters Patent of the United States were granted.

FOR THE WEEK ENDING NOVEMBER 12, 1872, AND EACH BEARING THAT DATE

SCHEDULE OF PATENT FEES: On each caveat \$10, On each Trade-Mark \$25, On filing each application for a Patent (seventeen years) \$15, On issuing each original Patent \$20, On appeal to Examiners-in-Chief \$10, On appeal to Commissioner of Patents \$20, On application for Reissue \$30, On application for Extension of Patent \$50, On granting the Extension \$50, On filing a Disclaimer \$10, On an application for Design (three and a half years) \$10, On an application for Design (seven years) \$15, On an application for Design (fourteen years) \$30. Air compressing apparatus, B. T. Babbitt 133,004, Air navigating apparatus, C. McDermott 133,046, Amalgamating gold and silver, apparatus for, J. Oliver 132,919, Animal deposits in streets, apparatus for preventing, E. Berlinger 133,007, Auger, earth, I. N. Pyle 132,980, Baby jumper, S. G. Bigelow 133,008, Bed bottom, spring, J. Ralston 132,982, Belt clasp, J. T. Senn 133,061, Boiler, wash, G. M. Prime 132,979, Boiler attachment, wash, G. H. 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APPLICATIONS FOR EXTENSIONS.

Applications have been duly filed, and are now pending, for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the day hereinafter mentioned:

22,941.—RAILROAD CAR SPRING.—A. B. Davis. January 29, 1873.
 22,947.—WRINGING.—D. P. Foster. January 29, 1873.
 23,060.—ELECTRO MAGNETIC ALARM.—M. G. Farmer. February 5, 1873.
 23,085.—LAMP.—E. J. Hale, C. H. Chandler. February 12, 1873.
 23,875.—LAMP SHADE.—C. and A. C. Wilhelm. April 16, 1873.

EXTENSIONS GRANTED.

22,048.—LOOK.—S. N. Brooks.
 22,071.—ELECTRO MAGNETIC ALARM.—M. G. Farmer.
 23,104.—REFRIGERATOR.—A. H. Bartlett.

DESIGNS PATENTED.

6,244.—THREAD HOLDER.—T. W. Carter, West Meriden, Conn.
 6,245.—OIL CLOTH.—H. Kagy, Philadelphia, Pa.
 6,246.—OIL CLOTH.—C. T. and V. E. Meyer, Lyon's Farms, N. J.
 6,247.—HUB BANDS FOR WHEELS.—O. S. Stevens, Belvidere, N. J.
 6,248.—PRESERVE DISH.—H. C. Wilcox, West Meriden, Conn.

TRADE MARKS REGISTERED.

1,053.—FANCY GOODS.—Cochran, McLean & Co., New York city.
 1,054.—MEDICINE.—V. Delaney, Santa Fe, Ill.
 1,055.—COFFEES, SPICES, ETC.—J. M. Earle, New York city.
 1,056.—NEEDLES.—Excelsior Needle Company, Wolcottville, Conn.
 1,057.—WHISKY.—P. Fegan, Washington, D. C.
 1,058.—SOAP.—S. W. McBride & Co., Chicago, Ill.
 1,059.—SUGAR CURED HAMS.—A. Schoeffel, Louisville, Ky.
 1,060.—SOAP.—J. W. Swalley, Erie, Pa.
 1,061.—EMERY WHEELS OR BLOCKS.—J. Tyzick, St. John, Canada.

Value of Patents, AND HOW TO OBTAIN THEM. Practical Hints to Inventors.

PROBABLY no investment of a small sum of money brings a greater return than the expense incurred in obtaining a patent even when the invention is but a small one. Larger inventions are found to pay correspondingly well. The names of Blanchard, Morse, Bigelow, Colt, Ericsson, Howe, McCormick, Hoe, and others, who have amassed immense fortunes from their inventions, are well known. And there are thousands of others who have realized large sums from their patents.

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HOW TO OBTAIN Patents

This is the closing inquiry in nearly every letter, describing some invention which comes to this office. A positive answer can only be had by presenting a complete application for a patent to

the Commissioner of Patents. An application consists of a Model, Drawings, Petition, Oath, and full Specification. Various official rules and formalities must also be observed. The efforts of the inventor to do all this business himself are generally without success. After great perplexity and delay, he is usually glad to seek the aid of persons experienced in patent business, and have all the work done over again. The best plan is to solicit proper advice at the beginning. If the parties consulted are honorable men, the inventor may safely confide his ideas to them; they will advise whether the improvement is probably patentable, and will give him all the directions needful to protect his rights.

How Can I Best Secure My Invention ?

This is an inquiry which one inventor naturally asks another, who has had some experience in obtaining patents. His answer generally is as follows, and correct:

Construct a neat model, not over a foot in any dimension—smaller if possible—and send by express, prepaid, addressed to MUNN & Co., 37 Park Row, New York, together with a description of its operation and merits. On receipt thereof, they will examine the invention carefully, and advise you as to its patentability, free of charge. Or, if you have not time, or the means at hand, to construct a model, make as good a pen and ink sketch of the improvement as possible and send by mail. An answer as to the prospect of a patent will be received, usually, by return of mail. It is sometimes best to have a search made at the Patent Office; such a measure often saves the cost of an application for a patent.

Preliminary Examination.

In order to have such search, make out a written description of the invention, in your own words, and a pencil, or pen and ink, sketch. Send these, with the fee of \$5, by mail, addressed to MUNN & Co., 37 Park Row, and in due time you will receive an acknowledgment thereof, followed by a written report in regard to the patentability of your improvement. This special search is made with great care, among the models and patents at Washington, to ascertain whether the improvement presented is patentable.

To Make an Application for a Patent.

The applicant for a patent should furnish a model of his invention if susceptible of one, although sometimes it may be dispensed with; or, if the invention be a chemical production, he must furnish samples of the ingredients of which his composition consists. These should be securely packed, the inventor's name marked on them, and sent by express, prepaid. Small models, from a distance, can often be sent cheaper by mail. The safest way to remit money is by a draft, or postal order, on New York, payable to the order of MUNN & Co. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents.

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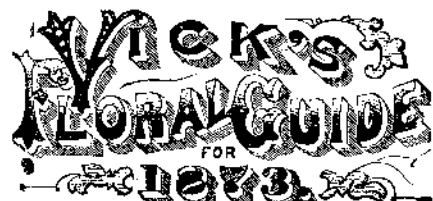
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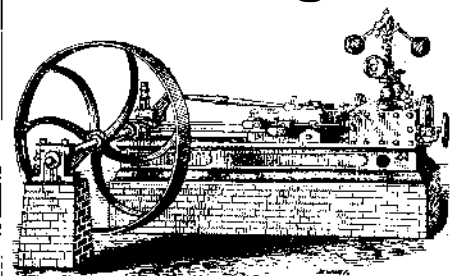


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