### RECENT AMERICAN INVENTIONS.

The following are some of the most important improvements for which Letters Patentwere issued from the United States Patent Office last week. The claims may be found in the official list :-

School Globes. - This invention consists in mounting two hemispheres in armed standards, which slide in parallel places toward or from each other in such a manner that on separating them the several parts or lines marked on their inner and outer surfaces retain their relative position opposite to each other. It consists further in the arrangement of a primary pedestal provided with a series of screw sockets in combination with a screw shank projecting from the lower end of the head, in which the armed standards of the hemispheres slide, in such a manner that one or more globes can be placed on the primary pedestal or taken from the same and returned to their original pedestals at pleasure. It consists also in combining with the sliding armed standards, slotted swivel socket in such a manner that the globe can be turned freely in either direction. John R. Agnew, of Mercersburg, Pa., is the patentee of this invention.

Lamp Burners.—This invention consists, first, in a novel and improved means for securing the draught chimney to the burner, whereby the chimney may be attached to the burner and detached therefrom with the greatest facility and the chimney allowed to expand freely as it becomes heated by the flame of the lamp so as to prevent breakage from that cause second, in an improved filling attachment, arranged in such a manner that the fountain of the lamp may, when necessary, be supplied with oil without detaching the burner from the lamp; third, in an improved means employed for raising and lowering the wick, whereby the latter is not subjected to any undue press ure which would tend to check the ascent of the oil and the wick tube not rendered liable to be forced apart, contingencies which frequently occur in using the ordinary burners; fourth, in the employment of an indicator arranged in such a manner as to show the amount of oil in the lamp, so that it may be supplied or replenished when necessary-a desideratum in the use of metal lamps. C. B. Matthews, of Oquawka, Ili., is the inventor of this improvement.

Zinc-White Paint.—Zinc-white paint has been ordinarily manufactured by grinding the white oxide of zinc in oil without any previous preparation beyond levigation, and its want of what is termed by painters "body" has been much complained of. The object of this invention is to enable the white oxide of zinc to be manufactured into paint having a desirable degree of body, and to this end it consists in subjecting the said substance in its dry state to the combined actions of friction and pressure, by which means its bulk is greatly reduced and it is enabled to be ground with a much smaller quantity of oil. This improvement is the invention of George T. Lewis, of Philadelphia, Pa.

Folding and Statching Paper.—This invention consists in the arrangement of a stitching device and pressing or smoothing rollers and of a series of folding blades in such a manner that a piece of thread is drawn through each sheet of paper before the last fold is completed, and that when completely folded each sheet is passed by the action of a pair of take-off rollers through the smoothing or pressing rollers, from which it is discharged ready for the binder. S. H. Tanner, of Frauenfeld, Switzerland, is the inventor of this device.

THERE are 2,800 streets in London, which, if they were placed in a straight line would extend 3,000 miles, or twice the distance from Calais to Constantinople. If a person should undertake to walk through all these streets, and should go ten miles a day, each working day, it would require a whole year, and meanwhile a new city, with from 60,000 to 70,000 inhabitants, would be built.

An anvil block for a steam hammer lately cast at the Port Richmond Iron Works, near Philadelphia weighs 31 tuns. The quantity of air used in the blast to smelt it was 4.000 cubic feet per minute, and one pound of coal was used for every pound of iron melted. About 371 tuns of pig metal, for the casting, were melted in four hours in one cupola, and the mold was filled in 4} minutes.



ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WERK ENDING SEPTEMBER 9, 1862.

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\*, \* Pamphlets giving full particulars of the mode of apply ng for patents, under the new law which went into force March 2, 1861, specifying size of model required, and much other information useful to inventors, maybe had gratis by addressing MUNN & CO., Publishers of the Scientific American. New York.

36,387.—J. R. Agnew, of Mercersburg, Pa., for Improvement in School Globes:
I claim, first, The arrangement of the armed sliding standards of supports, D, in combination with the hemispherea, A A', constructed and operating substantially as and for the purpose shown and described.

bed. econd. The arrangement of the primary pedestal, F, provided with ries of screw sockets, in combination with the screw shank of the d, C, and with the armed standards, D, and hemispheres, A A', structed and operating substantially as and for the purpose sei

constructed and operating suckets, d\*, in combination with the head, C\*, constructed and operating substantially in the manner and for the purpose specified.

purpose specified.

36,388.—Sarah A. Baldwin, of Waterbury, Conn., for Improvement in Door Plates and Card Receivers:

I claim the combination of the door plate, A, reversible slide, B, and cardreceiver, C, arranged substantially as and for the purpose herein set forth, also

The clamp, D, when applied to the door plate, A, and used in connection with the card receiver, C, for the purpose specified.

[This invention consists in combining a door plate and slides with a card receiver and a clamp, arranged in such a manner that a visitor may be informed whether the occupant of the house is at home or not, and in case of not being at home, admit of the card of the visitor being deposited within the receiver, so that the occupant may obtain being deposited within the receiver, so that the occupant may obtain wledge of the call when arriving at he admitting of the application of the card or address of any individual member of the house to indicate his or her absence.]

36,389.—Cortland Ball, of Augusta, Mich., for Improve

the within described tool as an article of manufacture, con and used as and for the pur ose herein specified.

36,390.—Uriah Billings, of New Bedford, Mass., for Improvement in Machines for Making Horseshoes:
I claim my improved horseshoe blank former, or combination of the adjustable, swaging and creasing rolls, I kL, and a moveable butters, N, constructed and applied, and arranged together, and with mechanism for operating them, substantially as herein before described.

scribed.

36,391.—J. P. Blake, of Waterbury, Conn., for Improvement in Making Sewing-Machine Needles:

I claim the method of making sewing machine needles by machinery, which elongates the portion of the wire which is to form the body of the needle, thus reducing it in diameter and extending it in length, substantially as described.

36,392.—J. P. Blake, of Waterbury, Conn., for Improvement in Machinery for Making Sewing-Machine ment in Needles:

Needles: aim the combination of rolls fitted with grooves alternately fla citagonal, for the purpose of reducing the transverse dimension etal rods and elongating them in length, substantially as de

or ribed.

I also claim the combination of rolls, having a groove with an enarged space of sufficient size to permit the butt of the piece of metal, whose dimensions are to be reduced, to be introduced between the rolls, with a gage which determines the longitudinal position of the roll or other piece of metal before the rolls begin to bite upon it, sub-

stantially as described.

I also claim the combination of rolls grooved, substantially as described, with gages to determine the positions of the rods of metal, and with guides which hold the rods edgewise when the rolls begin to act upon them.

act upon them. 36,393.—J. S. Brown, of Washington, D. C., for Improvement in Addressing Letters:
I claim the envelopes made transparent or equivalent, prepared so as to receive and properly exhibit the cards of address, substantially as and for the purpose herein specified.
I also claim the combination of the cards of address and the transparent or equivalent envelopes, substantially in the manner and for the purpose herein specified.

E. A. Cone, of Milford, Mich., for Improved thes Pin:

Clothes Fin:

I claim making clothes pins of two pleces of wood of the form herein pecified, and two pleces of wire which serve the double purpose of olding the pieces, A A, together at a proper distance, and as springs a sllow the two ends to open and close as described, the pin when nished having both ends fitted for the line, in the manner speci-

95.—Frederick Dayton, of Watertown, and W. S. Kelly, of Waterbury, Conn., for Improvement in

Kelly, of Waterbury, Conn., for Improvement in Stereoscopes:
I claim, first, a stereoscope case, A, provided with a clock movement, H, and a continuous sheet, B, of stereoscopic pictures, so arranged that the sheet will be actuated or moved by the clock movement, and the pictures made to pass before the leuses of the case, substantially as set forth.

Second, The silding bar, E, arranged in the relation as shown with the journal, e. of the lower roller, C, of the sheet, B, and having one of the journals of the shaft, I, of the upper roller, D, fitted in it, whereby the pinion, J, on the shaft of roller, D, may be detached from the clock movement, so that the sheet, B, may be wound on the lower roller, C, by simply piacing the key on the journal, e, of roller, C, as set forth.

Third, The rod or stop, K, in combination with the clock movement, H, as and for the purpose specified.

36,396.—Henry Dunham, Jr., of Abington, Mass., for Improvement in Machines for Sewing Soles to Boots and Shoes:

provement ill magnines for sewing solds to book and Shoes:

I claim the combination of the covered and hooked needle with the contracted with a conceve bottom, the whole being substantially as described and represented.

I also claim the combination of the last holder with its carrying plate, in such a manner as to enable the former to be inclined with respect to the latter, substantially in manner and as set fort. I also claim the above described arrangement of the feeding mechanism with respect to the last-carrying plate supporter, M, and the sewing mechanism acurved awl and a curved hook needle, arranged and combined with a guide wheel, O, and a last having a concave bottom, the whole being in manner substantially as specified.

36,397.—Lovett Eames, of Kalamazoo, Mich., for Improved Hydraulic Apparatus:
I claim, first, The piston, J, working in an upright cylinder, A, and so constructed that it will be acted upon in its upward stroke by the force of a h ad of water, and then allowed to descend by virtue of its

own g avity, when the head is cut off, substantially as herein set forth.

own g avity, when the head is cut off, substantially as herein set forth.

Second, The water chest or divisional box, E, arranged below the main piston, J, at the bottom of the body of the machine, and furnishes with a double disk valve, F, va ve seats, f and c', and eduction chambers, substantially as herein set forth.

Third. Controlling and regulating the passage of the spent water below the piston, through said piston, by means of a loaded plate valve, H, or its equivalent, substantially as herein set forth.

Fourth, Cutting off the pressure under the piston, and its loaded valve at the instant the water has exerted its maximum force upon the piston, by means substantially as herein set forth.

Fifth, Arranging above the piston, J, a force pump, when this pump receives its power from, is connected to, and operates in combination with the mechanism in the body of the machine, substantially as herein shown.

Sixth, The central equalizing chamber which is immediately above the double valve, F, for regulating the flow of water to the piston, J, at the commencement of its upward stroke, substantially as herein set forth.

Seventh, Tripping the valve, k, by means of the avtention invived.

set forth.

Seventh, Tripping the valve, k, by means of the extension jointed levers, 11, or their equivalents, as herein set forth.

Eighth, Cutting of the supply of water to the chamber, A, previously to the tripping of valve, k, means of rod, K, and doublevalve, F, so that the doublevalve, F, can be driven firmly to its seats by the force of the head of water, essentially as set forth.

36,398.—Lovett Eames, of Kalamazoo, Mich., for Improved Water Engines:

I claim, first, So constructing and applying valves to a water engine that they will control both ports, and keep a space equal to the whole of one port open at all the time, essentially as herein described.

Second, The solid double-faced valves, L L', in the cylinder, G, alve seats, h h' i', and ports, g g', arranged and combined with the yilinder, A, and its piston, E, substantially as and for the purposes terein set forth.

36,399.—R. B. Fitts, of Philadelphia, Pa., for Improvement in Treating Night Soil:

I claim the method or process of treating and putting up night soil, for transportation and agricultural purposes, substantially as described.

36,400.—Louis Friese, of Stuttgart, Germany, for Improvement in Riding Saddles:

I claim the combination of the binged links, C, plates, B D, bow, E, and cantel, F, in the manner herein shown and described.

[This invention consists in the peculiar construction of the frame of the saddle, each side of which consists of three distinct parts, to wit, the front plate, the backplate and the central connecting link, that are united to each other by hinges in such a manner, that the same are permitted to accommodate themselves freely to the motions of the rider and of the horse, and that a galling of the horse is avoided.)

36,401.—G. P. Ganster, of New York City, for Improvement in Breech-Loading Ordnance:

I claim the eccentric breech pin, B, constructed and operating substantially as described.

stantially as described.

36,402.—R. J. Gatling, of Indianapolis, Ind., for Improved Steam Marine Ram, &c.:

First, I claim arranging and combining the ribs, bb, and transverse frame timbers, c and d, and vertical frame timbers, i. side by side, so as to form continuous bearings against each other, anteriorly and posteriorly, the same being halvedor dovetailed together at their crossing, which arrangement allows the lower parts of the rib timbers to rest on and form a crotchet over the keel, as shown in Fig. 3.

Second, I claim the dor crotchet shaped metal bow shields, ffffff, constructed, arranged and combined substantially as described for the uses and purposes set forth.

36,403.—C. W. Grannis, of Gowanda, N. Y., for Improved Condenser for Coal-Oil Stills:

Condenser for Coal-Oil Stills:

I claim a condenser which combines,
First, Sloping sides.
Second, An Internal trough to catch and conduct the condensed
vapors to an external conductor.
Third, An external spout or conductor passing through or in a trough
of cold water, to conduct the condensed vapors to the worm or cooler.
Fourth, Jets of water or a body of cold water upon its outside, in
combination with a caldron or still having a broad open top, upon
which the condenser is fitted, forming a cover thereto, so that the
wapors arising from the entire surface of the oil in the still may pas
directly to the condenser, substantially as described.

36 404 LS Cray of New York City for Improvement

36,404.—J. S. Gray, of New York City, for Improvement in Self-Generating Vapor Burners:

I claim the combination of a wick tube, a heater cap, a conductor, a jet and a mixing tube, when arranged and operating substantially in the manner herein described.

I also claim the combination of a jet, a mixing tube and an adjusting serew, when arranged and operating substantially in of regulating the relative proportions of air and vapor admitted to the burner tip, as set forth.

burner tip, as set forth.

36,405.—W. O. Grover, of West Roxbury, Mass., for Improvement in Sewing Machines:

I claim first. Giving a vibrating motion to a thread carrier, in directions perpendicular to its advancing and retreating motions, or nearly so, by means of a revolving surface, inclined to a revolving shaft, the thread carrier stock being forced against that surface, and the contrivance acting substantially as specified.

Second, I claim giving four motions to a thread carrier, by means of an inclined revolvingsurface, a pin or sleeve, and a pivot, the whole either acting on the stock or controlling its motions, substantially as specified.

sither acting on the stock or controlling institutions, specified.

Third, I claim, in combination with a thread carrier having four motions, a stationary assistant looper, substantially such as described, the two acting in combination, substantially in the manner set forth. And, lastly, I claim in combination a vibrating thread tension, a statienary thread tension, and an eye or leader on a needle arm, when the three are relatively arranged and act in combination, substantially as described, for the purposes specified.

Washing of New York City, for Improved

36,406.—Robert Haering, of New York City, for Improved Composition Substitute for Horn, Hard Rubber, &c.: I claim the composition made by mixing the changed linseed oil with asphalt, sulphur and gutta percha, in the manner and in about the proportions herein specified.

[By treating linseed oil with protochloride of sulphur, a clastic gummy substance is obtained. This invention consist pounding and masticating this substance with asphalt, and with small mantities of guttaperchand sulphur, and rolling, molding or other-

184,407.—John Hardick and C. B. Hardick, of Brooklyn, N. Y., for Improvement in Valves for Steam Engines: We claim the stationary piston, g, in combination with the cylinder, formed with or attached to the valve, b, substantially as and for the process pecdied.

We also claim the disks, k k, and annular recesses, 11, in combination with the said valve, b, and cylinder, e, to cushion the valve and prevent concussion, as set forth.

36.408.

revent concussion, as set forth.

6,408.—Samuel Horsley and E. H. Jones, of Liverpool,
England, for Improved Apparatus for Cleaning and
Polishing Boots and Shoes:
We claim the combination with the rotary brushesor buffers, h and
of the disks or rollers, n, and fulcrum and crank-lever spindles, o
nd p, for supplying the cleaning substance or blacking from the
oughs or receptacles, l, substantially as herein described.

troughs or receptacies, i, substantially as herein described.

36,409.—Albert Johnson, of Putnam, Conn., for Improvement in Water Elevators:

I claim the crank box, E, placed loosely on the shaft, C, and provided with the slide or brake, H, spring, I, pulley, e, and bar, L, in connection with the wheel, D, attached permanently to the shaft, C, and placed within the crank box, all being arranged to operate substantially controlled to the purpose set for the save of the shaft, C, and placed within the crank box, all being arranged to operate substantially controlled the purpose set for the save of the slide or brake, H, on the wheel, D, by means of the bar, J, adjusted by the screw, E, so as to regulate the attempth of the spring, I, but this I claim only when used in combination with the crank box, E, and the mechanism contained within it, for the purpose specified.

[The object of this invention] is to obtain a well windlass of simple

[The object of this invention] is to obtain a well windless of simple and economical construction, by which the bucket may be raised with facility, and allowed to fall at any time or from any point, at the will of the operator, and without a reverse movement of the crank.]

of the operator, and without a reverse movement of the crank.]

36,410.—E. B. Jucket, of New Haven, Conn., for Improvement in Hose Couplings:
I claim the conical screw ring, D, and nut, E, constructed substantially as described, in combination with hose couplings, in the manner and for the purpose substantially as herein set forth.

36,411.—C. W. T. Krausch, of Chicago, Ill., for Improve

ment in Engine Indicators:
I claim the indicator and recorder, constructed and operated substantially as described, for the purpose of making a combined record if the performances of an engine.

of the performances of an engine.

36,412.—Jacob Kritsch, of Binghamton, N. Y., for Improvement in Securing Boxes to Wheel Hubs, &c.:

I claim the arrangement of the perforated flanch, d, with the screw polits passing through it, in combination with the screw, upon the exterior of the box, B, so that by unscrewing the box access may be add to the inside of the flanch, for the insertion or removal of the crew bolts as herein shown and described, for the purpose set forth.

screw bolts as nerein snown and described, for the purpose set form.

36,413.—William Kuebler and Henry Beierlein, of Philadelphia, Pa., for Improvement in Lamps:

We claim the described burner for coal oil lamps without a chimney, in which the gas-condensing chamber, d, is provided with an internal bottom flange, g, the position of g and its proportionate size of opening being in relation to the wick, arranged as set forth. We also claim the slitted gas condenser, d, combining with the internal bottom flange, g, the slitted top as set forth, when the slit, i, is shaped and situated in relation to the slit, v, in the draught chamber, e, as herein set forth.

e, as aerein set form.

36,414.—G. T. Lewis, of Philadelphia, Pa., for Improvement in the Preparation of White Oxide of Zinc for Use in Paints:

I claim the preparation of white oxide of zinc for the manufacture of paint, by subjecting it to the combined actions of friction and pressure, substantially as herein described, whereby its density is increased and the paint caused to have greater "body."

and the paint caused to have greater "body."

36,415.—Adolphus Lind, of San Francisco, Cal., for Improvement in Water Wheels:

I claim the employment of two sets of buckets, ccdd, and separating flange, C, in combination with the drum, A, and the drum, E recessed to receive said buckets; the said parts being arranged and operating together in the manner herein shown and described.

[This invention consists in having brackets placed on the peripher; nection with a cylindrical abutment, which is placed in contact with the drum and provided with recesses to receive the buckets of the wheel; the abutment being also placed within a case and all arranged with a view to admit of the ready discharge of the water after acting upon the wheel, so that the latter will not be retarded in its move ent, or have its efficiency diminished by carrying the water who the velocity of the latter diminishes.]

the velocity of the latter diminishes.]

36,416.—R. J. Marcher, of New York City, for Improved Device for Cutting up Composition Ornaments used for Picture and Mirror Frames, Architectural Purposes, &c.:

1 claim the stock, A. formed of two side pieces, a a, connected by rods, b, or their equivalents, and provided with a screw rod, B, and thumb nut, C, in connection with the knife or planer, D, fitted in the stock, A, substantially as shown and described, and all arranged to be used with, or applied to the bed or base of the ornament, for the purpose herein set forth.

pose herein set forth.

36,417.—C. B. Matthews, of Oquawka, Ill., for Improvement in Lamp Burners:
I claim the arrangement of the spring, D, with the lamp top, A, cone, C, and chimney, E, in the manner herein shown and described, so that the said spring will adjust itself, both vertically and laterally, to the chimney, and press the chimney with a yielding pressure in both directions, all as set forth.
I also claim having the wick fork or spur wheel shaft mounted upon a spring, in the manner and for the purpose herein shown and described.

bed.

18.—I, F. Maynard, of Nashua, N. H., for Improvement in Spinning Fliers:

claim the construction of a roving or spinning flier, formed with a netrolocking base or pedestal collar, figg, and provided with a ng or interlocking tenon, dede, and whirl, C2 C2, or a gear conlon, C6, substantially as herein described, and as fully exhibited he accompanying Figures, 12 3 4 5 6 7 8.

In the accompanying Figures, 123 45678.

36,419.—Antonio Meucci, of Clifton, N. Y., for Improvement in T eating Petroleum and Other Oils to Produce a Vehicle for Paints and Varnishes:

I claim, first, The employment or use of hyponitric acid, in treating petroleum, kerosene or other oils, substantially in the manner and for the purpose described.

Second, Mixing petroleum or other oils, after they have been exposed to a current of hyponitric acid as described, with linseed or with inseed "cakes" and 6sh oil, substantially in the manner and about m the proportions herein specified.

[The invention consists in rendering petroleum and kerosene, or other liquids, fit to be used in paints, by the introduction of a surrent of the proportion of the surrent of the production of a surrent of the production of the production of a surrent of the production of the productio

other liquids, fit to be used in paints, by the introduction of a current of oxygen gas or of any other gas or liquid containing oxygen and capable of parting with the same, and it consists also in mixing with petroleum and kerosene or allied liquids, an extract of the cakes ob tained in the manufacture of linseed oil or of faring of linse of giving to said liquids the required consistency to

them fit to be used in paints.) 36,420.-T. V. Nichols, of Olena, Ill., for Improved Hedge

Trimming Device:
I claim the horizontal knives, c, of cylinder, K, for cutting or trimming the top surface of the hedge, in combination with the knives, d d attached to the ends or disks, b of the cylinder, for trimming the sides of the hedge, said cylinder being connected to a shaft, I, places on a mounted frame, A, and driven from the wheel, B, thereof, sub stantially as described.

[The object of this invention is to obtain a machine by w may be trimmed at the top horizontally, and at each side perpendicu or at an inclination, at one operation.

21.—M. T. Ridout, of Milwaukie, Wis., for Improve ment in Pad Locks:

ment in Pad Locks:

I claim the combination of the bolt, D, with the spring, s, the anguar stud, the tumbler, d, and the main spring, g, substantially in the nanner and for the purpose herein set forth.

I also claim the arrangement of the tumbler, f, with the keybole over, a, the cam, b, the spring catch, i, the stop, k, and the bolt, D, ir its equivalents, of said parts, substantially in the manner and for he purpose herein set forth.

I also claim the arrangement of the curved guard plate, h, with the unbler, f, the spring catch, i, and key pivot, q, substantially in the nanner herein set forth.

manner herein set forth.

36,422.—E. S. Ritchie, of Brookline, Mass., for Improvement in Mariners' Compasses:

I claim the arrangement and combination of the air vessel, E, with the magnet or magnets, G. I also claim the combination of the said air vessel and magnet or magnets, with the cards, D, the same being for the purposes as specified.

sied.

36,423.—John Robinson, of New Wilmington, Pa., for Improvement in Machine for Holding Open Bags and Sacks:

I claim the bag holder, constructed substantially as described, of the arms, h h', pivoted to a handle, d, projecting from a standard, b, whether so avranged as to be adjustable to any hight or not.

36,424.—S. J. Seely, of Brooklyn, N. Y., for Improvement in the Manufacture of Cor ugated Plates:

I claim making corrugated iron plates for ships' armor, or other purposes, when, by reason of the irregularity of form or the thickness of metal required, such plates cannot be produced by foling wrought iron, by first castling said plates, and then subjecting them to the pro-

cess required to change them to the condition known and distinguished as malicable iron.

as maneable from.

36,425.—J. S. Swan, of Mongaup Valley, N. Y., for Improvement in Holdbacks for Wheeled Vehicles:

I claim the arrangement of the levers, FF', and sildes, b b', in combination with the cords or chains, d e, all applied to a wheeled vehicle, and operating in the manner shown and described.

This invention consists in the arrangement of the hinged levere meeted to the truck frame or perch of a carriage or other wheele licle, by means of pivots or in any other desirable manner, in con bination with two lines or chains, one connecting to a hinged segment, for the purpose of raising the levers from the ground, and one connecting with the straps of the horses or draught animals, in such a manner that in going up; bill, if the vehicle begins a retrograde motion, and the hinged levers are lowered, the strain of the horses forces them to bear hard on or to penetrate the ground and to hold the vehicle firm in its place, and, at the same time, the progress of the vehicle can be stopped whenever it is desired.]

36,426.—J. H. Shireman, of East Berlin, Pa., for Improvement in Horse Rakes:

First, I claim suspending the hand lever, N, upon the axle, B, so that the former may articulate upon the latter, in the manner and for the purpose described.

that the former may arriculate upon the latter, it is manuter and for the purpose described, the head lever, N, arranged and operating substantially in the manner and for the purpose set forth.

Third, I claim the perforated bar, T, in combination with the hand lever, N, and inclined "way," k, substantially in the manner and for the purpose set forth.

36,427.—John Shaefer, of Lancaster, Pa., for Improvement in Constructing and Attaching Iron Panels to Wooden Frames:

wooden Frames:
I claim the manner of making metallic panels with rods or lugs, a attached, and inserting them into wooden stiles, drawn together and held in place by means of burs or screws, b, substantially as set forth for the purpose specified.

36,428.—J. H. Tanner, of Frauenfeld, Switzerland, for Machine for Folding and Stitching Paper:

I claim, first, The arrangement of the classic bands, a2 e5, and classe, e6, or their equivalents, in combination with the folding blades as and for the purpose specified.

Second, The combination of a stitching device with the folding mechanism.

hanism.

Third, The arrangement of the shears, k, and nippera, l, in combiation with the stitching and folding mechanism, substantially as and
or the purpose specified.

Fourth, The employment of the vibrating notched lever, k', and
urved slotted plate, k3, as described, for the purpose of operating the

shears.

Fifth, The arrangement of the sliding clasp, 12, in combination with
the spring jaws of the nippers, I, bracket, I', and cross bar, 13, substantially as specified, for the purpose of opening and closing the
nippers at the desired intervals.

36,429.—Hiram Tucker, of Newton, Mass., for Improved Bed Bottom:

I claim the undulating bed bottom constructed and operating substantially as described.

36,430.—William Van Anden, of Poughkeepsie, N. Y., for

36,430.—William Van Anden, of Poughkeepsie, N. Y., for Improvement in Harvesters:

First, I claim making a section of the side rail of the frame next to the cutter and in front of the axie adjustable by connecting the same to the end of the stationary part of the rail by a center pin, so that when its lower end is disengaged from the end of the front rail of the frame, it may rotate on the center pin, substantially as hereinfore described and for the purposes set forth.

Second, I also claim the combination of the cutter bed (with the cutter bar working thereon), with the adjustable section of the side rail, substantially as hereinbefore described and for the purposes set forth.

cutter bar working thereon), with the aquistance section of the purposes set forth.

Third, I also claim the combination of the propeller wheel on the side next to the cutter, of a two-wheel mowing machine, with a frame having an oscillating motion transversely of the path of the machine when the said wheel is arranged on the outside of the side rail of the oscillating frame, substantially as hereinbefore described.

Fourth, I also claim the use of the solid or fixed knife-edge bearing or shoulder formation on the propelling wheel size, as a bearing on which to balance the frame of the machine and prevent it from slipping from side to side thereon, in combination with the 'said frame, and bearing, d2, of the main driving gear wheel, F, substantially as hereinbefore described and for the purposes set forth.

Fifth, I also claim the combination of the cutter bar elevator lever, with the back end of the flooring or table and frame of the machine, behind the axle of the propelling wheels, substantially as hereinbefore described and for the purposes set forth.

Sixth, I also claim the method of making an adjustable-spring driftener projecting upward from the back edge of the table or flooring, substantially as hereinbefore described, and for the purposes set forth.

Reventh I also claim the combination of the self-adjustable com-

substantially as hereinbefore described, and for the purposes set forth.

Seventh, I also claim the combination of the self-adjustable compensating pole with a frame having an oscillating motion transversely of the path of the machine and drug chain arranged and operating as hereinbefore described and for the purposes set forth.

Eighth, I also claim the use of the adjustable snaple for locking the dragghain, in combination with a self-adjustable compensating pole, and drag chain attached to an oscillating mower frame, substantially as hereinbefore described and for the purposes set forth.

Ninth, I also claim the arrangement of the cutter bar of a mower frame having an oscillating motion transversely of the path of the machine and two propelling wheels, so as to operate forward of the axion said propel ing wheels, substantially as hereinfore set forth.

16,431.—John Vial, of Cleveland, Ohio, for Improved Pump for Low-Pressure Steam Engines:

I claim the cylinder, B, plunger, H, and piskon head, F, in combination with the valves, D C M, and induction pipe, A, and exit pipe, t, these several parts being arranged and operating as and for the purpose specified.

36,432.—L. F. Whitney, of Charlestown, Mass., for Improvement in Rails for Street Railroads:

I claim the tread rib, f, in combination with the shoulder, b, and equidistant laterally-protruding knobs, substantially as shown and described.

36,433.—M. A. Winham, of NorthSan Juan, Cal., for Improvement in Hose Couplings:

I claim the employment, for the purpose of fastening hose couplings, of two or more hinged strrups, B. in combination with the wedge-shaped noses, b, constructed and operating substantially in the manner herein set forth.

36,434.—J. W. Woolsey, of Niles, Mich., for Improvement in Potato Diggers:
I slaim the standard, C, shanks or wings, E E, and bar, F, in connection with the slats, G, of flat, oval or any approximate form attached edgewise to the standard, C, and bar, F, to operate as and for the purpose herein set forth.
I further claim separately the flat, oval-shaped slats, G, when attached edgewise to the parts which support them, to operate as and for the purpose specified.
[This invention consists in the employment of a double mold board formed of slats and provided with a fount place or coulter, with shapes

formed of slate and provided with a front piece or coulter, with shanks or wings attached, the slats being constructed and arranged in such as to greatly facilitate the passage of the earth betwe and at the same time throw the potatoes out of the hills and to eithe side of them, as the implement is drawn along.

Satisfaction of New York City, for Improved Sawing Machine Adapted for the Use of the Auger and Chisel:

I claim the adjustable or sliding head, C, in combination with the bar, D, and the spring, L, connected to the saw slides, PQ, the saw being driven from the shaft, T, substantially as described, and all arranged to operate as and for the purpose set forth.

The object of this invention is to combine a sawing machine, which ill be capable of alitting work or resawing, and sawing seroll work

with a mortising machine and a boring device; the invention iss ranged that it may be used in any of the capacities above stated with a very slight adjustment of parts and perform its work in a perfect manner.]

36,436.—Elijah Barton (assignor to A. B. White and J. W. Barton), of East Hampton, Conn., for Improved Alarm Bell for Doors:

Bell for Doors:

I claim an alarm doorbell composed of a bell, A, having a spring, with a hammer, E, attached, secured to its arm or support, B, subsatially as shown and described.

This invention relates to a new and useful improvement in alarm tells for doors; it consists in a novel way of arranging the hammer and applying the same to the bell whereby the cost in the manufacture of this class of bells is materially reduced and a much simpler device obtained than that previously constructed, one less liable to get out of repair and easily put in working order if slightly deranged by use.]

36,437.—Bethuel Keith, Adolph Behr and N. S. Keith, of New York City, for Improved Process of Calcining Ores and Minerals:

Ores and Minerals:

I claim a mode or process of ox ydizing (or roasting or raiching), all ydizable substances, such as metals, minerals, sulphurets, bitaliurets and ores, and at the same time and operation reducing to a etallicistate such unoxydizable metals as muy be present the sein, by a use of the apparatus and in the manner herein described, or any her apparatus or manner substantially the same, and which will oduce the intended results.

produce the intended results.

36,438.—B. F. Lee, of New York City, and H. A. Alden, of Fishkill, N. Y., assignors, to the New York Rubber Company, for Improvement in Hose Reels:

We claim a hose reel embracing the combination with a frame of conical, cylindrical or other convenient form capable of revolution on a vertical spindle, of supporting hooks or brackets arranged spirally substantially as herein shown and described.

substantially as herein shown and described.

36,439.—G. M. Mowbray, of Titusville, Pa., assignor to himself and Bradhurst Schieffelin, of New York City, for Improved Naval Defensive Armor:

Iclaim, first, So constructingthe framing of the vessel with timbers, C C, or their equivalents, projecting outward beyond the ribs, A A, and so applying the armor plakes in combination with such timbers or equivalents that the weight of the armor is supported to such extent as may be desirable by the said timbers, or equivalents, and by them transmitted to the keelson of the vessel, substantially as herein specified.

ned. Second. The combination of the plates, D D and a a, the blocks, c c and d d, the angle pleces, e e, or their equivalents and the lining,  $f_*$ , he whole constructed and applied in combination with the ribs,  $\hat{A}$  A, substantially as herein specified.

.—H. M. Paine, of Worcester, Mass., assignor to E. . Archibald, of New York City, for Improvement in

M. Archibald, of New Your Corp.

Steam Generators:
claim the process of generating and superheating steam by injectwater in a comminuted state into superheated steam, by contact a which its particles are converted into steam, and afterwards perting the circulation of the steam so obtained through a heated mber to be superheated, substantially as herein specified.

A Chimner M. D., of Bristol, Vt., assignor to

chamber to be superheated, substantially as herein specified.

36,441.—S. A. Skinner, M. D., of Bristol, Vt., assignor to himself and Silas Ruggles, of Fitchbu g, Mass., for Improved Bedstead, Lounge and Chair:

I claim the frame, A, provided with the folding legs, B, in combination with the silding back, F, connected to the frame, A, through the medium of the sildes, E, fitted in the longitudinal groove, e, in the outer sides of the side pieces, a a, of the frame, A and the pivoted racks, j, all arranged as and for the purpose herein set forth.

[This invention relates to a new and improved folding bedstead, lounge and chain constructed in such a manner that It may by a very

lounge and chain, constructed in such a manner that it may, by a very simple manipulation, be conveniently converted into any one of the devices above specified, and when not required to be used in any way be capable of being folded compactly, so that it may be stowed in a small space, and also very readily packed in quantities for trans portation.]

36,442.—John Sutton (assignor to himself and James Gregory). of New York City, for Improved Combination of Sofa and Vessel Berth:

I claim, first, The combination with the fixed frame, A, of the seat and berth frame, E, and seat, substantially as and for the purpose set

orth. Second, The combination with the sofa box, C, constructed as de-scribed, of the seat-elevating doors or stops, d d', substantially as and for the purpose set forth. or the purpose set forth. Third, The arrangement at the back of the seat and in the manner escribed, of the hoisting gear, for the purpose set forth.

described, of the holsting gear, for the purpose set form.

36,443.—Isaac Cummings (assignor to himself and Eugene J. Post), of Vienna, N. J., for Improved Method of Operating Shakers of Thrashing Machines:

I claim operating the shaker by a direct connection with the main shaft of the motive power, independent of the thrashing cylinder belt, and detaching the shaker from all working connection with the thrashing cylinder frame.

BE-ISSUES.

Ing cylinder frame.

RE-ISSUES.

1,340.—S. R. Andres, of Troy, N. Y., for Improvement in Articles of Food made from Beans, Peas, &c. Patented July 23, 1861:

I claim the manufacture officur, meal, grits, or grains, from beans, peas or corn, substantially as and for the purposes described.

1,341.—F. F. Fowler, of Crane Township, Ohio, for Improvement in Hay Elevators. Patented April 17, 1860:

provement in Hay Elevators. Patented April 17, 1860:

I claim, first, In the construction of elevators for hay, the combination of the permanent pyramidal supporting frame and the revolving crossbar and its braces, with a central supporting plece, for all lowing the crossbar and its braces to turn upon the supporting frame, substantially in the manner and for the purpose described.

I also claim in the construction of elevators for hay, in combination with the crossbar, revolving upon an under supporting frame, the so arranging of the sheaves and holsting tackle, as that the weight to be arranging of the sheaves and holsting tackle, as that the weight to be arranging of the sheaves and holsting tackle, as that the weight to be called the crossbar, whilst the power to raise that weight is applied to the opposite end of the crossbar, for the purpose of enabling me to use a small and compact structure, that may be easily transported or moved, occupying but little space, and smill-clently rigid with in itself, without the use of additional guys, braces or other faste utings, as herein described and represented.

I also claim in the construction of elevators for hay two pyramidal frames, one placed upon the other, the under frame being upright and the upper one inverted, and the head thocks or apeece of boths on united as that the upper frame may freely turn upon, whilst tits supported by, the lower frame, substantially in the manner described.

1,342.—Wm. H. Horstmann, of Brooklyn, N. Y., for Improvement in Submarine Cables for Telegraphs. Patented Sept. 13, 1869:

I claim, first, the combination of a conductor insulated and then covered with a fibrous coating material to form an elastic bed for the outer wires, substantially as be refind escribed, combined with extensive wire or wires laid parallel with the conductor as and for the purposes set forth.

set forth. I also claim the link for splicing the length of the conductor as above

I also claim the first for spitcing the length of the conductor asserting specified.

1,343.—W. H. Ho stmann, of Brooklyn, N. Y., for Improvement in Submarine Cables for Telegraphs. Patented Sept. 13, 1859:

I claim forming the cable herein described, by the apparatus substantially as herein set forth, consisting of coating reservoirs and wrapping apparatus, &c., or their equivalents.

I also claim the final reservoir, m, for coating a telegraph cable just before it enters the water or ground, substantially as and forthe purposes described.

I also claim manufacturing the cable at the time it is laid, when found advantageous so to do, as above specified.

DESIGN.

—S. H. Ransom, of Albany, N. Y., for Design for a 1,655.—S. H. Rai Cook Stove.

# PATENTS FOR SEVENTEEN YEARS.



The new Patent Laws enacted by Congress on the 2d of March, 1861, are now in full force, and proveto be of great be to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged to EXPENSES years, and the government fee required on filing an application for a patent is reduced from \$30 down to \$15. Other changes

the fees are also made as follows :-

On filing each Caveat
On filing each application for a Patent, except for a design\$15 On issuing each original Patent\$20
On inning each epindaton Potent
On appeal to Commissioner of Patents\$20
On application for Re-issue
On application for Re-issue
On application for Extension of Patent
On granting the Extension
On filing Disclaimer
On filing Disclaimer
On fling application for Design, seven years
On flling application for Design, fourceen years,

The law abolishes discrimination in fees required of foreigners, ex the law abundance used to such countries as discriminate against citizens of the United States—thus allowing Austrian French, Belgian. English Russian, Spanish, and all other foreigners except the Canadians, te enjoy all the privileges of our patentsystem (exceptin cases of designs)

During the last sixteen years, the busin new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the Inventors throughout the country, we would state that we have acted as agents for more than country, we would state that we have acted as agents for more sup-FIFTEEN THOUSAND inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of Inventors for and Patentees at home and abroad. Thousands of Inventors for whom we have taken out Patents have addressed to us most flattering testimonials for the services we have rendered them, and the westil which has inured to the Inventors whose Patents were so this Office, and afterward illustrated in the SCIENTIFIC AMERICAN, wonidamount to many millions of dollars! state that we never had a more efficient corps of Draughtsmen and specification Writers than are employed at present in our extensive Offices, and we are prepared to attend to Patent business of all kinds in the quickest time and on the most liberal terms.

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able, are advised to make a sketch or model of their invention, and submitti to us, with a full description, for advice. The points of novelty are carefully examined, and a reply written corresponding with the facts, free of charge. Address MUNN & CO., No. 37 Park-row, New

Preliminary Examinations at the Patent Office

The advice werender gratuitously upon examining an invention doe not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similar invention from the records in our Home Office. But for a fee of \$5, accompanied with a model or drawing and scription, we have a special search made at the United States Patent fice, and a report setting forth the prospects of obtaining a Patent ., made up and mailed to the Inventor, with a pamphlet, giving in structions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Seventh-streets Washington, by experienced and competent persons. More than 5,000 such examinations have been made through this office during the past three years. Address MUNN & CO., No. 37 Park-row, N. Y.

How to Make an Application for a Patent.

If susceptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the townsists, for the 1 stant Omes. I meet should be securely packet, and inventor's name marked on them, and sent, with the government feet by express. The express charge should be prepaid. Small models from ce can often be sent cheaper by mail. The safest way to remi concey is by draft on New York, payable to the order of Munn & Coersons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but, if not convenient to do so, there is but little risk in sending bank bills by mail, having the letter registered by the postmaster. Address MUNN & Co., No. 37 Park-row, New York.

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Persons desiring to file a Caveatcan have the papers prepared in the shortest time by sending a sketch and description of the invention The government fee for a Caveat, under the new law, is \$10. A pam phlet of adviceregarding applications for Patents and Caveats, in En glish and German, furnished gratis on application by mail. Address MUNN & CO., No. 37 Park-row, Naw York.

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limit the issue of Patents to Inventors. Any one can take out a Paten

on concerning the proper cours in obtaining Patents in foreign countries through our Agency, the requirements of different Patent Offices, &c., may be had gratis upon application at our principal office No. 37 Party-row, New York or eithe of our Branch Offices.

Rejected Applications.
to undertake the investigation an We areprepared to un cted cases, on reasonable terms. The close proximity of our Washngton Agency to the Patent Office affords us rare oppo examination and comparison of references, models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prose cuted are invited to correspond with us on the subject, giving a brief stery of the case, inclosing the official letters, &c.

### Assignments of Patents.

The assignment of Patents, and agreements between Patentees and manufacturers, carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park-row, New York.

It would require many columns to detail ail the ways in which the tee may be served at our offices. We cordially invite all who have anything to do with Patent property or inventions to call at our extensive offices, No. 37 Park-row, New York, where any questions regarding the rights of Patentees, will be cheerfully answered.

Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 57 Park-row, New



- R. W., of N. Y.—Percussion in mechanics means the striking of one body against another, or the shock arising from the col-lision of two bodies. The theory of percussion with respect to the comparison of pressure and percussion has engaged much discus-
- J. T., of Mass. Water is very slightly compressible, but for all common purposes it is considered incompressible. It is this quality which renders it so useful for being employed in Bramal pressers and hydraulic jacks, by which thousands of pounds presspreserve and update jaces, by which the square inch may be transmitted in a rising column for elevating great weights. The tubes of the Victoria tubular bridge each weighing 1,200 tuns, were raised 100 feet by water pressure. through hydraulic presses.
- S. T., of Conn.-Gas made from resin has about double the illuminating power per cubic foot of gas made from coal The gas which is made from cannel coal is also much richer in oli ent gas (which is the principal agent of illumination) than the gas obtained from ordinary bituminous coal, like that at Pittsburgh, Pa It is not the quantity of gas, therefore, which determines its value but its illuminating pow
- J. S. H., of Pa.-It is true, as you state, that the elemen tary gases of steam are hydrogen and oxygen, which produce an explosion when ignited; but steam is never decomposed in a boiler by red hot iron plates except by absorbing the oxygen and setting the hydrogen only (which is not explosive), free. An explosion in a steam boiler, therefore, cannot be accounted for by the chemica theory but by overpressure of the steam, as a low pressure easily er weakened, overheated plates
- C. C., of Mass.—The manufacture of paper was introduced into England in 1588. We do not know precisely when its manufacture began in this country, but it is said that the first mill was erected in Delaware in 1714. The term Fourdrinier, as applied to paper making machine, originated from a wealth; firm of stationers in London who made valuable improvements in paper machinery Like many other inventors they failed to realize that reward for thingenuity which they deserved.
- P. G. E., of Pa. Martin's boiler differs from the common tubular marine boiler in having water in the tubes instead of using the tubes for flues. It is described in "Engineering Precedents" by Mr. Isherwood, Engineer-in-Chief, U. S. N.
- D. & H., of Ohio.-The invention which you describe for making steel is the same as that patented by Josiah M. Heath, of England in 1839. You have evidently not made the history of this subject a study or you would not have wasted your time in reinvent ess so well known to the trade.
- . S., of N. J .- Before the introduction of machinery for the purpose, lint was made on a large scale by hand. In this pro-cess the linen rag or cloth was stretched on a small table and a sharp knife suspended above it, with the edge parallel with one series of the threads, the filling, for instance, was brought down upon the cloth with a force so exactly adjusted that it cut part way throughthosethreads which were at right angles with the edge of the blade. The knife then received a slight motionlengthwise, turning up the severed fibers in a very light, loose, soft, feathery nap e sheet of lint was still left with considerable strength direction of the threads which lay parallel with the knife, and which equently not cut.
- A. C. I., of O .- A is right. After the pressure in the generator has risen above 10 pounds and thus become sufficient to the check valve the pressure in the receiver will always be pounds less than that in the generator, for the effect operating to close the valve is equal to the pressure in the receiver plus the weight on the valve, while the effect operating to open the valve is equal to the pressure in the generator.
- C. G. C., of Mich.—Machines have been invented for loading a wagon with hay as the wagon is drawn along; but it is quite possible that you may have a novel and patentable arrangement of parts to effect the desired object. You had better send us a sketch or model of the device, as we could then give you an opinion respect ing its patentability.
- L. E., of Conn .- The fact that the heads as well as the tails of comets are a vapory mass is proved by stars being visible through them. There is generally a small nucleus which may be
- A. T., of Vt .- Prof. Charles A. Seely, 244 Canal street, New York, will make a reliable analysis of your ores.

- M. B. G., of N. Y.—The army with which Xerxes invaded Greece was measured by building a square inclosure and filling it with soldiers standing as close as they could to each other, counting them, and then lling the inclosure in succession with all the troops. After making allowances for probable exaggeration, the most intelligent historians estimate the numbers of this army at 1,700,000 fighting men. The largest number ever killed on one side in any battle was probably 80,000, the number of Romans who fell at the battle of Cannae.
- M. S. T., of Ill.—Polishing wheels made of gum shell-lac and emery are in constant use, and have been for several years
- S. M. C., of N. Y .- In spite of the authority of any number of the daily papers you may be sure the phrase "The ship was laying at the wharf," is not grammatical. To lay is a transitive verb, and unless a ship has the power of laying eggs or laying something else this verb cannot be used in connection with her. It should certainly The ship was lying at the wharf.
- N. R. G., of Ohio.-The usual charge of powder for breaching masonry is 1/4 the weight of the solid shot. Benton says that this is the greatest that can be fired without overstraining the gun and its carriage; and, besides, as the resistance of the air in-creases nearly with the square of the velocity, very little additional useful effect would be produced by a greater charge. The mean weight of siege guns is about 250 times the weight of the shot, C. S. D., of N. Y.—It has been stated in the papers that
- the French Government has paid Prof. Doremns or
- the right to use his cartridge.

  A. B. W., of Mich.—Any importer of books will get you Lt. Harris's rules for rifle shooting. Morgan James, of Utica, will make you a good telescopic rifle. Maynard's breech-loading rifle is held to be good for hunting purposes. The cost for a telesco
- E. F. J., of R. I .- You have judged correctly of our silence respecting the "great motor" to which you refer. The utility of any invention can only be determined by a practical test.
- A. M. A., of Mo.—The propulsion of steamers by a column of water ejected through a bent tube at each side of the vessel was andoubtedly the invention of your father—Alex. Anderson of Philadelphia—in 1812, and it has been revived several times since. About six years ago a steamer so propelled was built at Leith in Scotland, and was used for fishing, but we never heard whether it was successful or not. In all likelihood, the one lately tried on the river Scheldt in Belgium, to which you refer, has been copied from th that was built at Leith.
- J. H., of N. J .- Under the circumstances you speak of the the first experimenter has no claim whatever to the invention because he abandoned his experiments. The patent of the second experimenter is valid, whether he knew of the abandoned experi ments or not, and he has all the rights of any patentee, as well against the first experimenter as others. "Legal priority" attaches to him who is both the first and original inventor-who only is entitled to a patent in any case. An experimenter would not be regarded as an inventer if he failed to complete the invention.
- R. S. M., of Mass.-Electro-plating without a battery is conducted as a regular business at wast at one place in the country. L. L. Smith, at College Point, Long Island, uses for all his extensive operations Beesely's magneto-electric machine, driven by steam engine.

# Money Received

- At the Scientific American Office on account of Patent Office business, from Wednesday, Sept. 10, to Wednesday, Sept. 17 Persons having remitted money to this office will please to examine removes making removes money to me once whe pease to examine this list to see that their initials appear in it, and if they have not received an acknowledgment by mail, and their initials are not to be found in this list, they will please notify us immediately, and in form us the amount, and how it was sent, whether by mail or ex-
- C. I. Van O., of N. Y., \$15; O. S. G., of N. Y., \$15; H. M., of Mass. \$15; S. N. L., of Mass., \$43; J. C. B., of Wis., \$25; L. K., of Mass., \$25; C. A. R., of N. Y., \$30; J. K., of N. J., \$22; E. D., of Mass., \$15; H. G., of Pa., \$15; J. W. F., of Pa., \$15; H. C. A., of Ill., \$40; F. & K., of Cal., \$25; J. J., of Mass., \$15; E. T. S., of N. Y., \$250; J. J. E., of N. Y., \$250; W. & F., of N. Y., \$200; F. N., of Conn., \$10; J. McN., of Pa., \$255; H. H. S., of N. Y., \$25; L. F. H., of N. Y., \$25; P. McG., of Iowa, \$15; A. B. S., of Pa., \$50; H. & K., of N. Y., \$25; J. L. B., of R. I., \$25; T. S., of Ky., \$25; G. C. G., of 111., \$15; C. E. S., of Wis., \$20; C. C., of Mass., \$15; J. M. M., of N. Y., \$10; R. F. C., of N. Y., \$15; A. Y. McD., of Iowa, \$25; G. M. C., of Me., \$25; T. & P., of Conn., \$15; J. B., of N. Y., \$12; J. K., of N. J., \$37; E. F. & J. H., of N. Y., \$10; C. & M., of N. Y., \$25; R. P. G., of Wis., \$20; A. B., of N. J., \$20; C. H. & G. W. D., of Pa., \$20; W. D. A., of N. Y., \$80; P. &. G., of N. Y., \$20: I. H., of Wis, \$20.
- Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from September 10 to Wednesday, September 17, 1862:-
- J. K., of N. J. (2 cases); G. C., of Mich.; J. C. B., of Wis.; L. K., of Mass.; A. J. B., of Iowa; J. Mc N., of Pa.; L. F. H., of N. Y.; C. A. Mass.; A. J. B., of lows; J. McN., of Pa.; L. F. H., of N. Y.; C. A. R., of N. Y.; J. B., of N. Y.; E. F. & I. H., of N. Y.; W. H. F., of Mass.; O. M. C., of Me.; A. Y. McD., of Iowa; T. S., ot Ky.; T. W. W., of Mich.; J. L. B., of R. I.; S. N. L., of Mass.; H. H. S., of N. Y.; H. U., of N. Y.; A. T. F., of N. Y.; H. & K., of N. Y.; W. L. L., of Mass.; A. McG., of Iowa; W. D. A., of N. Y. (2 cases).

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