

ISSUED FROM THE UNITED STATES PATENT OFFICE

# FOR THE WEEK ENDING JUNE 11, 1861.

## Reported Officially for the Scientific American

Pamphlets giving full particulars of the mode of applying for its, under the new law which went into force March 4, 1861, speci parents, unser the new law which wentinto force March 4, 1861, speci-fying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

1,498.—Hiram Aldridge, of Michigan City, Ind., for an Improvement in Machines for Thrashing and Separating

1,495.—In our many formation of the second of the secon

hinged and dowelled together, and torm, when on the machine, a con-tinuation of its side boarding, all in the manner and for the purpose described. Third, The arrangement of a beater, G, which has a space existing between its blades and its axis, and operates, in the manner described, for the purpose set forth. For the purpose set forth. Third, The adjustable open extension straw carrier belt, N, and ex-tension guideway,  $\phi$ , in combination with the canvas belt, E, and first straw carrier belt, F, substantially in the manner and for the pur-pose described. Fifth, The arrangement and combination of the extra closed beater P, with the first and second open straw carrier belts, F N, substan-tially in the manner and for the purpose described. Sixth, The combination of the extension tailboard, Q, with the in-clined bottom of a straw carrier guideway, d d or  $\phi$ , substantially as and for the purpose described. Beventh, The combination of a chaff carrier, T, which is adjustable on a fixed axis; U, in the path of a vertical circle, separator shoe, K, inclined transverse return spout, Y, and elevator, Z, substantially find the manner and for the purpose described. Bighth, The arrangement of the lower end of the adjustable inclined its ave deflecting board, S, on a permanently located shaft, U, so that it may be adjusted from its upperend in the path of a vertical circle, Nuch, The arrangement of the outside hangers, S', of the adjusting frames which carries the sieve and chaff carrier, T, mobination with the shafts, U W, curves slots, n n, and screw-threaded bearings, m m, with champ nuts, substantially in the manner and for the purpose set forth. Nuch, The arrangement of the outside hangers, S', of the adjusting trames which carries the sieve and chaff carrier, the purpose de-scribed. Teuth, The extension tailboard, Y', in combination with an inclined

with clamp puts, substantiany in the mannet series. Tenth, The extension tailboard, Y', in combination with an inclined sieve, which is adjustable on a fixed axis,  $U_i$  in the path of a vertical circle, inclined bottom of the separator shoe, K, incline transverse spout, Y, and elevator, Z, substantially as and for the purpose de-combined

scribed.
1,499.—John Andrews, of Brunswick, Maine, for an Improved Mode of Securing Circular Saws to Arbors.
I claim the combination, in the manner substantially as shown and described, of the hollow, adjustable collar, E, conical bush, D, and fixed recess collar, B, with each other and with the saw, C, and arbor, A, all as set forth for the purpose specified.
[In adjusting circular saws on their shafts or arbors, great difficulty is growning upper purposed in conservations.]

is generally experienced in consequence of the variation in the diam eter of the eyes of the saws. When too large, the eyes require to be bushed in order that they may fit their arbors, and when too small they require to be filed out. The object of this invention is to obviate this difficulty, and to this end a sliding or adjustable bush is employed, with a fixed and an adjustable collar and nut, to effect in connecti the desired end.]

0.—C. L. W. Baker (assignor to himself and J. W. Bliss), of Hartford, Conn., for an Improved Corn 1.500. Broom

Broom : claim an improved article of manufacture, consisting of a broom, ng composed of the liber of broom corn set in tufts in a block of of substantially in the manner as and for the purpose described.

wood, shostantially in the manner as an for the purpose described.
1,501.—H. L. Baldwin, of Branford, Conn., for an Improve-ment in Curry Combs:
I claim the described curry comb as a new article of manufacture, having its back plate, A, and teeth, a, cast in one piece, the teeth being of cylindrical or an approximate form, and about of an equal thickness throughout their length, as and for the purpose specified.
[This invention consists in casting the plate or back of the curry comb and the late h in one piece where by an implement is obtained which

and the teeth in one piece, whereby an implement is obtained which esses many advantages over those manufactured in the ordinary

<sup>nay.1</sup>
 1,502.—Sarah A. Baldwin, of Waterbury, 'Conn., for an Improvement in Skirt Supporters :
 I claim the combination of the several strips, A B, arranged and secured together and furnished with shoulder straps, D D, lacing hooks, i i, and spring pins for attaching the skirt to the supporter, all as described and represented.

The nature of this invention consists in forming the supporter of strips of covered steel, whalebone or reed, put together with clasps so as to form a waistband which will encompass the body, and in combining with their band shoulder straps and backstays, and a means for lacing the band around the body, and also spring pinsfor attaching the skirts to the band.]

the skirts to the band.] 1,503.—L. D. Barrand, of New York City, for an Improved Scroll Sawing Machines : I claim, first, The two inclined planes, F F', on which the rollers, d d d, work, arrangedas set forth, in combination with springs, E J', connected to the guide bars, C C', between which thesa wits hung, sub-stantially as described t Second, The slotted lever, G, connected to the lower carriage on the inclined plane, F', operating as and for the purpose described. Third, The guide finges, ff, on the inclined planes, F F', for guiding the rollers, d d, of the saw carriages, as set forth. [This invention relates to certain improvements in that class of saw-ing machines in which a saw frame or sash is not employed, and

ing machines in which a saw frame or sash is not employed, and which are generally known as "mulley" saws.]

wincen are generally known as "mulley" saws.] 1,504.—H. H. Beach, of Philadelphia, Pa., for an Im-provement in Grain Winnowers: I claim the two series of chutes represented by the letters, e and d, when combined and arranged substantially as and for the purposes set forth.

forth

1000. 1,505.-S. W. Bidwell, of Hartford, Conn., for an Improved Machine for Boring and Mortising: I claim the arrangement of the pulleys, i, belt, d, friction rollers, e, with the sliding heads, B, and pulleys, c, substantially as and for the purpose described.

-C. H. Burd, of Roxbury, Mass., for an Improved 1.506. 1,500.---C. H. BURU, OI HUNDERLY, HARSH, I'V. an Amproved Telegraphic Apparatus: I claim the combination of the permanent magnet, A, the two helices, B B, and the non-magnetic movable U-piece, C, the whole

arranged substantially as explained, and so as to operate together under circumstances and in manner as specified. I also claim the key as constructed and made to operate with a bat-tery the two helices, the permanent magnet and the non-magnetic U-piece, substantially as described.

o-prece, substantially as described. 1,507.—Amos Chase, of North Weare, N. H., for an Im-proved Adjustable Chair : I claim the rod, C, secured to the under side of the seat, D, and fitted in the socket, B, when used in combination with the bar or brace rod, G, connected with the back, F, and secured at its lower end to an arm, H, which is attached to rod, C, and is fitted in a slot, c, in the socket, B, the whole being arranged as shown to form an improved silding or adjustable chain or seat. [An engraving of this invention will appear soon.]

[An engraving of this invention will appear soon.]
1,508.—Darwin DeForest Douglass, of Springfield, Mass., for an Improvement in Window Blinds:
I claim, first, The flat metallic guide bars, A and C, made substantially in the manner described and for the purpose specified.
Second, The rack and philon, G and I, or its equivalent, in combination with the guide bars, A and C, and blinds, for the purpose specified.
1,509.—W. C. and J. Dunn, of New York City, for an Improvement in Carriage Bodies:
We claim, first, The combination of the open body. A, with the standing top, formed of the end pieces, E E, top, F, panels, G, and Soons, H, secured together as and for the purpose storth.
Second, The combination of the permanent open body and calash top with a standing top, constructed as explained, the whole being adapted and arranged to form a new and improved convertible body for vehicles, as set forth.

[The object of this invention is to combine an open body, brett or barouche body and close or standing top coach body all in one vehicle, so that either form of vehicle, by a simple manipulation, may be had as desired, and the whole device rendered capable of being anufactured nearly as cheap as the ordinary coach,]

1,510.—R. Finnegan and A. F. W. Schulte, of New York City, for an Improved Pressure Gage: I claim, first, The employment for transmitting the movements of the flexible plate, B, to the index, g, of a lever, F, and spirally grooved spindle, H, combined and applied substantially as specified. Second, The movable block, E, carrying the future mo the lever, F, and the screw, I, applied in combination with the slotted bar, D, or its equivalent, and operating substantially as specified, for the adjustment or correction of thegage.

1,511,-John Griffin, of Louisville, Ky., for an Improve-ment in Engines, &c., for Overcoming Dead Point in

Cranks : **UTAINES:** I claim the combination with the crank, **B**, of a suspended ring, **D**, Bispended between springs, **E**, so as to act upon the crank when assing its centers, in the manner shown and described.

1,512 .- David Haines, of Union Bridge, Md., for an Im-

provement in Hominy Machines: I caim the hopper. D array of the provements in noming machines: I caim the hopper, D, arranged as set forth, the vibrating stirrer, E, contracting yords, ij, arm, k, and crank shaft, G, all arranged and oper-ating as and for the purposes described.

[This invention relates to certain novel improvements in machines for making hominy, and clearing the same of its bran and other im-purities. The nature of this invention consists in arranging within a perforated cylinder a series of toothed beaters of a peculiar character. nd in giving opposite rotary motions to said cylinder and beaters, fo the more perfect and rapid reduction of grains of corn to hominy. It also consists in the arrangement of a vibrating stirrer within the hopperforkeeping up a regular feed, said stirrer being combined with and operated by the crank shaft, which gives the shaking motion to the riddle.

1,513.-Edward Howell, of Ashtabula, Ohio, for an Improvement in Sewing Machines: I claim the operating of its wheel, E, when constructed and ar-ranged as described, by means of the elastic pad, K, substantially as and for the purpose specified.

and for the purpose specified.
1,514.—E. F. Hyde, of Brooklyn, N. Y., for an Improve-ment in City Railroads:
I claim the arrangement of the sliding adjustable wheel, D, with the axle, C', and lever, E, as and for the purpose shown and described
[The object of this invention is to supersede the use of the ordinary switches and switchmen which are necessarily employed to adjust or operate them, so as to not only economize in labor but also to econo mize in the expense of the construction of the ward at the turn-outs

as well as in keeping the same in proper repair.)

1,515.—G. L. Jencks, of Providence, R. I., for an Improvement in Hemming Guides:
 I claim the peculiar arrangement or method, substantially as described, of uniting the fingers, 123, upon the stock of a pressure pad, for the purpose specified.

tor the purpose specified. 1,516.—Rhodolphus Kinsley, of Springfield, Mass., for an Inproved Bell-ringing Apparatus: I claim, first, The employment or use of one or more hammers, N, secured to a rotating platform, C, and operated simultaneously and automatically with the platform, C, so as to strike the bell, A, and rradually rotate within or beneath it, for the purpose specified. Second, The placing of the hammers, N, within adjustable tubes or sockets, L, arranged substantially as shown, for the purpose of adjust-ing the hammer, so that the latter will always strike the bell at right arranged resonance of the hammers of the strike the bell at right and the second of the hammer of the hammers of adjust-ing the hammer, so that the latter will always strike the bell at right arranged substantial the strike the bell at right the second of the se

Third, The arrangement, as shown and described, for the gearing, Third, The arrangement, as shown and described, for the gearing, F G J and K, with the radial arms, e, on wheels, F F, the pins, cd, and the probability of the purpose set forth. Fourth, I claim the combination of the hammer rods, M, and the ro-eck springs, P, when applied to the hammer rods, M, to operate as and for the purpose specified.

and for the purpose specified. 1,517.--W. S. Kirkham, of Branford, Conn., for an Im-provement in Locks and Knob Latches: I claim constructing the hub, F, of two parts, f g, fitted together as shown, and both parts placed on the knob arbor, G, and used in con-nection with the spring. H, the above parts being arranged with the slide, E, lever, D, and latch, C, to operate as and for the purpose set forth

forth This invention relates to an improvement in locks or knob latches, whereby the latches may be turned so as to suit either right or left hand doors, and properly secured in position so that they cannot be casually turned.]

,518.—Wm. A. Lighthall, of New York City, for an Improvement in the Construction of Tube Sheets for Coolers and Condensers: I claim constructing tube sheets for tubular coolers and condensers in the manner set forth. 1.518.

1n the manner set torth.
 1,519.—Henry Lowe, of Baltimore, Md., for an Improvement in the Manufacture of Caustic Soda:
 I claim the molding and burning of artificial carbonate of lime, substantially in the manner and for the purposes set forth.

stantially in the manner and for the purposes set forth. 1,520.—Richard Mansley, of Philadelphia, Pa., for an Im-provement in Machines for Opening Rope : I claim, first, The combination of the separate upper feed rollers, D 0', &c., their supports, P, and the reds, d, connecting them with the levers, d'', and weights, d''', the whole arranged substantially as de-scribed and for the purpose aforesaid. Second. The combination of the beaters, b, knife blades, b', and the adjustable feeding apparatus, the whole constructed and arranged sub-stantially as described.

stantaay as described. 1,521.—James McCarty, of Reading, Pa., for an Improve-ment in Annealing Cut Nails : I claim annealing cut nails by confining them in a suitable vessel, subjecting both vessel and contents to a red heat, and allowing the whole to cool from six to twelve hours, according to the size of the

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nails and tube, and maintaining the vessel airtight during the heating and cooling process, as set forth.

13

1,522.—H. McKenzie, of Talladega, Ala., for an Improve-ment in Tanning Leather : I claim the employment or use of the root and other parts of the plant known by the name of Geanothus Americanus, either alone or mixed with oak bark or other tanning materials, as described, for the purpose of tanning hiles or skins.

or tanning netes or skins. 1,523.--W. H. Nichols and F. D. Strong, of East Hamp-ton, Conn., for an Improvement in Nail Heads : We claim an ornamental mail or screw, made with a head which is first east upon the shank and then pressed in the manner shown and described.

[This invention is an improvement in forming ornamental metallic heads on the heads of common nails or screws by first casting a circular blank on the head of a nail or screw, suitably adapted to the size thereof, and then producing from said blank a head of the desired shape and ornamentation, by subjecting the btank to swaging dies adapted to the purpose, thereby obtaining a superior article, at less cost and with less imperfect work than can be made in the ordinary methods of forming ornamental heads on nails and screws.]

hethous of forming ornamental nears on nais and screws.] 1,524.—J. S. Parker, of West Willington, Conn., for an Im-provement in Machines for Turning Spools: I claim the combination of the protecting dog. E, or its equivalent, with the cutter head, A, for the purpose described. [This invention consists in the arrangement of a hinged dog, in com-1,524.

bination with an adjustable slide, and in such relation to the longituinally shall acquise the site, and in such relation to the longue dinally shall goutter head that, by the action of said dog, the end of the block is kept clear of the cutter intended to square said end until, by pushing the cutter out, the other end of the block is firmly driven into the spurs of the spur center, and a turning of the block independent of the said spur center.]

1,525.—F. A. Perry, of St. Louis, Mo., for an Improved Ornamental Fabric or Manufacture for Window

Shades: I claim as a new manufacture, a thin fabric prepared in the manner described, and ornamented in initiation of embrodery, either needle or tambour, in colors or white, substantially in the manner set forth.

or tambour, in colors or white, substantially in the manner set forth. 1,526.—J. H. Phillips, of Waverly, Mo., for an Improve-ment in Hemp Brakes : I claim having the edges of the clearers, aa, made in scolloped form, and so operated and geared that the scolloned blades of one wheel shall alternately pass between the blades of the opposite wheel, thus alternately elevating and depressing the hemp between the scolloped edges, all in the manner and for the purpose shown and described. [The nature of this invention donsists in possing the stalks of hemp or fax (the machine being well sconted for either nurses) between

or flax (the machine being well adapted for either purpose) between two breaking feed rollers which bruiseand crack the woody matter, and afterward submitting the bruised Stalks to two peculiar rotating cleaners, the slats of the wheels spread the stalks, and break away or knock of the boon from both sides of the stars, and, at the same time, give the stalks a shaking motion without injuring the long fibers.

the stalks a shaking motion without injuring the long fibers.
1,527.—S. S. Putnam, of Dorchester, Mass., for an Improved Horseshoe Nail Machine :

claim, first, Connecting each pair of hammers to a single lever or crosshead, through which they are operated, and by means of which they may be made to strike simultaneously and accurately around a line instant the transformer of the nail rod.
Second, for combination with the above, I claim the connecting rods, s and v, and eyebolts, r and u, or their equivalents, operating as set forth, for the purpose specified.
Third, I claim the rod, J, in combination with the levers, G and H, and with the hand lever, W, and lever, r', or their equivalents, where they the hammers may be stopped and started at the will of the operator, and with the hand lever, W, and lever, r', or their equivalents, where has the them.

and with the name to  $C_1$ ,  $M_1$  and  $M_2$  and  $M_2$  at the will of the operator, as set forth. Fifth, The gage, d2, which is brought into position to gage the nail rod while the hammers are stationary, and is drawn out of the way be-fore they are again started by derices acting by the power of the ma-chine itself, but brought into action of the operator, as set forth. Sixth, I chaim the rod, P, with its notch, IS, and shoulder, 2, in com-bination with the shaft, U, and the parts immediately connected there-with, whereby the nail rod isalways returned to its position, and the cutter, y', is raised out of the way of the hammers before they are started, as set forth.

1,528.-G. W. Rains, of Newburgh, N. Y., for an Improved

1,528.—G. W. Rains, of Newburgh, N. Y., 107 an Improved Apparatus for Steam Boilers: I claim, first, 'Theinvertet conical throat, g, arranged relatively to the water sipe or passage, a, and in combination with a piston rod passing through the bottom of the cylinder, substantially as and for the pur-pose specified. Second, Furnishing the piston, B, with one or more valves, e, ap-plicat to operate substantially as described for the purpose set forth. Third, The independent weight, J, applied to the piston rod, C, to operate in combination with the dog, I L, substantially as and for the "uncone smedified."

[This invention consists in certaimimprovements in the apparatus which constitutes the subject matter of Seller's patent, issued to the same inventor on April 24, 1860, and re-issued July 24, 1860. It could not be well explained without an illustration.]

1,529.-J. R. Robinson, of Boston, Mass., for a Damper

1,529.—J. R. Robinson, of Boston, Mass., for a Damper for Steam Boilers:
I claim the combination with a sliding damper applied to the rear tube sheet of a horizontal multitubular boiler, of a stationary frame, c, interposed between the said tube sheet and the damper, to form a space between the said damper and the tube sheet, substantially as and for the purpose specified.
And I also olain the construction of the so applied frame, C, with two or more openings, b bl b2, each or a size to communicate with one or more tiers of tubes, said openings being separated by bar-like parti-tions, which either fit of the tube sheet or not, as shown at d and e, in Fig. 2, substantially as described.

Fig. 2, substantially as described.
1,530.— J. R. Robinson, of Boston, Mass., for an Improvement in Valve Gear of Steam Engines:
I claim, first, The employment of two eccentrics connected by a link, for the purpose of closing the ports at various points in the stroke of the piston, in combination with independent means of opening the ports for the induction of steam, substantially as described.
Second, The employment, in combination with the so applied link, and its supporting rocker, N, of a teggle, O P, so arranged and applied link, throughout its whole range of motion on the valve wrist, and back again, substantially as and for the purpose specified.
Third, The employment for combining the throttle valve with the toggle, O P, which effects the movement to the cut-off link, of a toggle, O, P, which effects and rowenent hore direction is substantially as a solution of the eut-off link, of a toggle.
Third, The employment for combining the throttle valve with the spring, y, and aspring, y, the whole combined and operating substantially as specified.
1531 L B. Sawwar, of Templeton, Mass. for an Impleton and the solution of the substantially as the spring of the substantially as the spring of the substantially as the substantial of the substantial substantial of the substantial substantial substantial of the substantial substantial and the substantial substantial and the substantial substantial substantial and the substantial substantial and the substantial substantial and the substantial substantial and the substantial substantial substantial and the substantial and the substantial substantial substantial and the substantial substantial substantial substantial substantial and the substantial subs

specified.
specified.
1,531.-J. B. Sawyer, of Templeton, Mass., for an Improved Cane Scat for Chairs:
I claim, as a new article of manufacture, a cane bottom chair made single, but the strandsof ratan-in which are so interwoven as to form a commutous bearing surface, and are secured to the frame, A, by suitable holes, fl, in the manner substantially as specified.
1,532.-W. B. Strong, of New York City, for an Improved Trunk Convertible into a Bedstead :
I claim a trunk formet of two equal parts, a a', connected by hinges at one end, and provided with his, bb', the latter having a folding frame, c, a framing combined with bars, e d, a cover, C, of waterpoof fold more a combined army trunk and bedstead or couch, as set forth

(The object of this invention is to combine a trunk and bedstead in

uch a manner that the trunk may have nearly its usual available ca-

pacity for the reception of clothing, and still admit of being readily con-verted into a bedstead when required. The invention is designed for

the use of the army. Officers and such members of the army as are allowed to carry trunks with them while occupying the tents of a camp, cannot be generally provided with anything in the way of a bed stead to keep them elevated above the surface of the ground.]

1,533.-E. F. Slocum, of Chicago, Ill., for an Improvement in Lamps: I claim the combination of three or more springs with a lamp top, ar-ranged substantially as described and for the purpose specified.

1,534 .- E. W. Smith, of New York City, for an Improve-

1,534.—E. W. Smith, of New York City, for an Improvement in Steam Engines: I claim, first, Heating the cylinder of a marine steam engine by inclosing said cylinder in whole or in part within steam, which is genericated separately from and at a higher pressure and temperature than the imitial pressure of the steam admitted to the litterior of the cylinder, substantially as and for the purpose set forth. Second, The employment of the donkey boiler, C, connections, D, leading from the base of such connected spaces to the main boiler or series of boilers, A, all coorbined and arranged substantially as and so as to operate together in the manner set forth.

1,535.—George Smith, of New York City, for an Improve-ment in Combined Burglar Alatm and Animal Trap :

I claim the sere, E, arranged or pivotted as shown, to admit ords or chains being attached to both ends of it, in combination w he hammer, C, and one or more fire-arm barrels, A, substantially of for the purposes described. and for the purp (The object of this invention is to obtam an implement which may be

connected to one or more doors or windows of a building, so as to sound an alarm if anyone of them is opened, the implementat the ame time being capable of advantageous use as an animal trap.] 1,536.-Abraham Stroh, of Port Jervis, N. Y., for an Im-

1,050.—Abraham Stron, of Fortservis, v. 1., for an inte-proved Car Coupling: I chim the combination and arrangement of the slotted gravitating drop, H, bolt, G, box, C, springs, c, draw-head pipe, B, bolt, E, and draw-head, A, all in the manner and for the purposes herein shown and described. (The object of this invention is to obtain a coupling for railroad cars

that will admit of cars having blatforms of different lengths being con that will admit of cars having platforms of all other rengins being con-nected together, the coupling also admitting of a perfectly free vibra tion of the cars both laterally and vertically. Another object of the invention is, that it may couple itself and the parts be so arranged that in uncoupling or disconnecting the cars, the piece used need not be withdrawn from the draw-head but merely elevated a certain distance to clear or free the shackle, and be at that point supported by a drop. The invention has further for its object the applying of springs in such a manner as to insure durability and a perfect action thereof.]

a manner as to insure durability and a perfect action thereof.]
1,537.—S. C. Sturtevant, of Cleveland, Ohio, for an Improvement in Tubular Grates for Steam Boilers: I claim a series of detablable fluegrates when used in combination with the pipe, F, as and for the purpose specified.
1,538.—John Trageser, of New York City, for an Improvement in Apparatus for Evaporating Liquids: I claim the arrangement of one or more angular projections, a, on the sides of the pupes, a, of a cooler or evaporator, substantially as and for the purpose shown and described.

and for the purpose shown and described. 1,539.—A. H. Trego, of Lambertville, N. J., for an Im-provement in Car Coupling: I claim the attaching of rods or bars, C, to the bolts, B, when the said rods or bars are arranged as shown, so that their lower ends may, as the bolts are elevated, drop by their own gravity into the back parts of the draw-heads and sustain the bolts, the rods or bars being at the same time, in such position as to be acted upon or thrown out by the entrance of the shackle or link into the traw-heads, so that the bolt may ropinto the link, substantially as described.

1,540.-C. Van Name, of Binghamton, N. Y., for an Im-

proved Stanchion for Canal Boats:

claim the employment of cast iron stanchions, A, with fianch and attached to the deck, B, by means of bolts, c d, as and for se described. nurp [This invention consists in the employment, for the nurnose of sup

porting the rail, of a cast iron stanchion secured by bolts, which pass down through the deck, one of them into one of the beams which sup port the deck, and another into one of the ribs, in such a manner that by said stanchions the strength  $c_1:\omega$  boat is increased, and that a blow on the rail does not injure the structure of the boat.]

1.—James Weathers, of Greensburg, Ind., for an Improvement in Heading Bolts: ciam the headingtool, A A', B, C, C', e, D, D', constructed and ating substantially as set forth.

1,542.—E. R. Weston, of East Corinth, Me., for an Improvement in the Process of Converting Iron into Steel by Cementation :

aim the use of the fused or fusible metal upon the clay covering e crucible, as set forth.

1,543.-S. R. Wilmot, of Brooklyn, N. Y., for an Improve-

1,043.—5. R. Wilmot, of Brooklyn, N. Y., for an improvement in Hoop Skirts: I claim constructing the metallic slides and tips for hoops of skirts, with a lip or story of a length equal to the thickness of the hoop, ubstantially as and for the purpose set forth. [The object of this invention is to provide tips and slides for the hoops

of skirts with stops, so arranged as to prevent the hoops from slipping through them and at the same time admit of the tips and slides being swaged or glued directly on the hoops without any previous manipulation of any kind, thereby greatly economizing in time in their manu facture.]

1,544.—S. E. Woodworth, of Murphys, and J. E. Weth-ered, of San Francisco, California, for an Improved Arastra: We claum the combination of a cast iron arastra with ball bearings, G E G E, and ball pivot, H, of hollow center shaft, I, constructed in the manner and for the purposes described.

-G. W. Bridgman (assignor to himself and Osgood 1.545

1,545.—G. W. Bridgman (assignor to himself and Osgood Dane,) of Somerville, Mass., for an Improvement in Car Brakes:
I claim the combination and arrangement of the two rack bars, K K, the racks, I I, the gear, H, and the two pinnons, G G, and drums, F F, or the mechanical equivalent of such pinnons and drums, applied to the carriage body or plattorn frame, and the draft chains of the brakes of the two truck frames.
I also claim the arrangement and combination of the hand wheel shatts, N N, pinions, M M, and trucks, L L, or their mechanical equivalent of such pinions, F F, or the mechanical equivalent of such pinions, and F, and the statt of such pinions and drums, the whole being to operate substantially as and for the purpose or purposes, as specified.

-S. L. Fitts (assignor to C. and G. C. Winchester f Ashburnham, Mass., for an Improved Boring Ma 1,546.

of Ashburnham, Mass., for an improved Boring Ma-chine: I claim the construction of an automatic machine for boring holes around the edge of an irregular-shaped article, when arranged and operating substanially as set torth. Second, I claim the ratchet, r, and feed mechanism,  $\odot$  P Q R S, in combination with the revolving boring or drill shaft, D; operating sub-stantially as described. Third, I claim the sluding carriage, I, and sorting, L, for holding the carriage, M, up to the stop, v, or its equivalent, operating substantially in the manner set forth.

1,547.—A. M. Hill (assignor to W. S. Kirkham), of Bran-ford, Conn., for an Improvement in Locks and Knob Latches:

I claim the fitting or placing of the latch, C, of the lock in a collar,

which is placed in the face plote, B, and allowed to turn therein, the collar having two paralle, planesurfaces, e e, at its innerpart, and used in connection with the slide, I, placed at the inner side of the face plate, all being arranged as and for the purpose set forth.

[This invention relates to a simple means for admitting of the latch of the lock being turned to suit either a right or left hand door, and consists in leaving the outer part of the latch fitted in a collar which is placed in the face plate of the lock case and allowed to rotate there in, the collar being retained or prevented from casually turning by means of a catchor fastening 1

#### RE-ISSUES.

90.—J. A. Vaughn, of Cuyahoga Falls, O., for an Improve-ment in Grain Separators. Patented April 24, 1860. I claim the combination of a series of zig-zag riddles and directing boards, having a shake motion imparted to them with a short fan, when arranged to operate therewith substantially as described.

arranged to operate therewith substantially as described.
91.—J. A. Vaughn, of Cuyahoga Falls, O., for an Improve-ment in Grain Separators. Patented A pril 24, 1861 : I claim in combination with a series of zig-zag screens or riddles, and a series of directing boards having a shake motion, the stationary receiving chambers, for receiving the material from the screens, sub-stantially as herein described.
I also claim the combination of the series of zig-zag screens and di-recting boards having a shake motion, the stationary receiving cham-bers, and short fan, when arranged to operate substantially as herein described.

described. I also claim the combination of the directing board, P, cockle riddle, Q, and cockle board, substantially as and for the purposeherein de-scribed.

92.—Ira Perego, Jr., of New York City, for an Improve-ment in Shirt Bosoms. Patented Sept. 25, 1860: I claim, first, A shirt bosom made with a stiffening strip or strips of suitable material, applied substantially as and for the purposes herein set forth. cond. A shirt bosom having the upper portion thicker and stiffer the lower portion, substantially as herein described.

han the lower portion, substantially as herein described. [The object of this invention and improvement in shirt bosoms, is to prevent the upper part of the bosom, which is in sight, from rumpling or drawing up, and thus presenting a very unsightly appearance after being worn but a short time. The nature of the invention consists in the employment of an extra thickness or thickneses of cotton, linen, or other suitable material supplied to the bosom of a shirt, that the upper part of the bosom, or that part which is in sight, will be read ered less fiexible than the lower part of the bosom, when the bosom is starched and ironed in the usual manner. It will be perceived th the unstiffened part will break first and have the effect of keeping the upper portion stiff and unbroken for a considerable length of time.]

DESIGNS. -Levi L. Tower (assignor to Cutter, Tower & Co.), of Boston, Mass., for a Design for Trade Mark. 67.

#### New Books and Periodicals Received.

THE ATLANTIC MONTHLY. Published by Ticknor & Felds,

Boston. The July number is full of patriotism and heart-stirring literature. i. opens with an ode, entitled "Marching Orders," the periods of which thrill upon the ear like the sound of marching armies going orth to battle. It also contains a spirited and touching article on "Vashington as a Camp," by the late launented Major Winthrop; also touching biography of Colonel Ellsworth, who was assassnated at Alevandria. a touching Alexandria

AMERICAN JOURNAL OF PHOTOGRAPHY. Published by Charles A, Seely, No. 244 Canal-street, New York. This orignal, able and most useful journal connected with photo-graphy, commenced a new volume this month, in an enlarged and improved style. It is a semi-monthly publication, and deserves the support of the entire photographic profession. It's editor is an able chemist, as well as professor of photography and the allied arts.



not patentable. The ariling of radial chambers for powder and ball communicating by vents with a central fuse was suggested long ago, as an improvement on the shrapnell shell.

A. D., of Mass .- Of your specimens, No. 1 is a sulphuret of iron becoming oxydized; No. 2 is quartz; No. 3 is one of the com-plex earths—it contains clay and magnesia; and No. 4 is gneiss of stratified granite, the shining particles being mica. All four are worthless. You would gain nothing by placing an undershot wheel below an overshot. On the contrary, you would lose that portion of

the fall required to fill and empty the buckets of the second wheel. R. E. G., of N. Y.-You will find illustrations of a good valve for an oscillating engine on page 81, Vol. XII. (old series), of our journal, and another on page 256, Vol. I. (new series). The for-mer was invented by Crdge & Wadsworth, of Pittsburgh, Pa., and the latter by Adam Wood, of Arsenal, Pa

Y. G., of N. Y.—You are entitled to withdraw \$20 on your rejected case if it was filed in the Patent Office previous to the 2d of March. Since that time the schedule of fees has been changed. We mail you one of our pamphlets of advice to inventors, which we send free to any one who may wish a copy.

N. P., of N. Y .- You seem to be prolific of inventions, and ems to us that your ideas are novel. Send us sketches and a de it se scription of your devices, and we will carefully examine them.

C. B. K., of Mass.-You will find a good rifle illustrated in this number of our paper. We think this is a most excellent weapon

T. H. W., of Pa.—We have received your very kind note in reference to the renewal of your subscription. We certainly feel very much obliged to you for your past exertions in endeavoring to extend our circulation, and we regret exceedingly to hear of your misfortunes as connected with business at the South. We must all

suffer from this heavy national calamity, and do our best to support the government, without which we are in a state of anarchy and disgrace. B. H. J., of N. J.-We suppose that no nation in the world is making stronger efforts toward advancing in the arts than France,

and we infer from this fact that useful inventions ought to be valuable there. By a recent decree, the Emperor appropriates 40,000,000 francs to enable French manufacturers to purchase improved machinery, and thus compete with the English manufacturers. We are not possessed of full particulars of this judicious movement.

B. H. W., of C. W .- The specimen of stone which you send us is perfectly worthless. We are much obliged for your sug-gestions, and will take them into due consideration. We hope you will be able to procure a large list of subscribers in your vicinity.

C. C., of Conn.-It is impossible to fix any definite scale of values respecting patents. This question has been discussed time and again, without any practical results. It recently came up before a convention in Paris, composed of manufacturers, men of science and merchants. It was proposed to abolish patents and to substitute a system of government payments proportioned to the value of the respective inventions. The discussion ended with a very general impression that the idea was not practical, and that a system of laws granting patents was the very best which had ever bren devised for fostering art and science.

P. S., of Md.-Brown linen cannot be prevented from washing white, as the repeated application of soap and water bleaches the linen. We do not think there is any chemical that will aid you in this matter.

F. H., of Pa.-You are unquestionably right in asserting that, "since the introduction of gunpowder and firearms, wars have been less sanguinary, because decided with greater rapidity."

history of ancient and modern warfare fully confirms this assertion E. B., of N. Y., asks :-- "Is it patentable to apply an old principle to a new purpose ?" We answer yes, provided a new and seful result is thereby produced.

H. L., of N. Y .- Spectacles which would enable persons to see at night would be very useful, and, no doubt, very profitable to the discoverer. They would be of great advantage to night-scout parties

D. D. G., of Mass.-If you have been a careful reader of our paper, we are surprised that you should be ignorant of the name of the Commissioner of Patents. Refer to your back numbers, and ou will soon find out

H. C., of Md .-- We have examined your alleged improvementin conical shells, and it seems to us that you have hit upon an excellentidea. We advise you, by all means, to try an experiment and test is merits. There may be some radical defect in it that can only be found out by actual trial.

S. M. G., of Vt .- We are glad to learn that your invention works well, and that you are offered a liberal sum for the right. The patent law does not require a citizen to work or put on sale his pat-ent within any specified time. This is required only of foreigners.

E. M. F., of Pa.-We believe you can obtain the composition used in printers' rollers in Philadelphia, from any person who and Dutch streets, this city, will supply you.

R. W., of N. Y.-The city of Washington was taken by the British, under General Ross, on the 24th of August, 1814. The army of the invaders numbered only 4,000 men. They landed at Benedict, on the Patuxent, on the 20th, and marched for three days to the capital. The American militia, numbering 8,000, did not stand five minutes after the British opened fire; but the saliors under Captain Barney defended their battery to the last inch. Rather than retreat, they suffered themselves to be cut down at their guns. General Ross declared that had the militia behaved like the sailors the British army would have been annihilated. They lost 500 men mostly by the cannon of the seamen.

R. W. T., of N. Y .- If you propose, by establishing iron works on the line between this country and Canada, to evad the revenue laws, of course it would not be permitted.

### Money Received

At the Scientific American Office on account of Patent Office business, during one week preceding Wednesday, June 26, 1861 -

1861:— A. M. ●., of Wis., \$25; O. B. & K., of ●., \$15; C. C. P. W., of Mass., \$15; W. E. F., of Mass., \$25; J. H. S., of N. Y., \$15; A. W., of N. Y., \$43; J. R., of N. Y., \$15; W. H. B., of Mass., \$15; J. W. C., of Mich., \$10; L. D. G., of N. J. \$15; G. K., of N. Y., \$250; F. G. L., of Iowa, \$25; G. W. B., of N. Y., \$43; R. W., of Pa., \$15; C. M. P., Jr., Mass. \$25; F. & H., of N. Y., \$10; S. & L., of N. Y., \$20; J. L., of Mich., \$15; B. & R., of Ohio, \$25; A. H. H., of Mass., \$15; J. J., of N, Y., \$75; G. W. B., of L. I., \$20; H. H., of Ill., \$10; S. I., of Pa., \$10; G. D. H., of Il., \$15; J. M., of •, \$15; G. R. S., of Wis., \$20; E. E., of Cal., \$20; W. F. Q., of Del., \$15; L. S. H., of Cel., [315] H. L., of Mass., \$15; J. B. McM., of N.Y., \$225; T. F., of Mass., \$15; C. M(W., of Cal., \$10; W. B. R., of Cal. \$30; L. C., of N. Y., \$15; W. H., of Ct., \$15; J. C., of Pa., \$20; J. C. B., of N. Y., \$20; N. G. S., of N. Y., \$20; L. B. S., of Ct., \$20; B. T. B., of N. Y., \$20; H. G., O'N. Y., \$20; C. B., of N. Y., \$20; G. & S., of O., \$45; D. S., of Mass., \$20; N. C., of N. Y., \$20; C. H. F., of N. Y., \$20; E. D. W., of Mass., \$20; N. C., of N. Y., \$20; C. H. F., of N. Y., \$20; E. D. W., of N. Y., \$20; E. C. M., of Iowa, \$25; F. B. McG., of Mat., \$25; W. M., of Mass., \$25; M. D. C., of VL, \$25; E. M. A., of Iowa, \$25; D. L. of VL, \$20; W. M., of Mass., \$45; A. D., of N. J., \$20; O. L., of N. Y., \$40; P. D., of N. Y., \$25; S. E. •., of Ohio, \$25; A. M., of N. Y., \$25; G. & S., of Ohio, \$25; C. N. B., of Pa., \$25; W. S., of N. Y., \$10; W. F., of IL, \$35; C. H. B., of Pa., \$20; E. S., of Mass., \$20; L. H. D., of N. Y., \$25; G. S., of N. Y., \$25; G. S. doft, A. B., of N. Y., \$25; M. S., of N. Y., \$20; Y. F., of IL, \$20; Z. H. H. B., of N. Y., \$43; J. G., of L. I., \$20; E. K. M., of N. Y., \$25; G. S. A. of N. Y., \$20; S. S. L., of N. Y., \$10; S. S. H., of Mass. \$25; H. W. W. doft, Mass., \$26; H. W. W. dott, Mass., \$26; H. W. W. dott, Mass., \$26; H. W. W. dott, Mass., \$26; H. W. M. dott, Mass., \$26; H. W. Mass., Mass., \$26; H. W. Mass., Mass., \$26; H. W. Mass., of Mass., \$25; B. M., of Ind., \$15; J. B., of Ohio, \$25; H. W. W., of Cal., \$20

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from June 19 to Wednesday, June 26, 1861:-

R. W., of Pa.: F. G. L. of Iowa: J. W. C., of Mich.: S. E. O., of Ohio; A. M. O., of Wis.; B. & R., of Ohio; W. F., of Ill.; S. S. H., of Mass.; A. H. B., of N. Y.; C. M. P., Jr., of Mass.; P. D., of N. Y.; E. K. M., of N. J.; G. W. B., of N. Y.; W. E. F., of Mass.; G. S., of N. Y.; G. W. B., of L. I.; M. D. C., of Vt.; J. B., of Ohio; B. M., of Ind.; A. M., of N. Y.; H. W. W., of Cal.; S. & L., of N. Y.

H. H., of Mass.-Your pistol bomb is an old thing, and