THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

VOL. XIII.

NEW YORK, DECEMBER 12, 1857.

NO. 14.

SCIENTIFIC AMERICAN, PUBLISHED WEEKLY At No. 128 Fulton street, (Sun Buildings,) New York, BY MUNN & CO.

THE

O. D. MUNN, S. H. WALES, A. E. BEACH.

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Professor Rogers on English Coal.

This distinguished American savant, who has just accepted a chair in the University of Glasgow, Scotland, in writing of the physical power which England derives from the transformation of the latent power of coal into active force, states the following interesting facts:-

"Each acre of a coal seam, four feet in thickness, and yielding one yard net of pure fuel, is equivalent to about 5,000 tuns; and possesses, therefore, a reserve of mechanical strength in its fuel equal to the life-labor of more than 1,600 men. Each square mile of one such single coal bed contains 8,000,000 tuns of fuel; equivalent to 1,000,000 of men laboring through twenty years of their ripe strength. Assuming, for calculation, that 10,000,000 tuns out of the present annual products of the British coal mines, (namely, 65,000,000,) are applied to the production of mechanical power, then England annually summons to her aid an army of 3,300,000 fresh men pledged to exert their fullest strength through twenty years. Her actual annual expenditure of power then is represented by 66,000,000 of able-bodied laborers. The latent strength resident in the whole coal product of the kingdom may, by the same process, be calculated at more than 400,000,000 of strong men, or more than double the number of the adult males now upon the globe."

Letters with Diagrams.

We often receive letters containing sketches of machines, respecting which, information is asked by our correspondents; many of thesein fact the most of them-are written with the description on the first page and the diagram inside. It is difficult to read and understand such letters, because a leaf has to be turned over to find every letter of reference. Correspondents will save us much trouble, and enable us to understand their sketches better and more rapidly, if they will write the description on one inside page, and make the diagrams on the opposite one, or on a separate sheet. Such letters have but to be opened out and placed before us, to enable us to read the descriptions and examine the sketches with facility and without confusion.

New Decelorizing Agent.

M. Mene, a French chemist, has just discovered that hydrate of alumina, prepared by decomposing alum with carbonate of soda, is a perfect substitute for animal charcoal in the decolorizing of liquids. He has tried it on sugars, sirups and molasses, and it has given every satisfaction; and after having been used once, it can be washed and re-propared.

It has also the great advantage of cleanliness; and it is more pleasant to our fancy to know that our sugar has been clarified with alumina, than with burnt blood, and similar animal products.



This improvement in planing machines has especial reference to the shape of the bed and bed rollers, and its construction will be understood by reference to the engravings and the following description :--

Fig. 1 is a perspective view of the whole, and Figs. 2, 3 and 4 will be hereafter described. In Fig. 1, A is the frame ; B is the planer, and C the driving wheel of the feed



motion; D D are the feed and delivering rollers, ; E is the bed, and F the roller to render the passage of the stuff easy from the bed. The bed is supported in two movable pieces, G, one on each side, which can be raised or lowered to accommodate the thickness of the stuff by the screws, H H H H, and chains, I. JJJJ are slats having their outer ends attached to springs, so that they keep a pressure on the feed rollers. Planing machines are generally open to the objection that they will only smooth the kind of work for which they are specially constructed, and are not capable of being altered to various applicaof machines now manufactured-perfect specimens of multum-in-parvos--capable of doing a great number of things with the one piece of mechanism. Now, the great advantage of this machine is, that it can be made to plane either flat pieces of wood or beveled, as will be seen by reference to Fig. 2, which is a vertical section of the bed plate, E; the flat or horizontal top, e, can be removed by loosening the screws, a a, when the beveled part, b, will form the bed, thus placing the stuff at an angle with the planer, B, and will allow two beveled slats to be planed at once. Fig. 3 is a section of the bed roller, F, which consists of an outer case, f, that can be slid off, leaving a corresponding shaped roller, c, to the bed plate. Fig. 4 shows these two separate.

It was patented July 28, 1857, and further particulars may be obtained from the inventors and patentees, Geo. Darby, of Richmond, Va., or J. E. Young, of Augusta, Me. 40+

How Wine is Made ia California.

We have on previous occasions expatiated on the capabilities of the Golden State as a wine-producing country, and we now transcribe from the Los Angelos Star a description of the method of manufacturing this beverage in that city from native grapes :-

The first operation in the process of wine making, after the grapes arrive at the mill, is to shell them off the stems; six men are employed in this operation. The grapes, as they come from the vineyard, are thrown upon coarse wire sieves, which are firmly set at an angle of about forty degrees, above and around the mill. Wooden forks are used to shell the grapes, which, as they are detached and moved about on the sieves, fall through into a hopper, which conveys them to the mill. The stems remain upon the sieves, and are removed by hand.

The mill is formed by two horizontal wooden cylinders, about three feet long, and ten inches or a foot in diameter. These are kept in motion by means of a crank, which is easily turned by one man. The mashed grapes fall from the cylinders into a large shallow

tions; in fact, they are not like the majority | tank, from which the juice rapidly flows off, and passing through a couple of sieves, to separate any skins or seeds which flow along with it, is raised by a pump and conducted to the fermenting tubs. These vessels hold from eight to fifteen hundred gallons each. The juice in this state, fermented without the skins or pulp, produces white wine. The skins and pulp, together with the seeds, are removed to other tubs, where, during the process of fermentation, coloring matter is extracted, forming red wine.

To give a high color to the wine, the pomace, as it rises to the surface during fermentation, is frequently broken up and stirred into the wine. This is only practiced when the juice, pulp, and skins are fermented together in the same vessel.

Six men are kept constantly employed in shelling the grapes from the stems, and such is the ease and rapidity with which they are ground, that the mill is kept waiting nearly one-half of the time. After the mash is sufficiently fermented, which occupies from ten to eighteen days, the wine is drawn off into pipes, and the pomace is then taken to the press, where it is subjected to the pressure produced by a five-inch screw. Surrounding and attached to this screw is a drum of about ten feet in diameter; a rope is wound upon this drum, and one end carried to a capstan, when the power of two or more men is applied to long bars, which produce a leverage of no insignificant amount. Five men are employed in this branch of the operation.

The daily product of wine is two thousand gallons, and the estimated product of the present vintage is eighty thousand gallons.

Notwithstanding the pressure which has been applied to force the bruised grape to yield its spirit, yet so endurable are the exhilirating qualities of this fruit that the pomace still contains enough to tempt the cupidity of man; so the pomace is sold to distillers, at the rate of five dollars for the pomace from which one thousand gallons of wine have been made. The pomace is mixed with water, and then subjected to distillation, and the result is a good distillation of pure grape brandy.

Scientific American.



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Issued from the United States Patent Office FOR THE WEEK ENDING DECEMBER 1, 1857.

[Reported officially for the Scientific American.]

KNITTING MACHINES-Walter Aiken, of Franklin, N. H.: I do not claim the plates, L. between the needles, when fastened to a movable bar, as shown and de-scribe din John Nesmith's putent, of July 29, 1859. Neither do I claim a rocker bar, when made and ar-ranged as described in the patent of Nesmith, but only when constructed and arranged as hereafter claimed. I claim a set or series of traversing needles, arranged to slide independ-at of each cther. In combination with the stationary plates, K, between the needles, to hold the fabric knit, when the stitches are formed, construct-ed, and operating as described. I claim a vibrating traversing yarn carrier, operated so as to hold the yarn over of near the selvage while the carrier is vibrated so as to change the latch opener, as described. I claim a double-edged latch opener, in combination with a vibrating yarn carrier, operated so as to change the latch opener, as described. I claim the stationary pocker or supporting bar, F, so constructed and arranged as to support the outer ends of the needles beyond the fabric and under the latch opener, as described. Prows-Joseph Banks, of Dadeville, Ala : I claim

PLOWS-JOSCPh Banks, of Dadeville. Ala.: I claim the arrangement of the double branched colter, I, so that its rear branch rests on the point or share, and its forward branch supports the under side of said point, in combination with the vertical and forward, and rear adjustments of the colter in the beam, in the manner and for the purpose specified.

SPEED INDICATOR—James M. Benckert, of Philadel-phia, Pa.: I distinctly disclaim the employment of weighted arms, assisted by guinngs in governors or speed indicators for 1 am well aware that they are old. But I claim the arrangement of the double-threaded cam, F, segments, E, and swivel arm, G, as and for the purposes set forth.

[Λ description of this will be found on page 107.]

[A description of this will be found on page 107.] SERVENTES LEVEL—Christopher Becker, of Brooklyn, N.Y.; I claim first, The constructing of the telescope with square surfaces, a a, resting upon small points or surfaces upon the supports, and attached to the same in the manner and for the purposes described. Second, I claim the arrangement, construction, and manner of operating the spider threads by one screw only, as described. Third, I claim the arrangement of the set screws, S, acting directly upon and equare to the asts of the in-strument, in the manner specified. Fourth, I claim the arrangement and construction of the micrometer, and tangent servey, so as to prevent any dead movement, in the manner described. COMPOSITION FUEL—Elizabeth Bellineer, of Mohavk.

Convosition Fuel-Elizabeth Bellinger, of Mohawk, N. Y. : I do not confine myself to the precise propor-tions of the several ingredients specificd. But I claim the inflammable composition formed by the union of kawrigum, rosifa and sawdust, in suitable proportions, to give it the character specificd.

[For description of this invention, refer to another page.]

SEEDING MACHINES-Jarvis Case, of Springfield, III. : I claim so combining with the drivers' seat, H, a mark-er, having in its arm a hinged brace, or its equivalent, as that said drayer max, from his seat, turn ever or re-verse said drayer max, from his seat, turn ever or re-verse said drayer max, for his seat, turn ever or re-verse said drayer marker, seapeed it to the machine whilst turning around, and drop it into its working position without leaving his seat on the machine, as set forth, and for the purposes explained.

HAY RAKES-L. A. C. Brown, of Sparta, III. : I do not claim, broadly, a rake so arr.ngcd as to swing, and allow its teeth to be clevated, that it may deliver its load, for rakes thus arranged have been previously

Busic I claim operating or raising the rake through But I claim operating or raising the rake through the medium of the lever, I, provided with the pin, i, the wheel, B', and the curved bar, j, arranged substan-tially as described.

This invention consists in a novel arrangement of the rake head, by which it may be elevated at proper intervals to discharge its load. It is operated by one of the wheels of the machine.]

SEWING MACHINES-Joel Chase, of New York City: I claim the combination of the lever, G, when hung on an axis in the rockshaft, with the lever, I, when the motion thereofis limited by the stops in the mannerset forth, for the purpose of imparting the feed motion to the needle.

EXTENSION TABLES-Charles B. Clark, of Mount Pleasant, Iowa: I do not claim, broadly, the employ-ment or use of folding ralls applied to extension tables, irrespective of the arrangement shown. Neither do I claim the employment or use of fixed side pieces, irrespective of the peculiar arrangement as shown and described, for said parts have been previous-ly used.

1y used. But I claim having the jointed or folding side rails, B's, made of unequal lengths, and applied to the end pleces, A A', as shown in the drawings, for the purpose set forth. ['The object of this invention is to obtain a strong and

firm extension table when in an extended or closed state, and one that may be closed or opened with facility.]

REGULATING THE ACTION OF A FLY WHEEL—Abram C. Frederick, of Clarendon, N. Y.: I claim attaching a fly wheel to the machinery upon which it is intended to concentrate its force by the medium of a friction brake, as and for the purpose set forth.

as and for the purpose set forth. SEEDING MACILINES—Jacob Geiss and Jacob Brosius, of Belleville, III.: We are aware that perforated slides, moving rectilinearly in opposite directions have been previously used for distributing seed; and we are also aware that slides to vary the orifices of seed receptacles or cells have been previously used. We therefore do not claim broadly, and irrespective of construction and arrangement, such devices. But we claim the employment or use of thetwosector plates, B. C, constructed as shown, viz., one being fitted widd with an opening, f, and the other with a recess or seed receptacle, g', and ledge, i, the plates being fitted of the ccceptacle, d, and the connecting rods, D D, at-tached to the arms, c, c, at the desired points, as and for the purpose set forth.

[This seed planter will not choke in its distributing device, nor will the seed drop through when the ma chine is not in operation.]

MYS A GRAIN SEPARATORS—John R. Mofitt, of St. Louis, Mo.: I claim the construction and arrangement, sub-stantially as described, of the rotary beater, A, within the apron, in combination with the falling sections, B', operating in the manner and for the purposes set forth.

RAKE FOR HARVESTERS-C. P. Gronberg, of Geneva, III. : I claim the guide rods, b and c, and swinging frame, d, carrying the stationary fork, F, in combina-tion with the levers, 1 and n, and travelingfork H, the whole being constructed, operated and arranged in re-lation to each other, in the manner substantially as set forth.

Cooking Stoves-Renszelaer D. Granger, of Philadel-phia, Pa. : I do not desire to claim exclusively the d-viding of the lower flue to the products of combastion. But I claim as an improvement in the stove for which a patent was granted to me on the lat of March, 1843, forming underneath the oven a chamber through which a current of cold air, entering at the rear of the stove, may noss into the space between the back of the fire-place, and front of the oven, when the said chamber serves the purpose of dividing and dispe ving the pro-ducts of combustion as they pass through the lower flue to the chimney.

PILE FOR ROLLING BEAMS-John Griffen, of Phoenix vile, Pu. : I claim the manufacture of wrought iron I or T girders and bars, by forming the pile of grooved pieces, in combination with the intermediate webbing, arranged and combined in the manner substantially as described. ng,

described. CULTIVATORS—Joshua Gibbs, of Newark, Ohio: I am aware that adjustable and reversible shares have been heretofore used. I do not claim, broadly, to be the in-ventor of them. I especially disclaim whatever there may be in my device which resembles any portion of J. L. Eastman's patent, June 30, 1836, R. H. Sprin getead's patent, Feb-rury 12, 1845, and A. Leland's patent, January 2, 1840, But I claim a cultivator constructed as described, viz., having its frame, A. made of wrought iron in the form shown, with metallic lipped plates, J. made to slide lon-gitudiually on the frame, the share, C, of the form shown, attached to the plates, J. by blits m, and capa-ble of being adjusted and reversed, all as specified. IThis, cultimate runcide, none which is actremely

[This cultivator provides one which is extremely durable, easily kept in reptir, and one that may be adapted to all purposes or modes of culture practiced for " hoed" crops.]

Revolving Borrie CASTERS-Edward Gleason, of Dorchester, Mass. : I do not claim, separately and broadly, the revolving doors, E, nor the revolving body, B. But I claim the combination of the pinions, h h, each moving a caster door and cruet, and the wheel, F, with the pinion, e', of the roll or arbor, f, the said pin-ion, e', gearing into a segment rack, d', in the wheel F as set forth, so that when this combination is actuated through the knob, i, the castor, cruets and doors, to which they are attuched, may be rotated independently of the rotation of the body, B, of the castor.

[This is an improvement on a former patent, and is a very good castor.]

very good castor.] BALANCE IRON FOR MILL STONES—Josep'i H. Glover, of Skeqi's Creck, Ky. : I am aware that the bails of mill stances have been provided with blocks which were interposed between the point of the mill spindle and the interior surface of the bail. But to the best of my knowledge and belief it is new to render such blocks adjustable by means of screws, whereby the stone may at all times be readily balanced, and a better operation of the parts be thus secured, and the quality of he flour improved. In the patent of E. R. Bachon, March 31, 1840, a block is interposed between the point of the spindle and the bail. I disclaim everything contained in the patent of said Benton which resembles my improvement. I claim the block, B, when made adjustable from the exterior of the bail by means of screws, d, as and for the purposes set forth.

[For a further description of this, see another col

umn.]

LONG TRUNKS-FOR CLEANING COTTON-Isnac Hay-den, of Lawrence, Mass. : I claim covering the parti-tions of an elongated trunk or box for cleaning cotton and other fibrous substance a, with woven wire, having the scores formed by the wett, crossing the warp of said wire screen filled with metal or cement, the whole com-bined in the manner and for the purposes set forth.

DUNPING CAZ-George W. Hart, of Aurora, Ind. : I claim in combination with the reed, J, the slatted fold ing floor, 133456, supported and operated in the man-ner set forth.

FINGER BARS FOR HARVESTERS-J. M. Long, Peter Black and Robert Allstatter, of Hamilton, Ohio: We expressly disclaim the formation of finger burs of a sin-gle sheet of metal, rounded in if ront, and with the fin-gers passing through holes in the said rounded portion, as patanted by Moore & Patch, Nov. 25, 1886. But we chain the combination of the wrought metal-lie plates, P Y, with the reciprocating cutter bar, A, cutters, C, and square-shanked fingers B, said parts be-ing constructed and arranged in relation to each other for joint operation, in the manner shown and described for the purposes set forth.

CANE **PLANTES**—Tobias Marcus, of New York City: I claim the adjustable mold board, F' arranged and op-crated by means of the circular slide, M, in combina-nation with the adjustable beaum, A, and socket, B, se-cured by braces, C and N, in the manner and for the purpose a described and shown in the drawings and specifications.

BEE HIVES_Henry M. McClellan, of York, Pa. : I claim the combination of the sections, A B C, connected as shown with the rotating doors, D, agitating and regu-lating wires, E, ventilating tubes, F, and tolling and feeding cups G the said parts being constructed and ar-ranged in relation to each other in the manner and for the purPoses described.

MAQUINES FOR ROLLING DOUGH-John McColluin, of New York City; I claim the combination with rollers, suitable for rolling dough, or similar substances, of an endless feeding band or platform, moving on pulleys or friction rollers, as required, the band not being scared to the rol ers in any way, and being free to take its mo-tion from the dough.

EGG BEATERS-Harvey Miller, of Cincinnati, Ohio : I do not claim the ratchet bar or revolving shaft and beaters. But I claim the frame, A B, having a ratchet bar, g, and revolving beater, od, in combination with the jar or can, as described, for the purposes set forth.

LIFTING JACKS-David L. Miller, of Madison, N. J. : I do not claim to be the inventor of the individual or separate parts of the described screw jack. But I claim the adjustable cylinder, B, shoe, C, inner cylinder or adjustable standard, D, in combination with the main or lifting screw, A, and gearing, E and F, ar-ranged and operated as described and shown in the drawines.

MACHINE FOR THREADING BOLTE-WM. Sellers, of Philadelphia, Pa.: I claim the use of a die box and cams, substantially as described, when these are so ar-ranged as to be capable of revolving about a common center at different velocitics for the purpose of opening or closing the dies. I claim arranging the cams so as to leave open spaces between them, substantially as described, in combina-tion with the die box and dies as described, to facilitate the claim the mode of attaching the tap-holder to the revolving die-box, substantially as described.

PLOWS-W. W. Skinner, of Davenport, Iowa: I do not claim the rolling cutter, the use of the front wheels, the lever, beam, and plowshare, the rod mold board, or any of the described parts, except as shown and set forth any of the described parts, except as shown and set forth. But I claim the mold board, B E, B E, B E, friction roller, M, rotary cutter, a, wheels, p, adjusting lever, T, and seat, Z, when combined and arranged and operated in the manner and for the purpose set forth.

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CULTIVATORS-A. Q. Withers, of Redbanks, Miss. : I claim hanging the stock bars, G G, to the frame by hinge joints, so as to give them a vibratory play side-wise, substantially in the manner and for the pnrpose specified.

Specified. GAS LIGHTING LANTERNS—Abel Wilson, of Phila-delphia, Pa.: I wish it to be understood that although I prefer three corrugated cones, I do not desire to con-fine myself to that precise number or form of cones, as one cone only will serve the desired purpose, and as the coles may be made plain instead of corrugated. But what I claim is surmounting the body or casing of the lantern with its hollow perforated cone, C, in combination with the cone, D, when the same are ar-ranged and constructed, substantially in the manner set forth, and for the purpose specified.

CLOTHES WRINGER-Riley Smith, of Towanda, Pa.: I am fully aware clothes have been wrung in a cloth, bag or net, by applying the power that twists said cloth, bag or net, at one or both of their ends. This I do not

claim— But I claim, in combination with the cloth, bag, or net that contains the clothes that are to be wrung, a twisting or wringing device, composed of a cord i, and the lever, Z, when said cord is united to or winds around the clothes receiver, and the lever can slide thereon, so as to apply the greatest pressure nearer the center of the clothes receptacle, and moved where most desired or required, and as set forth.

SAUSAGE MACHINES—W. Shiff, of Fultonham, Ohio : I am aware that teeth or knives have been attached to a rotating drum or cylinder, and stationary knives or cutters have been used in connection therewith, and placed within a suitable box. I therefore do not claim broadly and separately the cutting device shown. Nor do I claim broadly the employment of a plunger working within a cylinder or trunk for stuffing cases wich asusage meat, for such devices are in common use, although arranged differently from that shown and de-cribed. But I claim the stuffing device formed of the cylindri-cal trunk, H. proylded with glots, k k', and the

cal trunk, H. provided with slots, k K', and the plunger, J, attached to the rod, K, asshown, when the above parts are arranged relatively with the box, B, for the cutting device, so that the within described parts may operate conjointly, as and for the purpose set forth. [The object of this invention is to make sausages di-

rect from the meat at one operation. The machine is a combination of a cutting and stuffing device, both being operated conjointly.]

CLASPS FOR METALLIO HOOPS-J. R. Speer, of Pitts-burg, Pa. : I claim the use of a hollow clasp, or fasten-ing for metallic bands, of the shape shown in the draw-ings, through which the ends of the hoop are passed in oppesite directions, and the projecting extremetiles bent over the clasp, and inserted into an aperture in the middle of the clasp, in the manner before described.

PROTOGRAPHIC PLATE HOLDER-John Stock, of New York City: I claim, 1st, A plate holder for photographic or otherpurposes, with movable pieces, F, to support the glass or plate, constructed in the manner specified, and for the purpose of accommodating different sizes of plates.

second, I claim the plates, H and L, acted upon by springs for the purpose of keeping the picces, F'F, in any desired position.

any desired position. PROPERLING CARS AND CARRIAGES BY HORSE POWEE —H. G. Vanderwerken, of Greenbush, N.Y.: I claim, first, So arranging the endless belt platform on a frame, independent of the truck, that the return part or under-side of the belt may rest upon, and gear into pinions on one or hoth axles and thus cause them to rotate in the direction in which the horse is apparently walking without the use of any intermediate gearing, in the manner substantially as specified. Second, I claim supporting the endless belt platform on the axles of the truck, in such manner that when the horse is at work, it will assume an inclined position, and when at rest a horizontal one, in the manner and for the purposes set forth.

MACHINE FOR MOLDING SHELLS-W. H. Ward, of Auburn, N. Y.: I claim, first, Adjusting the semi-fiasks to the pattern, to the molding bed and each other, by means of a circular V-shaped guides, constructed and around a descubled.

by means of a circular V-shaped guides, constructed and arranged as described. Second, The combination of the V-guides, with the ribs, g', and the recesses, no', in the base of the flack, for adjusting the pouring tube to the gate pattern. Third, The combination of the adjusting screws, d, in the base of the pattern, with the adjustable eccen-tric rod, arranged as described, for adjusting and raising the pattern, so that its center will coincide with the plane of the molding plate. Fourth, The combination of the core pin and adjust-ing flange, c, with the core pin holder, and adjusting recess, the whole arranged in the manner and for the purpose set forth.

PLOWS-R. B. Winston, of Richmond, Va. : I claim the construction of the beam, as described, in combina-tion with the land side, when the said beam is cast in one piece with the land side, in the manner described, and for the purpose set forth.

DRIVING BOX FOR LOCOMOTIVES—J. E. Wootten. of Philadelphia, Pa. : I claim the adjusting plate, C, or its equivalent, in combination with the divided journal box, B 8, as described, for the purpose and in the man-ner set forth.

CLEANING THE TOP CARDS OF CARDING MACHINES-Horace Woodman, of Biddeford, Me. : I do not claim the use of corrugated arches, affixed to the card frame, as a means of moving the cleanser frame, the same hav-ing been claimed by use in my former Letters Patent. Nor do I claim as new any device or machinery which is substantially described in my former Letters Patent. But I claim, first, The peculiar construction and ar-magement of fixed corrugated arches, R and R', and traversing corrugated arches, G and G, with gears, L and L', operating in the manner and for the purposes specified. Claim the peculiar construction and ar-magement of tangent minion L with seation of theat

L and L', operating in the manner and for the purposes specified. Second, I claim the peculiar construction and ar-rangement of tangent pinion, J, with section of teeth, o , and cavities, 9 and 10, at its ends, operating in com-bination with the plane face of gear, Y, in the manner and for the purposes specified. Third, I claim the said jointed lifters, constructed and operated as specified.

Mowing MACHINES—Ephraim Ball, of Canton, O., as-signor to himself and John Butter, of Buttalo, N. Y.; I claim the combination of the short curved brace rod, R, with the rigid and broad angle attachment of the in-clined bar, 2, to the finger bar. P, the whole arranged for joint operation, substantially as and for the purpose above set forth.

GOLD AND SILVER ORES-Joseph A. Bertola, (assignor to himself and John Stagg) of New York City: I claim the use of pyroligneous or other vectable acids hav-ing similar chemical action, in treating gold or eilver ores or "tailings" preparatory to amalgamation, sub-stantially as described.

FASTENING HARNESS TRACES_Joseph W. Briggs, of Cleveland, O., assignor to J. A. Lazell, of Plaiusville, O.: I do not claim as my invention the eccentric which presses the trace against curvatures in the bod plate; neither do I lay any claim to a cam lever in any way. But I claim the raked or elevated parts of the trace, C C C C, when used in combination with a cam lever as set forth.

MACHINE FOR SAWING BEVELED CURVES—John C. Hintz, of Cincinnati, O.: 1 claim, first, The cranes, D D', with the traversing and turning rests, E F, E' F', communicating by means substantially as de-scribed, with a winch, g, or its equivalent, convenient to the hand of the asyryer in the described combination with a scroll saw and feed roller for the purpose set forth forth. Second, I claim in this connection the rest, J j, con-structed and operated substantially as and for the pur-poses set forth.

CLEANING GAS RETORTE-S. W. Carpenter (assignor to Wm. W. Woodworth) of Yonkers, N. Y.: I do not claim as my invention the principle of the use of steam or stame as a cleanser of gas apparatus. But I claim the method or process of the introduction of water directly into the heated retort (the charge being drawn or exhausted) there to be converted into steam or stame, free to unite with and remove the car-bonaccous or other deposit contained in the retort or pipes, substantially in the manner set forth.

bonacous of once depict contained in the relote of pipes, substantially in the manner set forth.
PERNYTNG PERSS-John Henry, of Vevay, Ind.: I claim, first, The frisket carriage, M, attached to the frame, D, as shown and used in connection with the inclined bers or suldes, J, whereby said trisket carriage and its frisket is early a state of the frame, so that a blank sheet may be readily and conveniently adjusted on the frisket or a printed sheet be discharged thereform, as described.
Second, I claim thefrisket, N, when used for the purpose of discharging or delivering a printed sheet as set forth.
Third, I claim the combination of the pressure cylinder, J, and frame, D, when said cylinder is operated automatically by the wedges, L L, and spring, Q, as shown so as to be depressed at the proper time, and give the necessary impression to the sheet, and also be regiven, as described.
Fourth, I claim the arrangement of the feed board, B, and fly board, C, when arranged as shown, so that addite and eadjustable and capable of being removed at one side, so as to render the working parts of the pression for this invention will be found on an-

[A description of this invention will be found on another page.]

other page.] COEN HARVESTERS-Adam Humberger, of Somerset, O. : I am aware that shafts, with revolving arms and knives have been used in connection with guards for conducting cutstalks upon a platform or table. There-fore, I do not claim these devices as heretofore employ-ed, neither do I claim the carrying table, P, when moved with its supporting frame. Bot I claim, first, The large shafts, or rollers, E E, turning upon the fixed axle, DD, and having radial arms, L L and H H, with kuives, I I, in combination with the guards. M A, G G and F F, and knives, K K, for the purpose of cutting the stalks, and securely con-ducting them across the table, B, to the bunding table, P, as set forth.

aucting them across the table, B, to the bunding table, P, as set forth. Second, I claim the table, P, when movable upon its supporting frame, in combination with lever, U, and clamps, R R, for binding and shacking the corn, as set forth.

STANDARD FOR SEATS-John Irwin, of Philadelphia, Pa: I claim the conibination of the screw and spring, forming an improvement in adjustable and clastic stan-dards for scats, as set forth.

GANG PLOWS-E. C. Jones, of Pittsburg, Pa, ; I chim, first, The arrangement of the hinged beams, C. C. and springs, D. D. or any equivalent device therefor, when constructed and operating substantially as de-scribed.

scribed. Second, The coupling of the plows to a front bar, G, and back bar, H, as described, which bars can be roised or lowered by means of the rack rods. E L', and seg-ment levers, F F, or any equivalent means in their place, substantially in the manner and for the purpose set forth.

Prove-John Lane, of Lockport, III. : I claim first, The rigid foundation or frame, when constructed with a taper point and inclined flanch which projects nearly at right angles from the landside of the plow un-derneath the mold board and lay for use, in combina-tion with a yielding mold board, a yielding steel lay which has a complete aper socket at its point, and with a steel landside facing substantially as and for the pur-pose set forth.

[This improvement will be found described in another column.]

column.] PEDAL BASE FOR MELODEONS, &C. -G. W. Lane and Win. N. Manning, of Rockport, Mass. : We claim, first, The arrangement of the valves, the reeds and the air chamber of the pedal base upon the pedal board, or otherwise in an equivalent manner arranging the same behind the pedals, so that the whole of the pedal base is rendered portable, and can be attached to any instru-ment by simply connecting its air chamber by a pipe with the bellows of the instrument, substantially as de-scribed. Second, The arrangement of the valves, with their lever-likestems. inclined planes, and springs, substan-tially as described, for the purpose of combining the valves with the pedals to be operated thereby. [This pedal base is portable, and can be applied to any melodeonalready in use, or one constructed on pur-

any melodeonalready in use, or one constructed on pur-. [.seoq

SEED PLANTERS—Daniel B. Neal, of Mount Gilead, Ohio: I do not claim that any of the members of my machine are new. Nor do I claim to have been the first who has dropped the grain at pleasure of the operator in a power planter. But I claim the peculiar arrangement of handle, H, rod, J, bars, D M and C, slides, i i, and lever, c, when used in the manner and for the purpose described.

Rock Data. The handle and the purpose described. Rock Data. Lagrandow and the purpose described. I am aware that rock drills have been previously mounted so as to be capable of being adjusted in one direction only, viz. In a vertical plano, longitudinal with the fraule on which they are placed; and I am also aware that means similar to that described, ina been employed for effecting the purpose. The ratchet, Q, and pawls, RR, have also been used. I therefore do not claim the ratchet, Q, and pawls, R R.

R it. Nor do I claim the slotted semi-circular plates, M M, and their connection with the frame N, as slown, when separately considered. Nor do I claim the wiper or tappet, L. But I claim attaching the semi-circular slotted plates, M M, and frame, N, to the adjustable frame, E, fitted to the uprights, c. o, of the frame, A, as shown, and for the purpose set forth.

[In another part of our paper a description of this will

LIME KILNS-Jacob Newkirk, of Factoryville, N. Y. : I claim instead of taking the upper fire flues directly from the fire chamber into the interior of the klin, the carrying a portion of the flame and heat up into the arch, and thence by the upper flues into the stack or in-terior of the klin, by which means I conomiss and make a better distribution of the '.ext, and b.t.s. draft than when it is taken alone and annediately from the fire chamber, as set forth.

Bre chamber, as set forth. SEEDING MACHINZE—David O. Paige and John Clavy, of Dayton, Ohio: We are aware that pins and fiancies have been attached to rotating drums or cylinders, for the purpose of agitating the seed in the seed boxes of seeding machines, and prevent ng the choking and clogging of the same. But we are not aware that spiral fianches placed in reverse positions on druns or cylinders, so as to give a reciprocating or vibratory movement to the seed, and thereby effecting a greater agitation than usual, have been used.

thereby electing a greater astatistic than detail, into been used. We do not claim, therefore, broadly, and irrespective of the arrangement shown, the employment or use of spiral fianches or pins placed in spiral rows on drums or cylinders, for they have been previously used. But we claim the spiral 'flanches, c d, placed in re-verse positions on the rotating cylinders, D D, within the hopper, A, substantially as and for the purpose set forth.

[This is a very good seed planter, and its parts are well

COTTOX AND HAY PRESSES—George W. Penniston, of North Vernon, Ind. : I claim connecting each of the roges which operates the toggle to which the press and draw back the plunger: to expande, and independent capstan barrels, arranged to turn freely on the same

a constant

be found.]

arranged.]

Scientific American.

shaft, provided with a device to lock either of them to said shaft when desired, as described, so as to save threefourths of the time heretofore required to retract the press, and the time and labor of reversing the horse twice for each bale pressed.

Twice for each bale pressed. RAILROAD CAR WIRELS—Michael Phelan, of Bridge-water, Pa.: I claim the curved projections on the disk of four reversed since, forming arms, in combination with braces and a scries of arches, so arranged on the disk or front plate of four reversed since, so as to give a uniform spring to all parts of the casting in cooling, re-lie gratest possible strongth for the weight of iron used, and for the application or said curved projections and combination of arch s and braces, without a front plate in casting car wheels, as described.

CORN PLANTERS-Bradley L. Prime, of Hamilton, Ohio: I claim the yielding partitions, c, of the hopper, constructed, arranged and operating as and for the pur-pose set forth, in combination with the secondary pro-jections, n n' n", of the cam, E, the whole operating as described.

CORN HARVESTERS—John H. Ribbe, of Somerset, Ohio: I claim the combination af the bed, f, and arms, k l, with the movable carriage, C, or its equivalent, so as to receive the cut product and deposit the same, as described. I also claim the re-entrant reel, in combination with the receiving apparatus, as described.

MACHINES FOR MARING BROOMS—Spencer Rowe, of Baltimore, Md. : I claim the employment of the double pawl, operating on the ratchet wheels, c c, and hollow shaft, B, the rock shaft, D, and rods if, all arranged as described, when in combination with the guide, E, and friction spools, G, and bobbin, F, for the purpose of manufacturing corn brooms in a superior manner.

RDING SADDLES—Joseph Rudisill, of Natchez, Miss. : I do not claim a syring seat saddle, broadly. Neither do I claim having the foundation of the can-tel hinged to the tree, and rendered capable of yielding by a rubberspring, as in the patent of Seth Ward, 1857. Neither do I claim, broadly, a spring arranged at the head of the tree for assisting in rendering the seat elas-tic.

tic. But I claim the peculiar arrangement of a series of But I claim the peculiar arrangement of a series of light flat springs, a a, in a circular line around the up-per side of the cantel foundation, **B**, of the tree, **A** A, for use in combination with the coiled spring, **G**, as pe-culiarly arranged under the head, **C**, of the tree, said springs being actuated simultaneously by means of the eeat, **C**, and webbing or foundation, **D**, as and for the purposes set forth.

[This invention is designed to render horseback riding more comfortable and pleasant. It provides a seat which yields to the descent of the weight of the rider upon it. and then instantly assumes its original form as soon as the weight rebounds, or rises off of it, ready for a second descent of the weight upon it, as in pacing and trotting.]

SEED PLANTERS—John Robinson, of Eli, of Sharps-town, Md.: I claim, first, Regulating the quantity of earth deposited over and adjacent to the seed, by means of adjustable stops, d, when used in connection with the curved arms, G', lifting arms, E, and adjustable strap, K, in connection with the adjustable coverer, k, the whole constructed and operating as and for the purpose set forth. whole constructed and operating as and for the purpose set forth. Second, The combined arrangement of the vibrating box, I, litting arm, F, adjustable strap, k, and adjusta-ble stop, d, the whole operating as and for the purpose set forth.

WOBKHOXES-Charles C. Schmitt, of New York City: I do not claim separately or apartfrom the general con-struction of the box or escritoir, any of the parts de-

struction of the box of controls, and escribed. But I claim a workbox and escritoir constructed as described, viz., the hinged or folding front side, n, pro-vided with the flap, p, the recesses in the top to receive the writing and sewing implements, the secret drawers, z z and a concealed by the sliding plate or bottom, t, the whole being arranged or disposed as shown and described, for the purpose of forming a combined work-box and escritoir.

[For a description of this refer to page 107.]

[For a description of this refer to page 107.] SPREADING LIME AND OTHER FERTULZERS—Pierpont Seynour, of Last Bloomfield, N. Y.: I do not claim the use of the levers, rods, or eccentric or zis-zag wheels whereby I communicate motion from the carriage wheel to the distributing works, as such devices are well known, and in use for various purposes. But I claim the combination and arrangement of a series of vibratory plates or distributors, d, attached to and working upon the face of an inclined plane or dis-tributing surface, C. by means of the rod, F, or any equivalent connection that will give the required mo-tion to one end of said plates, while another portion is stationary upon the board or plane, in the manayand for the purposes described.

MACHINE BANDING-Charles Lensmann, of Brooklyn, N.Y. I do not claim the web or the composition sepa-rately; neither do I claim broadly saturating webs, woven from fibrous materials with the composition above described. woven from fibrous materials with the competitive above described. But I do claim as a new manufacture the machine banding, substantially as before described.

RAILROAD CAR WHEELS—A. B. Latta, of Cincinnati, O.: I claim the wheel constructed, as represented, in its parts, for the purpose of producing a tension stress on the dished wrough throw plates, B B, for binding the rims together, by drawing the plates, B B, apart in the center, and holding them by the ring, as represented, and substantially for purposes specifics.

and substantially for purposes specified. KNITTING MACHINES—S. D. Fairbanks, (assignor to himself and C. H. Akams.) of Cohoes, N. Y. : I do not claim a latch regulator, with a point to pass under the latches after they are closed, such as is described and represented in the patent granted to Jonas B. and Her-rick Aiken, May 22, 1855, neither do I claim a yarn carrier, in combination with a latch regulator, as de-scribed in said patent. But what I do claim is a latch interceptor, consisting of a bar or arm, arranged in such a position over the needles as to intercept the latches after they are opened or thrown back by the stitches of the fabric knit, and hold them open until the yarn is supplied to form new stitches, and then allow them to be closed again, sub-stantially as described. I also claim, in combination with the above described interceptor, the yarn carrier, f, for the purpose of de-livering the yarn, substantially as set forth in the spe-cification.

cification

SEWING MACHINES-Geo. Fetter, (assignor to himself and Edward Jones,) of Philadelphia, Pa.; I do not claim exclusively imparting to the pressure bar a lateral motion from the reciprocating motion of the needle bar. But I claim the needle bar, H, with its adjustable lever, L, in combination with the slide, J, and its pro-jections, n and j, the whole being arrange discipling op-ration, substantially in the manner and for the purpose set forth.

set forth. GAND PRINTING MACHINID-J. S. Moody, (assignor is: T. P. and J. P. Randelph), et Gineinani, (J. ;) lelains the arrangement of the arra, e, when provided with the form, d. distributing plate, f. cols, y. feed plate, S. daes, i, guide plate, 12, pring, J. and lever, h, and these arranged with the backs, H. S. and spring, K. Wean said hevers are furnished with ink rolls, no m, and alsoributing rolls, o, and the whole arranged with the vortical oblight of the lawers of the farme, blag generical the whole arranged with the rolls, no m, and alsoributing rolls, o, and the whole arranged with the roll of the solution of the lower part of the farme, B. B. in which the slatt, (J. works is not in future of the pressing down the end of the lever, h, on the future of and rules clovaling the arranged, constructed, and cor-role, as propositioned, in the marker and for the pur-poses of facting that cards to the maching in the card from the machine start bing, printed as specified, and represented in the accouptanying drawings.

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MACHINES FOR SHRAVING CLOTH-M. D. Whipple, of Charlestown, Mass., assignor to A. B. Ely, of Boston, Mass. : I claim removing the rest. E. away from be-neath the sheaving knives, and holding the cloth against the ledger blade by tension, in the manner and for the purpose substantially as set for:h.

Party Verners-Isa ac Gathman, (assignor to himself and Jacob and D. E. Breinig.) of Philadelphia, Pa. ; I do not claim exclusively the use of watery solutions for mixing paints. But I claim the employment of the alkaline salts of the fatty acids, oleate, margarate, sterate of retash, soda, usid like substances in combination withrosin and oil, as a thinner for paints instead of oil, substantially in the manner set forth and for the purpose specified.

RE-ISSUE.

BE-ISUE. GRAIN AND GRASS HARVESTERS-WM. H. Seymour (assignor to himself and D. S. Morgan), of Brockport, N. Y. Patent dated Dec. 14, 1852-Ante-dated Oct. 25, 1852 I I claim the combination of the platform and driv-ing gear for the discharge of gavel, the draught pole and the stand or rest on the platform for the forker, when the same are arranged substantially as described.

GRAIN AND GRASS HARVESTERS—Win. H. Seynour (assignor to himself and D. S. Morgan), of Brockport, N.Y. Patentdated Dec. 14, 1852—Ante-dated Oct. 25, 1852: I claim the combination with the stand or rest, W, upon the rearside of the platform, for the person who rakes off the grain, and with the platform of a strong rail, r, firmly secured to the outer side of the main frame, and extending thence along the rear side of the blatform to support it and the stand for the forker. main frame, and extending thence along the rear side of the the Platform to support it and the stand for the forker, substantially as set forth.

GRAIN AND GRASS HARVESTERS-Wm. H. Seymour (assignor to himself and D. S. Morgan), of Brockport, N. Y. Patent dated Dec. 14, 1852-Ante-dated Oct 25, 1852 : I claim the method described of protecting he gearing from being injured by the working and twist-ing of the main frame by mounting the said gearing in au auxiliary metallic frame, constructed and firmly at-tached to the main frame, as described. DESIGN.

COOKING STOVE-Elias Young (assignor to Chamber-lain & Co.), of Cincinnati, O. **Bescriptive Index to Chemical Patents.**

An Index to the chemical patents issued by the United States Patent Office during the year 1852. Prepared for the SCIENTIFIC AMERICAN by Dr. D. Breed, solicitor of patents, Washington, D. C. Continued from the SCIENTIFIC AMERICAN of November 21, 1857:

Archil-Prepared by treating lichen roccellus with volatile alkali, urine and lime water, in certain proportions: Leon Garosson, June 15, 1852.

Acid-Sulphuric; concentrating of, in leaden vessels to 66° Baume, at a temperature below the boiling point: Carl Hinrichs, September 7.

and sulphuric acid from sulphuretted hydrogen evolved in process of manufacturing car-

bonates : Charles Lennig, March 16. Beer-Concentrated material for; gum,

starch, sugar, &c., from evaporated infusion of grain : Franz G. Rietsch, February 3. Beer-Use of corn boiled to a jelly, into

which malt or rye is then mashed : Frederick Seits, January 20.

Butter-Preserved by use of iodide of potash: Louis De Corn, August 3.

Cement-Hydrate of lime and pulverized resin mixed with cold water : B. S. Welsh, May 18.

Enamel-For brick and iron; mixture of glass, lime, (hydrate or sulphate,) salt, oxyd | paration, the best process for obtaining, it in a of iron and water : Dunn and Howcs, Septem- pure state being to take 310 grains of fine ber 7

Gutta Percha-Heating to 285° to 430° Fah., then vulcanizing by a hyposulphite alone, or with metallic sulphurets, whiting or magnesia : John Rider, June 1.

Gas-Refrigerated by air. Apparatus: Robert Foulis, October 12.

Gas-Feeding into heated retort, charged with tituminous coal, either oil, coal tar, resin, asphaltum, or other bituminous or carbonaceous matter, in a fluid state, separately or mixed : Henry W. Adams, August 10.

Gas-Use of mixture of wood and fat for generating: Danre, Nichols and Lopez, December 8. France, September 27, 1851.

India Rubber-Juice or milk of tree treated with common salt, to preserve : F. Bronner, September 7.

carbonate of ammonia in welding; proportions: Boyd C. Leavitt, July 27.

sunlight: Ulysses Pratt, January 6. Antedated'July 6, 1851.

23. England, October 7, 1850.

Oil-Mixture of camphene, benzole, carbonate of potash and glycerine with whale oil: William H. Mason, May 25.

Paints-Treatment of magnesian minerals with mineral acids, for preparing pigments: Heman S. Lucas, November 23.

Paint-Watery solution of sulphate mixed with oil paints: Washington F. Davis, August 17.

Powder-For blasting; chlorate of potash and prussiate of potash: Edward Callow, February 17. England, August 6, 1850.

Soap-Use of ammonia (or carbonate ammonia) with kaolin, or other aluminous earth; composition of: William McCord, July 27.

Soda-Chromate; from ore heated with salt, chloride of potash, or hydrate of lime; jet of steam to expel iron as sesque-chloride; then treat with muriatic acid: John Swindells, December 21. England, November 14, 1850.

Soda-Carbonate; sulphate, heated with carbonaceous--materials, and treated with water, carbonic acid, evaporation, &c. : Henry Pemberton, October 19.

Sugar-Use of aluminate of lime with phosphate of alumina, or of lime and phosphoric acid, for clarifying: Oxland and Oxland, July 6. England, May 15, 1851.

Zinc-Metallic; impalpable powder prepared by cooling agency of steam: Henry W. Adams, July 28.

To Avoid Sneezing.

MESSRS. EDITORS : You will agree with me that it is not a superstitious notion that sneezing may be an indication of having caught a cold. The wise take it as a premonition to avoid encroaching upon a constitution at present sound; they shut every door, close every window, and even stop every crack through which the air may ooze. Sneezing is the effect of a convulsion of the diaphragm, or muscle separating the chest from the abdomen. The sudden check of the uniform condition of the respirating apparatus brings on sneezing. Therefore, by stopping or changing the cause, the effect is prevented. The air which is inhaled when a fit of sneezing is coming on, if Baryta and Strontia-Production of sulphur suddenly breathed out, will effectually arrest the sneeze. There are times when sneezing is out of place among persons of good breeding-times when it ought not to break deep silence, as at prayers. J. H. H.

..... The Purple of Cassius.

This is a color generally used in the glazing of earthenware, glass, porcelain, and enamels. It is one of the most ancient as well as the most beautiful of colors and has rather a scarlet tinge. Chemically it is composed of oxyds of tin, oxyd of gold, and water; and according to slightvariations in the amount of either metal various shades of color can be obtained. Various methods have been proposed for its pregold dissolved in 1550 grains of aqua regia, consisting of one part of commercial nitric, and four parts of commercial hydrochloric acid; the solution is evaporated to dryness in a water bath, the residue dissolved in water, filtered and diluted with 20 or 30 ounces of water and placed in contact with granulated tin, the purple precipitate being the desired compound. When freshly precipitated it dissolves in ammonia, but by exposure to the light the solution gradually decomposes, becoming gradually blue and then colorless, but when fused with a glaze on porcelain it is a most durable color. The richness of its tints is evidently due to the presence of the gold, which, causing it to be very expensive, has often been endeavored to be replaced by another metal; and often in experimenting, Iron and Steel-Use of calcined borax and much richer hues have been observed during certain stages in the oxydation of copper, thes however are only evanescent, the color quick-Ivory—Placed at certain angle to bleach in $\frac{1}{2}$ ly changing to the dead black of cupreous oxyd. We believe that some French chemists are now engaged in searching after a good scarlet Oil-Obtaining paraffine and paraffine oil or purple for porcelain, from copper, and we from bituminous coal: James Young, March hope that they may be successful, as it will greatly aid the progress of the art of decorating the works of the potter's wheel.

-----Bole Armenia.

This is an earthy mineral found in nearly every part of the world, and has the affix of Armenia, because first brought from that workmanship.

country. It is very friable and varies in color from yellow and brown to red and black, and has a greasy feel. When placed in water it readily absorbs it and, emitting bubbles of air, falls to pieces. Formerly it was much used es a medicine but it has now fallen into disrepute, because the only tonic that there could be init is due to the presence of oxyd of iron, which is now administered in its pure state. It is also used in Germany as a pigment, and also as a tooth powder.

Speed Indicator and Governor. J. M. Benckert, of Philadelphia, has patented a machine for the above purposes. It consists in having a series of arms pivoted to a revolving plate, with weights at their outer ends, and their inner ends being connected with gearing. The arms are connected to a gearing cam, which is rotated reciprocally, as the arms, by centrifugal force and springs, are made to recede or approach each other; the cam, as it thus rotates, giving the proper motion to an index, to designate the speed of the machine to which it is attached, and also actuating the throttle valve of a steam engine, or the gate of a water-wheel.

----Fire Kindling Composition.

By taking regulated proportions of kauri gum, rosin and alcohol, and allowing them to remain open to the ordinary atmosphere temperature, or to a gentle heat, the gum and rosin will be dissolved and amalgamated. Then add wood or sawdust in such quantity that it will stir up into a sufficiently consistent mass to be molded into cakes, and when dry it will form a very good fire-kindling material. It is the invention of Elizabeth Bellinger, of Mohawk, N. Y., and was patented to her this week.

Steel Plow.

By this invention the mold-board and lay always retain their form while on the frame or foundation; and in case the lay becomes sprung while being sharpened, it will be caused to take its original shape when applied to the frame or foundation. Thus all inconvenience from the lay and mold-board in steel plows being sprung and banging in the soil, is avoided. A perfectly smooth and regular steel surface is presented to the soil. This plow is well adapted for western lands. It is the invention of John Lane, of Lockport, Ill.

Bail for Millstones.

Joseph M. Glover, of Skegg's Creek, Ky., has patented an improvement in the above, which consists in having a box placed at the bow or bend of the bail, and a block secured in it; the block resting on the point of the spindle, and rendered capable of being adjusted by means of set screws, so that the stone may be balanced with great facility; also, when the hole in the block becomes worn, the block may be readily removed and a new one fixed in its place.

Rock Drill.

An improvement in the method of mounting drills so that they may readily be adjusted to the direction that it is desired the hole may be bored in the rock, has been patented by Joseph E. Nesen, of New York. There is also an arrangement contrived for griping the drill, at the proper time, and again loosening it, so that it may strike the rock with some amount of force.

Printing Press.

This invention is an improvement on hand presses, and is designed to facilitate the operation of printing by hand, so that the work may be performed in a much more expeditious manner than at present, and equally as perfect, with much less labor. It is patented by J. Henry, of Vevay, Indiana.

Workbox and Escritoir.

Charles C. Schmitt, of New York, has patented a most ingenious workbox for containing articles of value, such as jewelry, &c., The secret drawers are most cleverly arranged, and the whole is a unique and beautiful piece of

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