Scientific American.

HAND PRINTING PRESENCE-J. N. Phelps, of New York City : I claim, first, The combination and ar-rangement of the ratial pins, T, on the transverse shaft and shoulder carne, s, on the sides of the lever, N, os-ell stiog arme, J, spiral springs, U, for moving the same automatically, and spiral springs. M, for pressing the inking roller in contact with the printing rollers, Q R, when receiving the ink from the same, and in contact with the face of the type in the form secured to the under part of the platen, G, substantially in the manner and for the purpose described. Second, I claim arranging the inking rollers, Q R, in the relation to each other and to the inking roller, K, at the lower end of the platen, G, when raised as de-seribed, and in combination therewith. Third, I claim the segmental shield or plate, P, so arranged in relation to them and the corresponding segmental formed arm or support, C, as to d thoroughly protect the sheets of the paper being imprinted, from con-tact with the side inking rollers, and enable its edgea, to be moved upward in the space between the shield or plate, P, and arm or support, C, substantially in the manner as described.

LIFTING HANDLES-Joseph B. Sargent, of New Brit-ain, Conn.: I am aware that handles have been made with projections similar to D, for the purpose of striking on the plate, to prevent the handle from be-ing ruised above its proper position when in use. I therefore do not claim as my invention the projec-tions, D D, nor their striking on the plate. But I claim "a lifting handle" with the plate cast in any metal that can be bent, having the socket formed in the manner described, and operating in connection with the handle, as specified, the whole being an im-proved article of manufacture.

HEMP FRAKES-William Shelby, of Waverly, Mo. : I do not claim, broadly, the invention of reciprocating beaters or blades for hemp machines. But I claim the arrangement of the beaters or blades, I J, at varying distances, in combination with the yielding plates, K, as and for the purposes shown and described.

(In this hemp brake a series of reciprocating h

are employed, operating or working between stationary blades placed in oblique position relatively with the reciprocating beaters, and consecutively in a reverse position relatively with each other. These parts are used in connection with elastic plates, so that hemp or flax may be thoroughly operated upon, the woody portion being first broken, and then detached or separated from the fibrous portion.]

COMBINED BOOK AND SLATE—Forrest Shepherd, of New Haven, Conn. : I am aware that slates have been used in books, where it was necessary to turn back and forth from one to the other, which in general is attend-ed with more incomentence than where the two are used separately. I therefore do not claim that arrange-ment as uch as my invention. But I claim the combination of the slate with the book when so connected and arranged that the slate

But 1 claim the combination of the slate with the book, when so connected and arranged that the slate can be used with equal convenience and facility with sach page of the book, while the page and the slate are continually before the eye of the user, as re resented in Fig. 1, and the whole is constructed and connected substantially as described.

CAR SEATS-John W. Sibbet, of Cincinnati, Ohio : I Can Scats-John W. Sibbet, of Cincinnati, Ohio : I Caim constructing every alternate seat in two distinct parts, and providing the upper detachable portions, A', with guiding hubs. L, at their ends, to which are st-tached straps or bands, K, for elevating them, horizon-tal spring bars, N, whose ends enter slots, J, in the guide columns or posts, I, for sustaining them, in con-junction with the straps or bands, K, in their elevated portions, A', and combining with the said upper de-tachable portions, A', and the permanent seats, A, pieces of cushioned or stuffed cloth, Q, or other ma-terial, capable of being packed in the boxes, b, of the seats, the whole being constructed, arranged and op-erated substantially as described.

Every alternate seat in the car is made in two parts nd the upper portions are provided with means for clevating and sustaining them in a horizontal plane be-

tween the permanent seats and the roof of the car. The upper portions and lower vermanent seats are prowith cushioned canvass, or other sacking cloth, so that they can form beds upon the frames, and accommodate as many persons laying down as in a sitting

posture.]

RAILBOAD CHAIRS.-James H. Simmons, of Painted Post, N. Y. : I claim the construction of a chair raised in the center for the ends of the rails to rest on, as shown at cc, and sloping from near the center toward each end of the chair, leaving a space between the rails and the chair over the sloped portion, to accommodate the spring of the rails, together with projections, V V, as described.

CANDLESTICKS, &C.—Samuel Slocumb. of Cambridge, Mass. : I claim as a new article of manufacture, a lamp stand having a metal socket, a glass shank, and a mar-ble base, the whole being secured together by the rod, D caset forth ble base, the w D, as set forth.

PREPARING WOOL AND OTHER FIBERS FOR SPINNING —Waterman Smith, of Manchester, N. H. : I claim, in the process of drawing wool and other fibrous sub-stances, heating the sliver of wool, or other substance, and keeping it hot while it is being drawn, by passing it over or against, and in contact with, heated surfaces, for the purposes set forth.

MACHINE FOR CREASING AND BLACKING LEATHER FOR HARNESS-Adolph Stempel, of Oquaroka, Ill.: I do not claim, broadly, the employment or use of creas-ing and embossing rollers, in connection with a pres-sure roller, for ornamenting and creasing leather, for such device has been previously used. But I claim the pressure roller, F, and the creasing and embossing rollers, i, in combination with the color fountains, K L, and felt rolls, M, bite while being ar-ranged to operate as and for the purpose set forth.

(By the employment of creasing and embossing roll ers and a pressure roller combined, leather straps of various widths may be creased and embossed. In connection with these there are also two color fountains and felt distributors, so placed as to color the edges of with th

vention, I effect an important and valuable improve-ment, as my invention rests on an improved mode or means of carrying out such principle, and consists in an arrangement of pipes with respect to the vessel and boiler. Whereby the steam and water passages are en-tirely separate from one another, so that the water does not hinder or obstruct the passage of the steam from the boiler to the vessel, D, one not having to rush directly by and in contact with the other, while the steam may be flowing into the vessel, D, of the safety apparatus. Furthermore, my arrangement presents other advantages, as by means of it the safety appara-tus is entirely out of the boiler, and is not liable to be in juriously affected by the foaming of the water in the boiler.

boiler. I claim the improved safety apparatus as specified, or the above described arrangement of the two separate steam pipes. It, the two separate water pipes, gi, and tubular shaft, a, together and with respect to the boiler, A, the vessel, D, and its loaded level, C, and so as to enable the whole to operate substantially in manner as explained.

SPEED INDICATOR AND RECORDER FOR RAILROAD CARS-J. Dutton Steele and William Lorenzo, of Potts-town, Pa. : We claim the governor shaft and indi-cator, and the shaft carrying the prepared paper, in combination with the main driver, arranged and opera-ting as described.

ting as described. HARVESTERS—Charles T. Stetson, of Amherst, Mass.: I claim combining two double-edged cutting blades with each of the vibrating cutter shanks for the purpose of reducing the number of joints in the cutting appara-tins, substantially as set forth. I also claim combining an inwardly extending curved arm, a', with the inner end of the finger bar, when the vibrating end of said arm is made to play between guid-'ing checks, or in a guiding groove, and the said inner. end of the finger bar is jointed to a vertically sliding head, all substantially in the manner and for the pur-pose set forth.

pose set forth. Lock-O. B. Thompson, of Hudson, Ohio : I claim the tumblers, f, and guards, g, constructed and arranged substantially as shown, and placed in such relation with the plate, b, of the bolt tumbler, C, and slides, j, to op-erate as and for the purpose set forth. I also claim, in combination it the above parts, the bar, H, arranged substantially as shown, so as to be acted upon by the arbor bit, s, to adjust the tumblers, f, as the bolt, B, is shoved out from the case. I further claim the plate, I, and buffer, m, placed at the back part of the slid e chamber, E, substantially as and for the purpose set forth. TThis invention consists in the use of a series of slot-

[This invention consists in the use of a series of slot-

ted tumblers and guards peculiarly arranged, and placed in such relation with a bolt tumbler and adjusting lever that a very simple burglar and powder-prooflock is ob-

tained, one that may be cheaply constructed, the tumblers rendered permutable, and no parts liable to get out of order.]

SEEDING MACHINE-Joseph Walton, of Delavan, Wis. : I do not claim the sowing of grain broadcast by centrifugal force. nor combining a sewing machine and a harrow, nor the sowing of two or more kinds of grain at one and the same time. Lakim the pastary disk. B in combination with the

at one and the same time. I claim the rotary disk, B, in combination with the throat, L, the partition, N N, the valve, H I, the finger E, and the grass seed hopper, when the whole are ar-ranged and combined for joint operation as set forth.

CAR BRAKES-J. N. Ward, of Brooklyn, N.Y.: I claim the combination of the pulleys and brakes, to-gether with the mode of operating the same, the whole being constructed and arranged as specified, and for the purposes set forth.

purposes set forth. SELP INKING HAND PRESS_Daniel Zuern and L. L. Bevan, of Shamokin, Pa. : We claim the combination of the arm or lever, G, with the shaft, H, the crank, I, and the vertical revolving shaft, J, and the connection of shaft J, with the revolving arm, K, thereby accom-plitating a double action, viz, first upon the ink roller, D, second upon the movable bed, E, for reception of rard or paper to be stamped or printed. By down ver-tical pressure of lever, A, roller, D, moves horizontally over ink sponge, F, and in contact with it. We also claim the combination of finger, d, with hook e, on movable bed plate, E, and also the movable bed plate, E, for the purpose ubstantially as set forth. But we do not claim any other part or portion of the machine as new, or of our invention. Avir B Oves, Henry Howson, (assignor b) Isaac P.

AKIE BOXES-Henry Howson, (assignor to Isaac P. Wendall and Jacob L. Wendall), of Philadelphia, Pa: I claim the combination of the box with the bearings, B and B', and retaining keys, C and C', when the in-terior of the box is arched on the top, when the said arch terminates on each side of the recesses, g, form-ed in the sides of the box, when the keys are adapted to fit into the recesses and against the edges of the bear-ings, and when the seve al parts are arranged in re-spect to each other, substantially in the manner and for the purpose set forth.

Been in the device patched by his, ind to hocks, d. d. But I claim the shaft, E, provided with hocks, d. d. aud arms, e., which are connected by rods, f f, with lever, h, having their fulcra, i, connected by pendants, i, to the arms, k. of a shaft, l, which is connected with the scale beam, G, by the arm, o, and rod, a, the rods, q, of the body resting on the lever, h, when the latter raises the body and the latter provided with the rod, c, for the hocks l, to catch over, the whole being arranged substantially as and for the purpose set forth.

[This is an improvement on a cart previously patent ed, and illustrated on page 129, Vol. XII, SOI. AM. It consists in an improved mechanism, whereby the cart body may be firmly secured to its bed when necessary. and also readily detached therefrom, and elevated s as to be connected only with the scale beam, for the purpose of having its load weighed.]

PADLORS-E. M. Mix and J. E. Mix (assignors to themselves and C. D. Johnson), of Ithaca, N. Y. : We do not claim, separately, the curved tumblers, a, for they or their equivalents have been previously used. But we claim the combination of the curved or bent tumblers, a, and dog, D., rovided respectively with springs, C k, and arranged relatively with the bolt or shackle, B, to operate as and for the purpose set forth. [In this lock a dog with a series of tumblers are used, so constructed as to render it extremely difficult to pick or open by any instrument except the proper key. The invention is more especially applicable to padlocks, although its use is not confined to them.]

RUDDER FOR VESSELS-Silas Yerkes, Jr. (assignor to himself and George Yerkes), of Philadelphia, Pa.: I do not claim, broadly, making a rudder in two parts, and connecting them so as to act simultaneously, but inde-pendently of each other. But I claim the gearing of the outer or aftermost of the two hinged portions of the rudder with a fixed gear or toothed are attached to the vessel, substantially as and for the purpose specified.

[This rudder is made in two parts, called by the inventor the "main rudder" and " outside rudder " The former is hinged in the same manner as a common r dder, to the stern-post of the vessel, and the other one is hinged in a similar manner to the back of the fast one, and has secured to it a concentric toothed gear. which gears with a stationary toothed arc, concentric with the first one. The main rudder is operated in the usual way, and by its action the outside one is caused, by the arc and gear, to move faster in the same direction, and the two combined produce a greater effect on the water by a given movement of the steering apparatus than a single rudder presenting the same area of surface.]

RE-ISSUES

RE-ISSUES. MODE OF GENERATING HEAR-T. R. Hartell (assignee of Wm. Hartell and Joe, Lancaster), of Philadelphia, Ba. Patented Nov. 23, 1853 : I claim the adaptation of, or rendering available, tar, as a tael for the production of the intense and steady heat required for the malting of glass and for other processes and manufactures, by introducing water or the vapor of water into a furnace or fire place, in contact, combination with, or in close proximity to the tar, substantially as set forth.

SEWING MACHINES-I. M. Singer and E. Clark (assig SEWING MACHINES—1. M. Singer and E. Clark (assig-nees of John Bachelder), of New York City. Patented May 8, 1849: What is claimed is the combination of mechanism substantially such as is described, so that the cloth or fabric to be sewed being placed upon the machine will be automatically fastened on to the feed ing apparatus, carried forward to receive the stitches, and discharged from the feeding apparatus, aubstantial-as described, and so that scams of any desired length may conveniently be sewed.

CORN HARVFSTURS-E. C. Manck and W. T. McGa ney, of Conrad's Store, Va. Patented April 22, 1856 We claim, first, The rotary arms, p, in combination with eccentric guides, q, gubstantially in the manner and for the purpose specified. Second, The employment of a double series of cut-ters, for cutting stalk and stump, as described.

ADDITIONAL IMPROVEMENT.

METHOD OF ATTACHING LAMPE TO LANTERNS-John Fleming, of Pitraburg, Pa. Patented July 6, 1865: 1 Caim the improved arrangement described, the same considering in the attachment of the series, D, and clips, E E, to the lamp case, instead of to the lautern as and for the purpose specified.

DESIGN.

STOVES-E. J. Cridge, of Troy, N. Y.

Monster Steam Hammer.

There is at present being constructed in Newcastle-on-Tyne, says the London Times of the 4th ult., by Messrs. Morrison & Co., engineers, of that place, a monster steam hammer, ordered by the Russian government. It is the largest ever constructed on the Tyne, and is of most gigantic proportions. It is constructed on the principle of Messrs. Morrison's patent. The hammer bar and piston are forged in one solid mass. The diameter of the bar is thirteen inches, and that of the piston thirty-one inches, and the total weight of this portion of the hammer exceeds five tuns. It was forged by a two-tun hammer of similar construction. The cylinder stands on two frames of three feet in width, and there is a clear working space of fourteen feet between them. The frames arch overhead, and clasp the cylinder, the whole being securely fitted

and bolted together, and forming one solid mass. The total hight from the ground to the under side of the frame is nine feet four inches, and the total hight of the hammer itself is eighteen feet, the hammer having a clear fall of six feet. The ingress and egress of the steam is regulated by a double balance piston valve, which is worked by hand, by produced by giving two or three coats, and means of a long lever reaching from the valve to a staging, on which the engine-man stands. The number and force of the blows can be regulated, by means of this valve, to he most astonishing nicety, so great being the command which the workmen have over this immense mass, that it can be arrested in a moment, while in the act of falling. One of the great features of this hammer is the entire absence of all complication in its construction, so great, indeed, that it hardly looks complete as it stands, and it seems impossible that one lever could make various changes of movement and varieties of blows. so necessary to forge work, but this is the case. It is very well suited for the rough work it has to undergo, and is peculiarly adapted to be used in countries where-as in | rust for two days. The barrel must now be Russia-skilled labor is scarce, as it is almost impossible for any portion of it to get out of repair. The breaking of piston rods and cylinders, so common in other hammers, cannot occur here, as the hammer bar or piston rod is of such enormous dimensions, and is forged solid in the piston, the two combined forming iron.

the whole weight of the hammer. This novel machine is just completed, and will, in a few days, be shipped for St. Petersburgb.

Domestic Rccipes.

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ARTIFICIAL FLOWERS .- The beauty of these imitations of the floral world depends upon the taste and skill of the makers. The delicate fingers of woman and her quick powers of imitation, combined with an exquisite taste for the beautiful in nature, enables her to excel in this branch of art, which at present is carried to the highest pitch of perfection in the French capital. Although all the finest qualities of our artificial flowers are imported, still great quantities of them are manufactured in New York City, and they may be imitated by many females as a domestic recreation affording much pleasure. The materials required for them are velvet and fine cambric for the petals, and taffety for the leaves, with thin whalebone or wire for the stems. These are cut into the proper forms and pasted together with a solution of gumarabic. The colors to produce the shades are put on with a fine hair pencil in the same manner as drawings are colored and shaded. Carmine is employed to produce the red and pink colors; the yellow is a tincture of turmeric; green of distilled verdigris; blue neutralized sulphate of indigo; and purple a tincture of orchil or logwood and the oxyd of tin. Great care is necessary in the employment of these colors.

To CLEAN GLOVES .- Lay them on a clean board, and first rub the surface gently with a clean sponge and some camphene, or a mixture of compliane and alcohol. Now dip each glove into a cup containing the camphene. lift it out, squeeze it in the hand, and again rub it gently with the sponge, to take out all the wrinkles. After this gather up the cuff in the hand, and blow into it to puff out the fingers, when it may be hung up with a thread to dry. This operation should not be conducted near to a fire, owing to the inflammable nature of the camphene vapor. The receipts given in all the printed books we have consulted for cleaning gloves are barbarous.

MAHOGANY STAIN-The color of mahogany may be imitated with a strong solution of logwood and fustic put on boiling hot with a brush. The color can be reduced to any depth of shade according to the strength of the liquor employed. After it is quite dry the wood should be varnished and afterwards polished. A varnish made with dragon's blood dissolved in alcohol, and applied in two or three coats will make a very good imitation of mahogany. When dry it should be rubbed down with rottenstone and oil.

ROSEWOOD STAIN .- This is made of a strong solution of logwood and red wood, commonly called hypernic. It is put on the wood when hot with a brush. the dark lines being the light shades one. By washing over the surface of this stain with a weak solution of saleratus, it will receive a bluish tinge and appear of a darker shade. When dry, use any kind of varnish for the production of a polished surface.

YELLOW STAIN.—A decoction of turmeric and a little alum, or the grounds of beer and a little sulphuric acid, makes yellow stain on white wood. Dilute nitric acid brushed over white wood, then exposed to the heat stove. also makes a yellow stain; this is the most convenient one for imitating maple.

ing.]

PEDAL ATTAORMENT FOR PLANOS—William B. Stet-son, of Taylor, N. Y. : I claim the construction and ar-rangement of the pedal chord bars, b b, connecting suapension rods, c c c c c, and upper bars, f f, and finger rods, i i i i, and operated as described in com-bination with key-board instruments, and whereby the corresponding harmony of any melody or air is pro-duced simultaneously therewith by the performer, through the agency of the feet, substantially as set forth.

SAFFTY APPARATUS FOR STRAM BOILERS-Francis Stebbins, of Hinsdale, N. H.: I am aware that it is not new to so combine a vessel with a boiler and an alarm or signal apparatus, that such vessel, when the water in the boiler may be above its lowest safe water level, shall be kept filled with water by the pressure of the steam, and when such water may fall below such level of afety, such vessel, by the entrance of steam into it, shall be empired of its water and thereby, by the abstraction of the weight of water from such vessel, the alarm or signal sumarity aball be not in onerstion. the alarm or signal apparatus shall be put in operation, and therefore I do not claim such. Although I main-tain this principle of operation in carrying out my in-

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BILLIARD TABLE-Daniel D Winant, of New York (Ity, seignor to William R. Winant, of Brooklyn, N. Y. : I claim, first, Constructing the beds of billiard ta-bles of slass of glass, substantially as and for the pur-poses specified.

poses specified. Second, I claim the clips, c c, taking the beveled edges of the slab to retain the same, as described and shown. Third, I claim the block, e, receiving the screws, g, of the cushion rail, as and for the purposes described.

MECHANICAL MOVEMENT-Joseph H. Davis, of Womaximation movement-Joseph H. Davis, of Wo-burn, Mass.; I claim the arrangement set forth for transmitting power from any prime motor to a propel-ling gear or wheel, viz, through the intervantion of a series of curved or bent and weighted arrang, said arms working together a d connected to the gearing at their ends, substantially in the manner and for the purpose set forth.

BROWNING GUN BARRELS .- Mix one ounce of nitric acid and four ounces of the sulphate of copper in a pint of water, and apply this to the surface of the barrel, and set it aside to rubbed with a stiff brush, washed with lime water, dried, and afterwards varnished. It is sometimes necessary to apply two and three coats of the acid solution to obtain a proper coating of oxyd. The lime water neutralizes any free acid that may be left on the

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