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Issued from the United States Patent Office. FOR THE WEEK ENDING AUG. 7, 1855.

MODE OF SECURING TIRES UPON WHERLS-John L. Irwin, of Franklin, Ala. I claim attaching or adjusting tires to wheels, by having the ends of the tires bent so as to form lips or projections, a a, through which a screw bolt, C, is passed, for the purpose of drawing the ends of the tires together, and fitting the same tightly to the fel-lies or rim, the rim having a recess, d. made in it to re-ceive the lipsor projections and screw bolt, the recess be-scribed.

[This invention is designed to save time, labor, and fuel, in the setting of tires; also to prevent accident in case of the loosening of the tire. All our readers are familiar with the common mode of tire setting, viz. by making the hoop a trifle smaller than the wheel, and then expanding the iron by heat until it w ll slip on ; the subset quent cooling of the tire causes it to contract to its original dimensions, and consequently to bind tightly upon th wheel. Mr. Irwin dispenses with this round about process Instead of welding the ends of the tire together, he hooks them over, and connects them with a screw bolt. A recess is cut in the felloe for the bolt and hooked ends of the tire, which enables the operator to screw up the tire tightly after it has been applied to the wheel. If the tire becomes at any time a little loose, all he has to do is to apply a wrench to the bolt and tighten up. Under the old plan, the diameter of the tire would have to be reduced and reset.]

duced and reset.] Ship Wirk(HER—Peter H. Jackson, of New York City : I do not claim a pawl or pawls acting on their rachet wheels on either side of the center carrying the same, neither do I claim applying a pawl, hand spike, socket, and retaining pawl to a ratchet wheel, as this has been done, but only lor ortaing the said ratchet wheel in one direction, and I am aware that pawls with counterpoise weights to make them act upwards lustead of downwards, are well known. I am also well aware that winches and windlasses have been fitted by means of external ratchets and hooks, and internal ratchets and pawls applied at the outer end of the head, so that the same can be rotated in either direction. Therefore I make no claim to rotating winches or wind-lasses in either direction, as this is well known and in com-mon use.

Therefore I make no claim to rotating winches or wind. lasses in either direction, as this is well known and in com-mon use. It will be evident that my arrangement of ratchets and pawls has important advantages over such arrangements, because there is nothing to prevent a rope being easily wound around the winch or cast-off, whereas, in cases where the handspike is applied at the outer end of the winch or windlass head, the same has often to be pulled out to allow therope to be taken off, but in mine that is not the case, and besides this, there is more strain on the shaft carrying the parts when the hand spike is applied at the end thereof, than when it acts close up to the bit of timber carrying said shaft. I am not aware that a double acting pawl has ever before been applied beneath a ratch-et wheel, and fitte dwith the counterporse weightto make the same act upwards, and also allow for turning said pawl under to change sides, when said pawl is combined, with a double acting pawl, set on, and moving with a hand spike and socket (or lawer.) and applied to the upper part of said ratchet wheel in such a manner as to rotate the same in either direction, unterby producing a double acting purchase with oaly one ratchet wheel, and outain-ing the advantages specified. I claim the reversible or double acting pawl. 4, below the ratchet wheel, in combination with the double acting pawl, a, to which power is applied to rotate said ratchet wheel in either direction, in the manner. As as specified.

PROPELLING VESSELS BY THE DIRECT ACTION OF STEAM ON THE WATER-W M. J. McIntire, of New York City. I claim protecting the steam from condensation by discharging at the same time with it, some non-condensible gas or gase, or fluids, or both in combination, in such manner as form an envelope for the steam, for the pur-poses as described.

[This is a curious way of using steam power. Why not tie up the steam in a woolen blanket !]

MANUFACTURING CARPETS—John G. McNair, of West Farms, N. Y. I claim the fabric substantially as descrited produced by the double wefts, one or both of which is party colored, in combination with the two sets of warps, one to divide and ingrain the "eits, and the other to bind in the wefts, substantially as and for the purpose specified.

in the wefts, substantially as and for the purpose specified. DENTAL CHAIRS-D. W. Perkins, of Rome, N. Y. I claim, first tightening the ball and socket joint, so as to secure the body of the chair in the desired position by means of the land, F, which encompasses the socket, b, the band being operated upon by a clamp, G, as shown, whereby the parts, e, f, q, of the socket may be pressed or bound snugly around the ball d, substantially as shown and described. Second, I claim attaching the head rest, N, to the inner edge of the plate, 0, by hinges, and having the head rest secured at the desired angle of inclination by a segment rack, P, the plate, 0, beins allowed to slide laterally up-on a plate, Q, at the upper part of the bar, R, which lar works in an opening, S, in the tack of the chair, and is secured at the desired point by the rack, v, and spring catch, w, for the purpose of rendering the head rest cap-able of periect adjustment, as set forth. [The seat of this chair rests upon a ball and socket]

[The seat of this chair rests upon a ball and socket The seat of this chair rests upon a ball and socket joint, combined wi h which are suitable catch locks, so that when the chair is turned into any desirable position it will there remain fixed until again altered. There is also a peculiar arrangement of the head rest and back, which are very advantageous. Such an improvementa this has long been wanted by dentists, surgeons and other, and can hardly fail to find an extensive introduction.— Notwithstanding the great variety of movements of which Mr. Perkins' chair is capable, it is still very simple construction, strong and substantial in its parts.] MACHINE FOR MEASURING AND WEIGHING GRAIN— Charles A. Postley, of Philadelphia PA:: 1 claim the combination substantially as, and for the purpose set orth and described, of the weighing mechanism, or its equiva-lent, with the series of measures upon an endless chain which carries them in succession under the hopper, under the strike, and over the scales. I am aware that in the grain, weighing machines the weight of the grain received in the hopper, and when the destred weight haged in the hopper, and when the destred weight haged in the hopper, and when the destred weight haged in the hopper, and when the destred weight haged in the hopper, and when the joint, combined wi h which are suitable catch locks, so

Scientific American.

ADJUSTING BLINDS TO WINLOWS, &C.-C. E. Parker, of Boston, Mass., and Joseph Sanger, of Watercown, Mass.: We do not claim fitting blinds in grooves in the caving, and having a recess or box formed over the casing to receive the blind, for this is not new, iron doors and shutter shaving teen previously so arranged. Butwe claim attaching the ropes or chains, ee g, to the two parts, C C, of the blind, so that a portion of the ropes or chains, ee, will pass on the outer side of the casing, A, and within the apartment or house, and there-by allow the parts, C C, of the blind to be adjusted as de-sired, without raising or opening the sashes, as herein shown and described.

[In this improvement the blinds, instead of being h ng on hinges and made to open and close in the ordinary manner, are divided into two parts and caused to slide up and down in the window frames, like the common window sashes. By means of a simple application of cords and pullies the blinds thus arranged are moved from within the apartment, thereby obviating the inconvenience of opening the window for that purpose. The blinds can be made to disappear in the casement when not wanted for use. The simplicity, cheapness, and utility of this patent will commend it every where to notice.]

SAWING LUMBER-R. E. Parkhurst, of Brunswick, Me. I claim, first, the method described of connecting the rack bar to the carriage, so that the bar may have a sight notion, independent of the carriage, for the purpose set forth. Second, I claim the dogs, P R, constructed and operated as described, in combination with the notched bar, F', whereby they may be instantly moved, and set to accom-modate them to different lengths of log, as set forth. Third, I claim the described method of connecting the dogs with their sliding guides, P. whereby they may be operated longitudinally and transversely in the manner set forth. Fourth, I claim the pointed screw dors, V' V, operating

set forth. Fourth, I claim the pointed screw dogs, V' V, operating in the manner sul stantiafly as set forth. Firth, I claim the saw guide, IL2 so constructed as to be thrown out of the way by the log, in the manner set forth, Sixth, I claim the double deg. S; which when out of use may le sunk flush with the surface of the head block, and may te run in and out, in the manner described, for the purpose of sawing the butt and point of shingles.

MOLASSES PITCHERS-Edward Page. of Worcester, Mass.: 1 claim the application to molasses cups of a ves-sel to catch the molasses which drips from the cup, and the vessel to swing, as described.

the vessel to swing, as described. SEED PLAYTERS_SIAS G. Randall, and James II. Jones, of Rockton, III., In that class which open the soil and deposit the seed by dropping rather than by forcing, tering the ground, and dividing in such a manner as to displace the earth and drop the seed, also another device by which a soid naked wedge plerces the soil. and the seed, on its withdrawal, is dropped into the opening. Also another device by which the plixon protruding below the drill, is driven upwards by the pressure of the earth, and receiving the seed in a cavity in its side, on lifting the ma-chine, is pressed down by a spring, and discharges the seed against the earth, while the plixon fills the hole in the ground, we therefore do not claim any of these. But we claim the use of a sheath and a tongue filling it, so combined with a lever and forcing handle, that by means thereof, or their equivalents, the sheath in the earth as a lining until the seed is deposited through the lining substantially as described. FORMING SCREW-THREADS, & C., IN THE NECKS OF

FORMING SUBSTAINTING AGESCITED. FORMING SCREW-THREADS, &C., IN THE NECKS OF GLASS BOTTLES-AMBER Stone, of Philadelphia, Pa.; I claim, in the construction of tools for forming screw-thread, angular or other scores in the necks and orlifces of glass, earthen, or other bottles, and other articles, making the plug which forms the interior of the orlifce to turn with the bottle, jug, or other article, while the ma-terial of the orlifce is worked around it, substantially as described.

TANNING APPARATUS-George W. Snith, of Nanti-coke, N. Y. il claim surrounding the ordinary tan leachesy with a water chamber constructed in the manner and for the purposes here in set forth, not intending to limit my-self to a particular form or mode of structure, hut com-prising any form by which the leaches are surrounded by water spaces, substantially as described.

prising any form by which the leaches are surrounded by water spaces, substantially as described. Cosstruction of Artificial Leos-Addison Spaul-ding, of Lowell, Mass. 1 disciaim the knee joints, as patented in France by Ferdinand Leoppid John, Nov. 11, 1836, wherein the central pins withstand all the wear and shock of the leg when in use. I also disclaim any part, device, or thing embraced in the patent granted to Johnathan Russell, August 17th, 1850. John J. Drake, August 31st, 1852. I also disclaim the application and use of india rulber as applied to move the leg, as in the patent granted to John L. Drake, August 31st, 1852. I also, and finally disclaim the surface of deer skin suffice with hair, and attached to the bottom of the foot, described with the invention patented by B. Frank Palm-er, August 17th, 1852, as such will not relain any elasticity when used, but will cake together as hard as the vood of which the leg is composed. I claim, first, the knee spring, F, or its mechanical equivalent, for throwing forwards the portion of the leg marked A, at each step of the artificial leg, esentially in the manner and for the purposes set forth. Second, I claim the chain or rool, G, connected and com-bined with the india rubber, J, or their mechanical equi-valent, for swinging up the forward portion of the foot on the axis or pin. M, or other turning point, at each step of the operator, G, G, connected and com-bined with the india rubber, J, or their mechanical equi-valent, which is secured in the lacel of the forth each of the foot and tipped forward by the operator, to prevent he shock upon the cords and nerves in the stump of the antural leg, essentially in the manner and for the purposes set forth.

NORM. SRIF-ADJUNTING TONGUE IRON-W. J. Temple, of Princeton, Massa. It may be found best, in some caves, to leave off the nut on R, and connect the lever, M, directly bit, by making a hole or holes in its end or near it, and the form and arrangements of the other parts be varied by the circumstances of the particular cases. Therefore I do not claim the particular form or arrange-ment, but I claim making the part, R, movable and self-adjusting, in connection with the lever or any smillar means to raise it, in the manner and for the purposes set forth.

iorth.

EALEROAD SIGNALS—Jacob Busser, of Philadelphia, Pa.: 1 do not confine myself to the bells for producing the alarm, as the same may be effected by means of a cong or sing other suitable device. Nor do 1 confine myself to placing the parts above and below ground, as shown and described, as it may be better that the parts be all placed under ground excepting the bells and hammer, or their equivalents, the belts spring, cams, &c., have all been used in various ways for producing alarms. I therefore do not claim them separately. An an aware that signals of various kinds have been so arranged and connected to a railroad track as to be oper-ated by the passing locomotive. These I do not claim in-dependent of my special means of arranging and operating them.

them. I claim the combination of the cams, A B, spring, C, and the rod, E, operating upon the bell or its equivalent, H2, aud spring, P, which are placed upon the draw of the bridge, so that a locomotive, in approaching the draw, will sound the alarm, whilst a locomotive coming from the draw, will pass over the same cams without sounding the alarm, substantially as described.

IRON HOUSES. D. D. Badger, of New York City: I claim the method described of securing the bases of the columns to the breast summers or lintels, by bolling each on the inner side to a broad flanch, c, and keying it on the outer side by a key. d, whereby they are properly secured against any movement back or forth on the breast sum-mers or lintels, or against falling outwards, but are not prevented from falling inwards, when they become in-secure.

[The patentee of the above improvement is a member of the firm of Badger & Co., who are very extensively engaged in the business of erecting iron buildings. To their skill as mechanics the city of New York is indebted for many of the beautiful specimens of architecture in iron which now adorn her streets. The nature and object of Mr. Badger's invention is set forth in his claim. It is an

effective improvement. We hail every improvement relating to the construction of edifices of metal with great pleasure, for they seem to us to be ushers in of the desirable time when stores, dwellings, and all kinds of buildings will be rendered safe from the ravages of fire—that great destroyer of human life, property, and prosperity.]

Machine Bail, Bail, Bailer, Jamer Conner and Thomas Newby, of Kichmond, Ind.: We claim the use of the lever, N, vertical shaft. K, spring and trigger, H and S, spring, Z, and cam, A', by which the action of the drill in drilling is regulated or governed in its depth, arranged and operating substantially in the manner and for the purpose set forth.

HANGING MILL STONES_Robert Cochran. of Cincin-nati, Uhio: 1 claim the movable cochreye, 2 placed in the recess, 3, 3, on the top of the spindle, to cooperate with the cock-head, 4. fit in the balance-rings, 5 5, or their mechanical equivalents, the whole being substantially as described, and for the purp se set forth.

described, and for the purp sest forth. STRAW CUTTERS-D. C. Cumings, of Fulton, N. Y.: I do not claim, the upward cut in itself, as that has been done before. Lut l claim, first, the upward cut, when the material is fed in by a distinct device for that purpose, by which the dirt is separated from the straw or other material to be cut, passing out beneath the feed rollers instead of collect-ing on the stationary guard or cutting plate, substantially as and for the purpose, specified. Second, operating the movable feed roller by means of a spur wheel hung in a vibrating frame or yoke with a universal coupling for connecting its axis with that of the roller, when is aid roller is supported on spring bearings in-dependent of each other, substantially as and for the pur-poses specified. poses specified.

poses specified. CUTTER-HEAD FOR IRREGULAR FORMS-Daniel Dyn-lap, of Concord, N. H.: I do not claim merely applying to a plane iron a contrivance to gauge its depth of cut; nor do I claim the combination of knives in any manner with a rotary cuter head, so that said head shall serve as a guide or directrix to the form or pattern carrying the meterial to be dressed. But I claim combining with or arranging in connection with the rotary guide, B, and each of its knives, in man-ner as described, the cylinder crescent gauge, D, where-by, while the pattern or homers borne against the guide and secribed the generic by successive cuts, until brought down to its proper depth, but the dan-ger of accident duminshed, as specified. I also claim the described improved mode of applying and securing each of the cutters to its stock or supports, whereby. by a force acing longitudinally on them, they are not only held in such direction, but at the same time are gauges, D D, in manner and for the purpose, as specified. CORN PLANTERA-IR. W. Fenwick, of Brooklyn, N.Y.,

gauges, D. D. in manner and for the purpose, as specified. CORN PLANTERE-IR. W. Fen wick, of Broklyn, N.Y., and Reinhold Boeklen, of Jersey City, N. J.: We claim nothing new in the loose covering interior ring or tube, k, separately considered, at the bottom of the planting tube, and are avare that a conical valve at the bottom of the planting tube, connected with a seed delivery slide for operation together by a lever or handle, distinct from any thrust or pull imparted to the tube i.seli, and employing a much more complicated and different arrangement of operating gear has before been used. We claim the combination and arrangement, as shown, of the swinging seed slide, D, valve, H, and tube, K, for the purpose set forth. This hand corn planter is exceedingly slupple, and from

[This hand corn planter is exceedingly simple, and from its construction can hardly ever fail to drop and coverthe seed in the most perfect manner. The nature of the improvement consists in having the seed, slide turn on a center, and in connecting it with a conical valve at the tom of the planung tube, and with a sliding tube, which takes up dirt for covering the corn. When the end of the planting tube is struck into the ground the valve is operated, and with it the slide, whereby a proper quantity of seed is taken from the seed box in the upper part of the im-plement, and dropped; at the same time the covering tube is made to take up dirt and cover the corn. This is a very excellent corn planter.]

a very excellent corn planter.] WRENCH—Alden Graham, of Roxbury, Mass.: I do not claim the arrangement of a plate provided with ratchet teeth, in which a pawl catches, so as to allow the luple-ment to be cperaged without removing it from the but or other article to be turned as ratchet Wrenches have been previously used. But I claim fitting the jaws, E, when turning on pivots in the slot, and operating the same by a ring, c, having a screw thread, a, on its inner surface, to work between hreads, i, cut on the outer surface of the jaws, in the man-ner and for the purpose set forth. If this is more near denice for a wranch. Two near

[fhis is a very novel device for a wrench. Two near ly straight pieces of steel are attached by pivots through their centers, to the end of a suitable handle and form the jaws by which the nut to be turned is seized. The jaws are placed at right angles to the handle, and are hung in a slot in the latter. The back of the jaws are fumished APPARATUS FOR DISCHARGING ATMOSPHERIC ELEC-TRICITY FROM TELEGRAPH WIRES—John N. Game well. of Camden, S. C. Patented in England September 15, 185: 1: 16 on et claim the use of discharging points con-nected with the ground to carry off atmospheric electric-ity

nected with the ground to carry off atmospheric electric-ity. I claim the method of obstructing the passage of atmos-pheric electricity along the line, from one discharging point to another, or their equivalents, provided for a sim-lar purpose, by reducing the capacity of the conductor forming said line, at and immediately after its junction with said discharging points, h h, whether that reduction consists in the employment of an inferior conducting ma-terial, or in reducing the dimensions of the conductor, as set forth, or any other equivalent method of reducing the conducting capacity of those parts of the line, thereby forcing the discharge of the atmospheric electricity from the points. h h, as described. [This invention relates to an apparatus for discharging into the earth all atmospheric electricity with which the

into the earth all atmospheric electricity with which the telegraph wires become surcharged when the atmosphere is in a highly electrical state, thereby obviating all danger of injury to the magnet or telegraph instrument, and enabling the telegraph to be operated during the severest thunder storm. The theory on which this instrument is constructed is based upon the established principle that

atmospheric electricity will leap from one conductor to another, but that a galvanic current will not pass through the smallest space without a continuous conductor. Mr. Gamewell provides an angular coil of wire, placed

near the telegraph instrument or receiving magnet. The wire composing the coil is either made tapering, and diminishes from the size of the telegraph wire to a very small diameter, or in lieu thereof, the elbows of the coil are made of a poorer conducting metal than the other portions. This is for the purpose of causing the atmospheric electricity, when it arrives at the elbows, to leap from them on to some conducting points of better metal, which are placed almost in contact with the elbows. The conducting points are all arranged on a metallic bar, and this is connected with the earth by a rod. The appara tus is placed between the end of the telegraph wire and the telegraph instrument, so that all electrical currents, in approaching the instrument, must pass through the elbowed coil. The conducting points attract off the atmospheric electricity, and convey it safely to the earth, while the galvanic current passes freely to the instrument. Tel egraph companies are so practically acquainted with the damage to property and the pecuniary loss occasioned by the total suspension of operation on their lines, in consequence of the pranks of atmospheric electricity, that we need not point out to them the advantages of this improve ment. When it comes into use, the editors of our daily papers will have no occasion to announce, as they do now quite frequently, that in consequence of a severe thunder storm prevailing at such-and-such a place, all telegraphic communication was suspended, and important intelligence delayed. This invention is one of importance in the art of electro-telegraphing. It has been patented through

delayed. This invention is one of importance in the art of electro-telegraphing. It has been patented through the Scientific American Agency, in Europe Cuba, &c.] MANUTACTURE or DAGUERREOTYPE CASES-Halvor Halvorson, of Cambridge, Mass., (asignor to Horace Barnes. of Boston, Mass.): 1 am aware that boxes have had sheets of paper or pasteboard glued or cemented to their surfaces: I therefore do not claim the mere appli cation of paper by such means. I claim the improvement in the manufacture of picture cases or other articles of like character, from a composi-tion of sheet by such means. I claim the improvement in the manufacture of picture cases or other articles of like character, from a composi-ion of shellac and fibrous material, as described, the same consisting in making said case or article of the said composition, and one or more sheets of paper, and press-ing and combining the whole together in a press or be-tween dies, as described, so that the paper shall combine or connect itself directly with the composition, without the aid of cement interposed between them, and serve to add great strength to the article so made. And i claim the improvement of ornamenting the sur-faces of the improvement of ornamenting in apfyring the gold to the surface of the sheet of paper, or its equiv-alent, turnishing it while on sa d surface, and laying the said lurnished surface in cont at with the surface of the result as specified. I also claim the extension of the paper up the inner surfaces of the sides of the case, and by means of pressure in the mold the same being for the purpose of enabling me to affix to the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the support of the side the velvet covered frame for the

adjusting mechanism, substantially as specified. Looss—John Broadbent, of Oak Grove, Ky.: I claim, first, the insertion of the filling thread by means of two hooks or sets of hooks, arranged to operate one each side of the cloth, one to carry the filling thread to the middle of the shed, where it is met by the other, which takes the threads from the first and returns with it, thus drawing the thread entirely through the warp, substan-tially as described. Second, the employment of the said two hooks or sets of hooks, each as a deliverer to give the thread to the other, and receiver to receive the thread from the other, alter-nately, as described, by which means a good and fast sel-vedge is made on both lists of the cloth. Third, the employment of two fendins forks, j, made of any form, and arranged and operated in any manner, substantially as described, to conduct the filling thread into proper positions to be caught by the delivering filling hooks.

into proper positions to be caught by the detremments intro-hooks. Fourth, giving the two filling hocks or sets of filling hocks, each in turn, a sufficient movement laterally to the path in which they move, to insert the filling, for the pur-pose of enabling one to pass the other in the shed, to take from it the filling thread, substantially as described. Fifth, I claim giving the receiving hook a sufficient movement toward the middle of the cloth after i has drawn the filling through, and before the filling lack of the lay, substantially as set forth, to disengage it from the thread of filling which it has just drawn through.

[The principal feature of this invention consists in the mployment of two hooks instead of a shuttle for putting the filling into the warp, which enter the sheds from op posite sides, the one to take the filling thread from a bob-bin or one of a series of bobbins conveniently placed on the side of the loom, and carry it half way through the shed, where it is met by by the other hock. which takes the thread and retreats thus drawing the filling entirely through. The filling thus drawn through, is double, but the threads are laid evenly side by side, without the possibility of twisting, so that the texture and ap-pearance of the goods remains precisely the same as if the shuttle were employed. All the other points of the invention are more or less subservient to this principal feature. The invention is applicable to nearly all kinds of hand or power looms, either for plain, fancy or figured goods, as well as wide or narrow carpets. Among the advantages which the hooks possess over the shuttle, are first, in running lighter, and consequently requiring less power. Second, in being less subject to wear and tear_ the shuttle motion and its appendages being the most ex pensive part of a loom to keep in order. Third, in obviating the damage likely to occur by the shuttle flying from the loom. Fourth, in seldom requiring the stoppage of the loom, an accident which is not very liable to occur.-As there are no shuttles to be filled, the loom would not he required to stop for a whole day, since the bobbin an be renewed at any moment without stoppage. We regard this improvement as one of a very important and valuable nature. We understand thatit is now being adopted at Paterson, N. J.]

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construction, strong and substantial in its parts.] Machines for McAsturice Asp WriteHine Grain-Charles A. Postley, of Philadelphia, Pa.: 1 claim the combination substantially as, and for the purpose set forth and described, of the weighing mechanism, or its equiva-lent, with the series of measures, upon an endless chain which carries them in succession under the hopper, under the strike, and over the scales. I an aware that in the grain weighing machines the cutoff has been so arranged that it is operated by the weight of the grain received in the hopper, and when the destred weight is attained, this therefore, broadly, I do not claim.

desired weight battained, the therefore or outsight a single claim. But I claim the combination with the lever, M2, and valve, O, respectively, of the lever, M, operated by the cam, N, or its equivalent, and of the platform, Z2, and levers, g, and g2, by which the said valve may be operated by the motive power of the machine, or failing this at any time, by the weight of the grain itself, substantially asset forth and described.

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PREPARING FLOCK-L. W. Boynton, of Worcester, Mass.: I claim the combination of the screw, a, with the brush or traches, as A and E. when the bru-hor brushes have both a rotary and reciprocating motion, and the whole is constructed, combined, and made to operate sub-stantially as described.

cam, N, or its equivalent, and of the praverue, z_{a} , and the press, z_{a} and z_{a} by which the said valve may be operated by the weight of the grain itself, substantially as described. The pressure upon the machine, or failing this at any time, by the weight of the grain itself, substantially as described. Cass RrG⁻LATORS-S. W. Brown, of Lowell, Mass²: I claim the contructing and attaching a guick liver cup. F, or its mechanical equivalent, within the inside of the float through which the say passes on its way to the burners, it combination with the induction tule, D, or its mechanical equivalent, for the purposes of constituting a self-acting valve or valve seat, to evenly regulate the flow of the grases and for the purposes set forther the same and for the purposes set for the manner and for the purposes set for the same in manner substantially as described.

with screw threads, and are encircled by a correspondin screw ring, by turning which the ends of the jaws may be opened or closed at pleasure, and thus adjusted to suit any size of nut. There is a ratchet arrangement which per mits the turning of the nut without removal of the wrench after the laws have been adjusted. The combination of the two devices is ingenious, and results in the production of a very compact and highly useful instrument.]

BR ADDRG MACHYRS-Livera Hull, of Charlesto Mass. I claim the arrangement of the bobin, the pa and the weight within the racer, or with respect to another therein, substantially as specified, the same p senting advantages, as specified.

OIL DRIPPERS-J. M. Thompson of Holyoke, Mass.: I jaim the arrangement of the chamber, R. in combina-ion with the tubes, C and F. as constructed for the pur-oe specified.

po e specified. ATTACHINE HOOKS AND EYES TO CARDS-Addison Capron, of Attleborough, Mass., and J. S. Dennis, of Som erville, Mass. (assignors to themelves and H. M. Rich-ards, of Attleborouch, Mass.): We claim the described combination, or other substantially the same. of a feeding receiver, made to receive the articles, and naintain them at proper distances asunder, a card or sheet-feeding me-chanism, and sewing machinery on one or both sides of sid receiver. said receiver.

Scientific American.

GAUGE AT TACHMENT FOR HAND SAWS-A. F. Gray, and J. U. Fincher. of Thibodeau, La.: We claim attach-ing to one side of the blade of a hand saw, a gauge formed of two strips, a b and lugs, c, having slots, d, made in them, through which slots set screws, e, pass, the screws also passing through the saw blade, substantially as shown and for the purpose set forth.

[This gauge is adjustable on the saw blade at the pleasure of the operator, and it use is to regulate with precision the depth to which the saw cuts into the stuff. In cutting tenons, panel, cabinet, and every species of work where nicety is desirable, the improvement will be found of value. It can readily be applied to old or new saws, as it does not require that the saw shall be made specially for it; when not wanted for use the gauge may be quickly removed. It is very simple, and its expense is trifing.... Every carpenter or wood worker should have one.]

Every carpenter or wood worker should have one.] SPOKE M_{ACUINE} —Wim. Van Anden, of Poughkeeps ie N.Y.: First, I claim the use of the upper and lower ad-justable cutter holders, made adjustable laterally on their axes, substantially as described, in combination with the curved stationary cutters, G, and adjustable cutters, H, and collars for adjusting the same or their equivalents, for the pupces substantially as set forth. Second. I also claim the use of the adjusting yoke and the attachments thereto, for adjusting the cutter holders, or their equivalents, in combination with the cutter holders, or their equivalents, in ombination with the cutter holders, ing levers, or their equivalents, for the purpose set forth. Third, I also claim the use of the double-acting adjust-ing levers, or their equivalents, for the purpose set forth in combination with the cutter holders and their axles; and their combination with the pawls attached to the same, or their equivalents, for the purposes substantially as set forth. MANUXACTURE OF PLATE GLASS—Phillippe Stenger.

MANUFACTULE OF PLATE GLASS-Phillippe Stenger, (assignor to Pascal Yearsley.) of Philadeiphia, Pa.: I claim the application of tractile force to the manufacture of sheet glass, by means of the mechanical arrangement described, or its substantial equivalent.

BED SPRING OF LEATHER SPLITTING MACHINES: J. E. Tay, of North Woburn, Mass.: I claim the improved bed or back spring, as composed of a thin guard or spring sheet of metal, a, and a series of separate springs, h bb, cc. united to or forming part of a plate. B, as described.

Xc., united to or forming part of a plate. B, as described. TEMPLES FOR LOOM S-James Smith, of Laurel, Md., (assimor to himself and Wm. Botterill, of Howard Coun-ty, Md. I am fully aware that burrs, toohed and sertated surfaces have been formed for many purposes, and know-ing that a variety of woolden rollers, with pins inserted, have been used far tollers, I wish however to be under-stood as disclassing such devices, and instead confine my-self so lely to the following distinguishing devices. I claim the temple roller formed with solidraised con-fical shaped min teeth having a hinged con to its case. all

I claim the temple folief formed with solid raised con-ical shaped pin teeth, having a hinged cap to its case, all attached to a flexible rod h h h h, in combination with the forked spring, c d d d, when adjustable in brackets, e e e e. if fi, gg, the whole arranged substantia ly in the man ner described, and constituting very improved tem-ple s. the

DESIGN. LABELS ON BOTTLES AND JARS-Wm. A. Rogers, of Decatur, Ala.

Recent Foreign Inventions.

NEW METALLIC ALLOYS .- Messrs. de Ruolz and Fontenay, of Paris, have invented an alloy which may be employed for almost all purposes to which silver is usually employed. The improved alloy is composed only of silver, copper, and purified nickel; which metals may be combined in any suitable proportions, but the following are preferred :-Silver 20 parts, nickel from 25 to 31 parts, and the rest up to 100 parts in copper. An alloy is thus produced containing 20 per cent., or thereabouts, of silver, and constituting silver of the third degree of fineness, thus reversing the proportions of the ordinary composition of the second degree; this latter containing 800 parts of silver and 200 of alloy, whereas the improved compound contains 200 parts of silver and 800 parts of alloy.

The copper employed must be the purest obtainable in commerce; and the nickel should be purified by some suitable process. The means preferred for the purification of the nickel are as follows :-- When treating impure nickel of commerce, the metal is to be dissolved in a mixture of hydrochloric and nitric acid, or in dilute sulphuric acid. In the latter case the dissolution must be expedited by electric or galvanic agency, and the operation should be carried on in vessels of platinum. The solution is then submitted to the action of a current of chlorine, and the iron impurities precipitated therefrom by boiling with carbonate of lime-care being taken not to have too great an excess of this latter substance. render the whiteness greater.

The nickel is then precipitated by carbonate of soda, and taken up again by hydrochloric acid, and diluted with a large quantity of water. The solution is then saturated with articles are required to be forged, rolled, or chlorine gas, and an excess of carbonate of stamped, it is necessary, during this operation, baryta is added thereto. The liquor must then to restore the ductility and malleability which be left in repose in a cold state; and the nickel the phosphorus has to a great extent impaired. may either be precipitated in the metallic state To effect this, after having obtained regular

The patentees claim the production of an alloy composed of silver, copper, and nickel, in whatever proportions these metals may be of real silver, and may be used for various purposes as real silver.

In connection with the above invention, Messrs. Ruolz and Fontenay have also patented oratory he exclaimed, "tell us not of contracts; cut 36 acres of oats in seven hours, or 12 acres some improvements in the treatment of certain to clean the streets with machines, when the each. metals for producing an improved metallic work can be done by hand." alloy, which consist principally in additions to, and modifications in, the process before de- ing contracts for cleaning the streets; this we during the past week, to witness the farmers scribed.

advantageously modified as to employ the folquired effect has been produced by it.

brought into a granular state, and are after- | knife, for all these are made by machinery. wards replaced in the crucible and re-melted; He must go forth to make his house like the after which the silver is added. The best flux beaver, and take his prey like the panther. which can be used is an intimate mixture of borax and powdered charcoal. The ingots, nounced because of its superseding hand labor, when obtained, must be slowly annealed at a but machinery has not decreased the demand cherry-red heat, in a closed vessel with pow- for labor; it has only changed its direction; it dered charcoal.

ted mixture, described above, the following are | savage. the most suitable for cast articles :-- 1000 parts of the alloy of silver, copper, and nickel, and about 150 parts of the phosphorated mixture. The quantity of phosphorus to be added depends upon the length of time taken in heating. Thirdly, the following method is most prefera ble. The operation is as follows :- Phosphuret of copper is prepared in the ordinary way, and its richness in phosphorus is ascertained by analysis. This phosphuret of copper is then tebles and fruit at a low heat, in such a place re-melted and granulated; after which the following mixture is melted :--Phosphuret of copper 49 parts (of such a strength as to be then corking them up tight, sealing them over capable of introducing into 100 parts of the alloy from 1 to 20-1000ths of phosphorus), nickel 31 parts, and silver from 20 to 40 parts, or more, as desired by consumers. It must be well understood that the silver must not be introduced into the alloy until the phosphuret of copper and the nickel are completely melted, is a method illustrated for preserving fruits, and combined or mixed. The effects produced such as grapes, apples, &c., by carbonic acid by this introduction of phosphorus are to augment the fusibility of the alloy, causing it, have ice houses built like the one illustrated a when melted, to run in a very limpid state, to few weeks since, on page 356, of course will obtain a closer grain, to avoid all porosity, and find it the best method of preserving fruit with

2. In order to preserve the advantages arising from the presence of phosphorus when

Machinery and Hand Labor.

At a recent meeting held in this city, ostensibly called a "Mechanics and Workingmens'

There may be something wrong about makwill not discuss, but we do say, that any man getting in their harvest. He was astonished It has been found by experiment, first, that who declaims against the use of machinery at the great number of reaping and mowing this new combination of metals can be so far for any purpose, whatever,—at the present day machines employed, and the farmers assured -must be a knave or an ignoramus. The man him that but for them they would not have lowing proportions: copper as high as 49 parts, who denounces the use of machinery, to show, been able to secure their large crops. Hand nickel 31, and silver from 20 to 40; making a that he is honest in what he says, should help could not be obtained; good laborers total of 100 to 120. Second, that phosphorus march out to the wilderness to gain his living, were receiving \$2 per day and board, and can be usefully introduced into these alloys, with only the dress, weapons and implements and, in certain cases, extracted after the re- furnished him by nature. He must not take a . The reaping machines have proven to be "the | coat on his back, for the cloth of it is woven farmers' best friends this season." The nickel and copper are first melted, then by a machine. He must not take rifle, axe nor

We frequently hear of machinery being dehas become the drudge. man its director. And As to the use of phosphorus:-1. If it be 'if machinery is to be condemned, where shall required to obtain cast articles, such as statu- we begin ? The seamstress may complain that ettes and objects of art, a certain quantity of sewing machines have taken away her labor. phosphorus must be introduced into the combi- That may be, but it would just be as reasonnation. The introduction of phosphorus can able to complain of the needle and thread she be effected in several manners-first, by metal uses, for they are made by machinery. The diagrams, was published by Thomas Quantril, ing the mixture of the three metals with a laborer who has been sweeping the streets may mixture of equal parts of acid phosphate of complain of the street cleaning machines, but lime and powdered charcoal, brought to a red was not his own shovel made by a machine. published in our country. The author is now heat. Secondly, the mixture of the three A few moments reflection upon the uses of ma- no more; but his widow resides in Dover, metals may also be heated together, with a chinery ought to convince the most ignorant Ohio, and has the plates of the work and a remixture of 100 parts of phosphate of lime, 50 and skeptical of the benefits conferred upon vised copy. parts of sand, 75 parts of borax, and 10 parts man by machinery. It is a test of civilization of charcoal. As regards the relative propor. - it is a grand civilizer. Take it away from tions of the metallic alloy and the phosphora- man and he sinks into the most degraded

Preserving Vegetables.

We have received a number of letters requesting us to give the best means of preserv- | He now whistles, sings, plows, spins, weaves, ing vegetables and fruits in a state as nearly | and a hundred other things, useful, sentimental, fresh as possible. The information is no doubt of great importance. We can only give our opinion respecting a method which we think would be successful if tried fairly. It consists in expelling all the moisture from the vegeas an oven. Then placing them in common glass bottles, heating them up to almost 212°, with wax. Moisture is necessary in the decomposition of vegetable substances; therefore, we think the above plan would answer. The Swedes have pursued this plan for preserving potatoes, for a great many years. On page 261, vol. 4, SCIENTIFIC AMERICAN, there gas; it appears to be good. Those who can to have a greater homogeneity, and finally to | its original flavor and freshness.

Cutting Steel with Tin-Gumming Saws. MESSRS. EDITORS-In 1828, Ezra Goodell, (millwright,) had occasion to true a circular piece of tin of about three inches in diameter. and for this purpose he put it into a quick lathe used for turning rake teeth, and held a ground file against it. To his surprise, the file was cut by the tin, instead of the latter by the former. Among other experiments he tried the gumming of saws with a piece of sheet tin in gines has been running on the Providence and the same manner, but he found that it left such a hard surface on the saw that it could not be filed. This led him to abandon further experiments in that line. At that time there was no SCIENTIFIC AMERICAN to record such experiments for the benefit of society.

Reaping Machines.

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The American Farmer gives an account of a trial between Hussey's, McCormick's, and Atcombined, which alloy has all the appearance Meeting"-the contract system for cleaning kins' Reapers in a heavy field of oats. All of the streets was denounced, and one of the them worked well, but the self-raking attachspeakers was exceedingly severe on the street ment of Atkins is described as giving it a susweeping machines. In a flight of nonsensical periority over the others. The three machines

> A gentleman of our acquaintance made a visit through a great portion of Long Island enough of them could not be obtained at that.

Progressing Backwards.

It is rumored that the British government are about to re-enact the newspaper stamp act. The plan of throwing off the stamp duty of 2 cents on every copyprinted, and substituting a postage charge to that amount when before, mailed papers were sent free, does not work well for the government. There is a great falling off in the revenue.

A Book for Tinsmiths.

In answer to some inquiries, John H. Hanna informs us, that a book named the Tinman's Guide, illustrated with copper and steel a tinsmith, in Washington, D. C., a few years since. It is the only work of the kind ever

Steam Organ,

A mechanic in Worcester, Mass., has built an organ to be operated with steam as a substitute for the air blast. The steam is used at a high pressure, and its tones can be heard more than three miles distant. Well, steam is a genius. and musical.

Reform in Weights and Measures,

We are informed by a correspondent-J.Edi, of Verona, Wis.-that Charles Durkee. Member of Congress from that State, will make an effort to bring the subject of reforming our weights and measures, before the next Congress. We hope our readers in every Congressional Dist. will bring this subject to the notice of their representative. There will be very little opposition, we should think, to such a needed and common sense reform.

A Wonderful Voyage.

The Canadian Barque Arabia has recently made a voyage from Liverpool. England. across the Atlantic, thence up the St. Lawrence, to Quebec, and discharged a cargo of iron; then went up to Kingston, C. W., took a load of lumber and sailed up to Chicago. It is said however, that the form of vessels built for the Lake navigation, is unfitted for that of the stormy Atlantic.

Coal Burning Locomotive.

The "Taunton," a coal burning locomotive, constructed on Dimpfel's principle, which has been illustrated in our columns, has been running with great success for five weeks on the Reading Railroad. Anthracite coal is used for

by means of a galvanic current, or precipitated and homogeneous ingots by the aid of the in the form of an oxyd, which oxyd may be phosphorus, the phosphorus must be almost afterwards reduced to the metallic state. i totally eliminated or abstracted, which may be

Although the proportions above given are effected by submitting, during a long time, the those generally employed for the production of metal to a cherry-red heat, in a close vessel, the improved alloy, the proportion of silver with powdered charcoal.

may be variously increased up to the following The patentees claim the introduction (and in limit:-silver 30 parts, nickel 31 parts, and certain cases the elimination) of phosphorusin copper 49 parts: total, 110 parts. the manufacture of alloys of silver or other

It is advantageous, first, to melt the copper metals.

and nickel in the granular state, and after-[The above information is very useful. wards to introduce the silver; and the flux to The resignation of the venerable Dr. Waybe employed in this state consists of charcoal and borax, both in the state of powder; and land, President of Brown's University, Provithe ingots obtained are to be rendered malleadence, R. I., is announced. He has occupied ble by annealing for a considerable time in the chair of that institution for 29 years-alpowdered charcoal. most a generation.

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Cleveland, Ohio. O. P. STEVENS.

Cautain McClure.

In the British House of Commons, the committee charged with the consideration of the them. He believes that electricity has somesubject of rewarding Capt. McClure, for his thing to do with producing the result. He had discovery of the Northwest passage, have recommended that the sum of \$25,000 be pre- one, which he found to preserve the milk sweet sented to him.

fuelon it. Another of the same class of en-Worcester Railroad, using Cumberland coal, with success.

To Keep Milk Sweet.

A. Boyd, a correspondent, informs us, that he has practiced a peculiar method with much success of preserving milk sweet in the pans It simply consists in placing a piece of new han:mered iron, or three twelve penny nails in each tin pan, then pouring the warm milk on tried many experiments before he hit upon this ; for a longer time than other plans tried by him.