paratus and a guide roller, R, essentially as described, combining the guide roller with it by means of a spring, or making the outer arm of the lever as a spring for the purpose of enabling such spring to operate the lever, in manner and under circumstances as set forth.

I also claim combining the inertia weight with the spring lever, so as to cause such to operate as specified, under a sudden upheaval of the stern of the vessel.

FARE BOXES FOR OMNIBUSES, &C.—I. B. Slawson, of New Orleans, La.: I claim, first, The arrangement of an opening in the top of the fare box, through which outside passengers can deposit their fare, when such opening communicates with a chamber in which the fare first falls, and is temporarily arrested previous to being deposited in the receiving drawer beneath, for the purposes set forth.

Second, I claim the arrangement of the passage block, D, and cover, E, over the opening in the top of the fare box, for the purposes described.

CLASPS FOR HOOP SKIRTS—A. Smart, of New York City: I do not claim to be the first inventor of hoop clasps, nor do I claim any part of the described clasp that is seen in the patent granted to T. Wallace, Jr., Jan. 15th, 1858.

But I claim, as an improved article of manufacture, a hoop clasp constructed with a longtitudinal loop, e, substantially as and for the purposes shown and described.

CHURN—John E. Smith, of Galen, N. Y., and Wrightman Brown, of Ro e, N. Y.: We do not claim as our invention an automatic churn.

But we claim the combination and arrangement of the cylinder divided into two chambers, for the purposes described, by the partition, M, the close interior case, R, adjustable vane blower and regulator, E, refrigorating passage, Y, and ventilators, v v, operating conjointly, as and for the purpose specified.

SEEDING MACHINES—Joseph D. Smith, of Lanca ter, Ohio: I do not claim broadly the employment of two wheels for opening the furrow, the seed being dropped between the wheels.

But I claim the arrangement and combination of the spout, R, wheel, M, frame, H, and frame, D, as and for the purposes shown and described.

FEET WARMING DEVICE—George W. Smith, of Aurora, Ind.: I do not claim broadly, and irrespective of the arrangement and adaptation shown and described, the use of a steam chamber for heating purposes.

But I claim the employment or use of the chamber, I, when applied to a forge, and heated by steam generated within a box, E, or its equivalent, by the force of the forge, substantially as described.

CULTIVATORS—Nathaniel S. Smith, of Buffalo, N. Y.: I do not claim the flanged or broad cutting cylinder, B, nor placing a gang of hoes behind such a cylinder, nor the combination of the comb formed clearer with such a cylinder.

What I claim is the use of the double joint piece, D, to connect the gang of hoes to the axle, when said joint piece extends beyond the axle, and subserves also the purpose of a foot lever to throw the hoes out of the ground, in the manner and for the purpose set forth.

PROPELLER FOR BOATS—Le Grand C. St. John, of Buffalo, N Y.: I claim, first, the construction and use of a propeller case having three conduits arranged on parallel lines, so that the water will be received into the case through the outside conduits at the same stroke of the piston that water is discharged through the middle conduit, and *vice versa*, as set forth.

Second, I claim the arrangement of two revolving pistons, D E, with respect to an enclosing case, whether said case is made single, as represented in Fig. VII., No. 2, or double, as represented by No. 3, Fig. 1, and the combination thereof with a boat, so that in the act of propelling, water will be received into the case at one orifice or channel, and discharged at another orifice of channel, through the bottom of the boat, for the purposes and substantially as set forth.

Third, I claim the construction of my revolving pistons, partly of wood and partly of iron, substantially as described.

MACHINE FOR CUTTING IRREGULAR FORMS—Henry D. Stover, of Boston, Mass.: I claim, first, The guards, 3, and bar, 1, carrying them combined with the revolving cutters and table, in the manner described and for the purposes fully set forth.

Second, I claim the guide, J, so constructed and fitted to the outer surface of the bearing or tube, B, as to be vertically adjustable thereon to guide the pattern without wearing it, while the piece secured to the pattern relieves the shape from the cutting knives immediately above, essentially as set forth.

Third, I claim the combination of the adjustable elastic sleeve, L, with the tube or bearing, B, and guide, J, in the manner described and for the purposes fully set forth.

Fourth, I claim the slabbed spindle, 4, collars, 6, and the cutters, constructed and relatively arranged and operated, in connection with each other, essentially in the manner and for the purposes fully set forth and described.

ROLLING RAILWAY CHAIRS—James H. Swett, of Pittsburg, Pa.: I am aware that the portion of the metal that is to form the jaw or jaws has heretofore been raised up and then bent down into proper position. This injures the fibre of the metal, and makes a bad chair. I do not claim any such method.

But I claim the process of rolling railroad chair, the cutting under or into the solid iron for the purpose of forming the jaw, after the bar is rolled and bent, and thus avoid the raising up and afterwards bending down of the part that is to form the jaw, as heretofore done.

BRACELETS—Francis M. Sweet, of Syracuse, N. Y.: I do not claim the use of an elastic cord or band for the purpose of stringing loose pieces of jet or beads, as such are in common use.

But I claim the employment of the elastic rubber or spring connection between the two parts of the bracelet, operating substantially as described, and when the parts F and C are furnished with guides in the manner and for the purpose set forth.

HAT BODY MACHINERY—Alva B. Taylor, of Newark, N. J.: Having described my improvement, and a machine in which it is embodied, it may be proper to state that I do not limit it to the precise arrangement and construction described, but intend to vary these as circumstances may render expedient. Thus, for example, both disks of the picker may be caused to revolve either in the same directions with different speeds, or in opposite directions, and the picker may be combined with a perforated former not enclosed in a forming chamber, or with other devices than those described.

I claim the combination of a disk picker operating substantially as set forth, with a perforated former.

I also claim a disk picker composed of two disk, whose faces are studded with teeth operating substantially as set forth, to pick fibrous material fed into the eye of the picker, and to discharge the picked fibre at the run thereof.

GRAIN SEPARATORS—John D. Tifft, of Cuyahoga, Ohio: I do not claim broadly the application of a valve to the fan case, nor do I claim broadly the employment of an adjustable apron or board.

But I claim the employment of a circular side valve, H, in combination with the directing board, J, when the parts are constructed and arranged as shown and described, for the purposes set forth.

TRAVELING CASKET—T. R. Timbey, of Medina, N. Y.: I claim attaching the stiff sides, c c, of the traveling casket to the intermediate metal or other framing, d d, by means of rubber or other springs, B B, substantially as and for the purposes set forth.

OX YOKES—George W. Weeks, of Boston, Mass.: I claim making ox bows and yokes, of iron or other suitable material, hollow, substantially as described, for the object specified.

WASHING MACHINE—Thomas J. Tindall, of New York City: I claim combining with a suitable vessel for containing the clothes, &c., to be washed, and the washing liquid, and the exhausting pump or equivalent therefor, communicating with the said vessel above the intended charge, substantially as described, to exhaust the said vessel above the charge and relieve the pressure, to effect the circulation of the washing liquid by ebullition below the recognized boiling point, as set forth.

ROLLING AND PILING LOGS—William Todd, of Cherryfield, Me.: I claim the combination and arrangement of the tapered roller, E, with the diagonally arranged cylindrical rollers, A, for facilitating and guiding the movements of logs and heavy timbers, and piling the same in ranks or on teams and vessels, substantially as described.

APPARATUS FOR ROASTING COFFEE—Samuel Tower, of Grand Rapids, Mich.: I claim having a portion of each of the journals or axis, B C, attached to each sphere or shell, a b, and otherwise arranged and combined as set forth, so that when the spheres or shells are closed, the axis or journals will be completed, and the shells will be locked, all as and for the purposes described.

BRIDGE—L. E. Truesdell, of Warren, Mass.: I claim, first, An iron bridge constructed with a series of horizontal chords, C in combination with vertical standards, B, and diagonal braces, A, or their equivalents, when the whole is arranged and connected together in the manner substantially as and for the purposes set forth.

Second, I claim constructing the clamp, D, in the manner and for the purposes substantially set forth.

SEEDING MACHINES—Alexander Turner, Redden Bess and Hervey Sloan, of Franklin, Ind.; We wish to secure by Letters Patent the arrangement of the seed boxes, B and C, the seed slides, d and e, rod, H, wheels, G and F, and plows, J J, in the manner specified and for the purpose set forth.

SAFETY VALVE AND PRESSURE GAUGE—James H. Winn, of Portage, Wis.: I do not claim the piston safety valve.

But I claim the weighted pendulous rods and suspended index, L, applied substantially as described in relation with each other, and with the dial, M, and combined with the piston valve by means of a sector, I, chain e, and rod, d, or their equivalent, to operate substantially as set forth.

ATTACHING THE PROPS OF CARRIAGE BOWS—D. B. Wright and L. Sawyer, of South Amesburg, Mass.: We do not claim the employment of a movable shoulder piece, which screws upon the prop, as in C. Thomas' patent.

But we claim as an improved article of manufacture, a carriage prop in which the prop, C, is rendered independent of its plate, B, substantially as and for the purposes set forth.

CORN PLANTERS—Franklin W. White, of Worcester, Mass.: I claim, first, Operating the seed slides through the rod, p, and its arm, r, and the hole or holes, s, in the wheel, d, substantially as described.

I also claim, in combination with a dropping apparatus, and the double mold boards for opening the furrow, the openings, w, and guides, x, for admitting and directing the earth or soil that is to cover the seed, substantially as described.

TRACE FASTENING—John C. De Witt, of West Bloomfield, N. J., assignor to himself, and Terah Benedict, of Newark, N. J.: I am aware that buckles have been formed with tongues so arranged as to pass through the perforations of traces at right angle, and I therefore do not claim broadly such device.

But I claim the frame or body, D, provided with the tongue, f, projecting from it at right angles, when the frame or body is connected with the plates, e, of the tug, A, by means of the pivots, b b, of said plate, fitting in oblong slots, c, in the sides, d d, of the frame or body, so that the same may be shoved forward and backward to admit of its being locked, and also of being opened, substantially as described.

INKSTANDS—V. Fogerty, of Cambridgeport, Mass., assignor to Francis Houghton, of Somerville, Mass.: I claim, in combination with an inkstand or ink-reservoir, and its mouth, a dipper or vessel so applied within said reservoir as to be capable of being within it, and towards and away from said mouth, substantially in the manner and for the purpose of taking up ink or a liquid from the reservoir, as specified.

I also claim the application of the dipper to the movable cap of the mouth of the reservoir, so as to be operated by the said cap, in manner substantially as explained.

KNITTING MACHINES—Thomas Lovelidge (assignor to himself, and William Tulfirth), of Germantown, Pa.: I claim the pressure plate, E, situated between the two rows of thread guides, d and d', and operated so as to press the loops down the needles, substantially in the manner and for the purpose set forth.

SEED PLANTERS—W. A. Mahaffy, of Carimona, Min., assignor to John Greek, of Evansville, Ind.: I am aware that the reciprocating perforated seed slides have been previously used, and I am also aware that wheels or cylinders provided with seed cells have also been used for distributing seed, but I am not aware that reciprocating slides have been used in connection with rotating cylinders, provided with seed cells and pins to serve as cams or tappets to actuate the slides, and also as conveyors to carry the seed to the conveying tubes. I do not claim, therefore, separately and broadly, the seed slide, nor the wheels provided with seed cells.

But I claim the seed slides, b, in combination with the wheels or cylinders, E, arranged for joint action, substantially as and for the purpose set forth.

REGULATING THE TENSION OF THE THREAD IN SEWING MACHINES—John T. B. Rogers, of New York City, assignor to George B. Sloat, of Philadelphia, Pa.: I do not claim regulating the tension of the thread by graduated friction thereon, or by causing it to pass over variable angular surfaces.

But I claim the combination, substantially as shown and described, of the cone, A, and conical cap, B, for the purposes set forth.

CUT-OFF FOR STEAM ENGINES—Jacob Windmer (assignor to himself, and Howard Gilbert), of New Haven, Conn.: I am aware that many regulators and cut-offs for the steam engine have been known and used, some of which have been regulated by the pressure of the steam. I therefore do not claim regulating the uniformity of the motion of the piston by the pressure of the steam, as such, as my invention.

But I claim the combination of the bevel gear pinion, J, operated by the endless chain, L, and rod, M, with the bevel gear wheel, H, with its cam, G, when the whole is constructed, arranged and made to produce the result substantially as described.

RE-ISSUES.

HARVESTERS—W. H. Seymour and D. S. Morgan, of Brockport, N. Y., assignees of N. Platt, formerly of Ottawa, Ill.: Dated June 12, 1849: reissued May 23, 1854: What is claimed under the patent as the invention of the said Nelson Platt is

First, Combining with a machine for cutting grain and gathering it upon a platform, a raking mechanism which at suitable intervals sweeps the grain off the platform, changes the direction of its stalks relative to the path of the machine, and discharges it upon the ground in gavels, substantially as set forth.

Second, The employment of a sweep or vibrating rake, operating in such manner, that while sweeping the grain off the platform and discharging it upon the ground, it will change the direction of the stalks, as described.

Third, The method of vibrating a sweep rake, and turning its teeth in such manner that they will pass over the grain, points foremost at intervals to reach back and seize the grain and sweep it off the platform, whether the devices employed to effect these movements be such as described, or others equivalent thereto.

Fourth, The method of holding a sweep rake firmly, while raking the grain with the points of its teeth, in the proper position relative to the platform, by means of a latch or other equivalent thereto, which operating with a greater certainty than a weight, spring, or other fastening not rigid, more effectually prevents the rake teeth from rising to override the grain, and at the same time avoids the necessity of moving a heavy weight, or of overcoming the tension of a strong spring, in elevating the rake preparatory to its retrograde stroke.

Fifth, The construction and arrangement of a sweep rake and the mechanism for operating it, in such manner that it is carried back and forth, and its teeth raised and lowered, without support at the outer end,

Sixth, Changing the frequency of the alternations of the raking mechanism, by means of the shifting gear or other equivalent devices, for producing a varying rate of motion for the purpose of varying the size of the sheaves as may be required, substantially as set forth.

HARVESTERS—William H. Seymour and D. S. Morgan, of Brockport, N. Y., assignees of N. Platt, formerly of Ottawa, Ill. Dated June 12, 1849; reissued May 23, 1854; re-reissued August 31, 1858: What is claimed under this patent as the invention of the said Nelson Platt, is the combination of the vibrating sweep rake with the lever carrying the same, vibrated by gearing located within the inner edge or circle of said platform, as set forth.

HARVESTERS—William H. Seymour and D. S. Morgan, of Brockport, N. Y., assignees of N. Platt, formerly of Ottawa, Ill. Dated June 12, 1849; reissued May 23, 1854; re-reissued August 31, 1858: What is claimed under this patent as the invention of the said Nelson Platt, is constructing that portion of the platform of the reaping machine which is traversed by a rake working above it, with a solid floor so shaped as to allow the points of the teeth of the rake to move below the plane traversed by the grain, substantially as set forth.

HARVESTERS—William H. Seymour and D. S. Morgan, of Brockport, N. Y., assignees of N. Platt, formerly of Ottawa, Ill. Dated June 12, 1849; reissued May 23, 1854; re-reissued August 31, 1858: What is claimed under this patent as the invention of the said Nelson Platt, is the combination of a vibrating sweep rake with a fence or guard, to prevent the grain from being deflected from the path of the rake by centrifugal force, substantially as set forth.

STEAM BOILERS—F. P. Dimpfel, of Philadelphia, Pa. Dated April 1, 1856; reissued August 31, 1858: I claim the arrangement of the tubes and the connection of one or more receptacles, substantially such as described, for consuming the fine particles of coal which are carried by the force of the blast or draught from the fire chamber into the flues, the said receptacle being placed below the bottom of the main flue, and communicating therewith, and between the fire chamber and a check or deflector, or between checks and deflectors in the main flue, to check the momentum of the particles of coal, and cause them to drop into the receptacle to be consumed substantially as described.

I also claim, in the construction of the boiler substantially as described, forming a single flue in the middle, for the passage of the products of combustion from the main flues surrounding the water tubes to the smoke box, when this is connected with a check or deflector placed in the main tube, among the water tubes and in front of the said middle flue, substantially as described, to prevent the products of combustion from taking a direct course to the said middle flue, as described.

I also claim arranging the bent up ends of the water tubes where they are connected with the crown sheet of the furnace, in a series of double longitudinal rows, and leaving spaces between the double rows of greater width than the external diameter of the water tubes, substantially as described, to admit of taking out and inserting the tubes, whilst in other respects the said tubes may be placed as near to each other as may be desired.

I also claim interposing the net-work or plate between the rear end of the flue and the smoke stack, and the exhaust pipe, as and for the purpose set forth.

And I also claim combining with the deflector in the smoke box the receptacle for the sparks or fine particles of coal dust, substantially as described, for preventing the sparks from being consumed or accumulating in the smoke box, and interfering with the draught, as set forth.

MANUFACTURE OF TEXTILE HOSE—Linus B. Cooley, S. Babcock and B. G. Cooley, of Middletown, Conn., assignees of L. B. Cooley, and James C. Cooke. Dated March 16, 1858; reissued August 31, 1858: We claim the double tube or hose as a new article of manufacture, woven in the manner and for the purpose specified, and this we claim, whether our new manufacture be used for hose belting, card clothing, shoe soles, harness pads, and trace, or any other purpose.

DESIGNS.

COOKING STOVE—William P. Abendroth, of Rochester, N. Y.

SCREENS—James L. Jackson, of New York City.

BREAD-PANS—Nathaniel Waterman, of Boston, Mass.

EXTRAORDINARY SUCCESS.—In the foregoing list of patents issued on the 31st ult., we recognize the names of THIRTY-FIVE patentees whose cases were prepared and successfully prosecuted through the agency of Munn & Co. With our extraordinary facilities for the vigorous and careful prosecution of the claims entrusted to us, before the Patent Office, it is no wonder that so large a share of the business comes to our hand. With the facilities at our command we could quite as successfully undertake the care of every application made to the Patent Office—the more business entrusted to us, the greater the seeming success. Circulars of advice sent free.

Large Cholera Prize.

The Paris Academy of Sciences has again advertised its prize, amounting to about $20,000, for the discovery of the cause and the effectual cure of cholera. This prize is a bequest left some years since by M. Briant, and a competition has already taken place for it, without success. No less than one hundred and fifty-three essays were presented on the subject, but only two of them came within the scope of the conditions. One was by the chief physician of the hospital of Smolensko (Russia), the other by Dr. Ayre, of London. The first maintained the identity of the virus of cholera with that of smallpox and typhus, and he proposed the innoculation of persons with the smallpox virus while the cholera was raging. It was asserted that by doing so six out of every seven cholera patients would be cured.

The London physician maintained that eight out of ten persons could be cured by administering doses of calomel at the rate of one grain for adults, every five minutes, for the space of an hour. Neither of these proposed systems for curing cholera were accepted by the Academy of Sciences. The ground was taken by its members that a person to be entitled to the prize must discover a specific as sure and certain for the cure of cholera as quinine is for intermittent fever; also that the remedy should be as efficient for causing the disappearance of this disease as vaccination has been for virulent smallpox.

This is a prize worth striving to win by all the physicians in the world, not so much on account of the prize itself—although the sum is tempting—but for the benefit such a discovery would confer upon suffering humanity.

Pins and Needles.

The manufacture of the indispensible little pin was commenced in the United States between 1812 and 1820, since which time the business has extended greatly, and several patents for the manufacture of pins have been taken out. The manufacture in England and other parts of Europe is conducted upon improvements made here. Notwithstanding the extent of our own production, the United States imported in 1856 pins to the value of $40,255, while in the same year there were imported into this country needles to the amount of $246,060. Needles were first made in England in the time of "bloody Mary," by a negro from Spain, but as he would not impart his secret, it was lost at his death, and not recovered again until 1566, in the reign of Queen Elizabeth, when a German taught the art to the English, who have since brought it to the greatest perfection. The construction of a needle requires about one hundred and twenty operations, but they are rapidly and uninterruptedly successive.

Water.

Potatoes contain 75 per cent (by weight), and turnips no less than 90 per cent of water. A beefsteak, though pressed between blotting paper, yields nearly four-fifths of its weight of water. Of the human frame, bones included, only about one-fourth is solid matter (chiefly carbon and nitrogen), the rest is water. If a man weighing one hundred and forty pounds was squeezed flat under a hydraulic press, one hundred and five pounds of water would run out, and only thirty-five pounds of dry residue remain. A man is, therefore, chemically speaking, forty-five lbs. of carbon and nitrogen diffused through six buckets of water. Berzelius, indeed, in recording the fact, justly remarks that the "living organism is to be regarded as a mass diffused in water;" and Dalton, by a series of experiments tried on his own person, found that of the food with which we daily repair this water-built fabric, five-sixths are also water.

A NEW method of navigating canals has been announced by M. Leterre, and tried, it is said, with success. By means of a fixed wheel, turned by one man, a current is established in less than ten minutes throughout the whole length of the canal, so strong as, without any other motive power whatever, to carry forward a barge with its full load. The first experiment was tried on a ditch near Paris, under very unfavorable circumstances; nevertheless, M. Leterre had his paddle wheel set in motion, and in less than four minutes a laden barge followed the course of the current formed by the revolution of the fixed wheel for a distance of 3,500 feet. When will the wonders of French discoveries cease?

SINCE 1850, the time occupied by steamers crossing the Atlantic between this city and Liverpool is shortened two days. The amount of fuel consumed in the voyage so shortened is twice that formerly required by the steamers who took the longer time.