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### Liability of Telegraphic Companies in England.

The Court of Queen's Bench, says the London *Times*, was lately occupied with a case of great importance to the commercial world. In the month of July, 1857, a report reached the head-quarters in London of the South Eastern Railway Company that the Lewes Bank had stopped payment. The cashier of the company adopted the report, and telegraphed to their servants at the various stations on the line that they were to take no more notes or checks on the Lewes Bank. The notice of the alleged stoppage was also posted up at some of the stations, alongside a correct announcement that the Hastings Bank had suspended payment. In consequence of the publication of the false report, there was a run upon the Lewes Bank, in order to meet which the securities had to be realized at an enormous loss. The jury gave a verdict for the plaintiff, with \$10,000 damages. It appeared from the statement of the counsel that if the message of the cashier had not been published at the stations, it might have been looked upon as a privileged communication between the cashier and the subordinate servants of the company.

### Remedy for Sunstroke.

Dr. Dickson, of London, who was formerly a medical officer in the British army, disapproves entirely of bleeding in cases of sunstroke, but relies upon ammonia, quinine, and alcoholic stimulants, and the prompt application of cold water to the head. This is upon the principle that opening a vein diminishes the power of the heart, already deficient, while the stimulants being diffusive in their character, at once tend to give vitality to every portion of the system, and restore the circulation to the standard of health. Ammonia is preferable to alcoholic stimulants, as, while it is equally prompt and potent in its action, its application is not attended with the injurious and sometimes fatal re-actionary effects of spirits.

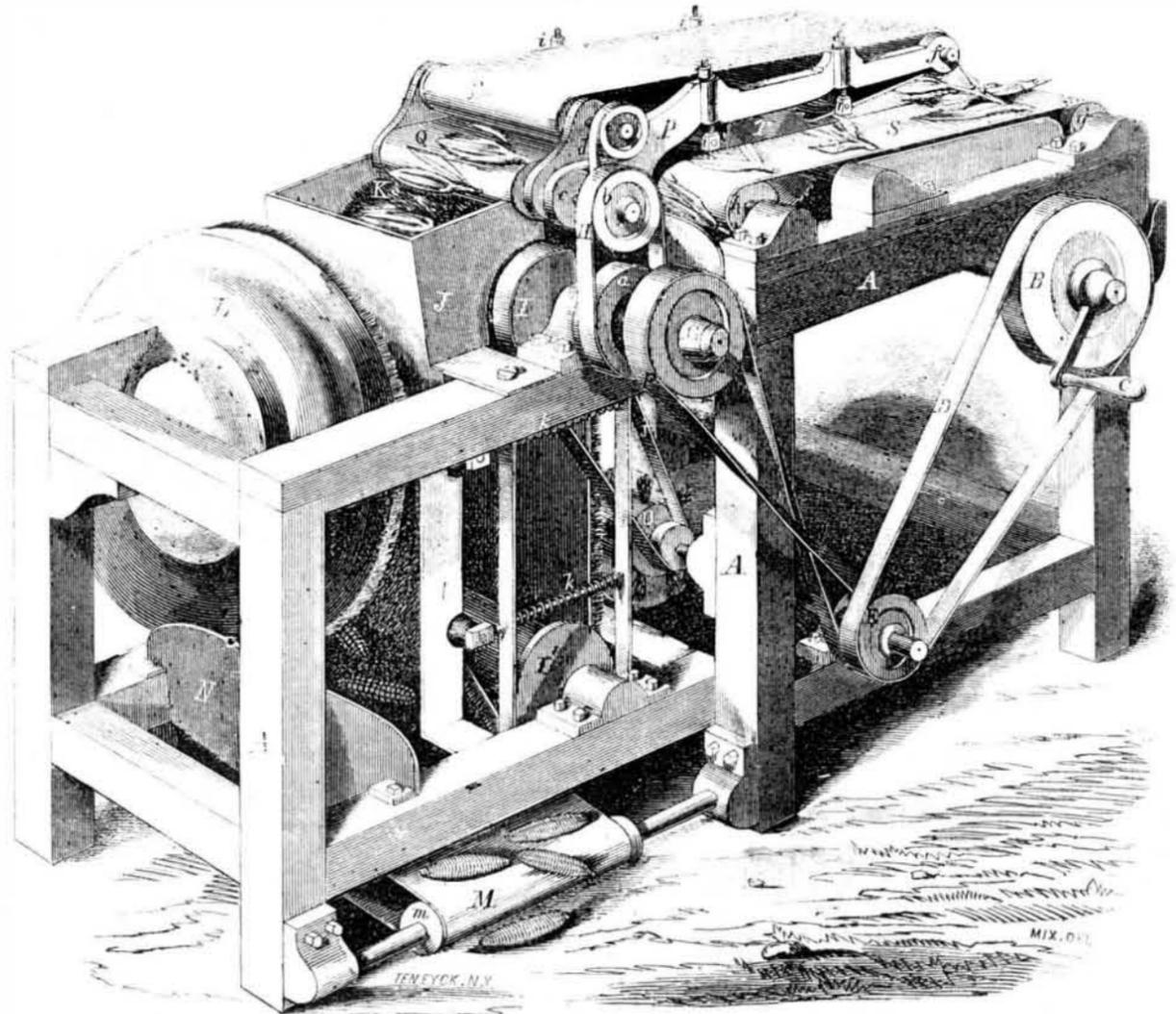
### Kentucky Mechanics' Institute.

The sixth exhibition of this institute will commence at Louisville, Ky., Sept. 14th, and the directors will be ready to receive goods for exhibition on the 7th. As all machinery, &c., is to be in actual operation, persons intending to exhibit are requested to inform Mr. D. Macpherson, Secretary of the Exhibition Committee, as to the amount of space and power they will require.

THE METALLIC OIL advertised in another column is an excellent article for lubricating machinery. It is durable and economical, and having stood the severest tests for some years past, we can cordially recommend it.

We have to thank Commander Thos. Page, of the U. S. steamer *Waterwitch*, for maps of his survey of the river Parana in that ship.

## SMITH'S PATENT CORN HUSKER.



The subject of our illustration is designed to husk corn perfectly without in any way injuring the corn, and the corn being fed to it with any length of stalk will be delivered from the machine perfectly free from husk and stalk. The working parts are mounted in a frame, A, and the power is given to a wheel, B, by the handle, C. D is a belt giving motion to E, from which the belt, F, rotates the wheel, G. On the shaft of G is a drum, I, round which passes the endless husking band, K, being provided with wire teeth, something like a carding belt. This band, K, also passes over small rollers in the frame, I, which can give to pressure and again assume their original position by their bearings being on the ends of spring rods, k; K also passes round another drum, I'. In front of K is a wheel, L, provided with wire teeth, and it is in passing between these two that the husk is torn off. From the drum, I, passes a band wheel, j, rotating a brush, O, which serves to clean the wire teeth upon K; there is also a cleaning brush to L. From a small wheel, a, on the shaft of G, a band wheel, H, passes, rotating a small pulley, b, at the extremity of a frame, P, which extends over the feeding device, and on the axis of b is a drum, around which passes the endless feeding band, Q. From a wheel, c, on the same axis, a band, d, rotates the wheel, e, which gives motion to the upper endless feeding band, R, that also passes around another drum, f, and under rollers whose bearings are so arranged as to keep the band, R, tight and yet give to pressure, by bars and springs, i. Underneath P two saws rotate, one on each side, and between

them Q and R pass. S is another endless band, there being one each side, passing over rollers, k and g.

The operation of this machine is as follows: The corn with stalk attached is placed on the endless bands, Q and S, and they are carried between R and Q until they come in contact with the saws, T, which cut off the butts and stalks; and the motion of the bands over and under the corn while it is momentarily stayed by the saws serves to slightly loosen the husk. The corn is carried on and falls into the hopper, J, which guides it between the endless husking board, K, and the husking wheel, L, from which it drops perfectly husked on to the delivering band, M, on the roller, m. This is operated by a pulley and band on the side of the machine not seen in our engraving, rotated from the axis of E, that passes directly across the machine. N is a guard plate, to ensure the fall of the ears on to M.

This ingenious device is the invention of W. H. Smith, No. 139 Thames st., Newport, R. I., and is the subject of two patents, one dated October 28, 1856, and the other October 6, 1857. The inventor will be happy to give any further information upon being addressed as above.

### The Original Morgan Horse.

The Springfield (Mass.) *Republican*, speaking of the origin of this noble breed of horses, asserts that Massachusetts has done many good things, among which is giving to Vermont the credit, and the world the benefit, of the celebrated Morgan horse. It appears that near the close of the last century a singing

master by the name of Justin Morgan lived in Chicopee street, West Springfield. The place where this man lived has been pointed out to the writer in the *Republican* by one who knew him and remembers his celebrated horse. In the spring of 1793 he raised the colt which has given celebrity to his name; and although a promising one, and fully appreciated by its owner, who was noted for his passion for good horses, it is believed that this horse could have been bought for fifty dollars.

Fortune frowned upon Mr. Morgan; and, seized with the spirit of adventure, about the year 1798 he migrated with his family and horse to the wilds of Randolph, Vt. Here he lived a few years, and died poor. Like the projectors of many valuable inventions, neither he nor his family realized profit from the skill and labor displayed in preserving the stock of this horse, who was the foundation of a breed which has given both wealth and character to New England. In this case is forcibly illustrated the influence of an ordinary action. Justin Morgan might or might not have been conscious of the results, when sixty-five years ago he raised that famous colt. The act was simple in itself, but the consequences are momentous. An impetus was then given to a branch of industry whose power is not yet fully felt. Wherever the horse is known there shall the name of Justin Morgan be repeated. The Morgan horse is destined to give as much celebrity to New England as the barb of the desert to Arabia. As a farm and family horse the "Morgan" is unequalled. Docility, hardihood, endurance, compactness, and sure footedness are his invariable properties.

**IMPORTANT TO INVENTORS.**

The rapid growth of our Patent Agency business during the past three years has required a great addition to our ordinary facilities for its performance, and we are now able to announce the completion of a system which cannot fail to arrest the attention of all who have business of this kind to transact.

**OUR PRINCIPAL OFFICE**

will be, as usual, at No. 138 Fulton street, New York. There is no other city in the Union so easy of access from every quarter as this, consequently there are greater advantages in regard to the transmission of models, funds, &c., through the various channels that center in New York. Two of the partners of our firm reside here, and during the hours of business are always at hand to counsel and advise with inventors. They are assisted by a corps of skillful Examiners, who have had many years of active experience in the preparation of cases for the Patent Office.

To render our Patent Agency Department complete in every respect, we established over a year ago a **BRANCH OFFICE IN THE CITY OF WASHINGTON**, on the corner of F and Seventh streets, opposite the United States Patent Office. This office is under the general superintendence of one of the firm, and is in daily communication with the Principal Office in New York, and personal attention will be given at the Patent Office to all such cases as may require it. Inventors and others who may visit Washington, having business at the Patent Office, are cordially invited to call at our office.

**A SPECIAL NOTICE.**

We especially require that all letters, models and remittances should be made to our address at New York.

**EXAMINATION OF INVENTIONS.**

We have been accustomed from the commencement of our business—thirteen years since—to examine sketches and descriptions, and give advice in regard to the novelty of new inventions, *without charge*. We also furnish a printed circular of information to all who may wish it, giving instructions as to the proper method which should be adopted in making applications. This practice we shall still continue, and it is our purpose at all times to give such advice free and candidly to all who apply to us. *In no case will we advise an inventor to make application unless we have confidence in his success before the Patent Office.*

Our extensive experience in mechanical and chemical improvements enables us to decide adversely to nearly one half of the cases presented to us for our opinion, before any expense has occurred in the preparation of the case for a patent.

When doubt exists in regard to the novelty of an invention, we advise in such cases a

**PRELIMINARY EXAMINATION**

to be made at the Patent Office. We are prepared to conduct such examinations at the Patent Office through our "Branch Agency," upon being furnished with a sketch and description of the improvement. Our fee for this service will be \$5.

After sufficient experience under this system, we confidently recommend it as a safe precautionary step in all cases before application is made for a patent—not that there will be no rejections under this system. It is impossible to avoid such results in many cases owing to the exceedingly wide range taken by the Examiners in the examination of cases; but, nevertheless, many applicants will be saved the expense of an application by adopting this course. Applicants who expect answers by mail must enclose stamps to pay return postage.

**THE COSTS ATTENDING AN APPLICATION**

for a patent through our agency are very moderate, and great care is exercised in the preparation of specifications, drawings, &c. No cases are lost for want of particular care on our part in drawing up the papers, and if the claims are rejected, we enter upon a speedy examination of the reasons assigned by the Commissioner of Patents for the refusal, and make a report to our clients as to the prospects of success by further prosecution.

A circular containing fuller information respecting the method of applying for patents can be had gratis at either of our offices.

**REJECTED APPLICATIONS.**

We are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prosecuted are invited to correspond with us on the subject, giving a brief history of their case, enclosing the official letters, &c.

**FOREIGN PATENTS.**

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business we have offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris; and 36 Rue des Eperonniers, Brussels. We think we may safely say that three-fourths of all the European patents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

Circulars of information concerning the proper course to be pursued in obtaining patents through our Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the principal office or either of the branches.

Communications and remittances should be addressed to **MUNN & COMPANY**, No. 138 Fulton street, New York.

The annexed letter from the late Commissioner of Patents we commend to the perusal of all persons interested in obtaining patents:—

Messrs. MUNN & Co.—I take pleasure in stating that while I held the office of Commissioner of Patents, more than one-fourth of all the business of this office came through your hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours, very truly, CHAS. MASON.



Issued from the United States Patent Office FOR THE WEEK ENDING AUGUST 10, 1858.

[Reported Officially for the Scientific American.]

Circulars giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

**STRAW CUTTERS**—Darius Babcock of Dryden, N. Y.: I do not claim a rotating cutter wheel with knives or cutters attached, so arranged that the cutters work over the mouth of the feed-box, for this is an old device.

But I claim operating the feed rollers, D D, through the medium of the levers, F F, rods, H H, connected with said levers by means of the sliding collars, b, palls, G G, and crank pulley, d, arranged substantially as described and for the purpose specified.

[This invention relates to an improvement in that class of straw, stalk, and hay cutters, in which knives are attached to a rotary wheel, the plane of rotation of which is at right angles with the mouth of the feed-box. The invention consists in placing the feed-box in an inclined position instead of having it in a horizontal position as usual, and arranging the cutter wheel so that the material to be cut may be readily fed to the knives, and the cutting operation of the cutter greatly facilitated. The invention also consists in the employment of a leger blade of novel construction, to facilitate the cutting action of the knives, and in an improved feed gear, so that the feed may be regulated as occasion may require.]

**MACHINE FOR THRESHING AND SEPARATING GRAIN**—N. J. Becker and J. M. Harvey, of Amsterdam, N. Y.: We claim the combination of the swinging arm, a, arms, S S, straw carrier brackets or projections, m, m, elbow lever, T, connecting by links, n p, the swinging arm, S, to the separator, pitman, v, v, operated by crank pin from the fan shaft to drive the swinging arm, S, and fan and threshing cylinder pulleys, D E, arranged substantially as described, and driven by the same band or belt as set forth.

We do not claim the combination of a reciprocating or independently moving perforated straw carrier with a stationary bed plate, but as gearing the serrated bar frame, G, to the perforated bed plate, H, and conducting board, I, that said latter portion shall give an accelerated motion to the bar frame G, simultaneously with, but in reverse directions to the travel of the bed plate, essentially as and for the purposes set forth. Providing the feeding throat of the thresher, or thresher conveyor, with a dust spout or outlet, Z, above and furnishing the cylinder race with a dust passage, X, in front, under the feed table, as shown and described.

**SEED PLANTERS**—Addison Berdan, of Macon, Mich.: I claim the arrangement of the reciprocating piece, L, adjustable tubes, a, stationary piece, M, and top plate, N, with hoppers, O, the whole being constructed for operating conjointly as set forth.

**HARROW**—Addison Berdan, of Macon, Mich.: I claim the combination of tooth bars, T, having projections, W, with guides, V, oscillating lever, O, and frame, U, the whole being constructed, arranged and operated as set forth.

**MACHINES FOR ROLLING LEATHER INTO BALLES**—Nathan Burk, of Fulton, N. Y.: I claim, in combination with the winding and clamping shafts, the spring table with its friction roller, stops and string guides, arranged and operating together in the manner and for the purpose set forth.

**WIND GUARD FOR CHIMNEYS**—F. M. Butler, of New York City: I do not limit myself to the size or shape of my wind guard, whether round or polygonal, although I prefer the former or an oval.

What I claim is, the arrangement of the pipe, b, radial guard, d, inner disk, e, and hood, f, when in substantially the proportions and for the purposes specified.

**OPERATING THE TEETH OF CYLINDERS FOR BURNING WOOL, &c.**—T. B. Butler, of Norwalk, Conn.: I claim the application of teeth to a rotating cylinder having a uniform peripheral surface, in such a manner as to be projected beyond the said surface to catch the fibrous materials to be operated upon and afterwards retracted into pockets within the said peripheral surface, for the purpose of holding said material and presenting the greater portion of it upon the even peripheral surface of the cylinder without any obstruction to the action of strippers, brushes, or other analogous devices for burning, giuping or cleaning it, operating in combination with said cylinder, substantially as described.

[The result obtained by this improvement is the distribution of the fibers over a smooth and uniform surface, upon which they are held firmly without being cut, while they are closely and at all points alike subjected to the action of as many strippers, brushes, or analogous devices as may be necessary to clean them, without the necessity of making the toothed cylinder or strippers, brushes or other cleaners rotate at a high velocity, which is very objectionable.]

**MACHINE FOR CHAMFERING AND CROZING BARRELS**—A. H. Crozier and Cyrus Carrier, of Oswego, N. Y.: We claim the method described of moving the crozing and chamfering tools to and from their work by means of the differential movement of the wheels, Q and S, produced in the manner described when operating the cam or eccentric which controls the action of the tools, all substantially as specified.

**METALLIC LATH SURFACE**—John B. Cornell, of New York City: I claim the described improved shape of the sheet metal sections, c, c', which enables them to securely retain coatings of plaster, when the said sections are secured to vertical supports, and which also enables said sections to be securely combined with partition studs without the aid of nails, screws or bolts, substantially as set forth.

**SAFETY GUARD FOR SAFE DOORS**—John B. Cornell, of New York City: I claim arranging a safety guard within the door of an iron safe, in such a manner with relation to the lock or locks, and the fastening bolts which are combined with said door, that the act of forcibly displacing the said lock or locks from its or their proper position on a locked door, will cause the said safety guard to be thrown into such a position that it will securely hold the said fastening bolts in an extended position from the moment that the lock bolts cease to exert a retaining action on the said fastening bolts, all substantially as set forth.

**APPLYING BRAKES TO HAND TRUCKS**—C. L. Daboll, of New London, Conn.: I claim the application of the described devices to hand trucks, in the manner and for the purposes set forth.

**APPARATUS FOR PURIFYING GAS**—W. F. Danowsky of Allentown, Pa.: I claim the use of the purifier, D, when arranged and combined with a gas trap, E, in the manner and for the purpose described.

**TREATMENT OF CAOUTCHOUC**—Austin G. Day, of Seymour, Conn.: I do not claim in the broad, vulcanizing rubber or equivalent gums, and irrespective of the special process used and product made. Therefore—

What I claim is, running the heat for vulcanizing elastic hard rubber compounds as set forth through the several grades of temperature, and the several intervals of time described and illustrated in the specification.

I also claim making, as described, the elastic, hard rubber composition of two parts by weight of rubber, and one part of sulphur, when such composition is made preparatory to the running of the heat through the several grades of time and temperature as set forth in the specification.

I also claim equalizing the temperature in the heating apparatus by mechanical means or by a current of steam, or its equivalent, in the manner set forth.

**BED BOTTOM**—W. H. Elliott, of Plattsburg, N. Y.: I am aware that beds have been constructed with springs, slats, and flexible strap, therefore I do not claim them or any of them independent of other devices, or of the peculiar arrangement set forth.

But I claim the combination and arrangement of braces, d', flexible strap, e, slats, d and c, and springs, b, whether the said braces, d', reach from one outside slat to the other, or only to some of the intermediate slats, and whether said braces are attached to the upper or lower side of slats, d, &c., as and for the purpose specified.

**HINGES**—W. H. Elliott, of Plattsburg, N. Y.: I claim combining with the table hinge, a portion of the rule joint, as specified.

**HARVESTERS**—M. E. Ellsworth, of Hudson, Ohio: I claim the described manner of attaching the seat to the gear plank by means of the rods, M N, or their equivalents, having a pin or hinge point both upon the gear plank and footboard, in combination with the rods, O and P, or their equivalents, which connect the footboard, C, directly with the reach board, E, all operating in the manner and for the purpose set forth.

**APPARATUS FOR TANNING HIDES**—L. C. England, of Owego, N. Y.: I claim the described improvement in the art of tanning—that is to say, causing the liquors to circulate among hides, which are kept in fixed positions, for the purposes and substantially in the manner set forth.

**SEED PLANTERS**—H. C. Fitch, of Brooklyn, Pa.: I am aware that seed distributing devices formed of movable and stationary plates or slides, and a cut-off similar to the device herein described, have been used, but I am not aware that a distributing device has been arranged with a rotating or semi-rotating seed box and plunger, so that the distributing of the seed, and the operating of the plunger, could be effected by rotating the seed-box. I do not claim, therefore, broadly and separately, the rotating device; but

I claim the rotating or semi-rotating seed-box, A, provided with the cylindrical case, B, fitted within the case, C, in connection with the plunger, E, connected with and operated by the movement of case, B, as shown, the plunger case, D, attached to case, C, and the seed distributing device formed of the perforated bottoms, d, f, of the cases, B C, and the cut-off, I, the whole being arranged for joint action, substantially as and for the purpose set forth.

[This invention consists in having the lower end of the seed-box fitted within a stationary cylinder, to which a plunger and case are attached, the seed-box being allowed to rotate, and by its movements distribute the seed and operate the plunger.]

**CULTIVATORS**—N. W. Fraser & A. J. McLellan, of LaPorte, Ind.: We claim the arrangement of the fender, D, attached to the shovel standards, D', the shoves, E, and the wheels, A, on the vertical shafts, a, the whole being arranged for joint operation as set forth and described.

**SEWING MACHINES**—James E. A. Gibbs, of Millpoint, Va.: I claim so constructing and combining or arranging and operating a revolving hook or looper with a reciprocating needle, as that the one loop shall be taken from the needle after the former loop shall have been drawn up on, along or over the needle during its reciprocating movement, in the manner and for the purpose substantially as described.

I also claim the conical sleeve or its equivalent for holding the spool and for revolving therewith, in combination with the adjustable cones, F and G, or their equivalents, for producing the requisite degree of friction upon the conical sleeve spool holder, when constructed and arranged so as to operate substantially in the manner and for the purposes set forth.

**LOCOMOTIVE STEAM ENGINES**—John C. Hagan, of Nashville, Tenn.: I claim, first, Arranging the cylinder of a steam engine substantially as described, or in an equivalent manner, so that it is free to move at right angles to the motion of its piston rod, and in a plane parallel with the plane of motion of the cranks connected with the piston rod.

Second, In combination with the cylinder of a steam engine, arranged so that it is free to vibrate, I claim connecting each end of the piston rod with the crank of a driver, and giving motion to both drivers in the same direction, without the interposition of connecting links.

Third, Giving to the cylinder of a steam engine a positive reciprocating motion, by combining therewith a secondary engine, or any equivalent mechanical device arranged so as to support and move the cylinder in a plane parallel with the plane of motion of the cranks connected with its piston rods, and in right angles to the line of motion of the piston rod.

Fourth, Supporting the main cylinder in the guides in which it vibrates, by means of trunnions arranged as described, so that the cylinder may accommodate itself to the axles of the drivers on an uneven track.

Fifth, Connecting the slide valves of the secondary engine with the quadrant block of the expansion gear of the main engine, by which means the motion and the changes in the valves of both engines are uniform and simultaneous.

Sixth, The combination of the slotted link (P L), the cam block, F, the pump hand gear, or any mechanical equivalents, whereby not only can the length of stroke of the pump be varied during the motion of the engine, but also the pump may be worked while the engine is at rest, as described.

Seventh, Combination of the sliding steam pipes with the main driving cylinder, arranged substantially as described, for the purpose of admitting steam to the cylinder.

**CLOTHES RACK**—A. A. Harris, of Ravenna, Ohio: I do not claim the employment or use of folding or expanding arms, broadly or irrespective of the arrangement shown and described, but

I claim the radical arms, so jointed or pivoted to hubs that they will be supported by the joints or attachments to the hub, the hubs being loose on the staff, so as to revolve, and at equal distances apart, to form a series of horizontal and parallel frames, each of which series may be folded up separately, and the whole be adjusted vertically by the main staff, as set forth.

**APPARATUS FOR HEATING AND COOLING AIR, TO BE USED AS A MOTIVE POWER**—W. Hidden & J. Reeves, of New York, N. Y.: We claim, Heating air in one section of a rotating or reciprocating cylinder, and at the same time condensing the exhausted air from the engine in another section of the same cylinder, and at intervals changing the condensing section into a heater, and the heating section to a condenser, by revolving or reciprocating the cylinder so as to alternately have the upper section occupy the place of the lower section in a tank of water, and the lower section to occupy the place of the upper one in proper relation to a furnace fire, substantially as and for the purposes set forth.

**TELEGRAPHIC INSTRUMENTS**—George B. Hicks, of Cleveland, Ohio: I claim the described devices or their equivalents, by means of which, two armature levers, one of which is upon the receiving instrument, and the other upon the recording instrument, are moved simultaneously, as seen in figures 4 and 5, in order to render it impossible for any portion of the current from M3 or N3 to pass through the magnets M M or N N, figures 2 and 5, except when required to change the position of lever, G, G'.

I claim the described arrangement for so connecting a circuit through the armature levers of the receiving and recording (local) magnets, figures 4 and 5, that a current may be diverted through the magnets M M or N N, figures 2 and 5, at the pleasure of a distant operator, and thereby changing the position of the lever, G G, figures 2 and 5, for the purpose of enabling the operators upon two distant circuits to transmit intelligence from one circuit to the other without the aid of an intermediate operator, by the means and in the manner specified.

I claim the employment of the devices named or their equivalents, whereby a current from the battery, a, may be diverted from one magnet, M M, to another, N N, as set forth by means of the arm, I, upon the lever, G G, figures 2 and 5, striking upon Z Z', as the lever, G G', is depressed at X or X'.

**SHIP'S WINDLASS**—Peter H. Jackson, of New York, N. Y.: I claim the bit, i, taking the end of the shaft, o, and key, i, or their equivalents, substantially as and for the purposes set forth.

**CABLE STOPPER**—Peter H. Jackson, of New York, N. Y.: I do not claim a hinged chain stopper, as this has before been used, but

I claim the combination of the cam lever or levers, g, with the hinged pall, e, in the manner and for the purposes substantially as specified.

**HANGING WINDOW SASH**—Ross Johnson, of Frederick, Md.: I claim side boxes, G G, constructed on the face of the jamb, a, and arranged in front and at right angles to the face of the sash, in combination with narrow, oblong weights, L D, and with pulleys, E F, arranged in a manner adapted for the use of side boxes, and flat weights, substantially as and for the purposes set forth.

**SEED PLANTERS**—E. W. Kimball, of Ottawa, Ill.: I claim the slide B, placed within the box or case, A, perforated at D, and provided with the endless band, c, and the seed case, D, attached, in connection with the elastic yielding plate, e, and rest plate or guide, f, placed at the lower end of the box or case. It being understood that I do not claim separately any of the parts, but the whole combined and arranged, as and for the purpose set forth.

[The object of this invention is to obtain, by the employment of a very few parts judiciously arranged, an efficient hand seed planter—one that may be readily manipulated, economically constructed, and not liable to get out of repair. The invention consists in placing a reciprocating hand slide within a proper case, and having an endless band provided with a seed cup, the slide dividing the case into two parts, and having an opening made in it to allow the seed to pass through.]

**BATHING APPARATUS**—Frederick Kraemer, of Brooklyn, N. Y.: I claim the tub, A, constructed of two semi-cylindrical portions, a, b, connected together as shown in connection with the steps, c, supply cocks, h, h, and discharge valves, B, the whole forming a new and improved article or apparatus for the purpose specified.

[The object of this invention is to obtain within reasonable dimensions a bathing device whereby a complete bath may be taken, or the body entirely immersed equally as well as in a large bathing house. The invention is designed to be used in private houses, and to be a portable affair, that may be moved from place to place with facility and fitted up as occasion may require.]

**MACHINES FOR CLEANING WHEAT**—Jesse Lantz & John Russell, of Wheeling, Va.: First, We claim the additional air tube or arch, F, in connection with the air tube or arch, E, for the purpose of receiving the wheat through an aperture in pipe, F, above the hopper, V, and from the hopper, G, as described.

Second, We claim the adjustable reeded rubber, o, combined with the flange rubber, i, constructed and operating, as and for the purposes described.

**ROCK DRILLS**—William Lewis, of Harrisburgh, Pa.: I claim, first, The combination of the peculiarly constructed lifting jaw, c, with the peculiarly constructed vibrating flexible frame, D, a, and inclined planes, E, E', whether operated by a lever or other mechanical device, substantially as set forth.

Second, The peculiarly constructed vibrating flexible frame, D, a, for holding the lifters together, and shifting them out of the way alternately, substantially as set forth.

Third, The united use of the lever, E, and strap, b, for operating on the lifting jaw, c, incline plane, E', for turning the bar, B, and flexible vibrating frame, D, a, for throwing the jaw out of gear with the drill bar, B, substantially as and for the purposes specified.

**MACHINE FOR CORING AND QUARTERING APPLES**—Charles Lounsbury, Jr., of Nichols, N. Y.: I am aware that the knife with a handle attached has been used before now by hand, and therefore do not claim it.

I claim the combination and arrangement of the knife with the movable step, i, the standard, a, with its attachment, d, the cup, h, h, and spring, s, being substantially made as described and for the purpose set forth.

**APPARATUS FOR GENERATING GAS**—Henry Lyles, of Washington, D. C.: I do not claim any of the members of this apparatus singly or individually.

But I claim the peculiar arrangement of the perforated chamber, A, as constructed with the retort, a, gage cock, c, stop cock, g, and siphon pipe, f, when they are constructed, combined and operated in the manner and for the purpose specified.

**RETORTS FOR DISTILLING OILS FROM COAL**—John McCue and W. B. McCue, of Freeport, Pa.: We are aware that there is a retort patented by Alter & Hill, which revolves continuously. We are also aware of Gengenber's patent, but both of these we disclaim, as our retort overcomes difficulties which both of these patents are subject to.

But we claim, first, The employment of the connecting pipe, C, located in the retort, B, in other than a central position, whereby we are enabled to conduct off the oleaginous products of the coal, while the said retort partially revolves backward and forward on its axis as is fully set forth.

Second, We claim providing the retort, B, with the longitudinal ribs, d, d, for the purpose of agitating the coal, and preventing its sliding, when the retort turns as is fully described.

**MACHINES FOR FANNING AND ASSORTING GRAIN**—R. Nutting, of Randolph, Vt.: I claim, first, The arrangement of the screens for separating and assorting, substantially as described, when so combined with shafts, frames and motive arrangement, that the grain, seeds, beans, &c., are required to pass over them in a sliding or rolling manner, and not caused or allowed to drop on their surface or fall thereupon vertically, or so as to strike an aperture endwise first, constructed and operating substantially as set forth.

Second, The hold-fast, substantially as described and for the purposes set forth.

Third, The extra-screens box, substantially as described and for the purposes set forth, in combination with the drawers.

Fourth, The percussion bar, substantially as described and for the purposes mentioned.

COUNTER SCALES.—H. B. Osgood, of New Haven, Ct. I claim the method of bringing the pea to standard weight, and to enable it to indicate weight from scales on opposite sides of the beam, consisting of the adjustable pins, in combination with the pea as described, substantially in the manner set forth.

ESCAPEMENT FOR TIMEKEEPERS.—E. Paulus, of Philadelphia, Pa. I claim the modification of the duplex escape wheel in suppressing the upright row of cogs, the manner of giving the impulse directly by it with a pin jewel set in the main roller mounted on the balance axis; the detent with its fork, toothed for gearing with the pinion of the resting cylinder, and its particular arrangement on the escape wheel axis; the arrangement of the resting cylinder with its pinion; the particular disposition of the lifting roller acting in the fork; the new and more solid arrangement to hold the escape-ment without bridges, but with simple pillars supporting two small plates secured with pins or screws, the whole constructed and operating as described, constitute a new escapement, which I introduce under the name of "Paulus escapement."

BAKE OVENS.—Wm. Pettet, of New York City: I claim, first, The arrangement and construction of an oven with two furnaces, the one being located on the exterior and the other on the interior of the oven, each communicating with the same series of flues, so that either one may be used at pleasure, whereby the heat may be retained within the oven, and diffused through the apartment, substantially as set forth. Second, I claim so constructing the interior of the described oven and its flues, that the entire lining may be removed, for the purpose of clearing the flues and replaced, substantially as described.

PRINTING INK ROLLERS.—Elisha Pratt, of Salem, Mass. I claim the employment of an alkali in the manufacture of inking rollers, in the manner and for the purpose substantially as set forth. I also claim the use of rosin oil, rosin and shellac, in combination with the other materials employed in the manner set forth, for the purpose specified.

REPEATING FIRE-ARM.—Franklin B. Prindle, of New Haven, Conn. I am aware that many pistols, &c., are cocked by pulling the trigger, and that the charge has been carried to the rear end of the barrel by pulling a separate trigger, and that a tube has been used to contain the charges, and a spring to force them to the rear end of the tube.

And that pistols, &c., have been charged and discharged by the same trigger, as is seen in the patent issued to Lewis Jennings, December 25th, 1841—and that two charge tubes have been used under the barrel—as is seen in the application of Frederick Newbury, rejected and withdrawn, February, 1856. I therefore do not claim either of these, as such, as my invention.

But I claim the use of two charge tubes (one of which to contain the balls, and the other the cartridges), in combination with the two charges and ramrod, when constructed, arranged and made to receive the charge and deposit in the barrel simply by pulling the trigger, substantially as set forth.

Second, I claim the combination of the hammer and sectors with the charges and ramrod (so that I may charge, cock, and fire by simply pulling the trigger), when the whole is constructed, arranged, and made to operate substantially as described.

HAY ELEVATORS.—E. M. Rees, of Norristown, Pa.: I do not desire to claim broadly the locking of the frame to and releasing it from an elevating rod, as such a device is described and claimed in the patent granted to T. T. Jarret, May 30, 1854.

Neither do I desire to claim broadly a spring latch for raising and retaining the frame.

But I claim the plate, G, with its spring bolt, F, and rod, H, in combination with the forked rod, D, with its upper end bent, as described, and its projection, F, when the several parts are constructed and arranged with respect to each other, and to the frame, substantially in the manner set forth.

STEAM VALVE.—George Riesack, of Pittsburgh, Pa.: I claim, first, The valve, D, with a projecting hollow stem, E, which is reduced so that its end presents an area only equal, or nearly so, to the ports, F, F1, F2, G, G1, G2, in combination with a main steam chest or chamber, J, and an auxiliary steam chest or casing, I, furnished with a stuffing box, d, and constructed so as to cover the whole of the back of the valve excepting the end of the stem or a portion of the back equal or nearly equal to the ports in its face, substantially as and for the purposes set forth.

Second, in combination with the above, the peculiar manner specified of making the face of the valve, D, with six ports, F, F1, F2, G, G1, G2, three for receiving and three for exhausting, said ports being arranged in such relation to each other, that when the valve is applied to an oscillating engine, one receiving port always stands in line with an exhaust port, and that only four of the ports shall be in use when the engine is working forward, and the extra two thus kept in reserve, so that the engine may be reversed on shifting the valve, by the pressure of steam from a full open port, as set forth.

SEEDING MACHINES.—T. R. Richmond, of Maillon, Ohio: I am aware that perforated seed slides are an old device, and have been used in various ways, but I am not aware that a series of slides have been used in connection with perforated caps and plates, so arranged as to discharge continuous streams of seed. I do not claim separately, therefore, the employment or use of perforated seed slides, but, I claim the reciprocating slides, I, operated as shown, in combination with the caps, K, and plates, L, the above parts being perforated, and arranged substantially as and for the purpose set forth.

[This invention relates to that class of seeding machines which are designed for sowing seed broadcast, and consists in a novel distributing device, whereby the seed is dropped or discharged from the seed box in a continuous stream, and by a very simple arrangement of means.]

HARROWS.—Jeremiah Routh & Abel Vaughn, of Grayville, Ill.: We are aware that various harrows have been devised in which rotary motion has been given to a horizontal harrowing wheel, by means of a vertical toothed wheel upon a horizontal shaft; said vertical wheel being so hung as to take hold of the soil in passing over it, and so geared to the horizontal harrowing wheel as to give it a rotary motion by its own rotation. This we do not claim.

We claim the combination of the vertical toothed wheel, D, with the horizontal toothed wheels, B, B, said wheels being connected by gearing as described, by which we secure the necessary rotation, without either side draft or dip of the horizontal wheels, as set forth.

PRINTING PRESSES.—C. Edward Sneider, of New York, N. Y.: I claim, first, The revolving double segment frame with segments balancing each other, in combination with a rocking type bar, T, operated through the segment frames, substantially as described. Second, I claim the rocking type frame, T, with eccentric ways, W, attached, working over fixed rollers, in the manner and for the purpose described.

Third, I claim the arrangement and the manner of operating the distributing cylinder, E, supported between the segment frames, C, upon the shaft, B, to which the segment frames are attached, said cylinder being made to revolve in the opposite direction to the motion of the shaft, and having at the same time a side motion communicated to the said cylinder for the purpose of distributing the ink upon the inking rollers, as described, in connection with an arrangement of inking rollers, operated in the manner substantially as specified.

Fourth, I claim the arrangement and construction of the fly motion, in the manner and for the purpose as described, operating in connection with the nipper, S, substantially as is specified.

STEAM VALVES.—William J. Stevens, of New York, N. Y.: I do not claim, broadly, the use of springs to expand valves, and I do not confine myself to the application of my invention to a system of valves like those described.

But I claim the slotted lever, F, the T shaped lever, G, and the spring, K, arranged in relation with each other, and with the piston rod and the valve stem, to operate substantially as set forth.

[This invention consists in a certain arrangement of a spring and levers, for giving a sudden movement to the valves, to change the direction of the induction and eduction of the steam to and from the steam cylinder, as the piston of the engine arrives at the end of its stroke.]

MACHINES FOR POUNDING RICE.—John Tallon, of New Orleans, La.: I claim the combination of the pounder, F, arms, S, A, cross-head, C, H, connecting rod, C, R, and crank, C, K, constructed and arranged to operate in relation to each other, as shown and described, and for the purposes set forth.

FOLDING GRIDIRON.—Joseph H. Thomas, of Newark, N. J.: I do not claim the invention of double or folding gridirons, but, I claim the application to a folding gridiron of the hinge joint, formed by the slotted stands, b, b, and the projecting bearings on the ends of the back cross-bar, a, or their equivalents; the jointed handle, e, and slotted standard, i, or their equivalents; the whole forming an adjustable folding gridiron, substantially as described.

CEMENT FOR ROOFING PURPOSES.—Joseph Thompson, of North Wrentham, Mass.: I do not claim any mixture of the various kinds of tar and oils, but adapt such materials to the intended use, being governed in choice by the consideration of price, and confine myself to the modification introduced in such mixtures by the use of soluble silicates. I call my solid mixed compound, Thompson's Improved Mastic Roofing, and my fabric, Thompson's Improved Felt.

Neither do I claim the broad ground of a combination of one or more alkaline or earthy silicates, with one or more tarry matters, but, I claim the composition substantially as described, consisting of an alkaline silicate, oil or oils, coal tar, or pitch of coal tar, and naphtha (water being added when necessary), such being for the purpose or purposes set forth.

BILLIARD CUSHIONS.—William K. Winant, of Brooklyn, N. Y.: I do not claim a steel facing to a billiard cushion, neither do I claim the attaching said strip or facing to the rubber, by causing said rubber, while melted, to flow into or around said strip of steel; neither do I claim India rubber, or other facing between the steel and the ball, but, I claim the strip, i, of steel or equivalent material, inserted into the crease or incision in the India rubber cushion, substantially as and for the purposes specified.

I also claim the metallic bearing bar, c, between the back of the India rubber and the cushion rail, substantially as and for the purposes set forth.

VARIABLE BORING BIT.—William Tucker, of Gloucester, R. I.: I am aware that it is not new to make a center bit with a tapering or screw center, made adjustable in such manner, with respect to the extreme outer edge of its cutter, as to enable the center bit to be capable of boring holes of different diameters; therefore I do not claim such, in the abstract, but what I do claim is, the combination of a tapering center point or screw center, d, and an auxiliary cutter, c, arranged on the shank, a, as described, with a main cutter, f, applied to the shank, so as to be capable of being revolved thereon, and fixed in position thereon, by means substantially explained.

REDUCING WOOD FIBRES TO PAPER PULP.—Henry Voelter, of Heidenheim, Wurtemberg, Germany. Patented in Wurtemberg August 29th, 1856: I make no claim in this application, as to the originality of invention of using wood pulp for paper making, although it might be shown that this even emanated from me; nor do I claim broadly the employment of mechanical agents, in combination with water or other suitable liquids, for the purpose of separating and obtaining the fibres of wood.

I also disclaim the various parts and mechanical devices constituting my machine when separately considered, and when not combined, as set forth; but I claim, First, The particular arrangement, construction and combination of the machinery, or the mechanical expedients employed, as herein specified, for reducing blocks of wood, or producing wood pulp, by feeding them up automatically to a rotating grind or millstone, in connection with the peculiar manner of applying or locating said blocks upon the circumference of the stone, or on a portion of its circumference, by holding them behind each other, in a position and direction essentially the same as described and set forth.

Second, The employment and the combination of a series of perforated and rotating cylinders with the reducing expedient, when contracted and connected between themselves, in the manner herein specified, by surrounding troughs and communicating channels or reservoirs, all made to operate as set forth, and for the purpose of assorting the fibres when separated from the wood in the mode described, rendering the pulp fit to be formed into paper of different qualities.

SEEDING MACHINES.—S. R. Weldron, of Winnebago Station, Ill.: I claim dividing the hopper, C, into two equal compartments, a, b, and using a slide, F, to graduate the opening, a, between them, when the hopper, thus arranged, is used in combination with the rotating seed distributor, G, flap or back board, G, and the double walls, f, g, all arranged to operate as and for the purpose set forth.

[This is an improvement in broadcast sowing machines, and the intention is to produce a machine in which the quantity of seed to be sown in a given area shall be regulated. It is a very perfect and good device.]

BEEHIVES.—Thomas H. Windle, of Wagohstown, Pa.: I am aware that beehives have been made with a moth trap attached, and also with sections of separate bee apartments, arranged together and communicating with each other, and having roll, or sliding holes therein, substantially as described; therefore, I do not claim, broadly, either of these devices, but, First, I claim the combined arrangement in the moth trap (B) of the tapering moth tubes (11, 11, 11), and the ventilated bee escape tubes (12, 12), when the same are used in combination with the hive, the whole being constructed in the manner and for the purposes set forth and described.

Second, I also claim making each of the larger bee apartments (C) with the self-cleaning slide (4), the said slide being conducted as described, and applied in connection with the tongued piece (7), so as to operate substantially in the manner and for the purpose set forth and described.

MACHINE FOR FORMING BATS FOR FELTING.—Thos. B. Butler, of Norwalk, Conn., assignor to Lounsbury, Bissell & Co., of Norwalk, aforesaid: I do not claim the rolls, J, G, or F, nor any combination of them, nor the vibration of J and G, nor the process of depositing the sliver diagonally upon the roll or apron.

But I claim the arrangement of rows of teeth upon the calender roll, to bring the sliver under the vibration of the roll, G, as changed, and the angle formed substantially as described.

I also claim the rods, L, springs, M, pins, P, and cams, R, or their equivalents, arranged and operating as described, and for the purposes set forth.

STEAM ENGINES.—John J. G. Collins, of Philadelphia, Pa., assignor to himself, William A. Rhodes, and Thos. Drake, of Philadelphia, Pa.: Without claiming broadly the super-heating of steam prior to its admission to the cylinder of a steam engine, I claim combining together for joint action, a cooler, regenerator and steam engine, when the said regenerator is constructed and operated substantially in the manner set forth, and when it is furnished with the device specified, or any equivalent to the same, by means of which it receives a supply of steam from the coolers, retains until it is super-heated, and delivers it to the engine, at intervals regulated by the movements of the latter.

BURNERS FOR VAPOR LAMPS.—Frederick Heidrick, of Philadelphia, Pa.; assignor to C. F. Clothier, of Philadelphia, aforesaid: I lay no exclusive claim to the hollow burner, F, the spur, H, or to the introduction of the non-conducting material between the tubes, A and B, but, I claim the employment of the self-adjusting washer, in connection with the burner, F, between G, and wick tube, D, in the manner and for the purpose set forth.

PLOWS.—Joseph Jones, of Wilmington, Del., assignor to Edmund Jones and Joseph Jones, Jr., of Wilmington, aforesaid: I do not claim the combination of the detent gear and levers, when constructed and arranged for operation conjointly, in the manner as and for the purposes set forth.

TANNING HIDES.—Theodor Klemm, of Pfullingen near Stuttgart, Wurtemberg, Germany, assignor to Edmund Moss, of London, England: I do not wish to be understood as limiting my claim to the use of the special composition of matter herein specified, as the said composition of matter may be varied within the range of my invention.

What I claim is, the process of treating and impregnating hides, skins, and other animal tissues, by alternately agitating them in a heated atmosphere or current of heated air, and rubbing or smearing them with the material specified, substantially as and for the purpose specified.

GAS RETORTS.—Alfred Marsh, of Detroit, Mich., assignor to himself, E. Hall Covell, J. Q. Dudley, and Robert Holmes, of Detroit, aforesaid: I do not claim a retort only as in combination with my arrangement, nor do I claim the mode of introducing the gas-manufacturing material into the retort, or the exit of the gas as described, nor the conducting the fumes from a retort by a pipe, only in connection with my arrangement as described; but, I claim, in the construction of apparatus for the manufacturing of gas from resin or oils, the spiral column holding the gas from the furnace through the center; a spiral column aperture between the threads of the spiral column in combination with the case, in the manner and for the purposes substantially as set forth.

CULTIVATORS.—Robert Sawyer, of Wales, Me., assignor to William G. Brown, of Monmouth, Me.: I do not claim the common cultivator, as made with one or more series of small double plow shares, applied to adjustable bars or supports, connected with a plow beam; but, I claim my improved weeding and hillin plow, constructed substantially as described, viz., with a coultter, B, a root cutter, D, adjustable cutters, G, G, and turning shares, L, L, applied to adjustable handles, and a plow beam, said made to operate substantially as specified.

COOKING STOVES.—John L. Stewart, of Nashville, Tenn., assignor to Randolph A. Nathurst, of Nashville, aforesaid: I do not claim the placing of an oven over the fireplace of a stove, for such an arrangement may be seen in many cook stoves, but, I claim, in connection with the sunken recesses, d, the use of flues or passages, d, e, f, substantially as and for the purposes set forth.

[The object of this invention is to prevent the escape of the products of combustion, smoke, gas, &c., from cook stoves when in use, an object not hitherto attained, on account of the exposure of the fire while cooking vessels were being adjusted in and removed from the holes in the top plates.]

FOLDING PAPER.—John North, of Middletown, Conn., assignor to American Book and Paper Folding Company, assignor to Anson Hardy, assignor to Steuben T. Bacon, of Boston, Mass.: I claim placing the sheet direct in register upon the knife to receive its first fold, in the manner and for the purpose above described.

Second, Folding paper by means of a straight edge or knife and reciprocating rollers. Third, Hanging the frame, m, m, with reciprocating rollers and folding knife, E, attached, to move and reciprocate in the arc of a circle. Fourth, Causing the rollers to rotate and change their motion alternately, for the purpose specified.

Fifth, Cutting the paper in the 12-fold, at the same time it is being folded.

PREPARING FRAMES FOR GUILDING.—James W. Campbell, of New York, N. Y.: I do not claim the lathe, C, for this is a well-known device, and in common use for turning oval and circular frames; but, I claim the inclined lathe, C, in combination with the inclined tool, F, when said tool is arranged substantially in the manner and for the purpose above described, adjusted to the frame, D, by the treadle frame, G, and at the same time allowed a lateral movement or play, to conform to any irregular movement of the frame due to an imperfect centering of the same on the plate, b, of the lathe, for the purpose specified.

KNIFE POLISHERS.—W. H. Horstman, of New York, N. Y., assignor to Reuben Shaler, of Madison, Conn. Dated Nov. 28, 1848: I claim the combination of the hopper, B, polishing surface, C, and D, and spring, E, or their equivalents, substantially in the manner and for the purposes set forth.

PRINTING PRESSES.—Geo. P. Gordon, of New York, N. Y. Dated Jan. 1, 1864: I claim, First, The arrangement and combination of a rotating disc, W, with an annular ring or outside disc, X, the two revolving each in an opposite direction to the other, for the purpose of breaking up the ink, so that it shall by such contrary motions become evenly distributed, and thus imparted to the rollers which ink the form of types.

Second, I claim moving the rollers, T, "one or more being used for taking the form, from the parallel position they necessarily assume for this purpose, changing to an oblique position which shall give to them a lateral motion, when in contact with the distributing discs, or some equivalent, for the purpose specified.

Third, I claim the arrangement of a form bed, which alternately varies its motion during its reciprocating movement; viz., first traveling under and in contact with a cylinder to give an impression, then being withdrawn from contact with the cylinder, and remaining withdrawn during the removal, to prevent an impression, such bed reciprocating and at the same time alternating from one of these positions to the other; thus performing two separate and distinct motions, entirely independent of, and in contrary direction to each other, while remaining in gear with the cylinder, when such bed shall be used with a cylinder or its equivalent having a part revolution with a reciprocating movement.

Fourth, I claim attaching to the reciprocating form or type bed, an adjustable rack, as well as a stationary rack, which two racks shall play into gear, upon a cylinder or segment of a cylinder, so that any and all wear or variation may at once be taken up by adjusting the movable rack, and by this means always cause the bed and cylinder or segment of a cylinder to work in harmony with each other and produce a clear and sharp impression free from slur.

Fifth, I do not claim placing a reciprocating bed in a vertical position, or any given angle from a horizontal position. But I claim so placing the bed when used with a rotating reciprocating cylinder or segment of a cylinder, which shall place or pile the sheets of printed paper upon the fly-board as set forth and described.

TURNING AND SLIDING TABLES FOR RAILROADS.—William Sellers, of Philadelphia, Pa. Dated March 23, 1858: I claim interposing the central part or box between the ends of the truss rail beams in such manner as to make use of the width of said central part or box, as a portion of the length of said beams, substantially as described. When the said beams and central box are so constructed and connected, as to form a table entirely supported from the central part or box, substantially as described.

COFFEE POTS.—Charles B. Waite & Joseph W. Sener, of Fredericksburg, Va. Dated April 23, 1855: We do not claim a condensing boiler, but we claim the arrangement described whereby the steam from the boiler is discharged into the water in the condenser, which absorbs the aroma, in combination with the syphon for returning the contents of the condenser into the boiler, substantially as set forth.

SURFACE CONDENSER FOR STEAM ENGINES.—J. P. Pirson, of New York City. Dated April 2, 1850: I claim, first, So enclosing the condensing surfaces of a surface condenser, within a tank which is constructed to be capable of acting as a jet condenser, that when the said surface condenser shall become deranged by breaks or otherwise, resort may be had to the jet condenser, whereby condensation may be continued and the vacuum maintained, substantially as set forth.

Second, The combination of a surface condenser with a box or case, in such manner that the condensation of the steam shall be effected therein, without subjecting the said surface condenser to atmospheric pressure, substantially in the manner described.

Third, The aperture, w, or its equivalent, for maintaining the vacuum, and as a passage for any steam which may remain uncondensed in the radiating condenser, as set forth.

Fourth, Connecting the evaporator with the chamber, h, substantially in the manner described, whereby the saturated water can be drawn off from the bottom of the evaporator.

DESIGNS.

PRINTERS' TYPES.—George Bruce, of New York, N. Y.

DOOR LOCK PLATES.—Cornelius B. Erwin, of New Britain, Conn. Two cases.

DOOR LOCK PLATES.—Henry E. Russell, of New Britain, Conn.

BOX STOVES.—N. S. Vedder & Henry Riply, of Troy, N. Y., (assignor to N. S. Vedder, of Troy, aforesaid).

COOKING STOVES.—N. S. Vedder, of Troy, N. Y.

PARLOR STOVES.—N. S. Vedder, of Troy, N. Y. Two cases.

OYSTERS AND STAR FISH.

The July number of the North American Review says, in reference to the havoc made among the oysters by the star fish in the harbor of New York and its vicinity, that the loss has been estimated at many thousands of dollars, and the proprietors of oyster beds have petitioned the State to remit the tax upon them, asserting that unless some way is found to check the ravages of these animals, the oyster is in danger of becoming extinct in many localities where they are now abundant.

The ancients believed that the star fish cunningly inserted one of its rays between the valves, and thus gradually destroyed its victim; but modern observation has determined that its mode of attack is very different. If the oyster is a large bivalve (one that would make the mouth of a crustacean epicure water), four or five asteria attach themselves to it, and waiting patiently until the mollusk opens his shell, intrude between the valves their stomachs, which first, for a greater convenience, they turn inside out. A liquid is supposed to be secreted by the stomach, which acts as an opiate upon the oyster, who no longer possesses the power to close his doors against the intruder, and thus becomes an easy prey to these burglars of the deep. It is to be hoped that the true lover of the delicious oyster, particularly those who are accustomed to study the radiata of the aquarium, will devise some plan to enable the bivalve to retain peaceful possession of his own house until he is forcibly ejected for the benefit of the lords of creation.

VACCINATION.—Too much importance cannot be attached to this great specific against smallpox. In one district in England (so says one of its journals), out of 1,536 deaths 419 have arisen from this terrible disease, a circumstance which requires great and immediate attention; for the large percentage of deaths above alluded to are but a portion which take place in this country annually; and it is to be feared that, if proper means are not taken, the number which is at present so large will soon be increased.

BLACK TONGUE.—A correspondent residing at Howell, Mich., informs us that a disease called the "black tongue" is prevailing in that section, and also that he has noticed that a similar disease is attacking the cattle in the southern States. He says his own experience is that not one in ten of the animals will die if they are permitted to chew coarse salt—the coarser the better. This is a harmless remedy, and should be tried.

A GOOD MAP OF THE Submarine Telegraph between America and Europe, well colored, and the Arctic's soundings attached, is sold by McKee & Stillwell, 89 Nassau street, New York. Price 10 cents.