## Scientific American.



[Reported Officially for the Scientific American.] LIST OF PATENT CLAIMS

## Issued from the United States Patent Office

FOR THE WEEK ENDING AUGUST 22, 1854.

Ontresequal Pump—W. D. Andrews, of New York City: I claim the construction of the pump, as described, viz., having a hub, in the shape of the base of a cone inverted, with arms attached to its periphery, of a gradually decreasing width as they approach its base, placed within a shell corresponding in shape to the outer circumference of the arms, and having induction passages of a spiral form gradually decreasing in pitch to their point of delivery and eduction passages, of a spiral form, of a gradually increasing pitch, until they approach its passed of a spiral form of a gradually increasing pitch, until they approach to the property of the property of the process of a spiral form of a gradually increasing pitch, until they appear to the process of a spiral form of a gradually increasing pitch, until they are in a spiral form, of a gradually increasing pitch, until they are in a gradually increasing pitch, until they are in a property of the process o

HOT-AIR FURNACES-N. A. Boynton, of New York City claim, first, the arrangement and construction of the I claim, first, the arrangement and construction of the dome and heating ring surrounding the same, combined by a series of pipes opening into the base of the dome, and carrying the smoke up over the same, as specified. I also claim the construction and arrangement of the smoke pipes, so as to prevent the lodgment of dirtherein, and precipitate the same into the fire chamber, thereby preventing the clogging of said pipes. I also claim the puppet valve cover, arranged and combined with the domeof the furnace, by which I insure a stopper at that point, not liable to the derangement of ordinary valves used for similar purposes.

ROTARY ENGINES-R. C. Bristol, of China, Mich .: claim, first, the resting of the outer cylinder by lugs upon a convex bearing, with a plate interposed and made adjustable by set screws, or by wedges, for the purpose of adjusting the outer cylinder to any and all possible variations of the shaft and inner cylinder, as described.

I also claim driving out the slides by steam acting under pistons at each end of them, two being drawn out

also claim driving out the slides by steam acting under pistons at each end of them, two being drawn out in equilibrio, while the other two are being acted against to propel the engine, as described.

Lalso claim ustog a cock or valve in the exhaust pipe to be closed before starting the engine, for the purpose of filling the engine, as described.

Lalso claim the metal rings a power of the purpose of filling the engine, as described.

Lalso claim the metal rings a power of the engine, as described.

Lalso claim the metal rings a power of the engine, and forced up to the ends of the cylinder by springs, for providing for the expansion and contraction of the metals, as set forth.

Lalso claim, in combination with the rings, thus forced up, the use of set screws for restraining the action of such springs, and preventing the atmosphere from causing undue pressure or friction on said rings.

Lalso claim the peculiar method of making the joint in the abutment, so as to be adjustable and perfect on the face of the inner cylinder at the end of the abutment and on the periphery of the inner heads, as described.

Hommy Mills—Beni. Bridendolph, of Clear Spring.

Hominy Mills—Benj. Bridendolph, of Clear Spring, Md.: I claim the compound spiral hulling shaft constructed as described, and operating in connection with a roughened concave for hulling and breaking corn, as specified.

STRAW CUTTERS-A. B. Earle, of Franklin, N. Y.: I laim the arrangement of a vibrating knife and recoil

ciaim the arrangement of a viorating kinic and reconspiring, as steforth;
I also claim the arrangement of a chopping knife on
Vibrating arms, fitted on each side with a handle, in
such a manner that the force of the blows of the knife
may be varied in proportion to the quantity of straw
to be out, and by which the operator may work on either side of the machine at pleasure.

ARRANGEMENT OF THE FTRAM ENGINE—W. M. Ellis, of Wassington, D. C.: I claim the arrangement of the annular cylinder and piston between the crank and cross-head, and uniting the two latter by a connecting rod passing through the space within the two former, as set forth

STOP AND WASTE COCK—W. Z. Hatcher, of Philadelphia, Pa.: I do not claim making a supplyway in the barrel of the cock. Nor do I claim the outlet waste hole, the waste pipe, nor the through ways.

But I claim making the waste way in the barrel of the cocks oa sto convey the water required to be wasted, from the pipe to the through way in the blug, that it may pass through the same to the outlet hole and pipe on the opposite side of the barrel, as described, and so that the plug may be turned in either direction for the purpose: and the notch or extra hole in the plug, and the check pin and stops heretofore used may be dispensed with, as described.

PORTABLE BURRAUS—Levi Haywood, J. L. Ross, and J. K. totis, of Bosen. Mass: We claim forming in a bureau or case of drawers, which is susceptible of dismemberment, an independent frame or case which, when the parts are disjointed, and back of the bureau attached to it serves as a box or case to receive the front, back, and end pieces of each drawer, the pieces which compose each drawer being packed in the same compartment of this independent frame in which the said drawer slides when put together.

COATING TRIEGRAPH WIRES—J. B. Hyde, of New York hty: I do not claim broadly the coating of wires by trawing them through a vessel having holes on oppos-te sides.

drawing them through a vessel having holes on opposite sides.

But I claim the employment of the molding kettle, with or without the melting kettle, provided and combined with an aperture covered with a disk of india rubber or its equivalent, having a hole or puncture in the center, which admits the wire and prevents the escape of the contained composition, and with the nozetor of die for determining the thickness of compound to be put on the wire, as specified.

I also claim the use of the cone (which determines the thickness of the coating) in such manner as that the outer end or nozzie thereof, shall, when in use, terminate in and be convered by water, so that the covered wire shall emerge from the come directly into or while the latter is in the water, through which the wire will then pass, as described, for cooling the composition.

then pass, as described, for cooling the composition.

And finally, I do dot limit the use of the apparatus for coating telegraph wires.

ACTUATING ENGINES BY BISULPHURET OF CARBON—BERNARD Hughes, of Rochester, N. Y.: I claim the application of bi-sulphuret of carbon to any convenient form of the steamengine, as a motive power, as described, when the vapor of said substance, after it has passed through the cylinder, is condensed by any known means of producing condensation in a suitable reservoir, and preserved for the future supply of the boiler, as described.

boiler, as described.

KNITTING MACHINES—George Jackson, of Cohoes, N. Y.: I claim the arrangement and combinations of the pressers and sinkers in the frame, as described, whereby the pressers and sinkers move together, and can be alijusted at such distance apart as may be requisite to graduate the size of the stitches, as required.

Laisoclaim the arrangement of the cams which are attached to the cam wheels and on one common shaft, to produce the relative movements of the pressers, the sinkers, the needies, and the thread carrier bar, with the carriers, in combination and cooperation with the movement of the cac cam, which being revolved by the movement of the shaft through the spur gear wheels, produces the relative movements of the tread carriers to the right and left, and under and above the needles, and gives the peculiar character and figure of

the fabric knit, so that by changing the surface of the face cam, and altering the relative proportions of the spur wheels to each other, the figure of the fabric may be altered indefinitely.

FLOATING DRAGS OR ANCHORS—Abel F. Lewis, of Shopiere, Wis.: I claim the arrangement described of the canting hawser, cable, and floating anchor, whereby a vessel may be held with more or less power, as circumstances require, when ground anchorage is unattainable.

BALANGING AND HOISTING SASHES-Robert Marquis of

BALMOING AND HOISTING SASHES—Robert Marquis, of Xenia, Ohio; I lay no claim to making both sasies mutually operative by means of the same cords which serve to cievate and lower said asshes.

I claim the single cord, which, passing aroundpulleys at the mid width of the sashes, is operated by a windown in the jamb, enabling the simultaneous or separate movement of each sash without liability of binding by the unequal expansion of different portions of the cord or impairing the strength of the sash by the removal or its substance, &c.

MANURE SPREADERS—Elbridge, Marshall, of Clinton N. J.: Iclaim the employment of the vibrating bruss for the purposes set forth.

GRAIN MILIS—Henry Mellish, of Walpole, N. H.: learn the arrangement of the ring saws, as set apar by the washers on the bolts, with the cracker rest enclosed by them, in combination with the adjustable case, or its equivalent, for the purpose of cracking ears of corn, and also alcided grain, that it had be the more of containing also shelled grain, that it has be the more readily received between the burr, and the granding surface of the adjustable case, and for the further purpose by the oblique direction of the tecth on the outer edges of the ring saws, and that of the tecth on the inner surface of the adjustable case of loveling the cracked grain into the space between the periphery of the burr, and the grinding surface of the adjustable case.

the burr, and the grinding surface of the aujuspanic case.

I also claim the arrangement of the burr, constructed as described, in cubbration with the finishing plate and the adjustable case, or its quivalent, operating as the burr onces, conjointly with the ring saws, or inside the anjustable case, and the torion saws, or inside the anjustable case, and the torion surface of the adjustable case, for the propose of further grinding and giving the required degree of fineness to the meal as it passes the torion surface of the adjustable case, for the purpose of fineness to the meal as it passes and operating conjunity as described.

DIAPHRAGM FUNF.—J. A. Pease, of New York City: I claim the clastic diaphragm with the metallic or wooden cylinder, in combination with the air chamber, for the purposes specified.

WOOD GAS GENERATORS—W. D. Porter, of New York City: 1 claim the construction of a gas apparatus or still, consisting of a metallic or other cyninder, the cones, dispiragm plate, and exit pipe, as described.

cones, disphragm plate, and exit pipe, as described.

Folding Umbrellas.—Henry Richardson, Sheldon Monis, Jr., and B. J. Perry, of bitenfield, conn.: We claim, first, the combination of the spring and its hook or caten, with the hinge, the said spring cent secure to one part of the hinge or rio, and the hook or catch taking mid a nuch in the other part of the hinge or rib; when the two parts of the rib are in line, for the purpose of making the joint right, as set forth. We claim that a hid improved combination is much more easily made, and more citizent in its operation: also, that it is nuch cheaper of construction, both in material and habor, and further, that it is much nearer in its finish.

terial and taber; and there, that the indent net into finish. Second, attaching the several joints or parts of the stick together, by means of a link which is connected to the end of the right-handed screw, and has ring, or equivalent, fitting in a hollow part behind or within the nat, which prevents its passing through the nat, but which at the same time allows the screw to turn freely within the nat, as described.

MANUFACTURING DOOR KNOSS—Artemas Rogers, of Palacsvine, Olino: I claim the instrument described, or its equivation, by the use of which I am enabled, with one and the same instrument in continuous use, to form the sorew threads or other impressions within the socaet of a door knob, remove the knob from the mole to the polishing jurnace, manipulate it during the fire polishing, and finally deposit it in the amnealing kiln, as set for th.

PAVEMENT WASHER, HOSE HYDRANT, AND HITCHING POST—C. M. Alburger, of Philadelphia, Pa.: 1 do non-claim a pavement washeratic hose hydrant indepen-dent of any peculiaraties in their construction and

combination.

But I claim first, making a double waste cock by outting the two waste notches, or their equivalents, in the
put in got the cock, so that either notch may be put in
communication with the usual waste holes in the barcommunication with the usual waste holes in the bar-ren by unring the plug in ther direction, as described, when the said double waste cock is used in combination with a payement washer, hose hydram, or ther hy-draulic apparatus requiring the water in the outletpipe above to waste in the ground below, when the reser-voir pressure is shut off by turning the plug of the

cock.
Second, I claim the general arrangement and combination of a pavement washer, hose hyarant, and hitching post, for the purpose described.

ing post, for the purpose described.

Two-Ply Carpers—Thos. Crossley, of Boston, Mass. Ante-dated ket. 22, 1854: I do not claim the manufacture of carpers emposed of different fibrous materials, in which the whole or nearly all of one fiber is shown on one side of the carpet, and all or nearly all of the tother fiber on the other side of the carpet, as this has been sone in pile carpets and other rabries. But I claim, as a new article of manufacture, a two-ply ingrain Carpet, having the lower ply composed entirely of linen or cotton and the upper ply of wool, when united as described, for the purpose of producing a durable and conomical carpet, to be subsequently primed upon one side, as described.

DAGUERREOTYPE PLATE HOLDER—Joseph Hill, of Skaneateles, N. Y.: 1 claim the application of the inward pressure by means of the springs, by their forceretaining the daguerreotype plates to the block by the contact of the a

ages of the block.
It is understood that the daguerreotype plates may
e confined by their ends as well as sides by the same
rinciple; blocks may be made of anysubstance.

Tuning Fores—J. C. Jinkins, of Bealsville, Ohio. I claim producing sounds of any required pitch with a single tuning fork by means of a movable cross bar inserted in the proper positions between the prongs of the fork, as set forth.

PREVENTING THE EXPLOSION OF BOILERS—A. W. Jones, of New York City: I am aware that contrivances have been made by which the valve which is raised by the pressure of steam is made to open another valve for its escape from the boiler, and I therefore so not claim to have been the first to have made such a discovery. What I claim is the combination of the rock shaft with the slide valve, piston, spring valve, and steam chest, as described.

chest, as described.

Sawing Clapboards, &c.—D F. Mellen, of Wentworth, N. H.: I do not claim two saws operating simultaneously upon opposite sides of the same piece of lumber.

But I claim the arrangement of devices, as described, by which the distance between the saws is varied to meet the varying thickness of the logs to be sawed, and the saws when so adjusted are elevated and depressed together, as required.

I claim the mathod, as described, of feeding the log between each successive cut of the saws, that is tosay, causing the feeding pawl, or the lever which carries it, to strike against a fixed stop, in combination with the yielding &g., as set forth.

I claim the method, as set forth, of raising and lowering the saws, when it is desired not to use them at the same time, but alternately, during the forward and backward motion of the log, the same being effected by the combination of the unlocking, shifting, and locking apparatus, in combination with the lever and chains, the whole operating as set forth.

he whole operating as set forth. SAW SET-Wm. O. Rust, of Great Falls, N. H.: I claim the rutary bender and its adjusting screw in their com-bination with the movable lever! I also claim the ar-rangement of the regulating back stop, on the station-ary arm, so that it may be used in connection with the movable lever, and for the purpose as specified.

SECURING GLASSES IN LANTERNS—Hugh Sangster, of Buffalo, N. Y.: I claim the combination of the springs and the frame arranged and operating as set forth, not

intending to claim the springs uncombined with the frame or some device equivalent thereto.

SEWING MACHINES—Edward Shaw, of East Abington, Mass.: I claim, first, the combination of the rack bar, C, with the bar, B, both curved in the same shape and forming a clamp capable of receiving a vibrating motion from the diamond-shaped teeth of the pinion, and constituting a clamp for sewing the seams of boot legs in the manner described.

Second, I claim feeding the clamp along and guiding it, so as to keep theleather to be sewed always in proper position with regard to the needle, and at the same distance from the same by means of the rack and gear with its diamond-shaped teeth and proper guides, as described.

CARPENTERS' GAUGE—Haloyon Skinner, and William Greenhalgh, of West Farms N. Y.: We claim the com-bination of the frame with the adjustable sliding bars, adjustable fences, and set screws in the manner here-in described.

HARNESS SADDLE TREES—Robert Spencer, of Southport, Conn.: I do not claim constructing the frame and contel of a harness saddle tree in separate pieces, nor the insertion of leather between them.

But I claim as a new article of manufacture my improved harness saddle tree, constructed as described, of combined iron and leather (or the equivalent of leather) the iron serving the purpose of a skeleton, and giving it the proper rigidity, while by trimming the leather portions of the tree the exact conformation is attained.

CATAMENIAL SUPPORTER—Alfred A. Starr, of New York Ofty: I claim the combination of the elastic springs in the manner and for the purposes set forth.

FASTENINGS OF PLOWS—David Swartz and Samuel Swartz, of Tonis Brook, Va.: We do not claim constructing the point and cutter in separate pieces so as to be attached and detached at pleasure.

But we claim constructing the mold board and land side with slots as described, and the point and cutter with the tongues or fianges to fit the said slots, so that the said point or cutter shall slide in contontally or nearly so and form a fastening with the mold board and land side without the use of screws or bolts, as set forth.

HARNESS SADDLES—Robert Spencer, of New York City: I claim the described new article of manufacture, consisting of a properly shaped harness saddle seat, cast in one piece with the unfinished lockey-shaped side bars, the said seat requiring to be only smootated and japanned to adapt it to use, and the said side bars requiring to be covered with patent leather or jockeys or skirts of sufficient thickness to make a smooth and harmonious finish with the japanned surface of theseat as represented and described.

Counting Machine-Paul Stillman, of New York City I claim the employment and arrangement of the clutches having a spring sideways, so as to catch into the face notches and the styles outside the countwheels by which they are operated to move a series of countwheels, in the manner and for the purpose set forth.

OVENS-Francis O. Treadwell, of New York City: I ciaim the use of the combination of the furnace, flues, and dampers, substantially as set forth, in combination with an endless band running through the oven, and over drums placed outside of it for the purpose of maxing a perpetual baking oven, as described.

TRAOK CLEARERS TO GRASS HARVESTERS—A. White-ley, or Springfield, Ohio: I claim the rolling cone mov-ing on the axis and furnished with a joint clearer for the purpose of clearing a track in the cut grass.

CHESS PRESSS—Philander Wilbor, of Milan, Ohio-I claim the combination of the two rack slides with the respective attachments of the cam and friction roller, by which means, in connection with the slides and ac-companying racks, the press is operated in the manner set forth.

SEWING MACHINES—Melvin Shaw, (assignor to Melvin Shaw and Daniel G. Wheeler,) of East Abington, Mass.: I claim the combination of the stiding bar with the curved clamp and the rest, constructed and operating tegether in the manner as set forth, by which means as the work is fea through the machine, it is kept constantly up to the needle and the stitches are placed at a uniform and unvarying distance from the edges of the material without dependence upon the care or skill of the workman.

of the workman.

PLANING LUMBER—Solomon S. Gray, (assignor to S. S. Gray and S. A. Woods.) of South Boston, Mass: first, I claim the peculiar construction of cutter head described, the cutter head itself being made use of to turn and break the shaving in the manner of a double iron plane and being furthermore made concave for the purpose of facilitating this operation.

Second, I claim the clamp as described for the purpose of dogging the lumber to the bed of the machine, the body of the clamp being pivoted and forced up by the screw or its equivalent, the dogs being adjustable therein in the manner set forth.

Third, I claim the described method of securing the dog t, the bed of the machine, by means of the teeth or cogs and the mortises in the Side pieces, for the purpose set forth.

OPERATING DAMPERS AND FURNACIS—Daniel Tread-

OPERATINO DAMPERS AND FURNACES—Daniel Treadwell, or Cambridge Mass., (assignor to Herbert H. and Frederick H. Stimpson, or Hostop, Mass )! I claim using the expansion of the stove or furnace for closing the damper through the medium of the devices described, or any other combination of similar devices.

FURNACES FOR MAKING WROUGHT IRON DIRECTLY FROM THE ORB—Thos. W. Harvey's (now deceased, late of New York City.) administrators. (assignors to the Harvey Steel and Iron Company:) I claim causing the deoxydating and desulphurating flames and sases generated in the furnace to act directly in contact with properly prepared ores of iron (and other metals) placed upon suitably arranged tables, while at the same time a high degree of heat is imparted to the under sides of said tables.

Cog Granno-James A, Bazin, of Canton, Mass., (assignor to Aifred B. Ely, of Boston, Mass.) I claim the described manner of manufacturing cog wheels, every alternate tooth being bent in opposite directions from the plane of the plate, as set forch.

the plane of the plate, as setforth.

TOOL REST FOR TURNING LATERS—M. H. Merriam, of Oheice, and W. W. Nichols, of Boston, Mass., (assignors to W. W. Nichols & Co., of Boston, Mass.) We claim the combination of the elevating screw with the nut and tool post and slide, in which by turning thenutyou can elevate the tool post and the elevating screw, at the same time the elevating screw is prevented from turning by the gibs, as described.

We also claim the greove in the slide, by which the tool post, elevating screw, and nut, are prevented from rising by pins or their equivalent, fitted into the nut and running in the groove when the nut is not turned, but when the nut is turned the tool post can be lowered. We claim the gibs and the elevating screw as combined with and running in the channels of the slide by which a vertical movement of the elevating screw is produced and a rotary prevented as set forth.

produced and a rotary prevented as set forth.

Tool for Boring Recesses for Casters, &c.—Benj.
F. Graves, (assignor to Wim. C. Knowiton.) of Boston,
Mass.: I do not claim the combining the throat of a
chisel, with the discharging chip groove of the twist
auger, or making the latter to enter directly into the
former, whereby its chips are not only alsoharged
through the said throat but by the pressure exerted on
them by the spiral form of the groove of the auger
they are made to aid in the discharge of the other chips
from the throat, and thereby prevent the choking of the
chips in the throat.
But I claim the combination and arrangement of the
twistauger, the two cuttersor chisels and their throats,
on the bock, so as to operate together and simultane
ously, and make a chammer or recess in a piece of wood of
the form as specified.

ously, and mast a chamber of recess in a precess wood of the form as specified. Not meaning to claim a single cutter and a twist au-ger as applied to a shaft so as to merely bore two cylin-arical recesses.

SEWING MACHINES—Sidney S. Turner, of Westboro' Mass., (assignor to Elmer Townsend, of Boston, Mass.; I claim the arrangement of a hook or hook needle underneath and so as to work up through the feeding bar in combination with the arrangement of the press oar in combination with the arrangement of the press-er above the feeding bar, and so as to press downwards towards it in the manner described, such enabling me to obtain an importantadvantage in operating by the single chain stitch sewing machine. And I also claim in combination with the mechanism for giving the vertical movements to the needle, the slot and the screw or pin. (or the mechanical equiva-lents therefor) for producing reciprocating semi rota-tive movements of the needle during the vertical move-ment of it, as described.

iems therefory for producing reciprocating semi rotative movements of the needle during the vertical movement of it, as described.

MACHINES FOR CASTING METALLIO EYES OR MAIL OF HEDDLES FOR LOOMS—Jacob Senneff, of Philadelphia, Pa.: I do not mean to confine myself rigidly to the precise arrangement of parts shown and described, as they may doubtless be varied without departing from the present improvements.

But I claim, first, themethod described of casting the eyes or mails on the strands of yarn or other material, by inserting the yarns successively within a mold sequence on a vibrating frame operated at the proper intervals of time by means of the eccentric cames, said mold being opened at times to disengage the mail thereform and provided with a core for forming the eye may be of the ground of the proper intervals of time by means of the eccentric cames, said therefore and provided with a core for forming the eye of the mold opens, in the manner and for the purpose set forth.

Second, I claim the manner of operating the core so asto enable it to be so withdrawn from the eye of the mail after the same is formed, and whilst it is firmly embraced within the mold by means of the springs and serve we operating as described.

Third, I claim the core carrier resting in a notch formed in the top of the spring, and having pins on its face, which pass through slots in the mold plates, and spring for moving the core horizontally from the stationary half of the mold and keeping it mid way between the mold plates, when they are opened by the lever and preventing it being thrown violently either way, as set forth.

Fourth, I claim the manner of operating the heddle frame holder, by means of the eccentric cams on the shaft capable of being moved longitudinally over the groves in said shaft, right langled levers to which the heddle frame is secured and spiral springs for keeping theends of the levers always in contact with the eccentric cams, and in combination therewith I claim the screw shaft and clamps, and the adjusta

ROLLING SHOULDERS ON AXLES-William Van Anden, of Poughkeepsie, M. Y.: I claim the arrangement of the cam rollers, naving the reduced surfaces with the guide and feeding tube or box through the hollow space of which I am enabled toput in the blank bar of iron, and withdraw the finished axie without displacing the forming rollers, or cams, or feeding tube, or box, as set forth.

STEAM VALVE—Robert Ross, of Philadelphia, Pa.: I claim in steam valves the mode set forth of constructing the valve, the same consisting in the loose or detached valve and stem or guide, and combined with the hollow valve rod in the manner set fortz.

RE-ISSUE.

Re-ISSUR.

BANK LOCKS—Augustus C. Harig, and David C. Story, of Lousville, Ky. Patented originally July 25, 1854; We claim connecting the series of male tumblers with the vibrating portion of the bolt in such a manner that all of said tumblers must vibrate with said series of tumblers, whilst any one of said tumblers must vibrate with said series of tumblers, whilst any one of said tumblers may be moved endwise independently of said vibrating portion of the bolt, and said portion of the bolt and vibrate with said series of tumblers, whilst any one of said tumblers may be moved endwise independently of said vibrating portion of the bolt, and vice versa, by which they are enabled to be operated in connection with a series of entirely independent stationary female tumblers, that can be adjusted in different positions, as set forth.

Second, we also claim the series of female tumblers when they are secured in such a manner to the lock case, that, while they admit of uninited adjustment to sait the different positions into which any key can be made to throw the series of male tumblers, they are so arranged as to be independent of the longitudinal movements of said male tumblers, or the bolt which is combined with them, and consequently are perfectly protected from injury or disarrangement by said movements and also from any violence that may be excrted upon the bolt.

Third, in connection with the said series of male tumblers, and the vibrating portion of the bolt arranged and combined in such a manner that they must vibrate with each other, and can be moved lengthwise independently of each either when he had a language in such a position that the bolt cannot beshot backuntli the vibrating portion thereof is brought up to the highest point allowed by the matching of the series of male tumblers with the bolt cannot be shot backuntli the vibrating portion the total the helps case, by which, when the bolt is shot out, both series of temale tumblers with the wire ranged and operating in the usher in such a manner that t

## The Ohlo State Fair.

The Fifth Annual Fair of the Ohio State Board of Agriculture, which is to be held at Newark, Ohio, commencing on the 19th of September, is to be a grand affair. We have received a list of the prizes offered, and a fine colored lithograph of the Fair grounds. As we have already noticed, Joseph E. Holmes, so well known as Superintendent of the Crystal Palace, is to be the superintendent, and the Ohio mechanics, we believe, will make a show worthy of their great State.

The grounds on which the fair is to be held was once an Indian fortification. It is enclosed in embankments made centuries ago. What a change in the destiny of races and nations .-What was Ohio one hundred years ago, and what was our whole country? Almost an unbroken wilderness. What a wave of emigrating conquest has spread over it in such a short time. It looks like a miracle. Those who talk of great periods of time being required to effect great changes in countries and peoples, have but to look to our country and sign themselves "mere sciolists."

## An Old Printing House.

M. Barth, printer, of Breslau, (in Prussia,) celebrated last month, the 350th anniversary of the first book printed in his establishment. This book is a German legend of some rank, and appeared in 1504. M. Barth's printing office is the oldest in Europe, and has been for 350 years uninterruptedly in the hands of his ancestors and himself.