



[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from the United States Patent Office.

FOR THE WEEK ENDING APRIL 18, 1855.

BLEACHING APPARATUS—Chas. T. Appleton, of Roxbury, Mass. : I claim the combination of an air-tight vat for receiving and retaining the goods, an apparatus for exhausting the air therefrom, and the necessary vessels containing the liquors used in the process of bleaching, whereby the various steps may be performed in a much shorter space of time than has heretofore been required, and without removing the goods from the vat, substantially as set forth.

SASH FASTENERS—W. E. Arnold, of Rochester, N. Y. : I claim the mode, substantially as set forth, of constructing and arranging a sash bolt and case, so as to pleasure to form either a right or left hand lock, the security also of said lock being attained by means substantially as described.

GAS REPORTS—H. P. M. Birkinbine, of Philadelphia, Pa. : I do not claim the D gas report, nor the passing of gas through a second retort, or heater, nor a retort with a cellular shell, or exterior wall.

But I claim the D gas report with the annular space above, as described, cast with and making a part of it as illustrated.

MACHINES FOR PUNCHING METAL—Marshall Barnett & Chas. Van der Wood, of Boston, Mass. : We claim so combining the punching bar, with a vibrating lever at one end, and a cam at the other end of it, as that it shall always rise and fall in a plane parallel to the bed of the machine, substantially as described.

MELODIONS—Jeremiah Carhart, of New York City : I am aware that a similar arrangement of the reed has before been adopted, and the air forced upwards through it to produce the tone by the bellows from below, and the hammer caused to strike the reed from beneath, but this has only been done in instruments employing a forced current of air produced by the blowing action of the bellows, and the hammer has necessarily been arranged within the wind chest, between the said chest and reed, and intermediate of the current passing from the bellows to the reed, whereby much inconvenience arises in the removal of the hammer, and adjustment of the reed, and to remove the hammer destroys or stops the operation of the reed for tuning or playing, this I do not claim.

But I claim the arrangement shown and described, in instruments operated by exhaustion of the air, of the reeds, valves, and hammers, in relation to the exhausting bellows or passage, so that the hammer is caused to operate outside of the influence of the bellows, and not between the bellows and the reed, and whereby the hammer may be readily detached and taken out of the instrument for repair, tuning or adjustment of the reed, without destroying the capability of the reed to speak or play.

Without claiming the application of buff consisting of strips of leather to musical instruments generally, or for any other purpose than that which I have specified, and claim their application to reed instruments in connection with hammers substantially as and for the purposes fully set forth.

[A description of this improvement in reed instruments may be found on another page.]

GRAIN AND GRASS HARVESTERS—Jarvis Case, of Springfield, Ohio : I claim placing the line shaft directly above the vertical center of the spur gear of the master wheel, in the manner and for the purpose described.

I claim the adjustable friction wheel in combination with the spring, R, and adjustable set screws, r, r, in the manner and for the purpose described.

EXPLOSIVE GAS ENGINES—Alfred Drake, of Philadelphia, Pa. : I do not wish to claim the employment or application of explosive mixtures of gases to engines.

But I claim, first, the igniting apparatus composed of the thimble, s, s', and the interior tube or blow pipe, y, y, arranged and operating substantially as described. Second, the arrangement and combination of the hollow piston rod, piston, and jacket, surrounding the cylinder, for the purpose of maintaining a constant circulation of water for cooling, substantially as described.

LUBRICATING COMPOUNDS—Nathan Dresser, of Rochester, N. Y. : I claim the lubricating compound and its application to journals, cranks, axles, and other machinery, subject to friction, using for that purpose the aforesaid compound or any other substantially the same, and which will produce the intended effect.

GAS GENERATOR IN A PARLOR STOVE—S. B. Ellithorp, of Elmira, N. Y. : I do not claim the stove condenser, clarifier, or gasometer, these being all well known old devices. But I claim the combination of the coal stove and retort, as fully described, thus combined making a portable coal gas generator for the purposes set forth.

SHIP'S WINDLASS—James Emerson, of Worcester, Mass. : I claim the combination of the geared sectors, I, I, with pawls, J, attached, the part pinions, G, G, levers, K, and pulleys, H, the above parts being constructed and arranged substantially as shown and for the purpose as set forth.

[See a description of this invention on another page.]

PROCESSES FOR MELTING SUGAR—G. W. Finzel, of Bristol, Eng. Patented in England May 7, 1853 : I claim the described improvement in refining sugars, that is to say, melting the raw sugar in a vacuum, preparatory to the further refining thereof in the manner, and for the purposes as set forth.

DREDGING MACHINES—C. H. Foné, of Mobile, Ala. : I do not claim the excavating wheel with buckets across the periphery, nor the tilting tipper for discharging the same, nor the manner of applying power to the same, nor the raising and lowering of said wheel in gear with the shaft of the engine. But I claim the device for keeping the wheel in gear while raising and lowering, and the combination of the radius bar and the sliding carriage which carries the shafts of the pinion, and also moves the waterwheels which slide on the feathered shafts, as this device and this combination of well known mechanical devices is my own invention, and has been used to keep the excavating wheel always in gear with the engine, and has never been so applied before.

I claim the self-acting latch, F, in its particular form and mode of adjustment, it being so shaped and adjusted as to hold on to the lid of the bucket until it is struck by the tipper, and so balanced that by its own gravity it will fall over and latch again before the bucket enters the water, this particular form and adjustment with the pin marked H, does away with the necessity of springs, and is the result of careful and expensive experiments.

I also claim that particular combination of chutes or sluice ways, G, G, which form an apex under the discharging tipper and pass athwartship, on an incline towards the scows, which particular combination has enabled me to discharge an excavating wheel laterally on either or both sides.

GRAIN AND GRASS HARVESTERS—E. B. Forbush, of Buffalo, N. Y. : First, I claim the combination of the gear, D, with the gearing, substantially as set forth. Second, I claim the extension of the platform timber, SS, beyond the finger bar, so as to connect it to the main frame of the machine near the driving wheel, with the view of giving strength and stiffness to the platform, and bring its weight as much as possible, on the main frame near the driving wheel, substantially as set forth.

Third, I claim as improvements upon the clamp, the locks, n, r, s, substantially as described. Fourth, I claim the improvement of the second angle, c, r, in the brace bar of the guard finger, substantially as described.

MOLDS FOR CASTING PENCIL SHARPENERS—W. K. Foster, of Bangor, Me. : I claim the arrangement of the spring holder, G, sliding plates, J and P, in relation to the grooved core, D, and gauge, K, for the purpose of adjusting and holding the blade, H, in the mold, and the forming of the slot in the pencil sharpeners, as set forth.

MACHINES FOR PUNCHING METAL—De Grasse Fowler & George Fowler, of Wallingford, Conn. : We claim the peculiar manner of connecting the operation of the two levers, n, n, k, to throw the machine out of gear at the time when

the punch is at its greatest elevation, when constructed, arranged and made to operate substantially in the manner described.

FOR TURNING THE LEAVES OF MUSIC BOOKS—Isaac Gallup, of Mystic Bridge, Conn. : I do not claim the revolving self-adjusting pulleys or finger carriers, as shown and described.

But I claim, first, the employment and arrangement of the swinging bars, F, F, F, and keys, G, G, G, in combination with said revolving self-adjusting pulleys or finger carriers, D, substantially as and for the purpose set forth. Second, the employment, substantially as shown, of the spring, I, in combination with the spring, H, for the purpose set forth.

Third, providing a stop, J, on each of the keys, G, and a spring catch, K, on the under side of the top, A, of the case, A, to fit against said stop, substantially as and for the purpose set forth.

Fourth, providing each of the fingers, C, with an extension, from a to b, for the purpose specified.

[A notice of this apparatus for turning music leaves may be found on another page.]

SEED AND BUTTON FASTENING—S. W. Hopkins, (assignor to W. C. Greene, J. T. Mauran, and Chas. Jackson), of Providence, R. I. : I claim the construction of the fastening, as shown and described, viz., having the shank of the stud or button formed of a tube, B, which contains a spiral spring, b, and having a bar, c, fitted in slots, d, in the outer end of said tube, and between the outer end of the spring, b, and a pin, a, attached to the outer end of the tube. The outer side of the bar, c, being provided with a recess, e, which, by means of the spring, b, is kept over the pin, a, and the bar, c, consequently secured in a transverse position with the tube, B.

[On another page a description of this improvement in studs and buttons may be found.]

ROTARY ENGINES—Abraham Masson, of Philadelphia, Pa. : I claim the combination of the four steam cylinders, and pistons with the curved guide arranged and operating so as to produce a continuous rotary motion, in the manner and for the purpose substantially as described.

FOUNTAIN PEN—H. K. McClelland, of Eldersville, Pa. : I do not claim, separately, any of the described parts; but I claim the construction of the implement as shown and described, viz., having a bag or receptacle, B, placed within a tubular handle, A, the lower end of said bag having a tube, C, attached to it, which tube is provided with a valve, e, and a button or stop, c, the tube, valve, and button or stop being enclosed by the pen holder, D, which contains a sponge, G, and is provided with openings or channels, J, through which the pen is supplied with ink as the valve, e, is operated as shown and described.

[In the next number a description of this pen will be published.]

HAY MAKING MACHINE—Francis Peabody, of Salem, Mass. : I claim, first, the described machine for making hay, consisting essentially of the rake for gathering the grass, in combination with the revolving scatterer, constructed and operating in the manner substantially as described. Second, I claim revolving the scatterer in a direction contrary to that in which the machine moves, for the purpose set forth.

Third, I claim the employment of a single wheel to carry and actuate the hay makers when this wheel in the center of the machine, in the manner and for the purpose set forth.

SHUT-OFF VALVE GEAR—J. B. Schenck, of Ansonia, Ct. : I do not claim, separately, any of the described parts, or eccentrics applied to a single slide valve, the one to open the steam ports, and the other to close them to cut off the steam.

Neither do I claim making one of the said cams or eccentrics movable for the purpose of varying the cut off. But I claim, first, connecting the slide valve with a lever, F, which is also connected at different points with two arms, e, e', of unequal length, working side by side, and receiving motion, substantially as described, from separate cams on the crank shaft of the engine, or some other shaft, having a corresponding motion therewith, the whole operating to give the valve a double movement, as set forth.

Second, effecting the connection between the finger wheel, O, and the level wheel, n, or its equivalents through which the said finger wheel transmits the movements of the governor to the cut-off cam, B', by means of pawls, t, t, act upon ratchet teeth, u, and providing a stud or stop, v, on the opposite cam to that which carries the finger wheel for the purpose, when the cut-off cam arrives in position to give full steam for the whole stroke of the piston, of liberating the pawl by which the motion is transmitted in the direction for retarding the operation of the cut off cam, and thereby rendering it inoperative, substantially as described.

[This improvement in valve gear will be briefly described in next week's Sci. Am.]

HORSE POWERS—John Simpson, of Atlanta, Ga. : I do not claim a driving wheel without central shaft or bearings. But I claim, first, the employment of the large or main vertical driving wheel without central shaft or bearings, in combination with the suspension band, in the manner and for the purposes set forth. Second, I claim, in combination with the driving wheel, without central shaft, and the suspension band, the inner run, k, and the pulley, m, so arranged as to throw the foot of the driving wheel back, all in the manner set forth.

COMPENSATION BEARINGS—Lewis Smith, of Buffalo, N. Y. : I claim relieving bearings of machinery from undue pressure and consequent friction, by means of the different expansion of two or more different metals, the parts being constructed, combined, and operating substantially as set forth, or in any other manner substantially the same.

MAKING PRINTER'S INK—O. A. Thompson, of Adrian, Mich. : I claim the composition of oil varnish made in the manner set forth, to be mixed with rosin, soap, lamp black, &c., for printers' ink.

PEN HOLDER—W. H. Towers, of Philadelphia, Pa. : I claim the combination of the sponge with the lever and pen, arranged and operated in the manner and for the purpose described.

DIES FOR BOLT FORGING MACHINES—J. T. Willmorth, of Northbridge, Mass. : I claim the tapering conical dies, b, b', constructed and operating in the manner described for the purpose set forth.

PAPER ROLLING MACHINE—T. J. Baldwin, of Bridgeport, Conn. : I claim lifting the pens, X, from the sheets of paper, a', at the proper intervals by means of the mechanism shown and described, viz., having the front edge of the sheets, a', as they move along on the endless apron, B, strike against a pendulum, F, attached to a pulley, D', on a transverse shaft, N, on the frame, A, said shaft being provided with a pulley, O, at one end, having a recess or groove, e, cut in its periphery, and a cam, Q, the pulley, O, working on bearings on a pulley, M, underneath, the said pulley, M, being driven by a belt, r, from the shaft, c. The cam, Q, operating a lever, T, by which the spring clutch is allowed to act and connect the pulleys, K, R, at one end of the drum, L, the projections, V, on the lower pulley, R, raising the pen stock so as to leave the blanks or spaces at the desired parts of the sheets, as set forth.

[To properly explain this invention, engravings are necessary; however, we will give a short description of it next week.]

PIANOFORTE ACTION—S. P. Brooks, of Suffolk, Mass. : I claim transferring the blow from the key lever to the hammer by means of the vertical bar, arranged and actuated substantially as described, whereby I am enabled to place the action below the level of the keys, as set forth.

I also claim attaching the hammer arm to the vertical bar, in such a manner that the up-and-down movement of the said bar will alternately bring the hammer against the string, and relieve it from the same, as set forth. I also claim the means used for keeping the hammer close to the string, after the blow has been given, the same consisting of a but attached to a vertical bar, and actuated by the key lever, as described.

INDIA RUBBER SPRINGS—W. F. Converse, of Harrison, O. : I am aware springs of india rubber and other similar materials have been completely confined in cylindrical and other unyielding cases, such an arrangement therefore I do not claim. But I claim the method of confining a cylindrical or prismatic block of india rubber at all points of its surface by means of a jointed or otherwise flexible cylindrical strap, connected to double levers or their equivalents, for applying the compressing strain convergently or radially upon the enclosed rubber.

I likewise claim in this connection adjustable end plates for securing the rubber from lateral expansion and for graduating the elastic force of the spring, if desired by means of screw nuts or equivalent devices, substantially as described.

ARRANGEMENT OF ROLLERS FOR MAKING METAL TUBES.—M. R. Griswold, of Watertown, Conn. : I claim the ar-

range of the adjustable, smooth, or serrated rollers, whose axes cross each other, as set forth, with the guide plate and slides, and guide rollers for making seamless metal tubes, as described.

HAY PRESS—Pella Manny, of Waddams Grove, Ill. : I claim having the followers, G, G, arranged or placed so as to cross or intersect each other at right angles and inclined, as described, and having the doors, H, I, at each end of the box or case also inclined to correspond inversely with the followers for the purpose of having the hay compressed in the form of square bales, the line of pressure being diagonally through the bale, or the followers and doors exerting the pressure on the four sides of the bale, as shown and described, whereby the line of pressure is exerted against the sides of the box or case.

[A brief description of this press may be found on another page.]

GAS COOKING STOVES—Andrew Mayer, of Philadelphia, Pa. : I do not claim as new in stoves, separately considered, the several parts or devices specified.

But I claim the arrangement shown and described, of the gas lamps or burners with their overhanging perforated plates or openings, side apertures or passages for distribution of the heat oven, and hot air chambers or boxes situated at the sides of the oven within the body of the stove and provided with lids and slide valves, as set forth, and for the purposes specified.

[Gas being destined to take the present of other fuel in our cities, within a few years, good inventions of this kind, secured by patent, will eventually become valuable. See notice of Mr. Mayer's improvements on another page.]

SLIDE REST FOR LATHES—C. A. Noyes, of Pittsfield, Mass. : I claim constructing the slide rest, as shown, viz., having the top, H, of the sliding box, C, rest upon a shaft, I, and inclining or tilting said top by means of the screw, E, toothed wheel, F, pinions, L, L, G, screws, K, K, and nuts, J, J, substantially as shown, whereby the edge of the cutting tool which is secured on the upper surface of the top, H, may be raised or lowered, as desired, and presented in a proper position to the article to be turned.

[The nature of this invention will be described in next week's paper.]

LIFE PRESERVING DOORS—J. T. Pheatt, of Toledo, O. : I claim the arrangement shown and described of the inflating apparatus or use of front and rear supports or supports, which not only answer all the purposes of wheels, but regulate and govern the action of the coulers in the ground, constructed and arranged substantially in the manner and for the purpose set forth.

[Another life preserver. See notice on another page.]

CULTIVATORS—John Stryker, of Six Mile Run, N. J. : I claim the application or use of front and rear supports or supports, which not only answer all the purposes of wheels, but regulate and govern the action of the coulers in the ground, constructed and arranged substantially in the manner and for the purpose set forth.

GRAIN AND GRASS HARVESTERS—Philo Sylla, of Elgin, Ill. : I claim, first, hanging the sickle stock, G, to the ends of the levers, E and I, which carry it by means of the hinges, H and J, or their equivalents located at the diagonal corners of said stock, substantially as described for the purposes set forth.

ROTARY ENGINES—John J. Thomas, of Manayunk, Pa. : I claim, first, the attachment of a piston, D, to a disk which forms one side of the working cylinder or piston chamber, and works in contact with a bearing face, G, on the cylinder of the piston, and another bearing face, E, inside of the piston, substantially as shown and described.

Second, constructing the engine, substantially as described with a central chamber, c, within or surrounded by the working cylinder or piston chamber, b, and with another chamber, m, on the opposite side of the disk, C, which carries the piston, and describes the communication of the chambers, b and c, by a recess, d, in the disk on one side of the piston, and between the chambers, b and m, by an opening through the disk on the other side of the piston, either of the said chambers, c or m, being the induction or suction chamber, and the other the ejection or discharge chamber, and the said chambers, c and m, being connected by a passage, and the said chambers, c and m, receiving its discharged contents, as set forth.

[On another page may be found a short notice of this improvement.]

SLIDE REST FOR LATHES—Chester Van Horn, of Springfield, Mass. : I do not claim the carriage, B, nor any mode of operating the same; neither do I claim the transverse movement of the tool block, C, on the carriage, B, for these are common to most lathe slides.

I claim forming the tool block, C, of two parts, c, c, and connecting said parts together by a dovetail or its equivalent, so that the upper part, c, may slide or work on the lower part, d, the faces of the two parts, c, c, that are connected, being oblique or inclined, as shown, and the part, c, being moved or operated by a screw, E, or its equivalent, for the purpose of elevating or depressing the tool, G, as described.

[A description of this slide rest will be published next week.]

METALLIC HONES—Wm. H. Webb, Jr., of Chelsea, Mass. : I claim a hone constructed with its sharpening surface composed of a combination of metals of different degrees of tenacity, and arranged together substantially as specified. Not intending to claim the broad ground of constructing a hone of metal.

FURNACE FOR LOCOMOTIVES—O. W. Bayley, of Manchester, N. H., (assignor to Manchester and Locomotive Works) : I claim the, as described, arrangement of the compartments, F, F, communicating with each other by the opening, H, and with the combustion chamber, K, by the openings, L, L, whereby the unconsumed gases from the freshly fed fire are heated by passing over the whole length of the incandescent fire, and consumed in the chamber, K, in the manner substantially as set forth.

RAKES—Henry Chatfield, (assignor to Henry Chatfield and Theodore L. Snyder), of Waterbury, Conn. : I claim constructing the teeth or tines of a rake or fork separately, with square or an equivalent form of apertures through the heads thereof, and uniting them by a single bolt, accurately fitting and passing through all the said apertures, and through a similar aperture in the shank of the instrument, the teeth or tines being kept at suitable distances apart by washers or blocks, placed upon the bolt between them, or enlarging the heads thereof, for the purpose, the whole being secured firmly together by a nut screwed upon the end of the bolt, or in any other suitable manner.

FOLDING TOPS FOR CARRIAGES—William G. Foglesong, (assignor to Wm. G. Foglesong and Benja. B. Anderson), of Xenia, O. : I claim the application of a catch, a, as described, or its equivalent, in front of the hinge which unites the principal bow or slatiron to the stem, for the convenient stretching, &c., of a carriage or buggy top as explained.

PROPELLERS—William D. Jones, of Foughkeepsie, N. Y. (assignor to Henry Whitfield, of New York City) : I claim the arrangement and combination of the parts forming a propeller, as fully set forth in the foregoing specification, for the purposes mentioned.

ELASTIC TUBE PUMP—Rufus Porter, of Washington, D. C., and Jonathan D. Bradley, of Brattleboro, Vt., (assignors to Jonathan D. Bradley, aforesaid, and George Denison, of New York City) : We claim, first, the mode of equalizing the resistance by a truncated cone of gradually diminishing thickness, by which the roller may leave the tube in combination with a lift, S, below, as specified. Second, the relieving the spring of the tube, and the allowing the water to recede by means of jointed arms, eccentrics, or cams, as specified. Thirdly, the mode of attaching the tube to the helical band by means of forming the latter in two parts, and by means of a band or molding on the former as specified for the purposes set forth.

[We are happy to see the name of our old friend Rufus Porter recorded once more among the successful applicants for patents. But where is the aerial steamship?]

SEWING MACHINES—E. Harry Smith, of New York City, (assignor to Thos. Wheeler and Wilson Manufacturing Company of Watertown, Conn.) : I am aware that machines have been before constructed in which a rotary shuttle has been used, and also that a machine has been made which is the subject of a patent granted to Allen B. Wilson, and dated June 15th, 1852 in which a combination is used of a bobbin with a rotating hook, which operates upon the loop in such a manner as to throw it over the bobbin; but would have it understood that I make no claim to any such rotating hook, or any rotary shuttle except that represented. I therefore claim a discoidal shuttle having its bearings in its periphery, and revolving around its own axis when constructed substantially in the manner and of the form described. And as a means of propelling the shuttle, I claim the em-

ployment of the lune form button constructed as described, which has a movement on its axis in the manner set forth, for the purpose of allowing the thread to slip alternately into and out of the concave in its periphery, and thus pass off the shuttle.

CAST IRON PAVEMENTS—George Neilson, (assignor to himself and Nehemiah Hunt) of Boston, Mass. : I do not claim a pavement block of hexagonal form, nor with a perimeter formed by six hexagons disposed around a common or central hexagon, as shown.

But I claim making a paving block with a perimeter of thirty faces, arranged as shown in figure 1, and formed by sixteen hexagonal hexagonal prisms disposed with respect to one another as therein represented, the same enabling such a block, where it abuts against a contiguous block when laid in a pavement, to be supported laterally by a semi hexagonal projection and recess, as described.

ADDITIONAL IMPROVEMENTS.

SADDLE TREES—Wm. E. Jones, of the U. S. Army. Original patent dated June 23, 1854 : I claim the combination with the hinged pommel and caule of the self-adjusting side pieces for the purpose of preventing an unequal pressure upon the edges of the side pieces, however much the saddle tree be expanded or contracted.

[The specifications and drawings of FIFTEEN of the patents in the above list were prepared at this office.]

To the Editor of the Scientific American.

SIR.—In your paper for March 31, I see that you have stated that a patent was issued to A. Bruer, of Mechanicsburg, Ill., for improvements in Corn Harvesters, which is a mistake, as it was issued to Gardner A. Bruce, and secured through your agency.

Respectfully, G. A. B.

Hotchkiss' Tramblock.

The National Intelligencer (Washington, D. C.) speaks in terms of the highest praise respecting the tramblock of Gideon Hotchkiss, of Windsor, Broome Co., N. Y., the well-known inventor of "Hotchkiss' water wheel." His tramblock is stated to adjust and set the foot of the spindle of the mill stone, with the most perfect accuracy. Out of ten large flouring mills in Georgetown, Alexandria, and the vicinity of Washington, nine have adopted it. It was on exhibition at the Fair of the Metropolitan Institute, in Washington, and met with the approbation of all the millers who saw it. Some of the largest millers in Western New York are also about adopting it—Anglevine & Co., of Rochester, and L. A. Spaulding, of Lockport, being among the number.

To make perfect milling it is well known that the faces of the stones in grinding grain must be set relatively in distance to one another, with the utmost accuracy, or good work cannot be performed by them. This accuracy of setting the stones is stated to be perfectly accomplished by Mr. Hotchkiss' new tramblock.

Internal Transportation and Travel.

Table with 2 columns: Item and Amount. Total \$1,000,000,000.

Interior Gold Coins.

A correspondent writing to us from Lexington, Texas, says that merchants will not take the gold \$50 pieces, U. S. coin, of 1852, for more than \$49, and makes the inquiry, "are these pieces really worth no more?" "If so," he says, "Uncle Sam has practiced a fraud upon the people." He wants us to give him information on this subject, but really we cannot. The Superintendent of the Mint at Philadelphia is the proper person to afford such information, and as a matter of justice to the public ought to do it.

Crops in Tennessee.

The Franklin Review says, the wheat crop in that region of Tennessee is unusually promising, and the only danger now apprehended to it is, that it is growing so rapidly that the late frosts may injure it. If not, the crop promises to be a first rate one.

Stupendous Railroad Bridge.

A railroad bridge of monstrous dimensions has just been completed, over the main channel of the river, at Maumee. It is 780 feet in total length, and 55 feet in height from the water level to the roadway. It is built on the "Howe-truss" principle, and contains 315,000 feet, board measure, of pine lumber, 40 tons of wrought, and 30 tons of cast iron.