

BOOKS AND PUBLICATIONS.

INTERNAL REVENUE LAWS—As Amended by the last Congress. With Copious Marginal References. A Complete Analytical Index and Tables of Taxation. Compiled by Horace Dresser.

This is a very valuable publication, and ought to be in the hands of all who wish to be informed of our internal revenue tax system. It is published by D. Appleton & Co., No. 443 Broadway, New York.

INCOME RECORD. A List giving the Taxable Income of Every Resident of New York.

This work has just been issued by the American News Company, No. 121 Nassau street. Price, 75 cents. We select a few of the names of those who paid tax on the largest incomes:—

Table listing names and taxable income amounts, such as A. T. Stewart, L. C. Clark, W. B. Astor, etc.

We shall all agree that these men ought to enjoy a comfortable living, but it would doubtless appear on examination that they are less happy than the same number of industrious mechanics picked out at random in any of the trades of this city.

A SUCCESSFUL COMMANDER.

Gen. Grant is the only one of our great commanders who has actually compelled, through the combined agency of stubborn fighting and strategical skill, the surrender of rebel armies. Thomas nearly annihilated Hood in Tennessee; Sheridan nearly did the same thing to Early's army in the Shenandoah Valley, while Sherman has always outgeneraled his antagonist in a manner that places his name among the great military chieftains of history.

THE YANKEE NUT-CRACKERS.—The Richmond correspondent of the London Times, February 16th, predicts "that General Lee's army will be a hard nut to crack, which will severely try the jaws not only of General Grant, but General Sherman."

[It's squeezed.—Eds.]

BREAKING ROCK BY FIRE.—The ancient method of breaking rocks by fire, has lately been revived at the Rammelsberg Mine, in the Hartz Mountains. In a portable furnace about one and a half bushels of coke burn from 4 P. M., to 5 A. M.; when the furnace is removed, and the rock left to cool, after being sprinkled with water.



ISSUED FROM THE UNITED STATES PATENT-OFFICE FOR THE WEEK ENDING APRIL 11, 1865. Reported Officially or the Scientific American.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying 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.

47,177.—Manufacture of Ordnance—Horatio Ames, Falls Village, Conn.:

I claim, First, Making the interior ring, a, of a combined series, out of solid metal, and without a weld, substantially as and for the purpose described.

I also claim making the section of a series of concentric rings, of which the inner one is longer than the one outside of it, substantially as and for the purpose described.

I also claim welding the sections to the mass during one and the same heat, by means of two hammers or rams, one working horizontally and the other vertically, substantially as described.

I also claim combining with the centralizing or matching pin, G, the arms and handles, h, by which it is more readily operated, held and withdrawn, substantially as described.

47,178.—Lazy Jack for Vessel's Sails.—Daniel R. Arnold, Haddam, Conn.:

I claim a revolving lazy jack surrounding the boom, sail and gaff, substantially as set forth and described.

47,179.—Staging for Buildings.—Wm. Arronquier, Worcester, Mass.:

I claim the construction of the supporting bars and platform, and their combination with the ladders, forming a staging, as described.

47,180.—Boiler Feeder.—J. W. Bishop, New Haven, Conn.:

I claim the combination of the vessels, B and D, diaphragm, c, or its equivalent, with a steam boiler supplying pumps, when constructed and arranged to connect or disconnect the power operating said pump, as and for the purpose substantially as herein set forth.

47,181.—Automatic Boiler Feeder.—J. W. Bishop, New Haven, Conn.:

I claim the combination of the vessels, B and D, diaphragm, c, or its equivalent, with inlet and exit pipe, C and M, constructed and arranged to operate a valve, A, substantially as and for the purpose specified.

47,182.—Steam Trap.—J. W. Bishop, New Haven, Conn.:

I claim the combination of the vessels, B and D, diaphragm, c, with a water tank or reservoir and steam boiler, constructed and arranged to operate the valves connected therewith, substantially as and for the purpose herein set forth.

47,183.—Low-water Indicator.—J. W. Bishop, New Haven, Conn.:

I claim, First, The combination of the two vessels, B and D, arranged as described, with a diaphragm, c, or its equivalent, in the manner and for the purpose substantially as herein set forth.

Second, The combination of the vessels, B and D, diaphragm, c, or its equivalent, with a steam boiler, when arranged to operate substantially as and for the purpose specified.

47,184.—Water Regulator.—J. W. Bishop, New Haven, Conn.:

First, I claim the valve, C, when constructed with a hollow stem, and combined with chambers, F and G, substantially as and for the purpose herein set forth.

Second, Adjusting the pressure of water in pipes by means of the chamber, G, and cocks, L and M, substantially as herein specified.

47,185.—Skate.—Daniel S. Brigham, Worcester, Mass.:

First, In combination with the supporting plates, A, B, the clamp bolts, E, G, and lock, H, and heel, I, of the heel and sole, substantially as and for the purpose described.

Second, Providing one or both of the catch bolts, E, G, with a pin which enters the leather of the sole or heel, to prevent any longitudinal motion of the skate, substantially as herein described.

Third, The application to a yielding or elastic runner of the adjusting screw, L, for the purpose of making the bottom part of the runner, I, following, substantially in the manner described.

Fourth, The combination with the supporting plates, A, B, of the clamp bolts, E, G, clamp lever, H, elastic runner, I, and adjusting screw, L, when constructed and operated substantially as and for the purposes described.

47,186.—Fanning Mill.—J. K. Buck, Winona, Minn.:

I claim the combination of the elevator, B, shaft, e, provided with the pulley, d and wheel, b, with the driving wheel, a, when all the parts are arranged to operate as and for the purpose herein set forth.

47,187.—Saw-set.—John Ruser, Philadelphia, Pa.:

I claim, First, The pinchers, A, with their jaws, b b', and cheeks e, e, combined with the within-described devices, or their equivalent, substantially as and for the purpose specified.

Second, Adjusting the pressure of the jaws, b, b', in combination with the pinchers, A, and springs, g, g, or their equivalents, the whole being constructed for joint operation, substantially as described.

Third, The adjustable plate, i, combined with the plate, C, substantially as and for the purposes set forth.

47,188.—Composition for Removing Scale from Boilers.—Jacob Buzby, Philadelphia, Pa.:

I claim the use for removing scale from steam boilers of a decoction of the bark of the sweet gum tree, in combination with a solution of gamboge or catechu.

47,189.—Gas Regulator.—Charles M. Cresson, Philadelphia, Pa.:

I claim the use in a gas regulator of a holder of the tapering form herein described, for the purpose specified.

47,190.—Machine for Spinning Flax.—Caleb S. Davis, Lancaster, Pa.:

First, I claim the direct application of steam to the rovings, in their passage through a chamber, J, having a series of slots, Y, with a steam pipe, M, having perforations, z, opposite the slots, Y, within said chamber, together with valve, L, in combination with the connecting pipe, m', arranged and operating in the manner specified.

I also claim a modified chamber, P, with its slots, Y, enlarged in combination with the disk or pulley, X, lever, W, and steam pipe, M, without perforations, constructed and operating in the manner and for the purpose specified.

47,191.—Machine for Holding the Uppers of Boots and Shoes.—E. M. Dickinson, Fitchburg, Mass.:

First, I claim the forked clamp, B, the springs, i, i, the yoke, j, and the springs, K, K, or their equivalents, in combination with the rest, A, as substantially described.

Second, I claim the forked clamps, B, the springs, i, i, the yoke, j, and the springs, K, K, or their equivalents, the rest, A, in combination with the rod, d, and the spiral spring, g, or their equivalent, for the purpose herein set forth, reference being had to the accompanying specifications and drawings.

47,192.—Press.—Hezekiah Dodge, Albany, N. Y.:

First, I claim the combination of the right and left hollow screw, E, fixed screw, G, and movable screw, F, with the follower, D, substantially as and for the purposes described.

Second, The stationary and movable right and left screw shafts, F and G, hollow screw, E, and spur wheel, C, with the driving spur wheel and shaft, B, B', substantially as described.

47,193.—Pump.—Wm. Foster Dodge, New York City:

First, I claim the cylinder cover, C, the air chamber, D, and the covers for the two side pipes, when such parts are united with the cylinder, A, and side pipes by a single plane joint, substantially as described.

Second, In combination with the air chamber, arranged directly over the cylinder, and with the stuffing box on the top of the so-arranged air chamber, I claim the tube, E, surrounding the piston rod, connecting the top of the air chamber with the cylinder cover, and isolating the piston rod and stuffing box from the air chamber, substantially as and for the purpose herein specified.

47,194.—Apparatus for Withdrawing Tubes from Wells.—Wm. H. Downing, Philadelphia, Pa.:

First, I claim the jaws or arms, A, A, having projections, a, a', and adapted to be opened or spread by the spring, F, and lever, G, when lowered into the tubing of a well, for the purpose of taking hold of and raising the same, substantially as herein set forth.

Second, I claim the combination of the toggles, C, C, yoke, C', and cord, D, for contracting the jaws, A, A, when the apparatus is to be withdrawn from the tubing, as explained.

Third, I claim the detachable cap, E, employed to retain the jaws, A, A, in their closed position while the apparatus is being lowered into the tubing, substantially as described.

[This device consists essentially of two pivoted jaws, having teeth or sharp projections on their outer faces, adapted to indent or penetrate the metal tubing to be withdrawn from oil wells. The jaws are thrown forcibly open to make the teeth catch the tube, by means of a spring and a lever, the latter being made to operate by means of a cord pulled by hand, which throws the end of said lever against the two jaws, opening them and forcing them toward the sides of the pipe with great force.]

47,195.—Upper Bearings or Bolsters for Spindles of Spinning Frames.—Mexworth D. Drake, Providence, R. I.:

First, I claim the use and employment of an upper and lower groove, oil chamber in the bore of the bolster, in combination with the use and employment of a spiral or helical groove, substantially as described.

Second, The use and employment of a spiral groove in the bore of the bolster, in combination with a groove, a, at the bottom, whether the top groove is used or not.

47,196.—Piano-fortes.—Spencer B. Driggs, New York City:

First, I claim the sounding chamber, B, provided under the case proper of the piano forte, substantially as and for the purpose herein specified.

Second, Connecting each or any one of the strings with the sound-board bridge independently of the other strings by means of two metal bearings, t, m, constructed or provided on or in one side of a stud, n or p, secured in the bridge and having between them a lateral opening through which the string can be inserted in a lateral direction substantially as herein described.

47,197.—Wardrobe Bedstead.—John Eby, Muncie, Ind.:

I claim the combination and arrangement of the posts, A, A, C, C, and F, F, bars, B, B and G, rails, D and E, doors H and K, with the elevating board, P, and table, T, the whole being constructed as described for the purpose specified.

47,198.—Composition and Manufacture of Iron.—Alexander H. Everett, New York City:

First, I claim the combination of cast iron, wrought iron, oxide of manganese, oxide of iron and fluor-spar or other fluoride as and for the purposes set forth.

Second, The combination of cast iron, magnetic iron ore, oxide of manganese and fluor-spar or other fluoride substantially as set forth and described.

Third, The process herein described for improving the qualities of cast iron.

47,199.—Tobacco Pipe.—George W. Francis and Wm. L. Woods, Washington, D. C.:

We claim, first, The combination of case, A, with its air holes, F, F, the bowl, B, and its nipple, D, the cap, C, the grooves, G, and air chamber, X, substantially as described.

Second, The combination of the bowl, B, and cap, C, with its air holes, F, substantially as described.

Third, The bowl, B, with its nipple, D, and cap, C, when arranged and operating substantially as described.

47,200.—Pumps.—Kingston Goddard, Philadelphia, Pa.:

I claim the construction and arrangement of the tubular and perforated piston rod substantially as described.

47,201.—Machine for Rolling Tea Leaves.—Kingston Goddard, Philadelphia, Pa.:

I claim the machine substantially as described which submits the leaves to the rolling action of the two described rollers.

47,202.—Method of Preserving Eggs.—Wm. Hansford, San Francisco, Cal.:

I claim the coating of eggs with glue substantially as and for the purposes herein recited.

47,203.—Fence.—Davis Harvey, Jackson Township, Iowa:

I claim placing upon any common fence a panel or board projecting outward and upward for the purpose of preventing dogs and wolves from getting to sheep.

47,204.—Tonic Bitters.—Isaac Hellman, St. Louis, Mo.:

I claim the combination of the several ingredients mentioned in the foregoing specification in the proportions and for the purpose set forth.

47,205.—Apparatus for Generating Carbonic Acid Gas.—Peter and Frederick Hinkel, New York City:

We claim, first, the long necked jar, l, hose, r, or their equivalents and the air tight connection between them and the cover of a gas generator, A, as described or its equivalent.

Second, We further claim the sliding bar, m, the wires, w, w, or their equivalents and the connection of them with jar, l, hose, r, and cover, A, in the manner fully described or its equivalent, and for the purpose set forth.

47,206.—Wash Board.—Nelson Homes, Laona, N. Y.:

I claim the wash board composed of the plane edged slats or bars, B, B, fitting closely together so as to prevent the leakage of water through, and having a necessary degree of elasticity, said slats being provided with corrugations, a, a, b, b, so arranged that the corrugations of anyone slat alternate with the next substantially as and for the purpose described.

47,207.—Instrument for Lighting Gas.—Thomas W. Houchin, Morrisania, N. Y.:

In combination with the tube, A, I claim the use or employment of the wick or taper, B, cord or string, C, and attachment, D, when the frame shall be constructed and combined substantially as shown for the purpose specified.

47,208.—Straightening Rails of Railroads.—John Johnston, Alexandria, Va.:

I claim the use for straightening rails of three or more pairs of rollers having depressions and projections conforming to the shape of the rails, the rollers themselves as well as the said depressions and projections of the several pairs being arranged in respect to each other as set forth.

47,209.—Machine for Pressing Brick.—John K. Lemon, Allegheny City, Pa.:

I claim a brick press which employs a pressing follower, C, and a movable supporting follower, b, which are so combined and operated that the latter is allowed to descend by its own gravity during the introduction of a brick into the press box, and to rise during the retrocession of the pressing follower, C, substantially as herein described.

Second, A spring, d, or its equivalent for elevating the follower, b, in combination with the crosshead, E, and rods, f, f, of the frame, C', for allowing the follower, b, to descend, substantially as described.

Third, Providing for adjusting the followers, C and b, so as to