

MISCELLANEOUS SUMMARY.

New carriages of a luxurious kind are about to be placed on the Nicholas Railway between St. Petersburg and Moscow. In addition to a handsomely furnished saloon and smoking chamber, each carriage comprises a series of smaller apartments opening on both sides of a corridor. The sofas, ottomans and cushions of the daytime are at night converted into beds, mattresses, pillows, etc., so that the passengers can sleep with all the comforts of home. These improvements are not confined to the first-class carriages, but are extended to those of the second and third class. Our railway directors and managers would do well to follow this example. Of course, a slight additional charge is made to passengers using these conveniences.

**FRENCH SILKS.**—The French silk manufacturers have suffered severely from the American war. The silk exports to the United States, in 1860, from France were 103 millions. In 1863 it fell to 23 millions. During this interval of three years the exports from France to the United States fell from 250 millions to 94; and North American produce imports into France for French consumption suffered to the same extent. Instead of 240 millions in 1860, which, owing to the rise in the price of cotton, reached 363 millions in 1861, it fell in 1863, to 81. This reduction applies especially to raw cotton.

The Wisconsin State Agricultural Society will hold its twelfth annual exhibition at Camp Tredway, in the city of Janesville, from September 25 to 29, 1865. The programme includes first-class trials of speed of trotting, pacing and running horses; superior trials of machinery; equestrianism; evening discussions of practical questions by the ablest men in the West; presentation of the prize banner to the county that shall make the best exhibition at the State Fair; and annual addresses by Major-General W. T. Sherman, Hon. H. S. Randall, LL.D., of New York, and other distinguished speakers.

The railway over Mont Cenis is to be worked, as is pretty well known, by means of a third rail, on which the driving wheels of the engine will run horizontally. The credit of the invention is assumed by the engineer of the line, Baron Squinzi. Mr. Vignoles, the English engineer, now steps forward to claim it as the infringement of a patent obtained by himself and Capt. Ericsson in 1830-31. The authenticity of the claim is avouched by Sir Charles Fox, who incloses Mr. Vignoles's letter to the *Times*.

The following statement gives an idea of the cost of keeping Paris clean:—The sweeping of the macadamized roads costs £33,680 a year; the cleaning of the paved ways £91,000, of which £3,120 goes for materials, £20,400 for carting away the dirt, and the rest in paying the sweepers, who consist of women as well as men. The expenses of management and superintendance are £10,400. Total expenditure, £135,080—\$675,000.

**A PEPPERMINT PLANTATION.**—At Ada and Lyons, Mich., Mr. Van Auken is extensively engaged in growing peppermint for distillation. He has nearly two hundred acres growing in the two counties. This is an easily-grown and highly remunerative product, giving four crops from one planting of roots. The one hundred acres devoted to this crop, last year, gave a net profit of \$5,000.

**MANUFACTORY OF LUBRICATING OILS.**—The firm of Morehouse, Merriam & Co., of Cleveland, Ohio, manufacturers of compound lubricating oils, now turn out from their factory from four to five thousand gallons a day, and have capacity, if pressed with orders, to produce double that amount. They give employment to about fifty hands. Large quantities of these oils are shipped to Boston.

The borers through Mont Cenis have come across a stratum of quartz that tests the power of machinery and compressed air to the utmost. Not more than a meter a day can be worked, and the stratum is four hundred meters in thickness, which will considerably increase the time necessary to finish the road.

The Union Copper Mine, at Copperopolis, during the month of June; shipped from the mine to San Francisco, via Stockton, the large amount of three thousand six hundred tons of ore, the freight money on which was \$29,000.



ISSUED FROM THE UNITED STATES PATENT-OFFICE

FOR THE WEEK ENDING AUGUST 29, 1865.

Reported Officially for 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.

**49,600.**—Carpet Fastening.—G. W. Andrews and J. P. Burnham, Chicago, Ill.:

We claim, as a new article of manufacture, the carpet fastening, B, made by bending a single piece of wire, with eyes, a, a, hooks, b, b, and a bracing stay, c, in the manner herein described.

**49,601.**—Corn Planter.—G. J. Bergen, Galesburg, Ill.:

First, I claim the plate, B, provided with the ears, a, a, and lugs, b, b, as and for the purpose set forth.

Second, I claim securing the hopper, A, by means of the hinge joint, c, front, and brace, d, constructed and operating substantially as and for the purpose set forth.

Third, I claim the seed slide, C, provided with the inclined flat groove, e, as herein shown and described.

Fourth, I claim making the post, E, with the detachable piece, h, as and for the purpose set forth.

**49,602.**—Liquid Ejector.—Abel Brear, Saugatuck, Conn.:

I claim the ejector, consisting of a single curved or bent tube, A, having an unobstructed passage, and external nozzle, a, for the admission of steam or other aeriform fluid, communicating with the said passage on its back or outer curved side, at a point directly opposite to, and in line with, the outlet or discharge opening, b, substantially as and for the purpose herein specified.

**49,603.**—Water Ejector.—N. S. Chappell, New York City:

I claim the movable or reversible shaft, F, having an attached nozzle, G, or outlet, in combination with an ejector, substantially as and for the purpose herein specified.

**49,604.**—Building for Preserving Milk, Fruit, Etc.—N. W. Clark, Detroit, Mich.:

I claim the arrangement and construction of the building, with its apparatus, E G H R U and W, as herein described and for the purposes set forth.

Second, I also claim the arrangement of the devices, R N S W and U, so as to be operated in the one apartment, J, without affecting the temperature of the adjoining apartment, D.

Third, I also claim the mode of preserving the ice, and saving all the drippings, by conveying the cold water from the melting ice by means of pipes through a series of rooms to one or more reservoirs or tanks.

Fourth, I claim the shape and construction of the faucet, U, arranged and combined with the head, W, and valve, T, as herein described and for the purposes set forth.

Fifth, I also claim keeping the sawdust undisturbed by means of tubes, P P P, in the partition walls, so that the crank, N, handle, S, and faucet, U, may be opened or removed without opening the apartment, D.

**49,605.**—Tent Frame.—Wm. H. Clark, Cincinnati, Ohio:

I claim the combination of the shaft, G, with the hinged legs, A, sleeve, C, and rods, J, when constructed and applied as herein described, so that in the extended condition of the frame the said shaft will extend above the frame for the attachment of guys.

**49,606.**—Machine for Scouring Leather.—W. M. Clarke, Butternuts, N. Y.:

First, I claim the frame, A, as constructed, in combination with the rotary table, B, carriages, C and E, substantially in the manner and for the purpose set forth.

Second, I claim the arrangement of B and C, operating substantially in the manner and for the purpose set forth.

Third, The ropes, E, pulleys, F, and crank shaft, N, operating the carriages, substantially in the manner and for the purpose set forth.

Fourth, The rotary table, D, in combination with the carriages, substantially in the manner and for the purpose set forth.

Fifth, The rubber arm, B, whitetree, H, lever, F, connecting rod, G, spring, L, and friction roller, T, with connecting rod attached, the whole combined and operating substantially in the manner and for the purpose herein set forth.

**49,607.**—Harvester.—Wm. Cogswell, Ottawa, Ill.:

I claim the flanged gudgeon, which is adjustably supported on the reel post, and sustains the reel with an extended bearing longitudinally, substantially as described.

**49,608.**—Harvester.—Wm. Cogswell, Ottawa, Ill.:

First, I claim attaching the outer bar, and through it the platform, to the frame by the pivotal connection and draught rod, at diagonally opposite corners of the frame, as represented, so that by the breaking or detaching of the latter the platform wheels around and tow behind.

Second, The method of connecting the bridge piece, L, to the frame by means of a pillar pivoted in holders, N O, and the box, P, which is adjustable vertically on said pillar, substantially as and for the purpose specified.

Third, The cap piece, T, in its three-fold character, as a portion of the journal bearing the circle for the lever and the holder, for the upper end of the pillar, M, substantially as herein set forth.

**49,609.**—Machine for Making Sheep Labels.—C. H. Dana, West Lebanon, N. H.:

I claim a machine for making labels for sheep, in which the several operations of numbering, lettering, cutting-off and bending the metal strip, are performed by means of die, cutting formers and jaws constructed and operating substantially as described.

I also claim the wheels, d d 2, in connection with the pawl, e, for numbering the metal strip, constructed and operating substantially as described.

**49,610.**—Rotary Engine.—Seth M. Davis, Rushville, Mo.:

I claim two pistons, P P, in combination with the steam pipes, n, n, and the steam ports, e e e, of the steam chest, D, when constructed as described and set forth.

**49,611.**—Carriage Top.—L. Z. Dodds and Robert Walsh, Three Rivers, Mich.:

First, We claim the combination of the top with the seat of the carriage, in the manner described, for the purpose set forth.

Second, Fastening the top to the seat of the carriage, substantially in the manner described, for the purpose set forth.

Third, The skeleton frame, constructed as described, for the purpose set forth.

**49,612.**—Apparatus for Mounting and Printing Photographic Cards.—G. W. Doty, Lockport, N. Y.:

First, I claim the mounting and printing photographic cards at one continuous operation, as and by the means substantially as described.

Second, I claim the construction and arrangement of the sections, B and C, jointed or hinged together, in combination with the plate, D, or its equivalent, as and for the purpose set forth.

Third, I claim the printing silk, H, type, c, and cap, H', arranged and operating in combination with the sections, B and C, or their equivalents, as and for the purpose set forth.

**49,613.**—Lamp.—John P. Driver, Marengo, Iowa:

First, I claim the base, E F G H, made hollow and air tight as a reservoir.

Second, The supply pipe, I J, for the double purpose of lifting the oil into the reservoir, and also of transmitting it to the lamp fountain, A B C D.

Third, I claim the thumb bellows, P Q R S, of india-rubber with the aperture, P, the slit, S, elastic flap, V, with a spiral spring to strengthen said flap, in place or not, as may be best, and the air chamber, N O, as set forth.

Fourth, I claim the hollow handle, L K H, to answer the double purpose of a handle and air pipe, to transmit the air from the bellows to the reservoir. In lieu of said thumb bellows an ordinary short india-rubber tube, with a mouthpiece, may be used to force the air into the reservoir.

Fifth, I claim the combination of the fount, A B C D, the reservoir, E F G H, the supply pipe, I J, the elastic india-rubber ball, P Q R S, with the aperture, P, the slit, S, and the valve, V, the air chamber, N O, with a spiral spring to hold said valve in its place, or other equivalents; the air pipe, L K H, connecting with the reservoir, E F G H, the support, D M, the whole arranged and operating substantially as herein specified.

**49,614.**—Anti-friction Wheels for Belt Gearing.—David Eldridge, Philadelphia, Pa. Antedated Aug. 13, 1865:

I claim the arrangement of an anti-friction wheel or wheels between the driving and driven pulleys, or between the journals of their shafts, so that the periphery of the wheel or wheels shall have a continuous rolling motion on the peripheries of the said pulleys or journals, as the case may be, substantially in the manner described and for the purpose set forth.

**49,615.**—Gate.—S. L. Fisher, Brimfield, Ill.:

I claim the construction of the wind paddle, A, forming the top of the gate, and projecting beyond the end of the gate, in combination with the ropes, C, when arranged and combined as herein described and for the purposes set for h.

**49,616.**—Punch.—M. J. Fitzpatrick and Benjamin Barker, New York City:

We claim, First, The bands surrounding the wormscrew shaft, and connected to the eccentric boxer in the combination, as and for the purpose specified.

Second, We claim the combination of the worm screw and wheel, the flattened main screw, the eccentric and main screw, substantially as and for the purpose set forth.

**49,617.**—Inkstand.—B. S. Fletcher, Cornish, N. H.:

I claim the combination of the bottle, C, the springs, D, and the guard, F, all arranged in the case, A, substantially as described and for the purpose set forth.

**49,618.**—Converting Reciprocating into Rotary Motion.—J. F. Foss, Lowell, Mass. Antedated Aug. 23, 1865:

I claim the construction of the sliding frame, C C, the combination, arrangement and operation of the said frame, C C, and the crank, D D, with the shaft, L, substantially as herein specified and for the purpose herein set forth.

**49,619.**—Damper for Stovepipes.—Joseph Fowler, Watertown, Wis.:

I claim, First, A series of divided disks, hinged, and formed alternately of larger and smaller size, the larger disks having openings near their centers, the whole forming a damper, as set forth.

Second, The triangular flanges, o o, in combination with the hinged bulb disks, for the purposes and as specified.

Third, I claim the cam pieces, l l, on the damper rod, h, in combination with divided hinged damper disks, for the purposes and as specified.

**49,620.**—Newspaper File.—Jacob Frick, Philadelphia, Pa.:

I claim, First, The strips, A and B, combined with the plates, C and C', and with the springs, a, or their equivalent, substantially as and for the purpose specified.

Second, The plates, A and B, one having a projection on its edge and the other a recess in the edge adjacent to the said projection, for the purpose specified.

Third, The strips, A and B, having strips of cloth, rubber or other elastic material secured to their inner edges, for the purpose specified.

**49,621.**—Horse Hay-fork.—D. M. Garrett, Shelby, Ohio:

I claim the arms, A' and B', curved laterally as shown and described, for the purpose of dispensing with the wooden heads, in combination with wheel, b, hook, J, link, K, and lever, L, when said parts are connected and arranged as herein shown and described.

**49,622.**—Fire Screen.—H. P. Gengembre, Pittsburgh, Pa.:

I claim the sliding screen or screens, S S, the slotted arm, T, and disk, H, the whole arranged and operating as and for the purpose specified.

**49,623.**—Steam Gage Cock.—Victor Giroud, New York City:

I claim the arrangement of the way, a', as herein described, in relation to the way, a, in the plug of the cock, for the purpose herein set forth.

**49,624.**—Globe Oil Cup.—Victor Giroud, New York City:

I claim the plug, D, with ways or ports, I J K L and M, in combination with the inner shell, C, with ways, F G G' and H, the globe, A 2, and receiver, B, the whole arranged and operating substantially in the manner herein described, for the purposes set forth.

**49,625.**—Cylinders of Wool-burring and Similar Machines.—C. L. Goddard, New York City:

I claim the manner of constructing the inner cylinder of burring machines of metal strips and wood combined, on a metal shaft, substantially as and for the purpose specified.

**49,626.**—Grain Dryer.—Robert Henegre, Buffalo, N. Y.:

I claim the arrangement of the perforated discs, C, provided with the cones, C', and secured serially upon the shaft, B, with the conical perforated hoppers, D, for the purpose of distributing the grain to and from the centre of the machine, the several parts being constructed in the manner specified.

**49,627.**—Button-hole Sewing Machine.—D. W. G. Humphrey, Chelsea, Mass.:

I claim the feeding gage, in combination with the ratchet hand or pawl, and the feeding ring which operates the clamp that holds the cloth, substantially as and for the purpose specified.

I also claim the adjustable cam plate which regulates the range of feeding motion for spacing the stitching in working the eyelet, in combination with the ratchet hand or pawl, and the feeding ring which operates the clamp that carries the cloth, substantially as and for the purpose specified.

I also claim the adjustable cam plate which regulates the range of feeding motion for spacing the stitches along the straight parts of the button-hole, in combination with the ratchet hand or pawl, the feeding ring and the adjustable cam plate for adjusting the range of the feeding motion in working the eyelet, substantially as and for the purpose specified.

I also claim the auxiliary spring which acts on the ratchet hand or pawl only at the time it is required to act on the ratchet teeth, in combination with the ratchet hand or pawl, the feeding ring and the feeding gage, substantially as and for the purpose specified.

I also claim connecting the loop carrier and the under thread carrier with each other to be operated together, and by the same means, substantially as and for the purpose specified.

I also claim uniting two loop operators for opening the loop of the needle thread and the loop of the under thread, substantially as described, so that they shall be operated by the same means, as described.

I also claim each of the loop operators, in combination with each of the oblique sides of the aperture in the plate below that part of the table on which the stitching is effected, substantially as and for the purpose specified.

**49,628.**—Extractor of Tubes, Drills, Etc., from Oil Wells.—William R. Hinsdale, Brooklyn, N. Y.:

I claim the cylinder, A, to which the bar, B, is attached at one side, so as to afford no obstruction to the passages of the rod to be raised, through the said cylinder to any desired extent, and which is constructed sharp edged at its lower end, as described, in combination with the spring, C, the top of which is nearly on a level with the top of the said cylinder, for the purpose specified, all arranged in the manner herein set forth.

**49,629.**—Flour Bolt.—James E. Huston, Hillsdale, Mich.:

I claim, First, The barrier, F, consisting of the parallel wires stretched between the ribs of the bolter frame, substantially as de-