

The Great Chaudiere Dam on the Ottawa.

The Ottawa Times gives an account of the great Chaudiere dam on the Ottawa river, which was formally opened Oct. 16th. It states that it has been ascertained that for years past the water in the Ottawa during the autumn months has been gradually decreasing in volume, and never before has it been so low as this season.

An arrangement had been effected sometime since between the mill-owners here and the Government, that the former might construct a dam in the bed of the river, just above the Chaudiere Falls, for the purpose of raising the water in the rear, with a view to augmenting the supply in the ponds and "floods" connected with the mills.

It was no ordinary undertaking to control the impetuous waters of the great Ottawa, and subject their powers to the manipulation of man—to obey his will, and to be obedient to his wishes and desires; but with all old Ottawa's greatness it has been brought down to usefulness, and compelled to exercise a certain amount of industry before taking its departure for its final home in the bosom of the Atlantic.

The New Metals.

The Boston Journal of Chemistry says:—We presume but comparatively few of our readers have had opportunities of examining the new metals brought to light by spectrum analysis. The two most remarkable, cesium and rubidium, are strikingly like the metal potassium; and so greedy are they for oxygen, it is necessary to keep them constantly immersed in pure naphtha.

The other new and interesting metals which we find in our collection are lithium, thallium, and indium. The first of these is of white color, and fuses at 180°. It is the lightest metal known, being almost as light as cork.

Sumac.

Considerable inquiry having been recently made for information upon the subject of sumac, the commerce in which seems to be growing in this country, the following from the New York Mercantile Journal will be of interest:

the Staghorn sumac, Smooth sumac, Dwarf sumac, Poison sumac, Poison ivy, and the Fragrant sumac. The sumacs have a resinous, milky, acrid sap, and several varieties are poisonous. Several kinds, among which are the most common varieties in this country, namely, the Staghorn and Smooth sumac, contain tannin and yellow coloring matter, and are considerably used for tanning light colored leathers and in dyeing.

The Richmond Enquirer says: "Large quantities are gathered in the counties of Eastern Virginia, and sent to Richmond, Alexandria and Fredericksburg for sale. It is dried and packed in bags, and sells readily for from \$1.75 to \$2 per 100 pounds.

The mordants used in dyeing with this substance are either tin, acetate of iron, or sulphate of zinc. The first gives yellow, the second grey or black, according to strength, and the third brownish yellow.

A Challenge from a Lady.

NEW YORK, Oct. 20, 1868. Messrs. WHEELER & WILSON, No. 625 Broadway: Gentlemen:—Referring to the challenge of Mr. Pratt, whose Wheeler & Wilson Sewing Machine has been in use ten years without repairing, I beg to state that I have used my Wheeler & Wilson Sewing Machine, in family sewing, fourteen years, without even the most trifling repairs, and it is now in so good condition that I would not exchange it for your latest number (now upward of 350,000). One needle served me more than a year for fine sewing.

Can any one beat this? Yours truly, Mrs. ANNE WARNER. Any one who can give a better report than this will be entitled to one of our new tucking gages. WHEELER & WILSON MANUFACTURING CO.

OFFICIAL REPORT OF PATENTS AND CLAIMS

Issued by the United States Patent Office. FOR THE WEEK ENDING OCTOBER 27, 1868. Reported Officially for the Scientific American.

Table with 2 columns: Description of patent/claim and Fee. Includes items like 'On filing each caveat', 'On filing each application for a patent', etc.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying the mode of procedure, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific American, New York.

- 83,355.—HARVESTER RAKE.—Philip Ammerman, Cynthiaiana, Ky. I claim the guide bar, k, and beveled block or cap, t, in combination with rake, A, and endless chain, C, substantially as and for the purpose described.
83,356.—SUGAR PAN DERRICK.—Joseph D. Ayers, East Greensborough, assignor to J. O. Cutter, and William Wallace Goss, Greensborough, Vt. I claim, 1st, the combination, in a sugar pan derrick, of the guide beams, B, E, and pulley, C, rotating upright, A, pulley, k, cord, a, b, derrick beam, C, drum and crank handle, l, all constructed and operating substantially as shown and described, and for the purpose set forth.
83,357.—MANUFACTURE OF PIGMENTS FROM THE SULPHURERS OF ZINC AND LEAD.—Nathan Bartlett, Centerville, N. J., assignor to himself and Francis Osmond, Richmond County, N. Y. I claim, 1st, The manufacturing of pigments from the sulphurets of zinc and lead, combined in the manner and by the means substantially as herein described.
83,358.—AUTOMATIC CAR COUPLING.—Wilson Bragg, Connertsville, Ind. I claim the combination of the chain, E, sliding block, C, and coupling pin, F, substantially as and for the purposes specified.
83,359.—HOT AIR REGISTER.—Thomas W. Brown, Reading, Pa. I claim the improvement of having the sectoral lever fixed directly to the flat journal, with the slats pivoted to the frame, and to a connection bar having no pivoted connection with the sectoral lever, as set forth, the whole being substantially as described and represented.
83,360.—SPRING.—Frederick Cajar (assignor to himself and James Anderson), New York city. I claim elliptical or arched springs, made of corrugated sheets or plates, arranged as herein shown and described, substantially as and for the purpose set forth.
83,361.—MILL FOR TEMPERING CLAY.—George Carnell, Samuel Williams, and William Ellis, Philadelphia, Pa. We claim the inverted double rack, H, cast with a cover, h2, and internal web, h3, in combination with saddle, M, and pinion, E, for operating the wheel, B, of a clay mill, in the manner substantially as shown and described.
83,362.—JUG SAW.—Joseph E. Chamberlin, Wilmington, Del. I claim the circular timber, b, with its vernier plane and index, iron band, d, sliding head blocks, c, c, braces, e, e, and saw, s, in combination with the semi-circular ways, r, r; carriage, g; segments, h; pulleys, g, g; and their connecting or reciprocating appliances, constructed, arranged, and operating substantially as and for the purposes set forth.
83,363.—FOLDING PERAMBULATOR.—Andrew Christin, New York city. I claim, 1st, Extending the front uprights, D, of a folding perambulator downward, to form supports for the front axle, J, as set forth.
83,364.—SEEDING MACHINE.—N. A. Clopton, and John S. Clopton, Fauquier County, Va. We claim the combination and arrangement of the reciprocating slides, k, l, vibrating arms or levers, b, connecting pipes or links, j, pivoted arms, g, f, and springs, i, or their equivalents, constructed and operated in the manner substantially as shown and described, and for the purpose set forth.
83,365.—MACHINE FOR EDGING METALS.—William Crossley, Chicago, Ill. I claim the combination of the slotted guide, C, carriage, B, E, clamp A, track, G, G, slides, M, M, crank screw, and slides, F, F, constructed as and for the purpose set forth.
83,366.—DRILL PRESS.—John M. Cullen, and Andrew J. Baird, Pittsburg, Pa. We claim, not any of the specified parts in severality, but the improved tool, consisting of the several parts specified, all combined, constructed, and arranged as described.
83,367.—FRUIT JAR.—Edward M. Davis (assignor to Henry M. Collins, Benjamin F. Collins, and Homer Wright), Pittsburg, Pa. I claim, 1st, The method, substantially as described, of labeling preserve cans and other similar vessels, in the act of sealing the covers of such vessels upon them.
83,368.—ATTACHING STRINGS TO TAGS.—Benjamin L. Dennison, Boston, Mass. I claim, 1st, The combination of the metallic clasp, a, with the string and label card, substantially as and for the purposes described.
83,369.—COMBINED HINGE AND FASTENER.—Leonard Felker, Tewkesbury, Mass. I claim the combination and arrangement of the support, e, with its stem, c, and of the catches, h and h', and wings, f, f, with or without the plate, a, when arranged to operate as and for the purpose described, and set forth.
83,370.—FEED WATER HEATER FOR STEAM GENERATORS.—R. F. Fenner (assignor to himself and Eli Haberstadt), Uxana, Ill. I claim the arrangement of the supply pipe, K, exhaust pipe, C, ingress pipe, B, water delivery pipe, G, filter, I, and vessel, A, substantially as herein set forth.
83,371.—SCREW TAP.—Walter K. Foster, Cambridgeport, Mass. I claim the arrangement of the main and lateral oiling passages, a, b, and the groove, d, in one of the ranges, of screw cutters, the whole being substantially as described.
83,372.—PROCESS FOR THE MANUFACTURE OF IODINE.—Jules Fougerat and Lucien A. Tartier, Quogue, N. Y., assignors to "The Alga Chemical Works," New York city. We claim, 1st, Filtering the calcined and boiled mussels, preparatory to their distillation, as set forth.
83,373.—SPRING BED BOTTOM.—Thomas J. Gaffney and Charles H. Ducks, Detroit, Mich. We claim the leather strips, H, in combination with the longitudinal top slats, G, and transverse steel bars, E, whereby the slats are secured to the bars, as herein shown and described.
83,374.—VULCANIZED INDIA-RUBBER BELTING.—Dennis C. Gately, Newtown, Conn., assignor to New York Belting and Packing Company, Antietam, October 2, 1868. I claim, 1st, Belting or banding for driving machinery, composed of paper or other pulped and calendered material, combined with india-rubber or other vulcanizable material, substantially as herein set forth.
83,375.—SPINNING MACHINE.—John Goulding, Worcester, Mass. I claim, 1st, The combination of the segment cam, k, in two parts, elastic roller, j, brake lever, S, with its pin, u, disk, y, drum, G, rollers, J, L and spool, c, in combination with the twisting tube, K, or other equivalent, to produce a counter twist to the roving, substantially as set forth.
83,376.—BOLT-HEADING MACHINE.—Robert Gracey, Pittsburg, Pa. I claim, 1st, The weighted lever, F, link, G, and toggle arms, K, K, in combination with the header, N, and steam cylinder, A, arranged and operating substantially as described.
83,377.—DIE FOR BOLT-MAKING MACHINES.—Robert Gracey, Pittsburg, Pa. I claim, 1st, The combination of the dies, a, a', die blocks, b, b', and plunger, f, with or without the socket, o, said parts being arranged substantially as described.
83,378.—INDEX.—Henry H. Hall, Boston, Mass. I claim the within-described index or abular guide to indexes, consisting of the combination of letters and figures, substantially as and for the purpose set forth.
83,379.—IRONING TABLE.—L. Harrington, Saugatuck, Mich. I claim a folding table, made with a three part top, A, B, C, in combination with flat iron holder, H, I, hinged leg, G, supporting a pivoted bearer, S, and bearer, T, constructed and arranged to operate substantially as and for the purpose set forth.
83,380.—CHECK-VALVE FOR STEAM AND OTHER ENGINERY.—Joel Hayden, Jr., Haydenville, Mass. I claim the combination of the valve, F, cup, F, connecting rod, G, outlet, D, and inlet, C, with a partition, A, an valve seat, B, between them, whereby the fluid or liquid is enabled to close the valve by its pressure against the cup, when the valve is relieved from outside force, substantially as herein described and shown.
83,381.—BUCKLE.—Henry Herbert, Jersey City, N. J. I claim the self-fastening buckle, consisting of a frame and two slotted slides, for the purpose substantially as described.
83,382.—HOT BLAST APPARATUS FOR PUFFLING AND OTHER FURNACES.—P. Hoop, Jr., and R. Hoop, Berlin Cross Roads, Ohio. We claim, 1st, The rings, C, provided with the lugs, e, in combination with the foundation plates, c, as and for the purpose described.
83,383.—DEVICE FOR SHARPENING SAWS.—David Huffman, Luray, Va. I claim the block, A, jaws, B, B, and screws, c, c, when constructed and arranged as described, and for the purpose set forth.
83,384.—STEAM GENERATOR.—R. W. Humphreys, Clarksville, Tenn. I claim a steam boiler, in the form of a hollow cylindrical annular ring, with fire box and fire flues, and smoke stack, attached substantially in the manner herein shown and described.
83,385.—ELEVATOR.—Amos B. Hunt, Matteson, Mich. I claim, 1st, The crane, B, crane post, A, shafts or pulleys, arranged at the points d, f, and i, rope or cord, C, arranged on the sheaves and passing down through the axis of the crane, in combination with a sweep bar, G, all substantially as set forth.
83,386.—SHOULDER BRACE AND SUSPENDER.—Ebenezer Jennings, Jr., New York city. I claim, 1st, A combined shoulder brace and suspender, consisting of two straps crossing each other at both ends in adjustable slides, substantially as described, either with or without an adjustable slide in the back crossing.
83,387.—SHOULDER BRACE AND SUSPENDER.—Ebenezer Jennings, Jr., New York city. I claim, 1st, A combined shoulder brace and suspender, consisting of two straps crossing each other at both ends in adjustable slides, substantially as described, either with or without an adjustable slide in the back crossing.
83,388.—PLANT PROTECTOR.—J. M. Hurt, Blacks and Whites, Va. I claim, as a new article of manufacture, the plant protector, consisting of the cylinder, A, adapted to rest upon the ground over the plant, perforated circumferentially near its top, a, B, and provided with the horizontal glass top, C, as herein described for the purpose specified.
83,389.—SHOULDER BRACE AND SUSPENDER.—Ebenezer Jennings, Jr., New York city. I claim, 1st, A combined shoulder brace and suspender, consisting of two straps crossing each other at both ends in adjustable slides, substantially as described, either with or without an adjustable slide in the back crossing.
83,389.—SHOULDER BRACE AND SUSPENDER.—Ebenezer Jennings, Jr., New York city. I claim, 1st, A combined shoulder brace and suspender, consisting of two straps crossing each other at both ends in adjustable slides, substantially as described, either with or without an adjustable slide in the back crossing.
83,389.—SHOULDER BRACE AND SUSPENDER.—Ebenezer Jennings, Jr., New York city. I claim, 1st, A combined shoulder brace and suspender, consisting of two straps crossing each other at both ends in adjustable slides, substantially as described, either with or without an adjustable slide in the back crossing.







