

No. 5050. THOMAS KATER, Hamilton, Ont., 13th August, 1875, for 5 years: "Improvements in Piano Fortes." (Perfectionnements aux pianos-fortes.)

*Claim.*—1st. A regulating rail for pianos, provided with a series of recesses or seats in its under side to receive the regulating buttons for securing a greater degree of adjustment in an upward direction; 2nd. A regulating rail for pianos, provided with a series of seats or recesses in its upper side to receive the button, regulating screws for securing the greatest possible degree of adjustment of the same in a downward direction; 3rd. A regulating rail for pianos, formed with an enlarged front edge, provided with a series of recesses on its top and bottom to receive the heads and buttons of the regulating screws as the same are depressed or raised; 4th. An agraffe for pianos having one or more openings for the passage of the string or strings, and a transverse opening at right angles thereto for the reception of a pin rod or bridge; 5th. The Agraffe A, placed on the turning block, plate, rail, or base having an opening or openings *a*, for the string or strings, a transverse opening *b*, and a pin or bridge *G*, passing through the latter to form a cheek in the string, and to secure a double bearing; 6th. An agraffe for pianos, having one or more string openings varying in diameter or size on opposite sides of a central transverse pin or bridge opening; 7th. The treble bar of an iron frame for pianos, provided with a channel *D*, formed in the bar parallel with and above the iron frame for the passage of the strings composing a treble note, so that the strings will be out of contact with the iron frame, and base of the treble bar.

No. 5051. CHARLES W. LEWIS, (Assignee of G. W. Davis), Boston, Mass., U. S., 13th August, 1875, for 5 years: "Compound for Destroying Insects." (Composition insecticide.)

*Claim.*—The admixture of carbonates of lime, magnesia and iron pyrites with alkali.

No. 5052. HENRY M. WELLS, Toronto, Ont., 13th August, 1875, for 5 years: "Window Blind Fastener." (Arrête-persienne.)

*Claim.*—The clasp A, B, with its adaptation to the purposes set forth.

No. 5053. THOMAS O. A. BAYLEY, Hamilton, Ont., 13th August, 1875, for 5 years: "False Top for Box Stoves." (Faux-dessus de calorifère.)

*Claim.*—1st. The combination of the false-top A, and the sliding damper B; 2nd. The construction of the draft F.

No. 5054. DEXTER S. BAILEY, Dover, Me., U. S., 13th August, 1875, for 5 years: "Improvements on Elevators." (Perfectionnements aux élévateurs.)

*Claim.*—The combination of the sprocket wheel A, and multiplying gear B, C, D, E, with the grooved-wheel F, and hand chain G, all arranged and suspended in a yoke.

No. 5055. ALEXANDER R. KOERBER, Berlin, Ont., 13th August, 1875, for 5 years: "Improvement on Musical Reed Instruments." (Perfectionnement des instruments de musique à anches.)

*Claim.*—1st. Dividing the wind chest of a reed instrument into two or more compartments C, and D, each compartment comprising in itself a separate wind chest in combination with an independent bellows B; 2nd. Having an octave in the centre of the instrument or in case of more than one division, an octave at each division overlapped or divided, the one half being given to one side and the other to the opposite side of the division.

No. 5056. WILLIAM ABERCROMBIE, Hamilton, Ont., 13th August, 1875, for 5 years: "Machine for Clamping Window-Sashes." (Machine à emboîter les croisées de fenêtres.)

*Claim.*—1st. The combination of plate *k*, provided with studs *r*, with plate *ic*, provided with female screw *bs*, in which a screw operates to adjust it in and out to suit the width of the sash to be clamped. 2nd. The combination of the adjustable clamping irons C, the bearings H, and E, and screw shaft L. 3rd. The combination of plate W, provided with female screw *bs*, with the right and left hand screws P, *q*. 4th. The combination of the adjustable clamping irons C, the right and left hand screws P, and bearings H, and E. 5th. The combination of the adjustable clamping-irons C, C, C, the right and left hand screws P, P, the bearings H and E, and the screw shaft L.

No. 5057. CARL F. W. L. DITTMAR, Boston, Mass., U. S., 13th August, 1875, for 5 years: "Improvements in Explosive Compounds." (Perfectionnements dans les compositions explosives.)

*Claim.*—An explosive compound made of sugar and glycerine treated with acids, water, and soda or the latter and saltpetre, or of sugar and starch so treated, or of sugar, starch and glycerine so treated, or of starch and glycerine treated with acids, soda and saltpetre; or of starch treated with the acids, water, soda and saltpetre, the process of treating vegetable fibre, for the purpose of rendering it explosive, such consisting, in reducing the fibre to pulp, desiccating and reducing such pulp to grains or powder, or compact forms, and treating such with acids, or such and one or more materials as specified; the process of preparing vegetable fibre for being rendered explosive by being treated by acids or other materials, such consisting in reducing the fibre to pulp, and subsequently desiccating it and reducing it to grains, powder or compact forms; in combination with the mode of preparing vegetable fibre for being rendered explosive by treatment with acids, the application to it of saccharine or starchy and alkaline solutions before treating it with the nitric and sulphuric acids; in combination with the mode of preparing vegetable fibre, for being rendered explosive, viz: by reducing it to pulp, desiccating the latter and reducing it to grains, powder or compact forms, and treating it with acids, the application to it, after such treatment of a solution of nitro or chlorate of potash, or such and nitro-glycerine; the new compound resulting from either of the modes of treatment mentioned in the four claims next preceding, in combination with the process of making an explosive compound or matter from a vegetable material reduced to pulp, dried and reduced to grains, powder or compact forms, and afterwards treated with a mixture of nitric and sulphuric acids, the treatment of the pulp with sulphuric acids as heretofore explained prior to its desiccation and subsequent treatment by the mixture of nitric and sulphuric acids, the new or improved explosive compound or matter resulting from the last mentioned claimed art or process of manufacture.

No. 5058. THOMAS B. WILSON, Manchester, Eng., and MARTIN P. HAYES, Sealorth, Ont., 13th August, 1875, for 5 years: "Evaporating Furnace." (Fourneau d'évaporation.)

*Claim.*—The combination of the furnace J, combustion chamber H, an double coned or other flue I, with the steam jet O, for forcing the combustion.

No. 5059. WILLIAM H. WRIGHT, Sangerties, and BYRON J. HOWD, Syracuse, N. Y., U. S., 13th August, 1875, for 5 years: "Railway Trucks." (Trains de voitures de railroutes.)

*Claim.*—1st. In a truck having wheels with sectional axles, the bridge D, supported at its outer ends by housings working in jaws and secured thereto, and the central bearings secured to the said bridge, in combination with the inner end portions of two sectional axles *a*, *a*, projecting past the inner jaws and their housings towards the centre of the truck. 2nd. In a truck having wheels carried by sectional axles, the buttons *x*, *x*, made on the inner and long ends of the axles in combination with the central bearings *ca*, and bridge D, supported by an I secured to the housings at its ends; 3rd. The housings *c*, *ca*, rendered elastic and carried by jaws C, *C*, one on each side of each wheel and connected to the frame pieces B, *B*, in combination with the bridge D, having its ends attached to housings, and the central bearings secured to the said bridge; 4th. The combination of the stay plates G, *G*, with an outer and inner jaw, each carrying a housing for supporting a wheel having an axle disconnected with its opposite wheel and the frame pieces B, *B*, of the truck; 5th. The bars E, *E*, and E, in combination with the stay plates G, and jaws C, *C*; 6th. In a truck having wheels rendered capable of revolving independently of each other and at different velocities, the bridge D, connected with and supported at its ends by elastic housings carried by jaws placed on the hub of the wheel, in combination with the inner long ends of a pair of sectional axles the central bearing placed between the inner jaws and the bars E, *E*, and E, connecting with the stay plates G.

No. 5060. AUGUSTUS SANBORN, Higganum, Ct., U. S., 13th August, 1875, for 5 years: "Swivel Plough." (Charrue tourne-oreille.)

*Claim.*—1st. A share for a reversible plough having the angle of its two sides less than a right angle; 2nd. A share for a reversible plough so shaped and so pointed to the land side that the nose points "land ward" in either adjustment. 3rd. The mould board *b*, made adjustable toward and from the axle *z*, by means of the bar *c*, and forked piece *f*, or their equivalent; 4th. The combination of the mould board *b*, the hook *k*, and the staple *l*, set adjustably in the piece *h*. 5th. The ear *s*, set back from the face of the mould board. 6th. The spring draft rod having an elastic oblong figure. 7th. The mould board *b*, having neither a raised nor sunken central line and otherwise shaped as described; 8th. The furrow gauge device made of the parts *p*, *r*, *s*, or all in one piece, and having the slot *o*, *o*, *o*.