

**Na. 13,294. Improvements on Dams and Locks.** (*Perfectionnements aux digues et aux écluses.*)

John Du Bois, Du Bois, Pa., U. S., 17th August, 1881; for 5 years.

*Claim.*—1st. The method of constructing river locks without working below water, by building upon land a floatable wooden structure embracing a bottom, main gates, flumes, and flume gates, side walls of a height greater than the depth of the water where the structure is to be located, and means for temporarily excluding the water, and then launching the structure and floating it over the position selected for it, and finally sinking it directly to its place. 2nd. A floatable lock constructed of timber with cells to receive stone or ballast, and with elevated walls and end gates whereby it is adapted to float to its place, when completed, to a height greater than the depth of the water in which it is to be used, and loaded with ballast. 3rd. A floatable or lock provided with thin vertical angle irons or mud-sills extending transversely across the underside. 4th. A floatable dam or lock having at its bottom transverse depending sharp edged irons or ribs adapted to cut their own way into, and take a firm hold in the bed of the stream. 5th. The combination of a jointed or flexible dam or lock gate adapted to rise and fall beneath the water, a chamber or passage beneath the gate to admit water for elevating the same, a secondary gate connecting with said chamber, and controlling the escape of water therefrom below the gate, and a float located above the dam and arranged to operate the second gate. 6th. In combination with a jointed dam B and the water passage thereunder, the pivoted gate *g'* having pinion *i* and the float located above the dam and provided with rock bar acting upon the pinion. 7th. In a hinged dam or water gate, a water-tight hinge consisting of a series of eye bolts applied to the surface to be connected and a continuous rod *d* inserted through the eye bolts and seated against both of the surfaces, whereby the rod is caused to serve the double purpose of a hinge pin and a packing. 8th. The floatable lock provided with the internal gates C D and with the end gates E hinged thereto, and arranged to turn down in the bed of the stream when not required for use. 9th. The floatable lock consisting of the foundation and side walls constructed of timber and provided with water channels, the two flexible gates and the two end gates. 10th. In a lock, the combination of the lower lock gate, the upper jointed gate and the end gate E located above the upper lock gate. 11th. The combination of a base or foundation, and a floatable dam or lock constructed for application thereto. 12th. In a base or foundation for dams and locks, the combination of the flooring, the timbers thereon, and the bolts having collars between the floor and the timbers.

**No. 13,295. Improvements on Musical Reed Instruments.** (*Perfectionnements aux instruments de musique à anches.*)

Moses O. Nichols, Clyde, Ellis L. Mundy and George Butt, Norwalk, Ohio, U. S.; 18th August 1881; (Extension of Patent No. 13,197.)

**No. 13,296. Improvements on Musical Reed Instruments.** (*Perfectionnements aux instruments de musique à anches.*)

Moses O. Nichols Clyde, Ellis L. Mundy, and George Butt, Norwalk, Ohio, U. S., 18th August, 1881; (Extension of Patent No. 13,197.)

**No. 13,297. Railway Car Axle Box.** (*Boîte à graisse d'essieu de char de railroute.*)

Joseph N. Smith: Jersey, N. J., U.S., 18th August, 1881; (Extension of Patent No. 7611.)

**No. 13,298. Improvements on Vehicle Seats.** (*Perfectionnements aux sièges des voitures.*)

Wellington Bristol, Madoc, Ont., 18th August, 1881; (Extension of Patent No. 7,883.)

**No. 13,299. Improvements on Car Locks.** (*Perfectionnements aux serrures des chars.*)

George A. Shaw, (Assignee of Robert W. Semple,) Toronto, Ont. 22nd August 1881; Extension of Patent No. 6,477.)

**No. 13,300. Glove Fastener.** (*Agrafe de gant.*)

William F. Foster, Chicago, Ill., U. S., 22nd August, 1881; (Extension of Patent No., 6,478.)

**No 13,301. Improvements in Cooking Stoves.** (*Perfectionnements aux fourneaux de cuisine.*)

George W. Johnson, Yarmouth, N. S., 22nd August, 1881; (Extension of Patent No. 6,459.)

**No. 13,302. Improvements in Cooking Stoves,** (*Perfectionnements aux fourneaux de cuisine.*)

George W. Johnson, Yarmouth, N. S., 23rd August, 1881; (Extension of Patent No. 6,459.)

**No. 13,303. Improvements in Processes for Converting Iron into Steel.** (*Perfectionnements dans les procédés pour convertir le fer en acier.*)

Henry H. Date, Toronto, Ont., 23rd August, 1881; for 5 years.

*Claim.*—The mode of converting cast or forged iron into steel, by subjecting it in a heated retort or oven to the action (without pressure) of gases generated from hydro-carbon fluid and charcoal. 2nd. The manufacture of steel tools from properly shaped pieces of forged iron by the mode of process.

**No. 13,304. Improvements in Fire-Escapes.** (*Perfectionnements aux sauteurs d'incendie.*)

Charles A. Gregory, Montreal, Que., 23rd August, 1881; for 5 years.

*Claim.*—A box or receptacle fastened to the building near the eaves and holding a chain ladder, or equivalent device, said box being opened and the ladder allowed to fall by means of a connection near the ground, or at one of the windows. 2nd. In combination with the box A the vertical rod D, its lower end being enclosed in the box E, from which it is operated. 3rd. In combination with the box A and chain, ladder B, the rod or hanger C.

**No. 13,305. Improvements in Bracket Pieces for Screen Frames.** (*Perfectionnements aux goussets des consoles pour les châssis d'écrans.*)

Edward N. Porter, Morrisville, and Lorenzo G. Burnham, Burlington, Vt., U.S., 23rd August, 1881; for 5 years.

*Claim.*—Corner brackets having the face plate A, the inwardly projecting angular flange B with lugs, spurs or screws, and adapted to be secured to a frame. 2nd. The bracket, or corner pieces fastened to a frame by attachment which enter the frame in opposite directions. 3rd. A double corner bracket composed of two bars, whose extremities are braced together. 4th. In combination with the bracket or corner pieces, the double corner bracket with bracing, and adapted to be secured to a frame and cross bars.