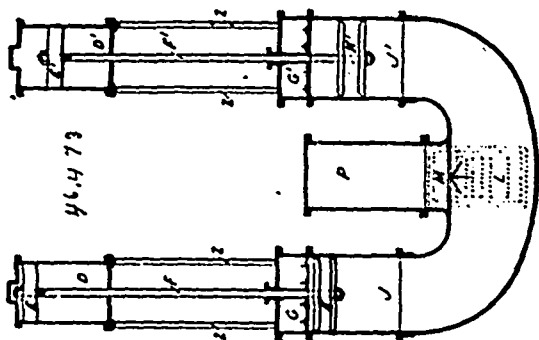


separated from the cylinder or casing whereby to provide a passage between them for the grain, means for directing the grain between the fan box and the cylinder and the fan arranged to exhaust or suck the air from the upper and lower chambers, substantially as set forth. 2nd. In a grain purifier, the combination of the cylinder the fan box therein having its sides separated from the cylinder forming spaces for the passage of the grain, partition plates dividing said space into tapering passages and devices above and below the fan box for treating the grain, substantially as set forth. 3rd. In a grain purifier, the combination of the cylinder or casing the concave in the upper part thereof, the head operating in said concave, the fan box within said cylinder, upper and lower suction chambers being formed above and below the fan box, the sides of the box being separated from the cylinder forming a passage for the grain, substantially as set forth. 4th. In a grain purifier, the combination with the cylinder and the fan box therein of suction tubes extended up and down from said fan box and having inlet openings through which to exhaust the air from the upper and lower suction chambers, substantially as set forth. 5th. The combination, substantially as described of the cylinder, having its lower or discharge end tapered or conical, the fan box in said cylinder and separated at its sides therefrom forming a passage for the grain, the yielding surface concave and head operating in the cylinder above the fan box, suction tubes extended from the fan box into the suction chamber above and below the same the finishing chamber arranged to receive the grain from the cylinder and provided with a screen or sieve and a revolving brush thereon, and a pipe connecting the screenings box of said finishing chamber with one of the fan suction tubes, substantially as set forth. 6th. The combination of the cylinder or casing, fan chamber, the suction chamber, the tube extending from the fan chamber into the suction chamber and having openings *o* in the latter, and a guard *o'* partially covering said openings, substantially as set forth. 7th. The combination of the cylinder or casing having an inlet for the grain and below said inlet an outlet for such grain, the fan box arranged between said inlet and outlet and separated from the cylinder or casing by an intermediate passage whereby the grain may pass outside the fan box, and tubes or connections whereby the grain is subjected to the action of the exhaust above and below said fan case, all substantially as set forth. 8th. The combination with the fan box, the suction chamber below the same and the finishing chamber below the suction chamber, of the tube extended from the fan box downward through the suction chamber, having openings within the suction chamber and communicating at its lower end with the finishing chamber, substantially as set forth. 9th. In a grain purifier, the cylinder or casing provided with upper and lower suction chambers and an intermediate fan box connected therewith and having a passageway along the outside of said box connecting the upper and lower chambers, substantially as set forth. 10th. In a grain purifier, the combination with the cylinder, the finishing chamber having a discharge at *S* above its screen, and a screening box *D* below said screen, the pipe *V* leading from the screening box, the fan and connections whereby said fan will produce an exhaust in the said pipe *V*, substantially as set forth. 11th. The combination of the cylinder or casing, the suction chamber, the fan, the suction tube leading from the fan to the suction chamber, the screening box, the pipe *V* leading from said box and connecting with the suction tube an air inlet pipe *V'*, connecting with the pipe *V*, and a valve controlling the pipe *V'*, substantially as set forth.

No. 46,473. Method and Means for Compressing Gases. (*Méthode et moyen de compresser le gaz.*)

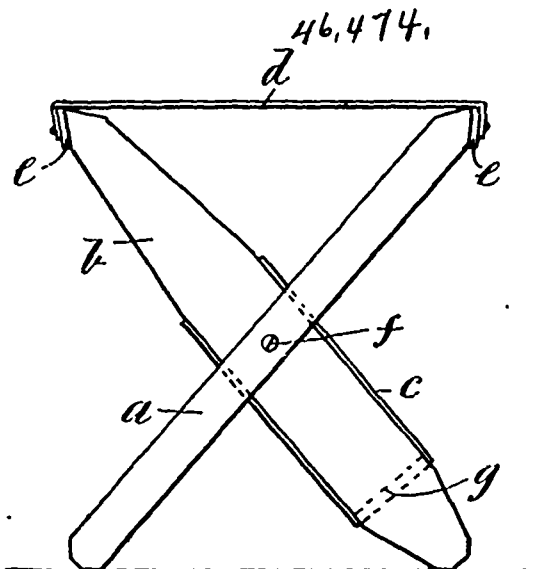


Daniel McGill, Wellington, New Zealand, 4th July, 1894; 6 years.

Claim.—1st. The method of compressing air or gas by direct steam pressure, consisting of the initial pressure of the steam discharging the air or gas when fully compressed and the resistance is great, and the expanding effort of the steam effecting the first compression of the air or gas when the resistance is small. 2nd. In an air or gas compressing engine, the combination with duplicate single acting air cylinders of a pipe or port connecting the open ends of said air cylinders, and filled with a liquid between said air pistons, of an air cushion or chamber communicating with the said connecting pipe or port by orifices, controlled by an externally operated valve. 3rd. In an air or gas compressing engine, the combination

of two single acting steam cylinders and pistons controlled by ordinary side valves, with two single acting air or gas compressing pistons, and cylinders with usual inlet and outlet air valves, and connected at ends opposite to air valves by a pipe or port filled with liquid, and an air cushion vessel thereon controlled by shut-off valve. 4th. In an air or gas compressing engine, the combination of duplicate single direct acting steam cylinders, and air compressing cylinders with steam and air pistons on single rod in each pair, with an auxiliary engine with crank, fly wheel and counter shaft, operating by compressed air or gas charge from compressors, the valve gear of said compressing direct acting engine.

No. 46,474. Camp Stool. (*Tabouret de camp.*)

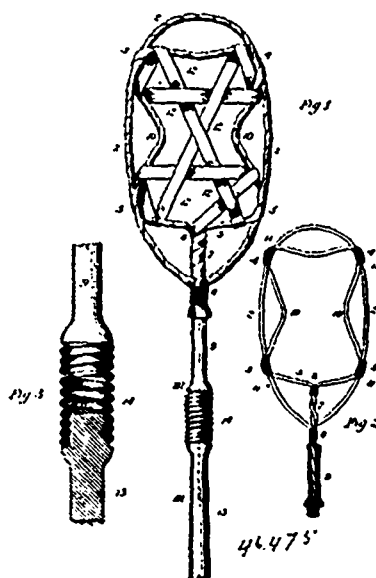


Agnes Ellis, 2 Lansdown Grove, Neasden, Middlesex, England, 4th July, 1894; 6 years.

Claim.—In a folding or camp stool, the combination of the parts constructed to dispense with the ordinary central rail, and in its place to provide a pocket or box which carries the pivots *f* upon which the folding stool works, substantially as herein described and for the purpose specified.

No. 46,475. Railway Car-seat.

(*Siège de char de chemin de fer.*)



Henry Hazlitt Forsyth, Chicago, Illinois, U.S.A., 4th July, 1894; 6 years.

Claim.—1st. A beater for railway car-seats, having a handle and a head which comprises a continuous marginal metal loop, and an inner brace situate substantially in the same plane, attached to the