the clamps thereof capable of being extended transversely into the passage, through which the dipper-handle or pole of dredging machine is passed, 3rd. The dipper handle constructed of bars Bi, Bi, and passed through guide having a central partition a; 4th. The trunnion and guide for a dipper handle or pole having adjustable friction, followers and a contral partition; 5th. The combination of the trunnion, the dipper handle, the followers E, the plungers F, and the levers, 6th. The combination of the trunnion, the dipper handle, the followers E, the plungers F, the levers G, G, and the cords H, H, and pulleys.

No. 4923. EDWIN A. BEERS, Dekalb Centre, Ill., U. S., 6th July, 1875, for 15 years: "Draught Equalizer." (Régulateur de la tire.)

Claim.—In combination with the bar A, (or its equivalent,) and the pole B, the evener C, lever D, chain F, and whifiletrees G and Gr.

No. 4924 WILLIAM D. PETERS, and GEORGE H. HOLT, Boston, Mass., U. S., 6th July, 1875, for 5 years: "Device for Emptying the Water out of a Vessel which has Sprung a Leak." (Appareil à vider un vaisseau qui a fait une voie d'eau.)

Claim.—let The combination with the pipe b of the conductor d, placed in the relative position shown in the drawing and provided with the valve orylug h; 2nd. The combination with the pipes b,d, of the guard c,c.

No. 4925. AUGUSTUS W. NEWELL, Bradford, Pa., U. S., 6th July, 1875. for 5 years: "Improvements on Bottles and Stoppers." (Perfectionnements aux bouteilles et bouchons.)

(laim.—lst A bottle having a neak provided with radial openings a, a, at opposite sides; 2nd. The combination with a bottle having a neck provided with radial openings a, a, a stopper B, having passages b, b, which may be caused to coincide with said openings and afford communication between the same and the interior of the bottle.

No. 4926. CHARLES C. BRAYLEY, Toronto, Ont., 6th July, 1875. for 5 years: "Rotary Engine." (Machine rotatoire.)

Claim.—The shaft B having the hub C, perforated by the slot Gincombination with the steam cylinder A, with inlet and exhaust parts E and F, the said steam cylinder having an irregular inner face in conformation.

No 4927. NELSON W. CLARK, Clarkston, Mich., U. S., 6th July, 1875, for 5 years: "Fish hatching Apparatus." (Appareil d'incubation pour le poisson.)

Claim.—1st. The water tank B, hatching troughs C, hatching boxes D, cleaning trough II, water ways 6, and the separating tank I; 2nd. In combination with any suitable troughs C, the hatching boxes D provided with feet c, gauge bottom sieves E, an perforated pan cover F, arranged to receive the water in the pan on top and discharge it below; 3rd. The cross-bar G, in combination with the troughs C and hatching boxes D. 4th. In combination with hatching boxes, the perforated pan cover F; 5th. The weir tank I, in combination with the hatching troughs and boxes of a fish hatching house.

No. 4928. WILLIAM S. HARLAND, Clinton, Ont., 6th July, 1875, for 5 years: "Glue Pot." (Poele à colle)

Claim.—1st. The air tubes B. 2nd The covering with plaster of Paris of the base or vessel for holding the oil, 3rd. The combination of the base A, air tubes B, plaster of Paris J, with the crimder F.

No. 4929. John Payne, New-Hamburg, Ont., 6th July, 1875, for 5 years. "Compound for destroying Thistles." (Composition pour détruire les chardons.)

Claim.—A compound consisting of liquor potassao oleum torebinthinae, and chloride of sodium, and when evaporated to a dry state, reduced to a powder.

No. 4930. Addison H. Laflin, New-York, U.S., (Assignee of A.S. Lyman) 6th July, 1875, for 5 years: "Improvement in Machines for dis-integrating Fibrous Substances." (Perfection-

nement des machines à decortiquer les matières ligneuses.)

Claim.—let. A fibre reducing engine in which the picker or beater roll is provided with teeth, points, angles or equivalent prominences, and is arranged in connection with the other parts of the mechanism, to operate upon the stock while it is Bonting, or is suspended in water, or other supporting liquid; 2nd. In combination with the picker or beater roll of a fibre reducing engine, an inclined way constructed as described so as to induce a circulation of the entire body of the stock into contact with the pickers, but without affording an opposing surface between which and the pickers, the stock may be caught and cut, ground or abraded, and. In combination with the picker or beater roll of a fibre reducing engine, an inclined way, so that the stock after coming in contact with the pickers may be carried directly renrward, without being lifted ever a back fall, as in the ordinary pulp engine; 4th. The picker hood provided with ventilating apertures in its walls; 5th. The steam pipe entering the picker hood behind the pickers tor the purpose of heating the water and aiding the circulation.

No. 4931. ARTHUR FORBRIGER, Cincinnati, Ohio, U. S., 6th July, 1875, for 5 years: "Drawing or Copy Book." (Cahier de dessin ou d'écriture.)

Claum.—1st. A book or tablet, composed of layers or sheets having progressive studies for copy upon them all pasted or secured on two or more sides at the edges in any manner, so that no study except the one in use can be seen by the pupil; 2nd. A book or tablet composed respectively of blank sheets and sheets with subjects for copy upon them, etc., to copy sheet being arranged to alternate with one or more blank sheets, and the whole book or tablet pasted or otherwise secure a together at two or more of its edges.

No. 4932. DEXTER A. ROOT, South Bay City, Mich., U.S., 6th July, 1875, for 15 years: "Combination Padlock." (Cadenas à combinaison.)

Claim.—Ist. The combination in a lock-case of the dog, the tumblers, and their springs, with a permutation change wheel and a notehed hasp; 2nd. The bolt II, provided with the notch a_i sleding in the top of the case in combination with the clip p_i and hook q_i on the plate A_i , for securing the same to the lock case.

No. 4933. WILLIAM E. SKINNER, Milford, Mich., WILLIAM O. SPAYTH, Tiffin, Ohio, and JOHN SPAYTH, Forest Hill, Cal., U. S., 6th July, 1875 for 5 years: Quadrant Level-Gauge." Jauge à onglet quart de cercle.)

Claim.—In combination with a bevel-square having an adjustable tongue, the moveable are idjustable plate A, provided on its face and both its circular ears with indentations or marks corresponding to the degrees of a quarter of a circle or any other division or mark or marks, and fastened to the stake E, by means of the stationary hinge-part C, and pivot D.

No. 4934. WILLIAM M. CATERSON, Philadelphia, Pa., U.S., 6th July, 1875, for 5 years · "Poison Bottle." (Bouteille pour le poison.)

Claim.-A bottle or jar having in prominent relief the representation of the front of a skull.

No. 4935. CARL WINDRATH, Buffalo, N. Y., U. S., 6th July, 1875, for 5 years: "Cigar Bunching Machine." (Machine à lier les cigares.)

Claim.—1st. A cigar bunch made from a sheet of compressed tobacco cut by suitable means into a rectangular block of the longitudinal outline of the cigar to be produced: 2nd. The combination wit a the receiver C. of the rammer D. and cutter K. 3rd. The combination of the receiver C. rammer D. cutter K., and gauge O; 4th. The combination of the receiver C. rammer D. cutter K., gauge O, and gauge board M; 5th. The pivoted cutters E. E. provided with slots Eir, in combination with the slide F, receiver C, and a suitable rammer; 7th. The combination of the rammer D, cutters E. slide F. receiver C, cutter Kr, gauge O, perforated gauge-board M and gland K.

No. 4936. ROBERT PATRICK, Jr., and JOHN A. MACDONALD, Branchton, Ont., 7th July, 1875, for 5 years: "Double-Acting Reversible Rotary Pump." (Fompe rotatoire de renversement à double-action.)

Claim —lat. The flanged disc or cylinder B. mounted on the revolving shaft A. and provided with the radially placed sliding blades E, in combination with the side plates C:, provided with the inwardly projecting alternately arranged cams D, inlet parts F, F, and discharge parts G, G.