No. 12,483. Method for Raising Sunken Vessels, Raising, Lowering and Transporting Heavy Weights, and loading and Unloading Vessels. (Methode pour relever les vaisseaux coules bas, monter, descendre et transporter les corps lourds, et charger et décharger les vaisseaux.)

Henry F. Brion, London, Eng., 11th March, 1881; for 5 years.

Claim.—1st. The arrangement for raising sunken vessels or other submerged bodies, consisting essentially in the employment of one or more levers for the purpose of raising by means of ropes, chains or cables attached to the submerged body and passing over the ends of the lever or levers and wound upon a winch, windlass or capstan, and one or more levers for the purpose of sustaining the partly raised vessel or body, by means of ropes, obains, or cables attached to the submerged body and passing over the ends of the lever or levers, and wound upon a winch, windlass or cap-stain, whilst the first name i lever or levers is or are lowered for another heist or lift. 2nd. The arrangement wherein a fixed support or pivoted arm is used for sustaining the submerged body, whilst the raising lever or levers is or are lowered into position for lifting. 3rd. The arrangement wherein both levers or sets of levers are employed for lifting each lever or sets of levers alternately, acting as a supporting lever or levers. 4th. The arrangement to which two vessels or floating bodies are employed, placed either at right angles to one another or in the same line, one for the purpose of supright angles to one another or in the same line, one for the purpose of supporting the levers, and the other for winding up the ropes, chains or cables. 5th. The arrangement for raising, lowering, and transporting heavy weights, in which the levers are carried in a truck or wazgon. 6th. The arrangement for raising or lowering and transporting heavy weights, in which the levers are carried in one truck or wazgon, and the winches are carried in another truck or wazgon. 7th. The arrangement for shifting the levers on their fulcrums by means of racks and pinions. 8th. The arrangement for shifting the clevers on their fulcrums by means of attaching ropes, chains, or cables to the ends of the levers, and winding them upon a winch, the said levers being fixed in position when at work by means of pins or bolts passing through shoes into holes pierced in the levers. 9th. The arrangement of supporting the levers upon a tripod or other suitable frame. rangement of supporting the levers upon a tripod or other suitable frame.

No. 12,484. Improvements on Fire Kindlers. (Perfectionnements aux allumoirs.)

David B. Goewy, Lyons, N. Y., U. S., 11th March, 1881; for 5 years.

Chrim.—1st. A porous block for fire kindling purposes, consisting of fire send two parts, and fire clay one part or thereabouts, and a small quantity of saw dust or bran. 2nd. The process of manufacturing fire torches or kindlers, consisting in first mixing fire sand, fire clay, saw-dust or bran, and water in or about the proportions named, then mounding the plastic mass into any suitable form, then perforating them, then burning or baking them at a white heat, lastly, supplying them with handles.

No. 12,485. Improvements in Boots. (Perfectionnements dans les bottes.)

Edward Roos, Galt, Ont., 11th March, 1881; for 5 years.

-1st. A boot provided with a felt sole placed between the lower sole and invole, and filling the space formed at the seam, between the upper and sole of the boot. 2nd. A felt lined boot in which the bottom of the lining is sewed between the insole and the upper, from thence fitting closely to the form of the foot, until it reaches the seam joining the leg to the foot of the boot, at which point it projects through the boot, forming a water tight joint, the leg of the boot being sewn on the inside, so that the joint will not impede the passage of the foot into the boot.

No. 12,486. Improvements on Fertilizer Distributors. (Perfectionnements aux distributeurs d'engrais.)

Thomas Chambers, Woodstock, Ont., 11th March, 1881; for 5 years.

Claim. - 1st. In a fertilizer distributor, the combination, with a hopper baving one concaved portion F, of the bottom fixed thereto, the movable concaved portion G, and crank screws H H.

No. 12,487. Improvement on Ploughs. (Perfectionnement aux charrues.)

George Ross, Chatham, Out., 11th March, 1881; for 5 years.

Claim .- 1st. In a centre draft plough, the combination of the adjustable beam c, bar or pivot x. flange piece D and brace F. 2nd. In combination, with the above, the screw N, and flange c. 3rd. The combination of the adjustable beam c, bent pieces II, screw J, slotted bar E and nuts and Washers L L.

No. 12,448. Improvements on Hand Seeders. (Perfectionnements aux semoirs a bras.)

Charles E. Roemelen and Christian Rashley, New Hamburg, Out., 11th March 1881; for 5 years.

Claim.-1st. The horizontal dished wheel H, having radial flanges I, said wheel alternately revolved, in opposite directions, by rod N and cord p winding and unwinding on hab K when the rod is reciprocated. 2nd The seed slide F having slotted projections M, in combination with eccentric L, on the spindle of wheel H, for shaking the seed through the feed apertures. 3rd. The combination of the slide F and spring lever E, with the adjusting screw G for regulating the discharge of seed,

No. 12,489. Improvements on Railway Alarms. (Perfectionnements aux alarmes des chemins de-

fer.)

Théodore Bélanger, St. Vincent de Paul, Que., 11th March, 1881; for 5 Years.

Claim.—1st. The roller C with cog wheels D D_I, in combination with commutator A, and electro-magnet bell or gong A_I. 2nd. The springs No.

1 and No. 2, with pole I I, slots E' E', plates L and M, in combination with rail H H, slots E E, covers G G, nuts K K; also in combination with the electric alarm box N, and wires M M M M Ard. The roller C, with gong A1, in combination with the springs No. 1 and No. 2; also in combination with the railway stations gongs.

No. 12,490. Improvements in Ear Trumpets.

(Perfectionnements aux cornets acoustiques.)

Stephen North, Syracuse, N. Y., U. S., 11th March, 18:1; for 5 years.

Claim—1st. The combination, with the resonant shell A, of the transmitting tube B, provided with the wire netting or drum head b. 2nd. The combination of the resonant shell A having the depression c, and the tube B arranged opposite the said depression. 3rd. The combination, with the shell A and tube B, of the furcated wire r. 4th. The combination of the shell A provided with the netting or screen c and with the depression c the tube B, arranged within the shell A and having one end directly opticited the arranged within the shell A and having one end directly opticities. one time of, arranged within the shell A and naving one end directly op-posite the depression c, and provided with a drum-head b having a central aperture s, the opposite end of the tube producing through the shell, and adapted for application to the ear, and the furcated wire r extended from the crown of the shell A into the aforesaid tube. 5th. The combination, with the shell A, of the ring d and the interchangeable wire nettings s, s2.

No. 12,491. Railway Crossing Gate. (Barrière de traverse de chemia de fer.)

Henry A. Stearns, Lincoln, R. I., U. S., 11th March, 1881; (Extension of Patent No. 5,929.)

No. 12,492. Improvements in Electric Light-(Perfectionnements dans l'écluirage ing. électrique.)

Henry C. Spalding, Bloomfield, N. J., U. S.. 11th March, 1881; for 5 years.

Claim .- 1st. The employment of assemblages or groups of electric lights, each group of a number of lights massed together and supported in an elevated position above the roofs of buildings, and the several groups arterranged, in such proximity to one another, as to light the spaces intervening between them. 2nd. The improvement in the art of lighting towns by electricity, by means of light towers arranged in triangular groups of three or more, each tower supporting a lantern containing a group of electric lights with suitable reflectors for deflecting and diffusing the lights.

No. 12,493. Improvements in Electric Lighting. (Perfectionnements dans l'éclairage électrique.)

Henry C. Spalding, Bloomfield, N. J., U. S., 11th March, 1881; for 5 vears.

Claim.—1st. The system of lighting towns, by groups or assemblages of electric lights massed together and supported in an elevated position, which consists in subdividing the group of lights into lesser groups, each subgroup being in an electrical circuit, distinct from, and independent of the others, and the lights composing each sub-group being so selected as to be interspersed with, and separated from one another by the lights of other subgroups.

No. 12,494. Improvements in Ground Augers.

(Perfectionnements aux sondes d tarières.)

William Stephenson, Jordon, Ont., 12th March, 1881; for 5 years.

Claim.—1st. In combination with the tube A, the central rod G passing through the centre of the same and terminating in a screw point. 2od. In combination with the maleable iron disc C D, the sharp steel edge bits E F attached thereto, and turned up on the outer edge. 3rd. The oval ventilating holes I I in the disc. 4th. In combination with an earth borng auger, the screws Hr Hr made separate and of different pitches, and screwed into the bottom of the auger, the screws having single or double threads. Mo. The combination of disc C D, bits E F, screw points H or Ht, tube A or tubes, and handle B to form an earth auger. 6th. The combination of the tube A, disc C D, bits E F, screw pointed rod G and handle B.

No. 12,495. Improvements on Life Rafts.

(Perfectionnements aux radeaux de souvetage.)

Thomas B. Griffith, Carva, Mass., U.S., 12th March, 1881; for 5 years.

Claim -1st. In a life-raft, the combination of cross-bars of cork, or other buoyant material, battened or otherwise confined between two surfaces of wood, or other material, longitudinally connecting ropes b and the cross-floats c strung upon, or otherwise secured to said ropes between the cross-bars, all arranged to form open compartments or sections d. 2nd. The combination, in a life-raft, of the buoyant cross-bars, the longitudinal connecting ropes b and the cork floats strung or otherwise secured thereto, with the life belts n secured to the cross-bars and within the sections d.

No. 12,496. Improvements in Bottle Wash-(Perfectionnements aux laveuses des ers. (Pe

William W. Horner and Horatio J. Higgins, London, Eng., 12th March, 1881; for 5 years.

Claim .- 1st. The construction and application to ro'ary machines for Claim.—1st. The construction and application to ro'ary machines for washing, riusing and draining bottles, jars and like articles, of a movemble water pipe carrying spikets or jets and a stop cock, the whole arranged so that, by a movement of a hand lever, the jets are automatically projected into a row of bottles, the stop cock being at the same time opened for supplying water to rinse the bottles, and the motion of the said hand lever for revolving the drum, withdrawing the said jets from the bottles and closing the stop-cock. 2nd. The construction and application to an apparat is so constructed, of a number of brushes for brushing the interior of the bottles. 3rd. In a rotary bottle washing apparatus, a moveable guard or cradle to allow of the machine being used for bottles of different lengths.