tially as and for the purposes specified. 11th. In a tank for imparting a composition to flexible material, the roller H, arms F, and guides B, substantially as and for the purposes set forth 12th. In a tank for imparting a composition to flexible material, the roller H and arms F, guides B, and device for adjusting the distance of the roller from the bottom of the tank, and securing the rollers at a given point, substantially as and for the purposes described.

No. 23,334. Sewing Machine.

(*Machine à Coudre.*)

John W. Post, New York, N.Y., U.S., 3rd February, 1886; 5 years.

Claim.—1st. In a sewing machine, a stand having detachable drawers, as set forth. 2nd. In a sewing machine, the combination, with the stand and the operating mechanism supported therefrom, of a cover or casing having transparent panels, substantially as and for the purpose specified. 3rd. In a sewing machine, the combination, with the legs of the stand having perforated bearings, and the brace E detachably secured to the upper ends of the said legs, and having screw-threaded bearings at lower ends of the treadle and treadle bar, and the bearing screws *f* and check and adjustable nuts *f*1, said parts being arranged for operation as described for the purpose specified. 4th. In a sewing machine, the combination, with the drive wheel and the stand of the guard C, composed of a screw piece of wire screwed or riveted to the stand, for the purpose set forth. 5th. In a sewing machine, the combination, with a bracket arm having a conical bearing, of a needle lever having a conical fulcrum stud formed integral therewith, said stud being slightly shorter than said bearing, and means arranged on the side of said bracket arm opposite to the said lever for securing and adjusting said stud in said bearing, substantially as described. 6th. The bracket arm I provided with a conical bearing, in combination with the needle lever V, having a conical fulcrum stud *v* formed integral with said lever, said stud being slightly shorter than said bearing, and the securing and adjusting screw *v*2 arranged on the side of said bracket arm opposite to the said lever, substantially as described. 7th. The overhanging arm provided with a conical bearing and the needle operating lever V, provided with a conical fulcrum stud formed integral therewith, said stud being slightly shorter than the said bearing, of the adjusting screw *v*2 and the locking screw V2, substantially as and for the purpose specified. 8th. The combination, with the head I2 having a slot, of the needle and presser bars provided with pins entering said slot, and a single and adjustable device for compensating for the wear of said pins in said slot, substantially as described. 9th. The combination, with the head I2, having a slot, of the needle and presser bars having pins entering said slot, and the adjustable and removable plate 123, substantially as and for the purposes set forth. 10th. In a sewing machine, the combination, with the head of the overhanging arm, having a groove *i*2, the presser bar and its coiled spring *m*, of a pointed and conical screw projecting into said groove *i*2, and forming one of the bearings for the coiled spring, as described for the purpose specified. 11th. In a sewing machine, the combination, with the head, of the overhanging arm having a groove *i*2, the presser bar, its coiled spring and a pointed screw *m*2 projecting into said groove *i*2, of the lifting lever O, substantialy as and for the purpose specified. 12th In a sewing machine, the combination, with the needle bar, of an operating lever connected thereto and adjustable vertically thereon, and means for compensating for the wear of the surfaces of the connection, substantially as described. 13th. In a sewing machine, the combination, with the lower driving shaft, of a feed bar mounted on and operated from said shaft, and for taking up the wear of the operating surfaces of said parts, substantially as described. 14th. The combination, with the bracket arm I and head 12, of the tension spring S1 bearing on the top of said head, and having a bent portion provided with a concave seat or socket fitting said arm, and the securing and adjusting screw *s*1 passing through said spring into said arm, substantially as and for the purpose set forth. 15th The combination, with the head 12, of the check tension spring S2 secured to the front face thereof, the screw *i*32 for holding and adjusting said spring, and the pins *i*33, *i*33 arranged on opposite sides of the free end of said spring for steadying the same, substantially as set forth. 16th. The combination, with the head 12, of the check tension spring S2 secured to the front face thereof, the screw *i*32 for holding and adjusting said spring, and the pins *i*33, *i*33 arranged on opposite sides of the free end of said spring for in different vertical planes, whereby said pins are adapted to steady said spring, and to serve as thread guides, substantially as set forth. 17th. In a sewing machine, a tension mechanism arranged on the head of the machine and consisting of the plates P, P1, the screw Q and spring *q*, said parts being constructed for operation substantially as and for the purpose specified. 18th. In a sewing machine, the combination, with the needle, bar and needle, of a thread check R consisting of a notched tubular pin or stud *r*, a spring actuated plunger *r*1 and a set screw *r*4, arranged for operation substantially as and for the purpose specified. 19th. In a sewing machine, the combination, with the overhanging arm, the needle bar having thread guide Γ, and guide or curl Γ1 etc., the needle of the tension devices P, P1, Q and the thread check R, substantially as and for the purpose specified.

No. 23,335. Form of Building Material.

(*Forme de Matériel de Construction.*)

John S. Armstrong, St. John, N.B., 3rd February, 1886; 5 years.

Claim.—1st. The reversely-curved or zig rag forms of building blocks *a*, *a*, substantially as hereinbefore set forth. 2nd. The combination of the whole blocks *a*, *a*, with part blocks *a*1, *a*1, in a wall, as described. 3rd. The combination of the slabs *b*, *b*, with a wall composed of the blocks *a*, *a*, substantially as described. 4th A wall composed of the blocks *a*, *a*, united and secured by the tatches *c*, *c*, as shown and described.

No. 23,336. Fishing Hook. (*Hameçon.*)

James Scotland and François Gordon, St. Pierre Miquelon, and 3rd February, 1886; 5 years.

Claim.—1st. The combination, with a fishing hook having one ore more pointed prongs, of a means of emitting light form such hook, such being for use substantially as set forth. 2nd. The combination, with the fishing hook having a shank, and one ore more pointed prongs extending therefrom, of a glass tube applied to, or encompassing the shank, and containing phosphorus, or a light giving or emitting, material, such tube at its ends being sealed or water-tight, and all being substantially as set forth. 3rd. The fishing hook implement, substantially as described, consisting of the shouldered shank and its series of curved and pointed prongs, and screw threaded stem the head screwed upon such stem, and the glass tube surrounding the stem, and containing a charge of phosphorus or a light giving material all being arranged essentially, and for use as set forth.

No. 23,337. Middlings Purifier.

(*Epurateur des Gruaux.*)

The George T. Smith, Middlings Purifier Company, Stratford, Ont. (Assignee of Charles A. Smith, Jackson, Mich., U.S., 4th February, 1886; 5 years.

Claim.—1st. The combination, with the front wall, of the feed hopper, the roller E and the pressure board D2, of the vibrating gate, having the upward projecting arm E2, the link *d*4 connecting the lower end of the pressure board with the arm and a spring arranged between the arm and the feed hopper and adapted to pull the arm towards the feed hopper, substantially as set forth. 2nd. The combination, with the front wall D of the hopper, the roller E and the pressure board D2, of the vibrating gate having the upward projecting arm E2, the link *d*4 connecting the lower end of the pressure board with the lower end of the arm, the spring *d*1 and link *d*2 arranged between the upper end of the arm and the front wall of the hopper, and the thumb nut *d*3 on the end of the link *d*2 and engaging with the outer face of the arm, substantially as set forth. 3rd. In a middlings purifier, the combination, with the casing above the shaker, of the partition B4 and the transverse partitions, which devide the space between partition B4 and the shaker into main air chambers, the transverse partitions which devide the space between the partition B4 and the deck into supplemental air chambers, the throats between the main air chambers and the supplemental air chambers, the wind trunk and the throats between the supplemental air chambers and the wind trunk, the fan and the dampers extending substantially the entire width of the air trunk, substantially as set forth. 4th. In a middlings purifier, the combination, with the shaker, an air chamber above the shaker, and a fan for producing an air current upward through the bolt cloth and the air chamber, of a removable dust box adapted to collect material taken from the middlings by the air chamber above the shaper, a fan adapted to produce an air currents, substadtially as set forth. 5th. In a middlings purifier, the combination, with the shaker, an air chamber above the shaker and a fan adapted to produce an air current upward through the shaker and the air chamber, of a dust box adapted to be removed through an opening in the casing of the machine, the sides of the opening fitting closely the sides of the dust box, substantially as set forth. 6th. In a middlings purifier, the combination, with the shaker, of an air chamber above the shaker, a fan adapted to produce an air current upward through the shaker and the air chamber, of a series of dust boxes adapted to be removed through openings upon opposite sides of the casing of the machine, substantially as set forth. 7th. In a middlings purifier, the combination, with the shaker, an air chamber above the shaker, and a fan adapted to produce an air current through the shaker and the air chamber, of a dust box arranged transversely of the shaker, and cleats connecting the dust box with a partition of the air chamber, whereby the dust box is adapted to slide through the casing of a machine path in a transverse to the shaker, substantially as set forth. 8th. In a middlings purifier, the combination, with the bolt cloth a series of air chambers above the bolt cloth, and a series of supplemental air chambers, of the dust boxes supported below the partition B4, and made removable through the openings in the side wall of the machine, substantially as set forth. 9th. In a middlings purifier, the combination, with the brush ways and the brush shafts, and their bearings, of the plate O provided with the inward projecting shelf O1, substantially as set forth. 10th. In a middlings purifier, the combination, with the brush ways, the brush shaft, of the the plate O provided with the inward projecting shelf O1 and the bearing P P1 adapted to slide on the shelf, substantially as set forth 11th. In a middlings purifier, the combination, with the brush ways and the brush shaft, of the plate O and the inward projecting shelf, of the bearings sliding on the shelf and means for adjusting the bearings, substantially as set forth. 12th. In a middlings purifier, the combination, with the brush ways and the brush shaft, of the plate O provided with the inward projecting shelf, of the bearing provided with the inward projecting shelf, of the bearing provided on its front side with a socket, and the adjusting bolt having its rear ned seated in the socket, substantially as set forth.

No. 23,338. Middlings Purifier.

(*Epurateur des Gruaux.*)

The George T. Smith Middlings Purifier Company, Stratford, Ont., (assignee of George F Sherwood, Jackson, Mich., U.S.) 4th February, 1886; 5 years.

Claim.—1st. In a middlings purifier, the combination of the brush-ways, the vertical posts or standards by the sides of the brush-way, and devices for supporting and adjusting the brush-ways upon the vertical standards, substantially as set forth. 2nd. In a middlings purifier, the combination of the brush-ways, the slotted vertical posts or standards by the sides of the brush-ways, the carries interposed between the brush-ways, and the vertical standards and devices adjustably supporting the brush-ways on the vertical standards, substantially as set forth. 3rd. In a middlings purifier, the combination of the brush-ways, the slotted vertical standards and the carriers interposed between the brush-ways and the vertical posts, and engaging with the outer and inner faces of the slotted posts, substantially as set forth. 4th. In a middlings purifier, the combination, with the brush-ways of the vertical posts, the carriers and the screw-threaded bolts and nuts connecting the brush-ways, and the carriers with the vertical standards, substantially as set forth. 5th. In a middlings purifier, the combination, with the brush-ways of the