

tubes 16 and 17, arranged to operate, substantially as set forth. 4th. In a furnace, the air tight shell 4, perforated arch 16, staves 18, and means of admitting air thereto from the ash pit 1, in combination with grate 11 and perforated dome 20, arranged to operate substantially as set forth.

No. 42,572. Wire Barbing Machine.

(*Machine à barbler le fil.*)

John S. Reid, No. 8 Victoria Street, Westminster, England, 12th April, 1893; 6 years.

Claim.—1st. In wire barbing machines, the combination of mechanism for intermittently drawing lengths of an unbarbed main wire or wires into the machine, mechanism for simultaneously forming two or more barbs upon such main wire or wires, and mechanism for alternately bringing such main wire or wires into and out of the range of operation of the barbing mechanism. 2nd. In machines such as are referred to in the first claim, a flyer which twists together and spools the main wires after they have been barbed. 3rd. The feed pulley A², and mechanism connected therewith, substantially as described. 4th. The combination of the slotted blocks or guides such as G, with the plates B and D, with or without the plates C, substantially as described. 5th. The blocks G, substantially as described and shown in the drawings. 6th. The combination of blocks slotted for the passage of the main wire or wires, diagonal holes through such blocks serving as guides for the barbing wires, cutting blades or surfaces fixed in, or forming part of the blocks, and moving blades working against the faces of the blocks, substantially as described. 7th. The barb twisting cylinder F, substantially as described. 8th. The means for driving and locking the cylinders F, substantially as described with reference to figures 20 to 24. 9th. The barbing mechanism, substantially as described and shown in the drawings. 10th. The combination of the flyer, the spool carried by the flyer and the brake for periodically retarding the revolution of the spool relatively to the flyer, substantially as described. 11th. The mechanism for periodically tightening the brake strap of the spool, substantially as described. 12th. The mechanism for causing the carriage T to reciprocate and lay the barbed wire on the spool, substantially as described. 13th. The spooling and twisting mechanism, substantially as described and shown in the drawings. 14th. The rolls M and M¹, situated between the barbing and twisting mechanism for preventing the twisting of the main wires behind them. 15th. Wire barbing machines, substantially as described and shown in the drawings.

No. 42,573. Pew Back. (*Dos de banc d'église.*)

Morris Lancaster, Northville, Michigan, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. The process herein described, of constructing built up work for seating, consisting of preparing a board A of desired length, breadth and thickness, smoothing the surfaces of said board in its normal flat condition, then resawing said board to form counterpart exterior boards A¹, A², then applying a thin layer or veneer between the undressed surfaces of said counterpart exterior boards, and compressing said exterior boards and the intermediate layer by desired forms or moulds to form seating of uniform thickness, substantially as described. 2nd. The process herein described, of constructing built up work for seating, consisting of preparing a board of desired length, breadth and thickness, smoothing said board in its normal flat condition, then resawing said board to form counterpart exterior boards A¹, A², then cementing between the undressed inner surfaces of the boards A¹, A², a thin rotary veneer, having its grain extended across that of the exterior boards, compressing said exterior boards and said veneer together by desired forms or moulds while the cement is green to form seating of uniform thickness, and then trimming the edges of said seating, substantially as described. 3rd. The seating herein described, consisting of the boards A¹ and A², having in combination an interposed veneer, substantially as described.

No. 42,574. Garment Hook. (*Agrafe de vêtement.*)

Frank E. De Long, Philadelphia, Pennsylvania, U. S. A., 12th April, 1893; 6 years.

Claim.—1st. A hook formed, substantially as set forth, of a single piece of wire bent to form a bill, a shank and means for attachment to a garment, and a member continuous of said wire, lying between the shank and bill, and forming a keeper for the eye and a guard for the fabric, substantially as set forth. 2nd. A hook provided with a member constituting a fabric guard, a portion of which member is extended from the region of the eye engaging bends in the direction of the apex of the bill, and in a plane intermediate of the planes occupied by the shank, and bill members and below the path traversed by the eye, substantially as and for the purposes set forth. 3rd. A hook provided with a member constituting a fabric guard, a portion of which is extended from the region of the eye engaging bends in the direction of the apex of the bill in a plane intermediate of the planes occupied by the shank, and bill members and below the path traversed by the eye, and which is bellied towards the bill, substantially as and for the purposes set forth. 4th. A hook provided with a member constituting a combined fabric guard, and

spring keeper, a portion of which member is extended from the region of the eye engaging bends in the direction of the apex of the bill, and in a plane intermediate of the planes occupied by the shank and bill members and below the path traversed by the eye, and which is extended beyond the apex of the bill, substantially as and for the purposes set forth. 5th. A hook provided with a member constituting a combined fabric guard and spring keeper, which extends in the form of bars along the shank, which embodies return bends in the vicinity of the eye engaging bends, and which is extended in a plane intermediate of the planes of the shank and bill and is bellied outward toward said bill, substantially as set forth.

No. 42,575. Garment Hook. (*Agrafe de vêtement.*)

Frank E. De Long, Philadelphia, Pennsylvania, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. A hook formed, substantially as set forth, of a single piece of wire bent to form a bill, a shank, thread eyes, and the oppositely disposed outwardly bellied inwardly compressible spring guard bars hereinbefore described. 2nd. A hook formed of a single piece of wire bent to form a shank and a bill, and a portion of which is extended from the region of the eye engaging bends along the bill and is bellied laterally away from said bill, substantially as set forth. 3rd. A hook formed of a single piece of wire bent to form a shank and a bill, and a portion of which is extended from the region of the eye engaging bends along the bill and is bellied laterally away from said bill on each side thereof, substantially as set forth. 4th. A hook formed of a single piece of wire bent to form a shank and a bill, and portions of which wire are extended along the shank to the region of the eye engaging bends, are curved upward in the vicinity of said bends, are extended along the bill, and are laterally outward one on each side of said bill, substantially as set forth. 5th. A hook formed of a single piece of wire bent to form a shank and a bill, and portions of which wire are extended along the shank to the region of the eye engaging bends, are curved upward in the vicinity of said bends, are extended along the bill, and are bellied laterally outward one on each side of said bill, and are formed with return bends, substantially as set forth.

No. 42,576. Garment Hook. (*Agrafe de vêtement.*)

Frank E. De Long, Philadelphia, Pennsylvania, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. A hook formed, substantially as set forth, of a single piece of wire bent to form a bill, a shank, thread eyes, and the oppositely disposed, outwardly expansible eye detaining spring keepers, hereinbefore described. 2nd. A hook for garments, having the usual bill, shank, and thread eyes, and having the wire forming the eye extended substantially parallel with and adjacent to the bill, and its outer portion curved and adapted to be deflected away from the bill, substantially as and for the purposes set forth. 3rd. A hook provided with two members structurally independent of the bill but existing in close proximity to the respective sides of it, curved at their outer portions to diverge from the bill, and free to be deflected away from it, substantially as and for the purposes set forth. 4th. A hook formed of a piece of wire bent to form a shank and a bill, portions of which wire extend along the shank, at a point between the eye engaging bends and the bill apex are curved upward and extended along the outside of the bill, and at their outer portions are bent away therefrom, substantially as and for the purposes set forth.

No. 42,577. Coffee Pot. (*Cafetière.*)

Francis H. Abell, Grand Crossing, Illinois, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. A coffee pot with closed spout and open steam pipe, in combination with a condenser to said steam pipe, substantially as specified. 2nd. A coffee pot provided with a closed spout, a grooved neck with openings at each end of said groove, in combination with a condenser in said neck, substantially as specified. 3rd. A coffee pot with a closed spout, a grooved conical neck, with openings at each end of said groove, in combination with a condenser, fitting into said neck, substantially as specified. 4th. A coffee pot with a closed spout, a neck with a groove, with ends open, in combination with a covered condenser, substantially as specified. 5th. A coffee pot with a spout having a cover and a large removable strainer at its lower end, affording a chamber between it and the pot, and a grooved neck with openings at each end, in combination with a condenser, in said neck, substantially as specified.

No. 42,578. Brick Kiln. (*Four à brique.*)

James Henney, Cloverport, Kentucky, U.S.A., 12th April, 1893; 6 years.

Claim.—A brick kiln, of the character described, consisting of an outer wall within which is arranged a series of furnaces in the sides and ends, a series of chimneys interposed between the furnaces, a series of intermediate transverse flues connected at their opposite ends with the chimneys, flues at the end of the kiln, each having an intermediate transverse portion and opposite diagonal extensions connecting with the corner chimneys of the kiln, and a flash wall extending around the interior sides of the kiln, between which wall and kiln the furnaces communicate.