

before described, viz.: mechanism for expressing a body of such material through a die in a bar or column, means for sustaining the latter, and mechanism for severing it into bricks, consisting of one or a series of wires mounted on an endless belt, substantially as described, caused to move with and to carry said wire or wires across the path of the said bar of clay, whereby the latter is divided into bricks. 8th. The combination, in a brick-making machine, with mechanism for forcing the clay through a die in a continuously moving bar, of means for sustaining and preserving the same in line with the die, and a device for severing the bar into bricks, consisting of a wire or series of wires, suitably mounted on an endless flexible belt, arranged and caused to move with and simultaneously across the path of the continuous bar, whereby the same is cut off into bricks, all constructed, combined and operating substantially as described. 9th. In a brick-making machine, the combination, with means for forcing a continuous bar of clay through a die, of an endless belt running over pulleys, and supported in a suitable frame, which belt is located and adapted so as to receive said bar of clay thereon and be by the latter propelled and mechanism for cutting off the advancing end of the car into bricks consisting of one or a series of wires suitably mounted over and under the end of the bar on a flexible endless belt inclined towards the bar of clay, and propelled through intermediate connections, by the push or force of one bar impinging upon the first mentioned belt, all constructed, combined and adapted to operate substantially in the manner and for the purpose shown and described. 10th. The combination, with the belt B, adapted to receive and sustain the ejected continuous bar of clay, of the pulley P₂, gears W₁, W₂, pulleys P₃ and P₄, and the endless carrier running upon the last mentioned pulleys, and having mounted thereon the cut-off wires, whereby the wires are successively carried athwart the moving bar of clay, and whereby the latter is severed into bricks, substantially as shown and set forth. 11th. In that class of brick machines wherein the clay is expressed through a die in the form of a bar, the combination of a multiple carrier, a series of cut-off wires secured thereto and held taut by spring-controlled devices, whereby said wires are adapted to yield to hard bodies in the clay and then resume their normal position, together with suitable mechanism for propelling said carrier, and causing the cut-off wires to advance through and sever the bar of clay into bricks, substantially as and for the purpose set forth. 12th. In combination with the endless cut-off belt B₁, the U-shaped bows secured thereto, and adapted to hold the cut-off wires, substantially as shown and described. 13th. The combination, with the endless belt or carrier B₁, of the elastic U-shaped bows secured thereto, the said bows being adapted to hold and by their elasticity keep taut the cut-off wires, yet allow them to yield temporarily to obstructions, substantially as specified. 14th. In combination with the belt B₁, the U-shaped bows, having means substantially as shown, for the ready attachment thereto of the cut-off wires, and for determining and limiting the position of the latter, substantially as and for the purposes set forth. 15th. In combination with the endless cut-off belt, and the described wire-holding bows, the rigid plates D, substantially as shown and for the purposes specified. 16th. In combination with the endless wire, cut-off belt or carrier, the plates D, when provided with the up-turned flanges d₁, substantially as and for the purposes specified. 17th. In combination with the bows U, the cut-off belt and its pulleys, the plates D, when secured to said belt at a single point or transverse line, whereby the belt is at all times permitted to hug closely the said pulleys, substantially as specified. 18th. The combination, with the cut-off belt and its convex-faced pulleys P₃, P₄, and the U-shaped bows, of the plates D, having concave bases to conform to the shape of said pulleys, substantially as and for the purpose specified. 19th. In combination with the flexible endless carrier B₁, wire holders U and pulleys P₃, P₄, of the plates D, when secured to said belt at a single point, or transverse line to the rear of the minor axes of the plates, substantially as and for the purposes specified. 20th. In combination with clay expressing and moulding devices, the belt C and cut-off mechanism and frame F₁, with means, substantially as shown, for adjusting the said frame vertically, for the purpose specified. 21st. In combination with the endless cut-off belt or carrier, having plates D secured thereto, the guide-ways G, substantially as and for the purpose set forth. 22nd. The combination, with the belt B₁, pulley P₄, driving pulley P₅, the series of wires mounted on plates D on said belt in a suitable frame, of the opposed series of rollers r beneath the belt B, all constructed, arranged and adapted to operate substantially in the manner and for the purposes described. 23rd. The endless cut-off belt or carrier, the plates D, with their sides extending beyond the edges of said belt, the bows U and cut-off wires mounted thereon, and the guide-ways G, all constructed, combined and adapted to operate substantially as and for the purposes stated. 24th. The clay expressing and moulding mechanism, the belt B, the cut-off mechanism, consisting of a series of wires transversely mounted on an endless belt or carrier, arranged with relation to said belt B, and the moving bar of clay, substantially as shown, and frictional devices, substantially as shown, constructed and operating substantially as and for the purposes described. 25th. The following elements in combination, to wit: clay expressing and moulding devices, a belt B running over pulleys suitably journaled in a frame, and adapted to receive thereupon upon the bar of clay issuing from the die of the machine, a pulley, as P₂, on the shaft of one of said belt pulleys, a positively driven pulley, as P₃, an idler, as P₄, on a pivoted adjustably weighted lever, as L, a slack or friction belt, as B₁, running over said last mentioned pulleys, together with mechanism for severing the moving bar of clay into bricks, consisting of a series of wires mounted on an endless belt or carrier, arranged with relation to the belt B and bar of clay thereon, as shown, all combined, constructed and adapted to operate and co-operate, substantially in the manner and for the purpose set forth. 26th. In combination with the belt B, its pulleys P₃ and P₄, and the endless belt B₁, bearing the cut-off wires, the pulleys P₃ and P₄ journaled in the vertically adjustable frame F₂, substantially as and for the purposes specified. 27th. In combination, with the wire cut-off belt and its pulleys, arranged as shown, with relation to the belt B and the continuous clay-bar X, of the gears W₁, W₂, proportioned as described, whereby the said cut-off belt is caused to advance at a speed having a relation to that of the belt B that is in effect the bar of clay, as set forth, whereby the cut-off wires are caused to be carried squarely through the moving clay-bar. 28th. In

combination with the cut-off belt, and mechanism for driving the same, and rollers r and pulley P₂, of the U-shaped wire holders having the distance between their opposite limbs greater than the width of said rollers and pulley, so as to admit of the cut-off wires being carried below the bar of clay, as specified. 29th. In combination with the belt B, and the off-bearing belt running over pulleys respectively in suitable frames, the independent transfer roller I, located with relation to said belts, substantially as and for the purpose described. 30th. In combination with the belt B, and cut-off mechanism, the independent roller I, having the tapering form, as shown and for the purpose specified. 31st. In a brick machine, of the class recited, the following elements in combination, viz: an endless belt or its equivalent for receiving and sustaining the moving bar of clay issuing from the die of the machine, an endless carrier having cut-off wires suitably mounted thereon, and propelled by mechanism, substantially as described, and an off-bearing belt caused to travel at a greater surface speed than that of the carrier and the bar of clay expressed from the die of the machine, whereby the severed bricks are successively carried away by said off-bearing belt, in time to escape the wire that has just severed the brick from said moving bar of clay, the combination and arrangement being substantially as and for the purpose described. 32nd. The combination, with the belt B and the wires mounted upon the endless cut-off belt running over pulleys above the path of the bar of clay, and propelled by suitable mechanism, substantially as shown, of the off-bearing belt caused to run faster than said belt B, whereby the severed brick is carried away in time to escape the wire which has just cut it from the said bar, substantially as shown and described. 33rd. The combination of the cut-off belt carrying the transverse wires, the pulley P₃, and mechanism for driving the same, of the pulley P₄ journaled in the tighter frame T, whereby said pulley P₄ may be adjusted longitudinally, substantially as and for the purposes stated. 34th. The combination, with the cut-off belt running over pulleys P₃ and P₄, mounted upon the frame F₂, of the frame T sliding upon said frame, and having the pulley P₄ journaled therein, and the adjusting screw t working in said sliding frame, and having its forward end abutting against a projection t₂, located between the said pulleys P₃ and P₄, as and for the purpose specified. 35th. The improvement in scrapers for freeing belt pulleys of clay or other substances, consisting in the combination with said scrapers of deflecting wings, for directing the material scraped from the peripheries of the pulleys, so that the same will fall beyond the belts, substantially as described. 36th. In combination with the pulley P₃, and the deflecting wings j, j, the detachable scraper J adjustably mounted on the latter, substantially as and for the purpose specified. 37th. In combination with the cut-off belt and its pulleys, the scraper J having the detachable wings j, j, as and for the purpose stated. 38th. In the class of brick machines, in which the bar of clay expressed through a die is severed into bricks, by means of a series of wires on an endless moving carrier, the method of adapting the cut-off mechanism for making either bricks or tiles, (in connection with suitable airs consisting in mounting upon said carrier an even number of said cut-off wires whose distance apart is substantially equal to the length of ordinary bricks, and removing alternate wires for adapting the cut-off to make tiles and re-inserting such alternate wires for making bricks, substantially as set forth. 39th. In combination with the off-bearing belt and its frame and rollers, the cap pieces z₂ in proximity to the edges of said belt and rollers, and having their top faces elevated slightly above the belt, as and for the purpose specified. 40th. In combination with the off-bearing belt rollers, the cap pieces z₂ covering the journals of the rollers, and extending over near to the ends of the latter and beyond the bearings thereof, substantially as and for the purpose specified. 41st. The combination with the off-bearing belt-rollers, of the cap-pieces z₂ and corner pieces z₁, the ends of the journals of said rollers being nearing in contact with said corner pieces. 42nd. The combination, with the rollers r₁, of the longitudinally adjustable bearing strips z₂, cap-pieces z₂ and corner-pieces z₁, constructed and arranged as specified.

No. 21,606. Hasp Lock. (*Serrure à Moraillon.*)

Theron S. E. Dixon, Chicago, Ill., U.S., 6th May, 1885; 5 years.

Claim.—1st. As an improved article of manufacture, a lock, the shackle or link of which is provided with a projecting arm, for the purpose as described. 2nd. As an improved article of manufacture, a lock, the shackle or link of which is provided with an arm for the purpose of a hasp, and also a projection on offset upon its rear side, substantially as described.

No. 21,607. Clay Crusher. (*Moulin à préparer l'Argile.*)

Truman D. McKinney and Walter J. Soper, Tecumseh, Mich., U.S., 6th May, 1885; 5 years.

Claim.—1st. In a clay crusher, a pair of polygonally shaped jaws adapted to rotate with a hopper, to break up lumps of clay and deliver the same to a pair of crushing rolls, substantially as and for the purposes described. 2nd. In a clay crusher, in combination with shaped jaws, adapted to rotate with a hopper, in combination with a pair of crushing rolls, said jaws and said crushing rolls being driven from a main shaft common to both through intermediate gearing, substantially as and for the purpose specified. 3rd. In a clay-crushing machine, a base frame supporting the driving mechanism described, in combination with a pair of conically-shaped crushing rolls, which are supported in suitable boxes upon said frame, substantially as set forth. 4th. In a clay-crushing machine, a base frame carrying the pair of crushing rolls, and the mechanism for giving motion to such rolls, in combination with a frame resting upon the base frame and carrying a pair of rotating jaws, and the mechanism for communicating motion thereto, substantially as described.

No. 21,608. Spring Attachment for Platform Rocking Chairs. (*Manière d'Assujétir les Ressorts des Fauteuils-Plate-formes à Bascule.*)

William I. Bunker, Chicago, Ill., U.S., 6th May, 1885; 5 years.