

coincident pointing dies, and a transversely revolving rotary heading tool, substantially as specified. 16th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, and a transversely revolving rotary heading tool and a wire feed device, substantially as specified. 17th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies and a transversely revolving heading tool, a wire feed device and a stop or gauge for the end of the wire, substantially as specified. 18th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a wire feed device, and a stop or gauge for the end of the wire, substantially as specified. 19th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, and a transversely revolving rotary heading tool, a wire feed device and a stop or gauge for the end of the wire, substantially as specified. 20th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, and a transversely revolving rotary heading tool, a wire feed device and a stop or gauge for the end of the wire, substantially as specified. 21st. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a transversely revolving heading tool, and a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, substantially as specified. 22nd. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, and a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, substantially as specified. 23rd. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, and a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, and a wire feed device and a stop or gauge for the end of the wire, substantially as specified. 24th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, and a wire feed device, a stop or gauge for the end of the wire, and a rotary cutter, substantially as specified. 25th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, a wire feed device, a stop or gauge for the end of the wire, and a rotary cutter, substantially as specified. 26th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, a wire feed device, a stop or gauge for the end of the wire, and a rotary cutter, substantially as specified. 27th. The combination, with a pair of rotary die carriers, of a series of opposing clamping dies mounted upon each of said carriers, and with their operative faces lying lengthwise of the axes of revolution, a series of coincident pointing dies, a transversely revolving heading tool, a series of rotary swaging dies or blocks mounted upon one of said rotary carriers, and interposed between said clamping dies and said rotary heading tool, a wire feed device, a stop or gauge for the end of the wire, and a rotary cutter, substantially as specified. 28th. A pair of revolving rail blank clamping dies D, D, each furnished with a projecting ledge d, and counteracting with each other, substantially as specified. 29th. The combination of a pair of rotary disks or die carriers B, C, with a series of clamping dies D, D mounted thereon, provided with projecting ledges d, substantially as specified. 30th. The combination, with a pair of rotary disks or die carriers B, C, each provided with a series of clamping dies, of projecting ledges on the disk B for carrying the blank forward, substantially as specified. 31st. The combination, with a pair of rotary disks or die carriers B, C, each provided with a series of clamping dies, of projecting ledges on the disk B for carrying the blank forward, and a blank guard F, substantially as specified. 32nd. The combination, with a pair of rotary disks or die carriers B, C, each provided with a series of clamping dies, of projecting ledges on the disk B for carrying the blank forward, a blank guard F and a drag-spring L, substantially as specified. 33th. The combination, with a pair of rotary disks or die carriers B, C, each provided with a series of clamping dies, of projecting ledges on the disk B for carrying the blank forward, and a blank guard F, said disk C and the dies thereon having a peripheral groove to receive the end of said blank guard F, substantially as specified. 34th. The pointing dies E, E having V-

shaped cutting edges e, e, and cheeks or meeting faces e, e, outside, slightly higher than said cutting edges, substantially as specified. 35th. The rotary pointing dies E, E, having their peripheral meeting faces or cheeks ground on a larger circle than the path of their cutting edges, substantially as specified. 36th. The combination, with a pair of continuously revolving rotary die carriers and dies thereon, of a stop for the end of the wire, and a rotary slip for feeding the wire against the stop and across the path of the dies, substantially as specified. 37th. The combination, with a pair of continuously revolving rotary die carriers and dies thereon, of a stop for the end of the wire, a rotary slip feed for feeding the wire against the stop and across the path of the dies, and a rotary cutter, substantially as specified. 38th. The combination of a pair of continuously revolving rotary die carriers and dies thereon, of a stop for the end of the wire, a rotary slip feed for feeding the wire against the stop and across the path of the dies, a rotary cutter, and a curved guard for the severed blank, substantially as specified. 39th. The combination, with a pair of rotary disks B, C, and clamping dies thereon, of a transversely revolving rotary heading tool, and a bearing roll to resist the thrust of the heading tool, substantially as specified. 40th. The combination, with a pair of continuously revolving rotary die carriers and dies thereon, of a stop for the end of the wire, and a rotary slip feed for feeding the wire against the stop and across the path of the dies, a rotary cutter, a curved guard for the severed blanks, a transversely revolving rotary heading tool, and a double coned bearing roll B bearing against the bevelled edges of the disks opposite the point of thrust, substantially as specified. 41st. The combination, with a pair of rotary disks B, C, and clamping dies thereon, of a transversely revolving rotary heading tool and a double coned bearing roll B bearing against bevelled edges on the disk opposite the point of thrust, substantially as specified. 42nd. The combination, with a pair of rotary disks B, C, and radial adjusting devices, substantially as specified. 43rd. The combination, with rotary disks B, C, and clamping dies D, D thereon, of a radially adjustable transversely revolving rotary heading tool, and a vertically adjustable bearing for the shaft of said heading tool, substantially as specified. 44th. The combination, with rotary disks B, C, and clamping dies D, D thereon, of a radially adjustable transversely revolving rotary heading tool, substantially as specified. 45th. The combination, with the shaft C and a wheel or gear thereon of the inclined keys o, o, substantially as specified. 46th. The combination, with the shafts B, C, and intermeshing gears thereon, of the inclined adjusting keys o, o, substantially as specified. 47th. The combination, with the rotary die carrier disks B, C, and their shafts B, C, of gear o and a split-gear o, o, one part of which is adjustable upon the other for taking up wear between the teeth of said gears, substantially as specified. 48th. The combination, with rotary die carrier disks B, C, and clamping dies thereon, of a rotary heading tool N, interposed swaging blocks N₁, and a cam N₂ for returning said swaging blocks to position, substantially as specified. 49th. The combination, with rotary die carrier disks B, C, and clamping dies thereon, of a rotary heading tool N, interposed swaging blocks N₁, and a cam N₂, for returning said swaging blocks to position, and a guard N, substantially as specified.

No. 29,062. Brick Machine. (*Machine à briques*.)

Charles L. Emens, Holton, Mich., U.S., 1st May, 1888; 5 years.

Claim.—1st. The combination, with the horizontal chamber and the right and left feed screw thereon, of a tempering chamber communicating with the horizontal chamber and containing a tempering shaft, which feeds the clay to the right and left hand feed screws, substantially as specified and shown. 2nd. The combination of the horizontal chamber having duplicate compartments and an intermediate casing, a right and left hand feed screw journaled in the intermediate casing, a tempering chamber located centrally adjacent to the horizontal chamber and communicating with the compartments of the latter, and a tempering or forcing device in the tempering chamber, substantially as described. 3rd. The combination of the horizontal chamber having duplicate compartments, and a casing intermediate between said compartments, the feed screw provided with right hand augers in one compartment, and left hand augers in the other compartment, journaled in the intermediate casing and actuated by devices applied to that portion of the shaft within the said casing, and a tempering chamber and its shaft arranged opposite the middle casing so as to deliver clay to the duplicate compartments, substantially as described.

No. 29,063. Bottle Capsule.

(*Capsule de bouteille.*)

William Lawson, Dublin, Ireland, 1st May, 1888; 5 years.

Claim.—1st. The combination, with a bottle, of a cap adhesively secured on the top of the bottle head, and consisting of a disc of thin pliant paper having sections removed from the circumferential portion thereof to form isolated fingers, which are bent down and adhesively secured to the sides of the bottle head without overlapping, and a strap likewise of thin pliant paper enveloping the bottle neck, and vertical sides of the head to cover the cap fingers and adhesively secured in position, substantially as set forth. 2nd. The combination, with a bottle, of a cap adhesively secured on the top of the bottle head, and consisting of a disc of thin pliant paper having sections removed from the circumferential portions thereof to form isolated fingers, which are bent down and adhesively secured to the vertical sides of the bottle head, and a strap also of thin pliant paper enveloping the neck and fingers on the head, and adhesively secured both to the fingers and to the bottle head between the same, substantially as set forth. 3rd. The combination, with a bottle, of a cap adhesively secured on the top of the bottle head, and consisting of a disc of thin pliant paper having sections removed circumferentially therefrom to form isolated fingers, which are bent down and adhesively secured to the vertical sides of the bottle head, a metallic disc being interposed between the bottle top and the cap, and a strap likewise of thin pliant paper enveloping the neck and fingers on the head and adhesively secured in position, substantially as set forth.