

supporting wheels having pivotal connections with the frame, and means for connecting them together intermediate of their pivotal connections, substantially as described, whereby the main frame is caused to have a lateral motion relative to the ground actuated by wheels in turning the machine. 2nd. The combination of the main frame with the divided supporting frame carrying the wheels at its outer ends, and having pivotal connections with the main frame at points between the wheels and its point of division, and means for causing the parts of the frame to be actuated one by the other in the movement of the wheels in turning the machine, substantially as described. 3rd. The combination of the binder-frame, a main supporting-wheel arranged in rear thereof and having a pivotal connection therewith, a front supporting wheel also having a pivotal connection with the frame, a tongue connected to the wheel-frame, and means for connecting the wheel-frames intermediate of their pivotal connections so as to move in unison substantially as described, whereby the swinging of the tongue will cause the rear wheel to be turned at an opposite inclination to the front wheel, and the frame to have a lateral motion relative to the ground, as set forth. 4th. The combination, with the front and rear supporting wheels having the carrier and binding devices located between the same, of an end wheel located at the grain side of the machine and having its frame supported at front and rear substantially as described, whereby the main frame may move endwise in relation to said end wheel in turning the machine. 5th. The combination of the front and rear supporting wheels connected by means of the pivoted arms, the end or grain wheel connected to one of the arms of said supporting wheels, and the main frame supported by the wheels, substantially as described, whereby the main frame is caused to move endwise in turning the machine, as and for the purpose set forth. 6th. The combination of the harvester frame, an outer or grain wheel supported in guide-ways, and the arms or levers connecting the grain-wheel with the turning mechanism, substantially as and for the purpose set forth. 7th. The combination of the harvester-frame, an outer or grain wheel having its frame supported at front and rear in guide-ways in the harvester frame, and means substantially as described for connecting the grain wheel with the turning mechanism. 8th. The combination of the harvester-frame, an outer or grain wheel supported in guide-ways, the rock-shaft in the harvester-frame, the arms or levers for connecting the rock-shaft with the grain wheel frame, and means substantially as described for connecting the rock-shaft with the turning mechanisms, as and for the purpose set forth. 9th. The combination of the slotted supporting frame for the grain wheel mounted on the tracks or guide-ways, and connected through mechanism with the pivoted supporting-wheels, the bell crank lever pivoted to the supporting-frame and carrying at one end the grain wheel, and means substantially as described connected to the other end of said lever for raising and lowering the grain wheel, all substantially as set forth. 10th. The combination of the cutting and grain delivering and binding devices described, and means for operating the same with the automatic clutch mechanism acting to throw the same into and out of action in turning the machine, and a lever or shifting device for throwing the mechanism into and out of action by hand, substantially as set forth. 11th. The combination of the main frame with the divided supporting-frame carrying the wheels at its outer ends, and having pivotal connections with the main frame at points between the wheels and its points of division, a driving and driven mechanism, and an automatic and hand-operating clutch substantially as described, whereby in turning the machine the driven mechanism may be thrown automatically out of action or may be thrown out by hand, as set forth. 12th. The swiveling reel-post, combined with means substantially as described for automatically acting upon the reel to turn it in turning the machine, as and for the purpose set forth. 13th. The combination of the harvester-frame, a pivoted wheel-supporting frame, a swiveling reel-post, and means substantially as described for connecting the reel-post with the wheel-supporting frame, as and for the purpose set forth. 14th. The combination, with the front and rear supporting-wheels connected by the pivoted arms, of the swiveling reel-post connected with the arm of one of the supporting-wheels substantially as described, whereby the reel is caused to be moved automatically out of the way of the team in turning the machine, as set forth. 15th. A swiveling reel-post, carrying the reel, combined with the machine to move said reel to and from the cutters automatically in turning the same, and means substantially as described, whereby the reel can be raised and lowered in its various angles of relation to the machine, as and for the purpose set forth. 16th. The combination of the carrier extending in beyond the cutters, the binding devices located at the inner end thereof, a vertically arranged butt-rake pivoted near the inner end of the carrier and extending to the cutters, and means substantially as described arranged adjacent to the cutters for imparting both an endwise and reciprocating motion to the rake, as set forth. 17th. The combination of a separator-arm for dividing the grain, mounted so as to oscillate a trip-arm, and mechanism substantially as described for connecting said arm, as set forth, whereby the trip is caused to automatically and positively control the movements of the separator by the grain accumulated to form the bundle and cause it to hold the incoming grain during the binding operation. 18th. The combination of the carrier, a binding mechanism, packers, and a separating-arm operating in a reverse direction to the packers, and a trip mechanism for controlling the separating-arm, substantially as described, whereby the separating-arm is caused to act upon the incoming grain upon the carrier and force it back and out of the way of the packers, as and for the purpose set forth. 19th. An automatic trip for grain binders acted upon and controlled by the separating-arm, in combination with means to be controlled by the driver in his seat on the machine for operating the trip at will, substantially as described. 20th. The combination of an automatically operated separator, and an automatically operated trip with means to be controlled by the driver for throwing the same into action at will, substantially as described. 21st. An automatic trip for grain-binders, acted upon and controlled positively by the separating-arm substantially as described, whereby the grain to form the bundle is separated from the incoming grain before the binding devices are brought into action, as and for the purpose set forth. 22nd. The combination of the horizontally arranged carrier, a trip-arm located in the path of the grain, a separating-arm actuated by the trip-arm, and a binder

mechanism trip actuated by the separating arm, substantially as and for the purpose set forth. 23rd. The combination, with the intermittently rotating pinion for imparting motion to the separator, of the bifurcated pivoted rocking arm operated by the trip arm to rock said arm, and cause it to alternately disengage and engage the clutch of the pinion to throw the same into and out of action, substantially as and for the purpose set forth. 24th. The combination of the fixed jaw, the pivoted jaw, the rod or shaft provided with the disk or head, and a revolving drive-wheel provided with cams to engage the head to reciprocate the shaft and positively open and close the jaw, substantially as described. 25th. The combination of the swinging-frame carrying the gripper, the reciprocating combined cord guide and stripper, a knife, the arm or lever for reciprocating the cord guide stripper and knife, an arm connected with the knife-arm and forming a guide for and connection between the gripper-frame, cord-guide, stripper and knife, and a revolving drive-wheel with cams for reciprocating the cord-guide, stripper and knife, intermittently operating the gripper and swinging the gripper-frame from the knotted, substantially as and for the purpose set forth. 26th. The combination of the revoluble knotted-shaft, the combined cord-guide and stripper, a knife having a fixed relation to the cord-guide and stripper, the cam and rack-wheel for revolving the knotted and moving the knife and guide it in one direction, and the revolving ejector-arm for reciprocating the cord-guide and knife in the opposite direction to sever the cord and strip the knot from the knotted, substantially as and for the purpose set forth. 27th. The combination of the reciprocating knife, the gripper, and means, substantially as described, for connecting said gripper and knife as set forth, whereby the knife is reciprocated and the gripper-frame swung bodily from the knotted and intermittently rotated by the knife-reciprocating mechanism. 28th. The combination of the cord guide and stripper, a knife, a cord-gripper and an arm or lever for connecting the same, substantially as described, whereby the cord-guide and stripper is reciprocated, and the gripper swung to and from the knotted and intermittently revolved, for the purposes set forth. 29th. The reciprocating cord-guide and stripper, in combination with an ejector-arm acting on the stripper to cause the same to strip the knot simultaneously with its action in ejecting the bundle, as and for the purpose set forth. 30th. The combination of the cord guide and stripper, a knife and an arm or lever for operating said parts having a swinging movement imparted thereto by the revolving gear and cam wheel and the revolving ejector arm, substantially as described. 31st. The slotted frame for carrying the tying devices provided with bearings for the driving-shaft upon each side of the cam and gear wheel, in combination with the driving-shaft provided with the key seat or slot to engage the feather in the gear-wheel, substantially as and for the purpose set forth. 32nd. The combination of the guiding and depressing arm with the separating arm operating and timed in their movements, substantially as and for the purpose set forth. 33rd. The combination of the tension and take-up arm, the rocking arm pivoted to the end of the take-up arm and connected to the frame by a link operating, substantially as described, and the needle-shaft provided with the cam or projection to engage the arm of the take-up and operate the same and through it the rocking-arm, as and for the purpose set forth.

No. 30,918. Cigar Rolling Machine.

(Machine à enrouler les cigares.)

The Universal Cigar Rolling Company, Jersey, N.J. (assignee of Oscar Hammerstein, New York, N.Y.) U.S., 8th March, 1889; 5 years.

Claim.—1st. In a cigar rolling machine, the combination, with a point-receiving thimble, of a chamber or receptacle for containing paste or the like that is connected with said thimble for supplying paste to a cigar tip, substantially as described. 2nd. In a cigar rolling machine, the combination, with a point-receiving thimble, of a chamber for containing paste or the like, connected with said thimble, and means substantially as described for forcing paste from said chamber to the thimble in the desired quantity, as specified. 3rd. In a cigar rolling machine, the combination, with a point-receiving thimble, of a chamber for containing paste or the like, connected with said thimble, and a piston within said chamber for gradually forcing the paste from said chamber to the thimble, substantially as described. 4th. In a cigar rolling machine, the combination, with a point-receiving thimble, of a paste chamber connected with said thimble, a piston within said chamber for gradually forcing paste from said chamber to the thimble, and with means, substantially as described for moving said piston as specified. 5th. In a cigar rolling machine, the combination of a point-receiving thimble and a paste chamber connected with said thimble, of a piston within said chamber, a screw rod carried by said piston, a sleeve engaging said rod, and a rock-shaft connected with said sleeve for gradually advancing the piston within the chamber, substantially as described. 6th. In a cigar rolling machine, the combination, of a point-receiving thimble, with a paste chamber connected with said thimble, a piston within said paste chamber, a screw rod connected to said piston, a sleeve for turning said rod, a rock-shaft connected with said sleeve for turning said sleeve, the crank N on said rock-shaft, the pin f and the shaft e carrying said pin, all arranged and operating substantially as described. 7th. In a cigar rolling machine, the point-receiving thimble having a passage way communicating with its inner wall, combined with a paste chamber connected with said passage way, and a piston within said paste chamber for forcing paste through the passage way, substantially as described. 8th. In a cigar rolling machine, the combination, with rollers for rolling a cigar, of a shaft O, finger R and spring S connecting said finger to said shaft, substantially as described. 9th. In a cigar rolling machine, the combination, with rollers for rolling a cigar, of the shaft O having the pinion b_2 , finger R carried by said shaft, and the pinion d_2 and means for turning the same, substantially as described. 10th. In a cigar rolling machine, the rollers for rolling a cigar, combined with the shaft O having pinion b_2 , finger R and spring S connecting the finger R to the shaft O, and with the pinion d_2 meshing with the pinion b_2 , shaft F₂ and the independent frame P supporting the shaft O, whereby said shaft may have longitudinal movement, all arranged for operation