

and prongs, substantially as described. 55th. In combination in a knitting machine, the transfer-prongs, means for advancing the said prongs and for retracting the same including the two gears moving at different rates of speed and means for operating the gears, substantially as described. 56th. In combination, the needles, the transfer-cams, the transfer-prongs for the loops, means for shifting the same along the needles, a cam for advancing the transfer-prongs, a cam for retracting the same, connections to the transfer-prongs and means for driving the cams at different speeds, substantially as described. 57th. In combination, the needles, transfer-cams, the transfer-prongs for the loops, means for shifting the same along the needles, a cam for advancing the transfer-prongs, a cam for retracting the same, gearing for operating the cams having different numbers of teeth and connections between the cams and the transfer-prongs, substantially as described. 58th. In combination, the needles, transfer-cams, the transfer-prongs, means for shifting the same, the cam for advancing the transfer-prongs, the cam for retracting the same, the gears carrying the cams, said gears being operated at different rates of speed and connections between the cams and the transfer-prongs for operating the same, substantially as described. 59th. In combination, the needles, transfer-cams, the transfer-prongs for the loops, means for shifting the same along the needles, the cams for advancing and retracting the transfer-prongs and the connections therefrom comprising the sliding rack, the lever having a segment engaging the same, the rock-shaft and the connection from the lever to the rock-shaft, substantially as described. 60th. In combination, the two rows of needles, transfer-cams, the transfer-prongs, the sliding rack with means for operating the same, the two pivoted levers having segments, the connection from the levers to the transfer-prongs and a segment on one lever engaging the rack, substantially as described. 61st. In combination, the needles, transfer-cams, the transfer-prongs, the rack, the slide carrying the same, means for operating the slide, the connections from the rack to the transfer-prongs, and the detachable connection between the rack and slide, substantially as described. 62nd. In combination, the needles, transfer-cams, the transfer-prongs, the shifting block therefor, connections for shifting the block, connections for advancing and retracting the transfer-prongs, the gear carrying the advancing cam, the gear carrying the retracting cam and the third gear for operating the shifting connections, the said advancing gear moving slower and the retracting gear faster than the shifting gear and means for operating the gear, substantially as described. 63rd. In combination, the needles, transfer-cams, the transfer-prongs, means for advancing and retracting the same, means for shifting the prongs lengthwise of the needle-row comprising the step by step gear and intermediate devices, the pinion meshing therewith, the toothed wheel connected to the pinion and the gear having the pin for engaging the toothed wheel with operating mechanism for the gear, substantially as described. 64th. In combination, the needles, the transfer-prongs, operating connections thereto for advancing and retracting the prongs and for shifting the same along the needle-row, the main shaft, the laterally shifting rack-wheel on the shaft having the incline, the switch pin to act thereon, the pinion arranged to be operated by the rack-wheel and to operate the said connections to the transfer-prongs and pattern mechanism for controlling the switch-pin, substantially as described. 65th. In combination, the call-bar extending lengthwise of the needle-row, the racking bar also extending lengthwise thereof, pattern mechanism for operating the racking-bar longitudinally of the needle-row and means for operating the call-bar and racking-bar at each stroke of the machine and in a direction laterally of the machine, substantially as described. 66th. In combination, the needles, the transfer-prongs, the main shaft, the shifting rack-wheel thereon, means for shifting the same, the supplemental shaft, the pinion thereon, the gearing loose on the main driving shaft, geared to the supplemental shaft and connections to the transfer-prongs operated by said gearing for advancing and retracting the prongs and for shifting the same along the needle-row, substantially as described. 67th. In combination, the needles, their cams, means for rendering the needles inactive comprising a racking bar, means for reciprocating the bar laterally of the machine, the sliding block having a loose connection therewith to permit it to move laterally and means for adjusting the sliding block, substantially as described. 68th. In combination, the transfer-prongs, driving mechanism therefor for advancing and retracting the prongs and for shifting the same along the needle-row and the pattern mechanism including a pattern device, means for moving the same, the rotary cam-wheel with operating means therefor, the sliding bar adapted to engage the cam-wheel, the catch plate arranged to hold the bar out of engagement with the cam, said catch plate being adapted to be operated by the pattern device to release the bar and connections from the bar to the driving mechanism to control the times of operation thereof, substantially as described. 69th. In combination, the transfer-prongs, driving mechanism therefor for advancing and retracting the prongs and for shifting the same along the needle-row, and the pattern mechanism comprising the pattern device with operating means, the cam-wheel, the sliding bar adapted to engage the same, the connections from the slide to the driving means for the transfer prongs to control the times of operation thereof, and the open frame-latch to hold the slide-bar out of engagement with the cam and arranged to be lifted by the pattern device, substantially as described. 70th. In combination the transfer-prongs, driving mechanism therefor including the shifting-wheel for advancing and retract-

ing the prongs and for shifting them along the needle-row, the switch pin for operating the same laterally, the pattern mechanism with connections for operating the switch-pin and the flange of the shifting-wheel for holding the switch-pin in its moved position, substantially as described. 71st. In combination, the transfer-prongs, driving mechanism therefor, including the shifting-wheel for advancing and retracting the prongs and for shifting them along the needle-row, the switch-pin, means for operating the same, the pin on the switch-pin, the flange on the shifting-wheel and the incline for returning the switch-pin to position, substantially as described. 72nd. In combination, the transfer-prongs, driving mechanism for advancing and retracting the prongs and for shifting them along the needle-row, the sliding bar with connections to the driving mechanism to control the times of operation thereof, the grooved cam having reversely inclined portions, the pattern device and means controlled thereby for throwing the bar into connection with the grooved cam, substantially as described. 73rd. In combination, the two sets of transfer-prongs, the two seats of driving mechanisms therefor for advancing and retracting the said prongs and for shifting them along the needle-rows, two slide-bars with connections to the driving mechanism to control the times of operation of the driving mechanisms, the cam for operating the bars when in contact therewith, the latches for controlling the engagement of the bars with the cam-wheel and the pattern device arranged to operate the latches in succession, said cam having reverse inclines to rest the bar first operated before the second bar is operated, substantially as described. 74th. In combination, the two sets of transfer-prongs, the two seats of driving mechanism for advancing and retracting the transfer-prongs and for shifting the same along the needle-rows, said driving mechanism including the shifting-wheels, two slide bars arranged side by side, the levers connected thereto, the hollow shaft connected to one lever, the shaft connected to the other lever and passing through the hollow shaft, means operated by the shafts for controlling the two sets of driving mechanism by engaging the shifting-wheels and pattern mechanisms for controlling the slide-bars, substantially as described. 75th. In combination, the transfer-prongs, the driving mechanism for advancing and retracting the prongs and for shifting the same along the needle-rows, said mechanism including the main shaft, the shifting-wheel thereon having the rack, the supplemental shaft having the pinion splined thereon, and connections from the supplemental shaft to the transfer-prongs, the revolving pulley loose on the supplemental shaft, the locking disc on the supplemental shaft having a clutch connection with the pinion and the clutch connection with the pinion, with means for shifting it to engage the revolving pulley and to be released from the locking-disc, substantially as described. 76th. In combination, transfer-prongs, driving mechanism for advancing and retracting the prongs and for shifting the same along the needle-row, said mechanism including the main shaft, the shifting rack-wheel thereon, the supplemental shaft having the pinion to engage the rack, and connections from the supplemental shaft to the transfer-prongs, the revolving pulley on the supplemental shaft and the clutch to connect the same with the shaft to return the parts to normal position, substantially as described. 77th. In combination, the transfer-prongs, driving mechanism for the same for advancing and retracting them and for shifting them along the needle-row, including the main and supplemental shafts with a clutch connection between them, and connections from the supplemental shaft to the transfer-prongs, and means for rotating the clutch connections backward, substantially as described. 78th. In combination, fastening prongs, a main shaft, devices between the main shaft and the prongs for advancing and retracting the latter and shifting the same along the needle-row, said devices including a clutch portion together with means to operate said devices backward when disconnected from the main shaft, substantially as described. 79th. In combination, fashioning mechanism, including the transfer-prongs, the main shaft, operating means therefrom to the fashioning mechanism, including the loose gears, for advancing and retracting the prongs and shifting them along the needle-row, and a clutch connection and means for turning the gears backward when the clutch connection is disengaged, substantially as described.

#### No. 60,755. Pharmaceutical Product.

(*Produit pharmaceutique.*)

F. Hoffmann-La Roche & Cie, assignee. Carl F. M. Schaerges and Paul Schwarz, all of Basel, Switzerland, 2nd August, 1898; 6 years. (Filed 14th September, 1897.)

*Claim.* 1st. The process for the preparation of a pure alkaline acetosulphanilate by acetylating an alkaline salt of sulphanilic acid by means of glacial acetic acid and by delivering the product of reaction from free sulphanilic acid and alkaline acetate by means of water and alcohol. 2nd. As a new antipyretic and antineuralgic product, the herein described pure alkaline acetosulphanilate, which consists of a white hygroscopic substance in minute crystals, is readily soluble in water, soluble with difficulty in alcohol and insoluble in ether.

#### No. 60,756. Electric Heater. (*Chauffeur électrique.*)

The American Electric Heater Co., Detroit, Michigan, U. S. A., assignee of Richard A. L. Snyder, Pittsburg, and August F. Timmerhorn, of Detroit aforesaid, 2nd August, 1898; 6 years. (Filed 4th April, 1898.)