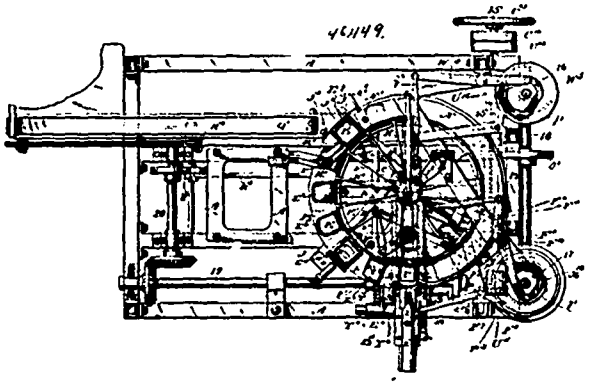
the combination with means for folding the bag bottom, of a folding plate M^2, for making the first fold, and a folding plate N^2, for making the second fold, with an oblique downwardly-turned plate M^3, carried by and in advance of the first folding plate, and adapted to gently turn in the paper preparatory to forming the first fold. 11th. In a bag forming mechanism comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, guides for supporting and guiding the movable section, maintaining it parallel with the first section, and an adjusting screw for propelling the movable section toward or from the fixed section. 12th. In a bag forming mechanism, comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, the folders for folding the paper against the former arranged to act against the side of the movable section, and a screw for adjusting the former connected to the movable section thereof and to said folders, so that in displacing the movable section the folders acting against it are equally displaced, and their relative engagement is unimpaired. 13th. In a bag forming mechanism, comprising a former, and means for folding a sheet of paper around it to form a paper tube, the former constructed in two sections, one of them fixed and the other movable toward and from it, a movable frame supporting the movable section, the folders for folding the paper against the former, having bearings in said frame, and means for moving said frame to adjust the thickness of the former. 14th. In combination with a relatively-fixed former section K, a longitudinally-movably saddle L, having the former section K^1, attached thereto, and folders as L^3, L^4, having bearings in the saddle so as to preserve the same position with reference to former-section K^1, irrespective of the adjustment of the saddle. 15th. In combination with a relatively-fixed former section K, a longitudinally-movable saddle L, having the former-section K^1, attached thereto, a folder plate L^3, and a folding roller L^6, also attached to and moving with the saddle, substantially as and for the purpose specified.

No. 46,449. Package Making and Filling Machines.

(*Machine à faire des paquets et les remplir.*)



Henry Eyster Smyser, Philadelphia, Pennsylvania, U.S.A., 3rd July, 1894; 6 years.

Claim.—1st. In a package filling machine, the combination of a pocket constructed to be expanded and contracted, a plunger for forcing a bag into the pocket, and mechanism for contracting the pocket to grasp the bag and prevent its displacement by the withdrawal of the plunger. 2nd. In a package filling machine, the combination with a former having a bottom plunger adapted to move downwardly, a plunger beneath adapted to move up to meet it and grasp between the bottom of a bag on said former, and driving mechanism for moving said plungers down together to carry down a bag from said former, of a series of pockets constructed to be expanded and contracted, driving mechanism for moving them successively under said former, to receive the bags carried down by said plungers, and mechanism for contracting each pocket to grasp the bag when it is drawn into it, and prevent its displacement by the return movement of the upper plunger. 3rd. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a chute for delivering charges of material into the pockets successively, and a mechanism for contracting each pocket before the charge of material is delivered into it, whereby the pocket closely grasps and supports the bag and protects it against distension by the dumping of the material into it. 4th. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a former and plungers for carrying a bag from said former into a pocket, driving mechanism for moving the pockets to bring them successively to the bag-receiving position, a chute for delivering charges of material into the bags held in said pockets successively, and a mechanism for contracting the successive pockets constructed to act on each pocket to contract it after the bag has been placed in it, and before the charge of material is dumped into it, whereby during the dumping in of the material the bag is closely grasped and supported by the pocket. 5th. In a package filling machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, a chute for delivering charges of material into the pockets successively, and a mechanism for contracting each pocket before the charge of material is delivered into it, with an agitating mechanism for shaking down the contents of the packages successively, and a mechanism for expanding the successive pockets prior to the operation of the agitating mechanism. 5th. In a packaging machine, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bags into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, whereby the pocket is caused to serve as a loose guide for the bag during its lifting and falling movements while under the action of the agitator. 6th. In a packaging machine the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bars into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, whereby the pocket is caused to serve as a loose guide for the bag during its lifting and falling movements while under the action of the agitator. 7th. In a packaging machine the combination of a series of bag-holding pockets, constructed to be expanded and contracted, mechanism for advancing them successively, means for introducing bags into the pockets successively, an agitating mechanism for alternately lifting and dropping the bags for shaking down or compacting their contents, and folding and pasting mechanism for closing the top of the bag, with a mechanism for contracting each pocket after the bag is placed in it, and for re-expanding it before the operation of the agitating mechanism, and a mechanism for contracting each pocket before the top of its contained bag is closed and sealed by said folding and pasting mechanisms. 8th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, mechanism for contracting the pockets to embrace their contained bags, a plunger for expelling the completed packages from the successive pockets, and a mechanism for expanding each pocket before the operation of said plunger. 9th. In a packaging machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, with mechanism for contracting them to embrace the contained bags, and an adjusting device adapted to determine the extent of contraction of the pockets by said contracting mechanism. 10th. In a packaging machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, and folding and pasting mechanisms for closing the top of the bags, with mechanism for contracting each pocket before the top of its contained bag is closed and sealed by said folding and pasting mechanisms, and an adjusting device adapted to determine the extent of contraction of the pockets by said contracting mechanism. 11th. In a packing machine, the combination of a series of bag-holding pockets, constructed to be expanded and contracted, with mechanism for contracting them to embrace the contained bags, consisting of an arm (as M) acting against one section of the pocket to thrust it toward the opposite section, a cam (as M^7) connected to and operating said arm, and an adjusting screw (as *m*) interposed in the connection between said cam and arm, and adapted to adjust at will the extent of thrust imparted by said arm to the pocket, and thereby to limit the contraction of the pocket against its inclosed bag. 12th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed to be expanded and contracted, mechanism for advancing them successively, mechanism for contracting the pockets to embrace their contained bags, and a mechanism for expanding the pockets consisting of a pusher located exterior to the pockets at the position where the pockets are to be expanded, and mounted to be movable toward and from the pocket, a cam for reciprocating said pusher, and intervening connections for communicating the thrust of said cam to the pusher. 13th. In a packaging mechanism, the combination of a series of bag-holding pockets constructed each with a movable wall whereby the pocket may be expanded or contracted, and a projecting rod connected to said movable wall, whereby when pushed in the wall is displaced to expand the pocket, with a mechanism for expanding the pocket, consisting of a pusher movable against said rod to thrust it in, and a driving mechanism for reciprocating said pusher. 14th. The combination of a pocket E, having a movable wall E^1, and sliding rods e^1, e^1 connected thereto and mounted to protrude at their ends beyond their supports, with a pusher, as J^1 mounted to act against the ends of said rods to thrust them back and displace said movable wall to expand the pocket. 15th. The combination of a circular series of bag-holding pockets, a carrying wheel to which they are fastened, having bolt-notches corresponding in number and spacing to the pockets, and a driving mechanism for intermittently advancing the pockets, consisting of a bolt constructed to advance and enter a notch, to oscillate forward carrying the wheel with it the distance from one pocket to the next, to tc thereupon retract out of