

shoulder *g*², all substantially as described and shown. 5th. In a rivet-setting machine provided with apparatus for operating a riveting bar, and for supplying rivets to be fixed in position by said bar, the combination of a riveting bar having a die of less diameter at one end, with a thimble or friction clutch of such diameter as to retain its hold upon the bar, and having an enlarged base as a presser-foot upon the material to be rivetted, and its lower half expandible to permit the descent of the rivet, and its upper half expandible by the riveting bar, all substantially as described and shown.

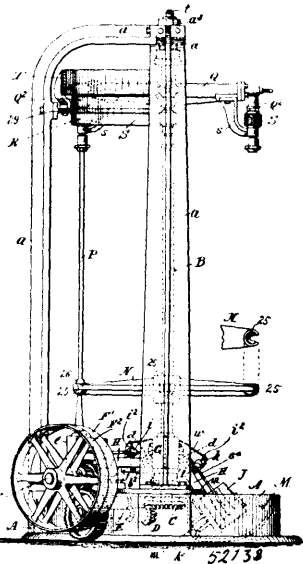
No. 52,137. Culinary Implement. (Ustensil de cuisine.)



David Ward, Arnprior, Ontario, Canada, 1st May, 1896; 6 years, (Filed 19th March, 1896.)

Claim.—As an article of manufacture, a culinary implement comprising a handle A, having a head B, in which are placed nails the heads of which project from the surface for manipulating a cleaning cloth, as and for the purpose hereinbefore set forth.

No. 52,138. Machine for Blowing Glass. (Machine pour souffler le verre.)



Michael Joseph Owens and Edward Drummond Libbey, both of Toledo, Ohio, U.S.A., 1st May, 1896; 6 years. (Filed 14th March, 1896.)

Claim.—1st. In an automatic machine for blowing glass, an air-conduit, a sectional mould, a removable blow-pipe, means for supporting the blow-pipe in operative relation to the air-conduit and to the mould, and means for automatically closing said mould after

the introduction of the blow-pipe in its support, and for automatically opening the mould prior to the removal of said blow-pipe. 2nd. In an automatic machine for blowing glass, an air-conduit, a sectional mould, a removable blow-pipe, means for supporting the blow-pipe in operative relation to the air-conduit and to the mould, means for automatically closing said mould after the introduction of the blow-pipe in its support, and for automatically opening the mould prior to the removal of said blow-pipe, and means for cooling the mould while open. 3rd. In an automatic glass-blowing machine, a sectional mould, an air-conduit, a removable blow-pipe, a support by which the removable blow-pipe may be temporarily sustained in connection with the air-conduit and in operative relation to the mould, means for automatically opening and closing the mould, and means for imparting, with respect to the blow-pipe and mould, a rotational movement of the one relative to the other. 4th. In a glass-blowing machine, in combination, a mould and a mould-carrier, means for imparting movements to the carrier, an air-conduit that is movable in unison with the mould and a removable blow-pipe which may be temporarily placed in connection with the air-conduit and in co-operative proximity to the mould, for the purpose substantially as set forth. 5th. In a glass-blowing machine, a mould-carrier with the mould thereon, and an air-supplying conduit, both movable, and having means for imparting travelling movements thereto in unison, a removable blow-pipe, and means comprised in said machine for affording a support for the blow-pipe whereby one end thereof may be in communication with the air-supplying conduit and the other in co-operative proximity to the mould, substantially as described. 6th. In a glass blowing machine, the combination with the vertical rotatable shaft having at its bottom a revoluble mould-carrier with the mould thereon, having at its top an air-conduit which is revoluble in conjunction with the mould-carrier, and having an intermediate part, supported by, and revoluble by reason of the rotation of the shaft, for affording a temporary support for the blow-pipe whereby the top thereof may be in connection with said conduit, and the bottom in operative proximity to the mould, substantially as described. 7th. In a glass-blowing machine, in combination, a mould-carrier, and a sectional opening and closing mould thereon, means for imparting movements to the carrier, an air-conduit that is movable in unison with the mould, a removable blow-pipe which may be temporarily placed in connection with the air-conduit and in co-operative proximity to the mould, and mechanism for periodically and automatically opening and closing the mould sections, substantially as described. 8th. In a glass-blowing machine, in combination, a mould and a mould-carrier, means for imparting movements to the carrier, an air-conduit that is movable in unison with the mould, a removable blow-pipe which may be temporarily placed in connection with the air-conduit and in co-operative proximity to the mould, a valve in said conduit and means for automatically and periodically operating the valve, substantially as described. 9th. In a glass-blowing machine, in combination, a mould and a mould-carrier, means for imparting a travelling movement to the carrier, an air-conduit that is movable in unison with the mould, a blow-pipe which may be placed in connection with the air conduit and in co-operative proximity to the mould, and means for imparting a rotary movement to the blow-pipe, substantially as and for the purpose set forth. 10th. In a glass-blowing machine, in combination, a mould and a mould-carrier, means for propelling the carrier to which the carrier is articulated whereby it may have a vertical swinging movement, a basin for a cooling liquid in the course of travel of the carrier, an air-conduit that is movable in unison with the mould, and a removable blow-pipe which may be temporarily placed in connection with the air-conduit, and in co-operative proximity to the mould, for the purposes substantially as set forth. 11th. In a glass-blowing machine, in combination, a sectional mould and a mould-carrier, means for propelling the carrier to which the carrier is articulated whereby it may have a vertical swinging movement to descend into the basin, a basin for a cooling liquid in the course of travel of the carrier, an air-conduit that is movable in unison with the travel of the mould, a removable blow-pipe which may be temporarily placed in connection with the air-conduit, and in co-operative proximity to the mould, and means for automatically opening the mould sections as they approach the basin for the purposes substantially as set forth. 12th. In a glass-blowing machine, in combination, the base A, the central vertical rotatable shaft having connected thereto near its bottom a revoluble mould-carrier with a mould thereon, having at its top an air-conduit which is revoluble in conjunction with the mould carrier and having an intermediate horizontally extended part for affording a temporary support for the blow-pipe whereby the top thereof may be in connection with said air-conduit and the bottom in operative proximity to the mould, a gear C on said vertical shaft, the horizontal counter-shaft E, geared to the lower end of the vertical shaft, the driving-shaft F, and gearing connecting it with the counter-shaft, substantially as described. 13th. In a glass-blowing machine, the combination with the base having the track *m*, of the vertical shaft B, connected to and radially extended from the shaft and having a friction roll which runs on the track, the mould mounted on the carrier, a radial air conduit carried by an extended from the upper part of the shaft and means for supporting, removably, a blow-pipe in connection with the said conduit and in proximity to the mould, substantially as described. 14th. In a glass-blowing machine, the combination with the base having the basin M, therein, and the track *m*, which runs around the top of the base and