BROADLY, my invention relates to means for removing sand, dust and other particles from a surface upon which a heavy article is to be placed in order to prevent marring of the surfaces which come into contact. More specifically, my invention relates to the removing of particles from the jolt table of a jolt-roll-over machine in order to prevent wear of the surfaces which come into contact when the mold is placed upon the jolt table. Among the objects of this invention are to provide means for removing sand and other particles from the jolt table; to provide automatic means for accomplishing the desired results, said means being actuated by the operation of the machine; to provide means which will direct a blast of compressed gas upon the jolt table during the operation of the roll-over mechanism so that dust and like particles shall be automatically removed from the table; and such further objects, advantages and capabilities as will hereafter more fully appear, and as are inherent in the structure herein disclosed. My invention further resides in the combination, construction and arrangement of parts illustrated in the accompanying drawings, and, while I have shown therein a preferred embodiment and a modification thereof, I desire the same to be understood as illustrative only and not as limiting my invention.

In the accompanying drawing, Fig. 1 is a plan view of a jolt-roll-over machine having my invention applied thereto; Fig. 2 is a side elevation of a portion of the structure shown in Fig. 1; Fig. 3 is a plan view of a part of the mechanism shown in Figs. 1 and 2, the same being detached from the rest of the mechanism; Fig. 4 is a fragmentary elevation of the structure shown in Fig. 3 and taken from the left side of said figure; and Fig. 5 is a fragmentary view similar to Fig. 2 but showing another mode of carrying out my invention.

Referring more in detail to the annexed drawings, numeral 1 designates the roll-over mechanism generally, and 2 the jolt table, upon which the flask and mold are to be placed during the operation of the machine. During the ordinary operation of a roll-over machine the jolt table 3 customarily has a certain amount of sand, dust and the like drop thereon which it is desirable to remove from the table before placing the flask thereon, so that a grinding action will not take place and cause a roughening of the surfaces in contact. In order to accomplish this function I have provided a pipe 4 having a series of perforations 5 along one face thereof directed toward the table top so that compressed air or the like forced therethrough will blow off all sand and other particles on the surface of the table. The fluid under pressure is furnished to the pipe 4 by means of a pipe 6 which is connected to a source of fluid pressure. Different types of valves 7 and 8 are shown in Figs. 3 and 5, respectively. These valves are automatically actuated during the operation of the roll-over mechanism. In the construction shown in Figs. 1, 2 and 3 the valve 7 is actuated by an arm 9 which strikes the arm 10 of the valve as the roll-over cylinder 11 moves either to the right or left, as shown in Fig. 2. The arm 9 is carried by a bracket 12 mounted on the head of the cylinder 11 but any other suitable means for actuating the valve may be resorted to. The valve 7 is automatically closed by spring means 13, as soon as the arm 9 has passed the point where it holds the valve open. It will thus be seen that the valve is momentarily opened shortly before the flask is placed on the table and again shortly after the flask is removed therefrom, directing two blasts of compressed air or the like upon the table top, insuring the removal of all particles therefrom.

In the form of my invention shown in Fig. 5 the valve 8 has a stem 15 projecting toward the axle of the roll-over frame. Mounted upon this axle is a cam plate carrying a freely rotating roller 16 which engages the end of stem 15 or a projection 17 on the pivoted arm 18 carried by the casing of the valve 8. It will thus be seen that this mechanism will function in the same manner as that described above, causing two jets of air to pass over the face of the jolt table during a single operation of the machine.

It is of course understood that the specific description of the structure set forth above may be departed from without departing from the spirit of my invention as set forth in this specification and the appended claims. Having now described my invention, I claim:

1. A jolt-roll-over mechanism, comprising:
   a. a jolt table;
   b. a pipe having a series of perforations along one face thereof directed toward the table top;
   c. means for furnishing fluid to the pipe;
   d. means for automatically actuating the pipe;
   e. means for removing sand and other particles from the table; and
   f. means for directing compressed air or the like therethrough to blow off sand and other particles from the table.

2. A jolt-roll-over mechanism, comprising:
   a. a jolt table;
   b. a pipe having a series of perforations along one face thereof directed toward the table top;
   c. means for furnishing fluid to the pipe;
   d. means for automatically actuating the pipe;
   e. means for removing sand and other particles from the table; and
   f. means for automatically closing the pipe by means of a spring.

3. A jolt-roll-over mechanism, comprising:
   a. a jolt table;
   b. a pipe having a series of perforations along one face thereof directed toward the table top;
   c. means for furnishing fluid to the pipe;
   d. means for automatically actuating the pipe;
   e. means for removing sand and other particles from the table; and
   f. means for automatically actuating the valve by means of a cam plate and roller.

4. A jolt-roll-over mechanism, comprising:
   a. a jolt table;
   b. a pipe having a series of perforations along one face thereof directed toward the table top;
   c. means for furnishing fluid to the pipe;
   d. means for automatically actuating the pipe;
   e. means for removing sand and other particles from the table; and
   f. means for automatically closing the pipe by means of a spring and cam plate.

5. A jolt-roll-over mechanism, comprising:
   a. a jolt table;
   b. a pipe having a series of perforations along one face thereof directed toward the table top;
   c. means for furnishing fluid to the pipe;
   d. means for automatically actuating the pipe;
   e. means for removing sand and other particles from the table; and
   f. means for automatically actuating the valve by means of a cam plate and roller.
1. In a mechanism of the character described, a jolt table, roll-over mechanism, a perforated pipe arranged substantially at the level of the table top, the perforations being directed toward the upper surface of the table, means for supplying a fluid under pressure to the perforated pipe, means for controlling the flow of fluid through the pipe and means connected with the roll-over mechanism for automatically actuating the control means during the functioning of the apparatus.

2. In combination with a roll-over machine and its table, a pipe adjacent the table for conveying a gas under pressure, said pipe having perforations therein, directed toward the table, means for conveying the gas to said pipe and means for admitting and cutting off the supply of gas thereto, said last mentioned means including a valve in the gas conveying means and a projection from a moving part of the roll-over machine whereby the valve is opened.

3. In a machine of the character described, having a table on which a mold is to be deposited, the combination of a perforated pipe, substantially at the level of the table top with a valve controlled pipe connected thereto and provided with means for automatically closing the valve, said machine having means for automatically opening the valve when the machine is operated, said last named means comprising a cam carried by the roll-over axle and adapted to coact with the valve for the purpose stated.

4. In a mechanism of the character described, a jolt table, roll-over mechanism, a perforated pipe arranged substantially at the level of the table top, the perforations being directed toward the upper surface of the table, means for supplying a fluid under pressure to the perforated pipe, means for controlling the flow of fluid through the pipe and means connected with the roll-over mechanism for automatically actuating the control means during the functioning of the apparatus, comprising a cam carried by the axle of the roll-over mechanism for actuating the fluid control mechanism in one direction.

In witness whereof, I hereunto subscribe my name to this specification.

FREDERICK A. SEEMAN.