

cylinders 18, 18a, a constant supply or replenishment of the supply is maintained through the feed slides 14, 14a as is taught in the companion applications above referred to. The relative arrangement of the pistons and apertures in the slide are such as to prevent an excessive charge of the cylinder.

The dies 31, 31a are cooled by the circulation of water or another cooling agent through passages 54, 54a, arranged adjacent the impression or mold cavity 30 and having discharge tubes 55, 55a as illustrated in Fig. 3 of the drawings.

While it has been stated through the specification that two differently colored thermoplastics may be used in forming the successive series of die castings, it is within the scope of this invention to cast two different types of materials suitable for die casting operations which would vary not only as to color but as to structure. For example, it is possible to make a combined plastic and metallic casting, it being understood that separate heating units will be provided for the separate materials in order to control the melting point or to bring the different materials to the desired temperature suitable for performing the casting operation. This combination would find its usefulness in making, for example, a pull chain on which would be arranged a combination of plastic and metallic beads or other members in spaced relation thereon, the spacing being controlled by the means provided for moving the respective casting cylinders into registering position with the impression of the die. By cooling the inner ends of the cylinders 18, 18a, the pistons operating therein will be kept cool, thus preventing clogging or congestion of the cylinders.

Instead of utilizing uniform colors in each of the hoppers as at 17, 17a, each hopper may contain materials of variegated colors and a greater amount of one color to provide a base or ground color for the resulting castings to be formed. For example, if a white base color is desired, blue and red particles may also be included to produce on the resulting casting a white base or ground color with red and blue blotches appearing thereon, whereas the black base may include white, yellow, red or any other contrasting color. In using the multiple colors, it would also be desirable in some instances to use relatively large particles of the supplemental or mottling colors and finer particles of the ground color to produce a more definite contrast in the resulting casting. However, in some cases, there will be some blending of the colors in the resulting casting. One set of castings arranged on a single mounting member may be of solid unitary color and the other set of variegated colors.

Having fully described our invention, what we claim as new and desire to secure by Letters Patent, is:

1. The herein described method of casting successive series of different colored thermoplastic members which consists in providing relatively movable die parts with a mold chamber between adjacent surfaces thereof, feeding one colored thermoplastic material into one cylinder and feeding another colored thermoplastic material into an independent cylinder, heating the materials at the discharge ends of the cylinders to plastic form, intermittently moving the respective cylinders separately into registering alignment with the mold chamber of the dies, pressure discharging the heated material from the

cylinders when registering with the chamber of the die parts, and controlling the movement of the cylinders into registering or casting position with respect to the die parts to govern the number of successive castings produced by the material in one cylinder with respect to the castings produced by the material of the other cylinder.

2. The herein described method of forming independent thermoplastic die castings, which consists in providing relatively movable die parts with an impression formed between adjacent surfaces thereof with an admission passage opening into the impression on the parting line of the die parts, feeding thermoplastic material into independent cylinders arranged in juxtaposition to each other, heating the material in said cylinders at the discharge ends thereof, intermittently moving the respective cylinders into registering position with the admission passage to said impression, and selectively discharging the material from said cylinders when the respective cylinders are in registering position with said admission passage to produce die castings intermittently formed from the materials in the respective cylinders.

3. The herein described method of forming independent thermoplastic die castings along a mounting member, which consists in providing relatively movable die parts with an impression formed between adjacent surfaces thereof with an admission passage opening into the impression on the parting line of the die parts, feeding thermoplastic material into independent cylinders arranged in juxtaposition to each other, heating the material in said cylinders at the discharge ends thereof, intermittently moving the respective cylinders into registering position with the admission passage to said impression, selectively discharging the material from said cylinders when the respective cylinders are in registering position with said admission passage to produce die castings intermittently formed from the materials in the respective cylinders, and controlling the movement of the respective cylinders into registering position with said admission passage to produce a predetermined series of successive castings from the respective materials employed.

4. The method of forming thermoplastic castings on a mounting member, which consists in intermittently moving relatively movable dies toward and from spaced sections or areas of the mounting member to register with the mold cavity of the dies, and intermittently pressure injecting different colored thermoplastic materials from independent sources of supply into the mold cavity of the dies when intermittently engaging spaced sections of the mounting member to form differently colored castings on said spaced sections of a short length of said mounting member.

5. The method of forming thermoplastic castings on a mounting member, which consists in intermittently moving relatively movable dies toward and from spaced sections or areas of the mounting member to register with the mold cavity of the dies, intermittently pressure injecting different colored thermoplastic materials from independent sources of supply into the mold cavity of the dies when intermittently engaging spaced sections of the mounting member to form differently colored castings on said spaced sections of a short length of said mounting member, and selectively controlling the injection of the different colored materials into the mold cavity to regulate the grouping and arrangement of