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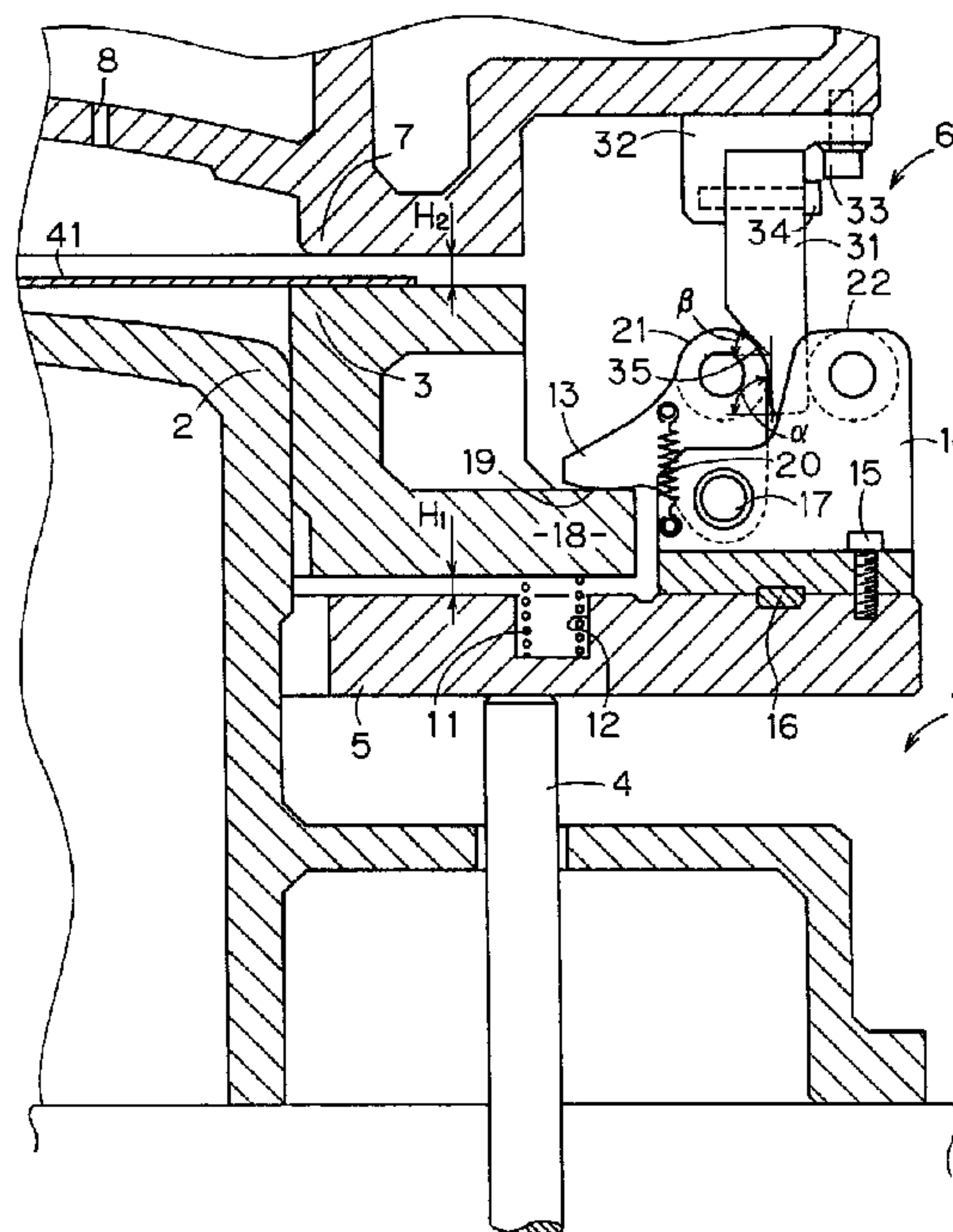
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(54) Titre : STRUCTURE POUR MATRICE D'EMBOUTISSAGE ET UNITE DE POINT FIXE CONNEXE

(54) Title: STRUCTURE FOR A DRAWING DIE AND A RUN-UP UNIT THEREFOR



(57) Abrégé/Abstract:

An object is to provide a structure for a drawing die, which can reduce, as low as possible, a noise generated when a die abuts against a thin plate on a blank holder of the drawing die. A structure for a drawing die, comprises: a punch, a blank holder vertically movably supported by a cushion pin fitted over the punch, and a die disposed such as to oppose to the punch for moving the die up and down, in which a thin plate lifted by the cushion pin is placed on the blank holder, and the die is lowered to clamp the thin plate by the blank holder and the die, thereby drawing the thin plate, wherein a sub-blank holder is disposed between the cushion pin and the blank holder, a resilient material is interposed between the sub-blank holder and the blank holder, a run-up clearance is provided between the sub-blank holder and the blank holder, a run-up lever is rotatably mounted to the sub-blank holder for pressing the blank holder to allow the blank holder to run-up before the die collides against the thin plate on the blank holder, an operation cam for driving the run-up lever is disposed on the die at a location thereof opposed to the run-up lever, and the die collides against the thin plate on the blank holder after the blank holder runs up.

ABSTRACT

An object is to provide a structure for a drawing die, which can reduce, as low as possible, a noise generated when a die abuts against a thin plate on a blank holder of the drawing die.

A structure for a drawing die, comprises: a punch, a blank holder vertically movably supported by a cushion pin fitted over the punch, and a die disposed such as to oppose to the punch for moving the die up and down, in which a thin plate lifted by the cushion pin is placed on the blank holder, and the die is lowered to clamp the thin plate by the blank holder and the die, thereby drawing the thin plate, wherein a sub-blank holder is disposed between the cushion pin and the blank holder, a resilient material is interposed between the sub-blank holder and the blank holder, a run-up clearance is provided between the sub-blank holder and the blank holder, a run-up lever is rotatably mounted to the sub-blank holder for pressing the blank holder to allow the blank holder to run up before the die collides against the thin plate on the blank holder, an operation cam for driving the run-up lever is disposed on the die at a location thereof opposed to the run-up lever, and the die collides against the thin plate on the blank holder after the blank holder runs up.

