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(54) **MOLD-PRESSING DEVICE**

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(52) **U.S. Cl.** **83/588**; 83/167; 83/633; 83/686; D19/72

(58) **Field of Search** 83/167, 588, 633, 83/686; D19/72

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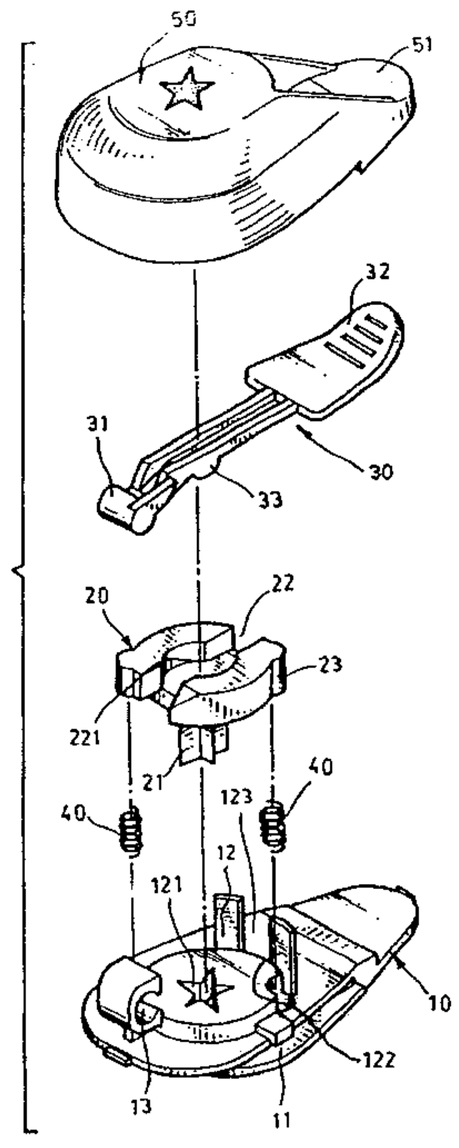
(57) **ABSTRACT**

A mold-pressing device including a seat body formed with a horizontal fissure at one end and a vertical chamber communicated with the fissure. A mold block is disposed in the chamber. One face of the mold block is disposed with a solid die, while the other face of the mold block is disposed with a channel passing through the mold block. A pressing lever is pivotally disposed in the channel of the mold block. A housing covers the seat body and is formed with a window for a pressing section of the pressing lever to extend therethrough. In use, a paper or a sheet is pushed into the fissure of the seat body and then the pressing section of the pressing lever is depressed, whereby a protuberance of the pressing lever is moved downward to force the mold block downward with the die punching the paper or the sheet placed in the fissure. Therefore, a product with a shape as that of the die is formed.

13 Claims, 3 Drawing Sheets



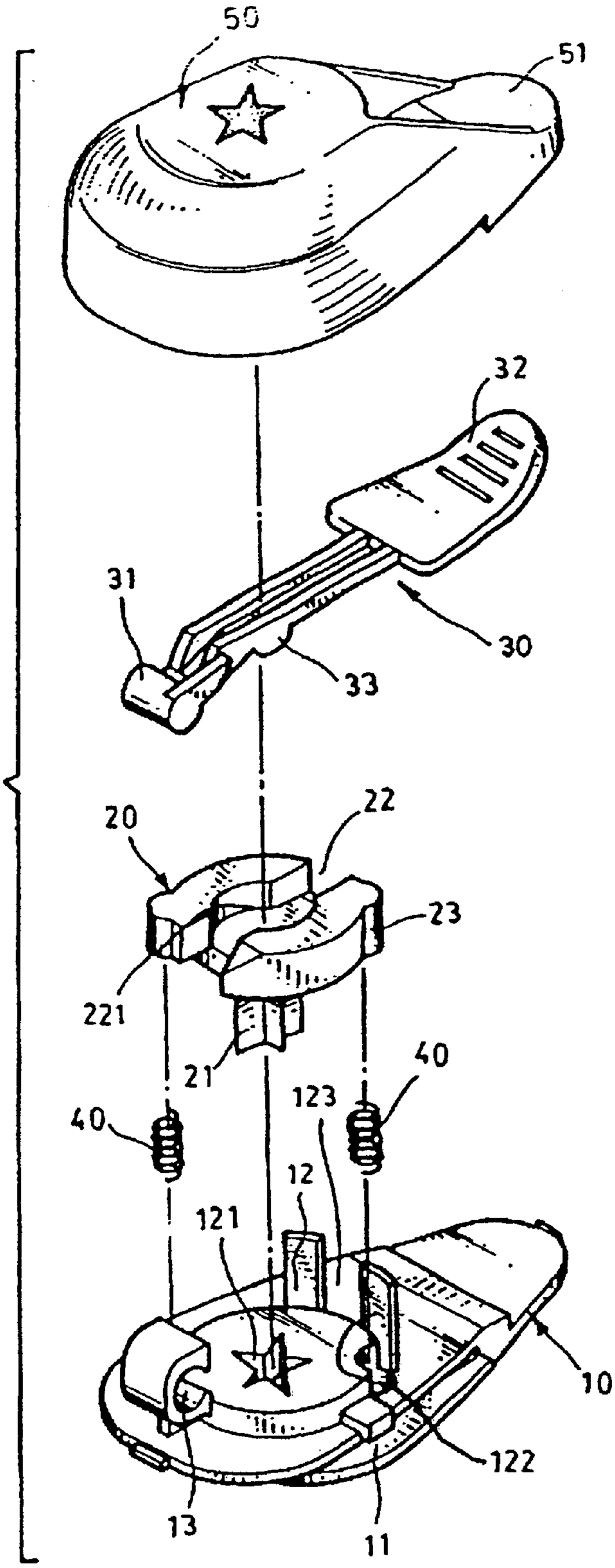


FIG. 1

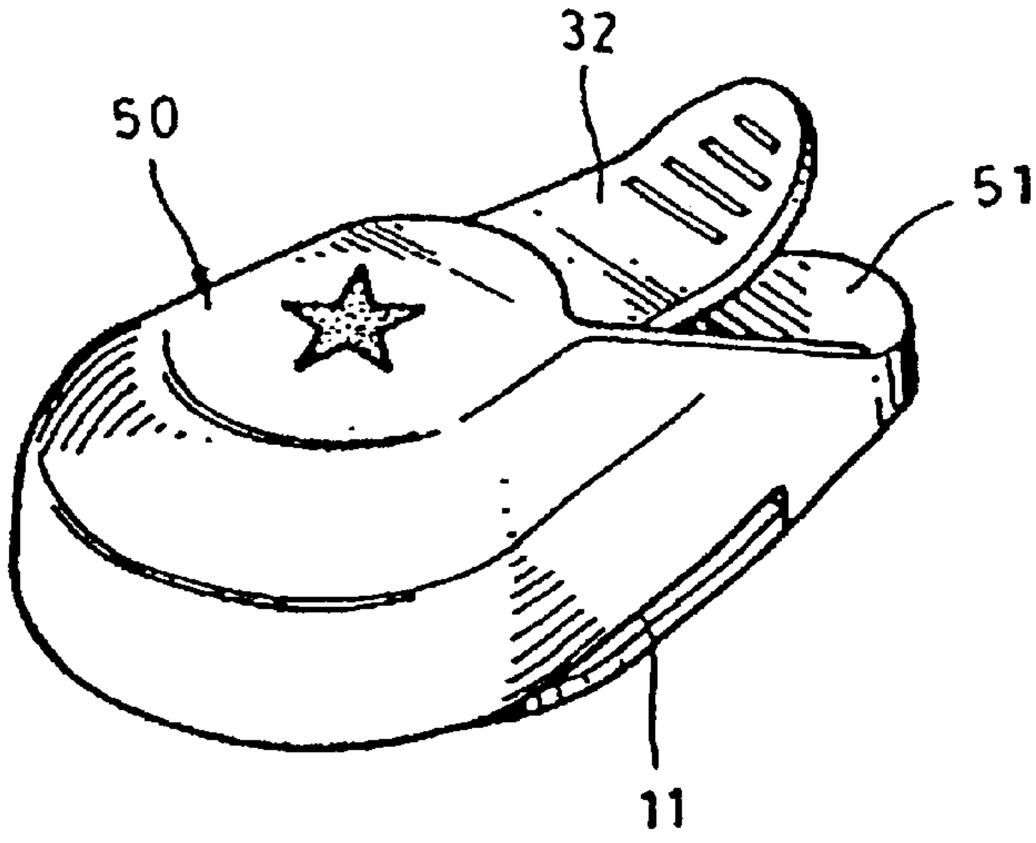


FIG. 2

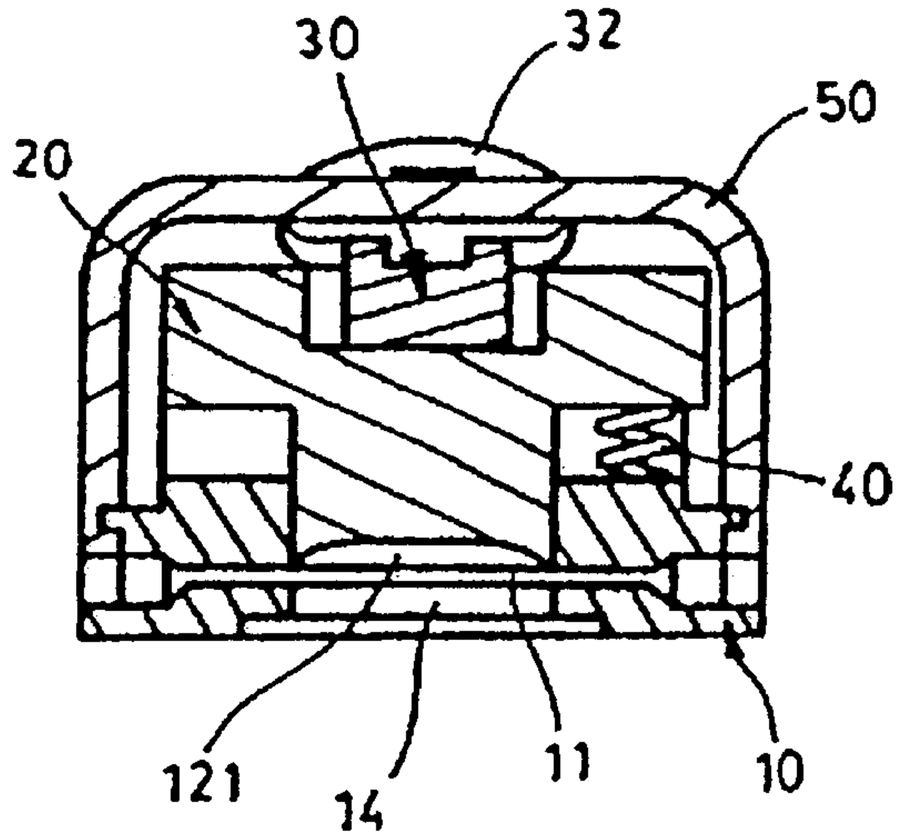


FIG. 3

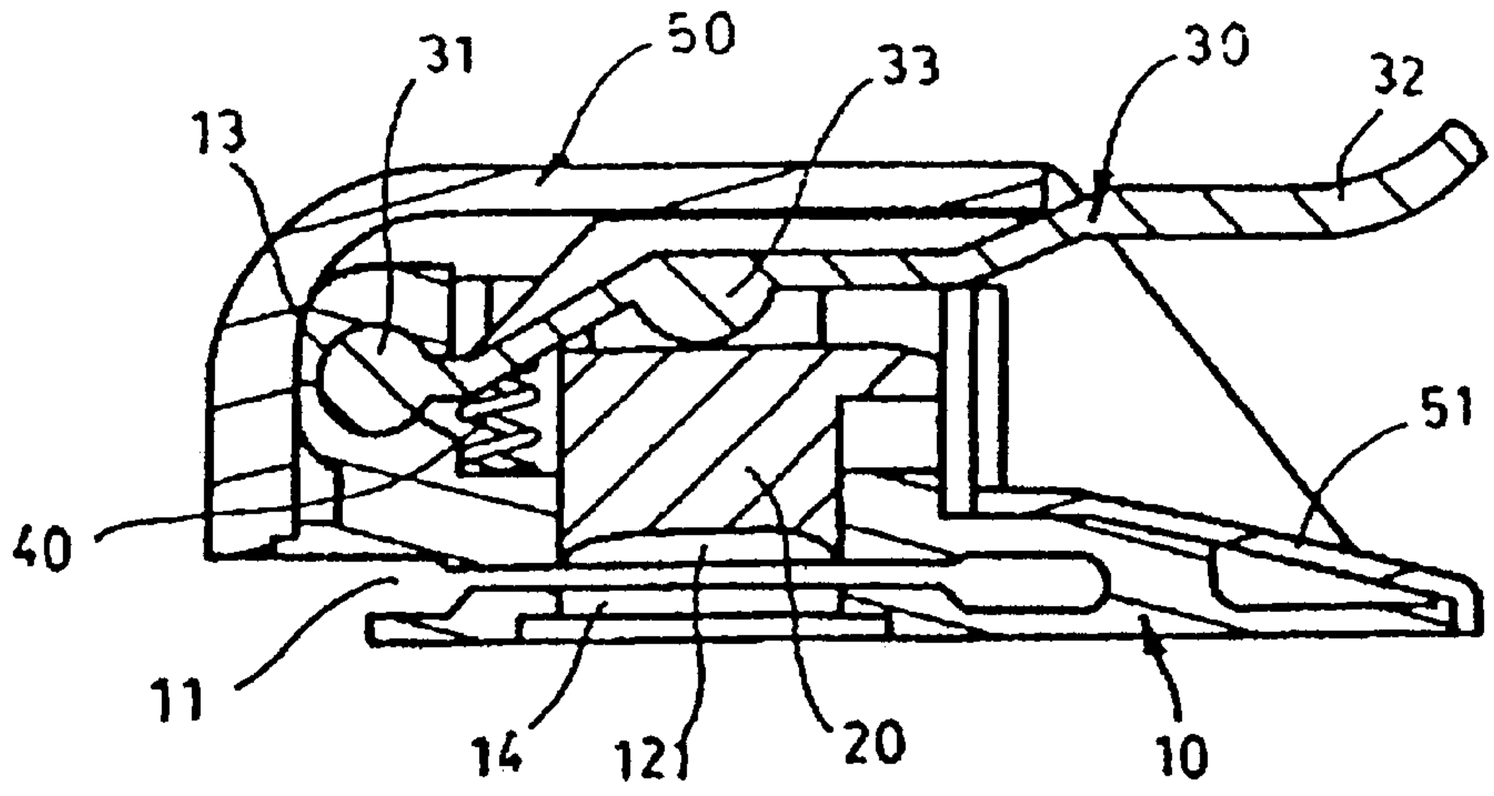


FIG. 4

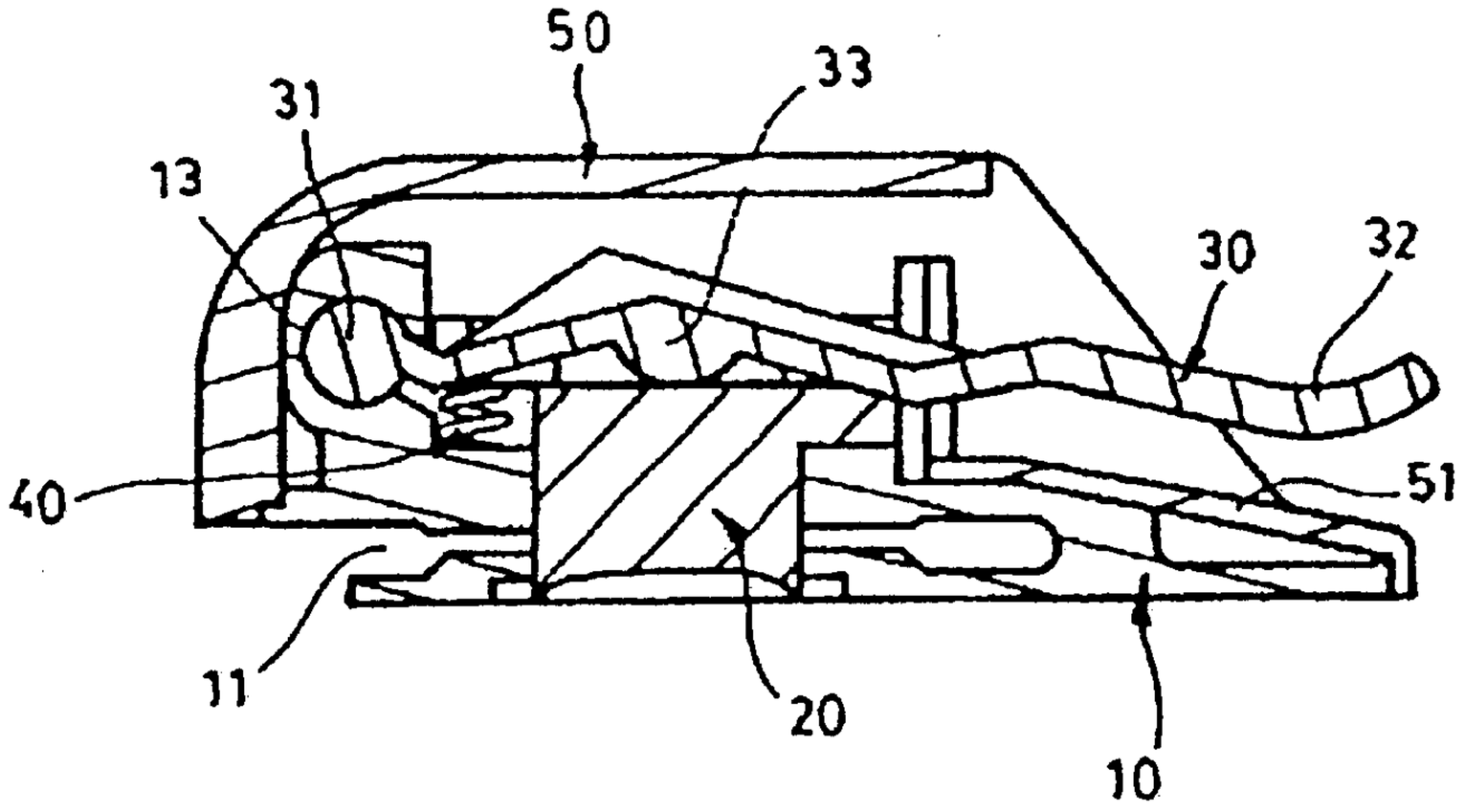


FIG. 5

MOLD-PRESSING DEVICE

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.

BACKGROUND OF THE INVENTION

The present invention relates to a mold-pressing device in which a mold block is movably disposed in a seat body. A pressing lever is pivotally disposed on the seat body for pressing the mold block. The seat body is formed with a fissure and the mold block is formed with a die. A paper or a sheet can be pushed into the fissure of the seat body and then the pressing section of the pressing lever is depressed, whereby the mold block is forced downward with the die punching the paper or the sheet placed in the fissure. Therefore, many products with a shape as that of the die can be formed.

Generally, when it is desired to manufacture a great amount of identical pictures, first many papers or sheets are stamped with a mold painted with ink. Then the pictures are cut off by a knife or a pair of scissors. Such procedure is very troublesome and waste-consuming. Alternatively, many papers can be stacked and cut off at one time to save time. However, in the case that the paper has a considerable thickness or the picture is too small, it will be hard to cut off the picture with smooth edges.

SUMMARY OF THE INVENTION

It is therefore a primary object of the present invention to provide a mold-pressing device including a seat body formed with a horizontal fissure and a vertical chamber communicated with the fissure. A mold block is disposed in the chamber. One face of the mold block is disposed with a solid die, while the other face of the mold block is disposed with a channel passing through the mold block. A pressing lever is pivotally disposed in the channel of the mold block. A housing covers the seat body and is formed with a window for a pressing section of the pressing lever to extend therethrough. In use, a paper or a sheet is pushed into the fissure of the seat body and then the pressing section of the pressing lever is depressed to force the mold block downward with the die punching the paper or the sheet placed in the fissure. Therefore, a product with a shape as that of the die is formed.

It is a further object of the present invention to provide the above mold-pressing device, in which a resilient member is fitted under the mold block in the chamber of the seat body. After the mold block is released from the pressing force of the pressing lever, the resilient member serves to restore the mold block to its home position.

It is still a further object of the present invention to provide the above mold-pressing device in which the mold block is replaceably placed in the seat body, whereby the mold block can be easily replaced by another mold block to manufacture different products.

The present invention can be best understood through the following description and accompanying drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective exploded view of the present invention;

FIG. **2** is a perspective assembled view of the present invention;

FIG. **3** is a front sectional view of the present invention, wherein the pressing lever is not pressed downward;

FIG. **4** is a side sectional view of the present invention, wherein the pressing lever is not pressed downward; and

FIG. **5** is a side sectional view according to FIG. **4**, wherein the pressing lever is pressed downward to punch the paper or the sheet.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Please refer to FIGS. **1** to **5**. The mold-pressing device of the present invention includes a seat body **10** formed with a horizontal fissure **11** at one end and a vertical chamber **12**. The bottom of the chamber **12** is formed with an opening **121** communicated with the fissure **11**. An upward extension **122** is disposed on rear side of the chamber **12**. A pair of opposite notches **123** are formed on the periphery of the chamber **12**. An insertion cavity **13** is disposed in one notch **123** opposite to the other notch **123**. The bottom of the seat body **10** is formed with a through hole **14** communicated with the fissure **11** opposite to the opening **121**.

A mold block **20** is disposed on the seat body **20**. One face of the mold block **20** facing the fissure **11** is disposed with a solid die **21** such as an animal or a cartoon picture. The other face of the mold block **20** is disposed with a channel **22** passing through the mold block **20**. Two opposite recesses **221** are formed on two sides of the channel **22**. The mold block **20** is disposed with a projection **23** corresponding to the extension **122** to be fitted therein.

A pressing lever **30** is disposed in the mold block **20**. One end of the pressing lever **30** is disposed with a pivot shaft **31** for rotatably inserting in the insertion cavity **13** of the seat body **10**, whereby the pressing lever **30** is pivotally disposed on the seat body **10**. The other end of the pressing lever **30** is disposed with an upward bent pressing section **32**. In a addition, the pressing lever **30** is formed with a protuberance **33** extending in a direction reverse to that of the pressing section **32** for fitting in the recesses **221** of the mold block **20**.

At least one resilient member **40** is fitted under the projection **23** of the mold block **20**. *As illustrated in FIG. 1 preferably two resilient members 40 where at least one resilient member 40 comprises first and second oppositely disposed springs adjacent to said die. The first spring is disposed along a second axis and the second spring disposed along a third axis, the third axis spaced apart from the first die axis and the second axis.*

A housing **50** covers the seat body **10** and is formed with a window **51**, whereby the pressing section **32** of the pressing lever **30** can extends through the window **51** out of the housing **50**. *As illustrated in FIGS. 1 and 2, housing 50 preferably maintains an indication corresponding to the shape of die 21.*

In use, a paper or a sheet is horizontally placed in the fissure **11** of the seat body **10** and pushed inward to a true position. *Fissure 11 is maintained perpendicular to the movement axis of die 21.* Then the pressing section **32** of the pressing lever **30** is pivotally depressed about the pivot shaft **13**, whereby the protuberance **33** of the pressing lever **30** is moved downward to exert a force onto the mold block **20**. Accordingly, the mold block **20** is forced downward with the die **21** passing through the opening **121**, *which maintains a shape corresponding to die 21,* of the chamber **12** to punch the paper or the sheet placed in the fissure **11**. Therefore, a product with a shape as that of the die **21** is formed and moved along with the downward moving die **21** into the

through hole **14** to drop outside as shown in FIG. **5**. The resilient member **40** serves to restore the mold block **20** to its home position. At this time, the pressing section **32** of the pressing lever **30** is moved upward along with the mold block **21** to its home position. The above operation can be repeatedly performed to manufacture many products.

It is to be understood that the above description and drawings are only used for illustrating one embodiment of the present invention, not intended to limit the scope thereof. Any variation and derivation from the above description and drawings should be included in the scope of the present invention.

What is claimed is:

1. A mold-pressing device comprising:

a seat body formed with a horizontal fissure at one end and a vertical chamber, a bottom of the chamber being formed with an opening communicated with the fissure, a pair of opposite notches being formed on the periphery of the chamber, an insertion cavity being disposed in one notch opposite to the other notch, a bottom of the seat body being formed with a through hole communicated with the fissure opposite to the opening;

a mold block disposed on the seat body, one face of the mold block facing the fissure being disposed with a solid die, the other face of the mold block being disposed with a channel passing through the mold block;

a pressing lever disposed in the channel of the mold block, one end of the pressing lever being disposed with a pivot shaft for rotatably inserting in the insertion cavity of the seat body, whereby the pressing lever is pivotally disposed on the seat body, the other end of the pressing lever being disposed with an upward bent pressing section, the pressing lever being further formed with a protuberance extending in a direction reverse to that of the pressing section; and

at least one resilient member fitted under the mold block in the chamber of the seat body.

2. A mold-pressing device as claimed in claim **1**, wherein an outward extension is disposed on rear side of the chamber of the seat body, the mold block being disposed with a projection for fitting in the extension, the resilient member being fitted under the projection between the bottom of the chamber and the mold block.

3. A mold-pressing device as claimed in claim **1**, wherein a housing covers the seat body and is formed with a window, whereby the pressing section of the pressing lever extends through the window out of the housing.

4. A mold-pressing device as claimed in claim **1**, wherein the resilient member is a spring.

5. A punch for punching a sheet of material, said punch comprising:

a body formed with a fissure for receiving the sheet of material, and a pivot shaft defining a pivot point;

a lever pivotably mounted about said pivot point of said pivot shaft;

a block positionable between said lever and said body, said block having a die moveable along a first axis, said block further comprising a channel configured to receive said lever; and

at least one resilient member adjacent to said die along a second axis spaced apart from said first axis, and disposed between said block and said body, wherein when said block is positioned between said lever and said body and when said lever is pivoted about said pivot point between a first position and a second position, said lever engages said block having said axially moveable die to punch the sheet of material.

6. The punch according to claim 5, wherein said at least one resilient member comprises first and second oppositely disposed springs adjacent to said die, said first spring disposed along said second axis and said second spring disposed along a third axis, said third axis spaced apart from said first and second axes.

7. The punch according to claim 5, wherein said fissure is substantially perpendicular to said first axis.

8. The punch according to claim 7, wherein said body has an opening which communicates with said fissure.

9. The punch according to claim 8, wherein said opening has a shape that corresponds to said die.

10. The punch according to claim 7, wherein said body has a pair of aligned openings which communicate with said fissure.

11. The punch according to claim 5, wherein said punch further comprises a housing which houses said block when positioned between said body and said lever.

12. The punch according to claim 11, wherein said lever extends through said housing.

13. The punch according to claim 11, wherein said housing provides an indication corresponding to a shape of said die.

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