

Candidate's answer

Introduction of the Description

The invention refers to a letter-weighing device, as well as to a method and a product for manufacturing the device of the invention.

Several existing letter-weighing devices require the use of a plurality of counterweights . They are clumsy to use and to transport. Letter-weighing devices that do not require a plurality of counterweights are also known. One of these known devices is shown in Figs. 2A and 2B. This known ~~weighing device, which she had bought through the internet. As shown in Figs. 2A and 2 B, Lady Turntax's letter-weighing device is~~ L-shaped: a first leg 6 rests on a table top 5 and a second leg 7 vertically extends from the first leg 6 via a curved part 8. The second leg 7 has a slit 7a for receiving a letter B. As shown in the side view of Fig. 2B, if the weight of the letter is greater than a threshold value, the letter-weighing device starts tilting about the curved part 8 in the direction of the arrow A. Therefore, in this letter-weighing device the curved part 8 acts as the fulcrum.

The leg 6 further comprises a counter-weight 9. The distance between the fulcrum and the counter-weight 9 along the leg 6 defines a lever arm. The counter-weight 9 can be shifted continuously in a slot 6a along the leg 6 in the directions of arrows C. Hence the lever arm is adjustable. Each position of the counter-weight 9 corresponds to a different threshold values for the weight of the letter. If the weight of the letter held in the slit 7a is above the threshold value set by the position of the counter-weight 9, the letter-weighing device tilts. A scale on the leg 6 indicates the different threshold values. Lady Turntax's letter-weighing device has an advantage over that of Fig. 1 that different threshold values can be set without the need for separate counter-weights.

However, this device comprising a mobile counterweight is expensive and quite difficult to manufacture, since additional parts (movable counterweight, guiding rail) have to be provided.

The invention proposes a cheaper and simpler letter-weighing device, that does not require multiple counterweights, nor a movable one.

The letter-weighing device of the invention is defined by independent claim 1. In the device of the invention, it is not the lever arm of the counterweight that is adjustable, but the lever arm defined by the position of the letter. In this way, it is possible to determine the threshold value simply by changing the distance between the letter and the fulcrum. A second part of the letter weighing device acts as a counterweight, no movable weight is necessary, and the device can be manufactured in a simple and economical manner.

An advantageous way to manufacture the device is defined by the independent process claim 12. According to this method, the device is obtained by cutting and folding a foldable material along pre-determined lines.

According to the invention, also the blank of foldable material for use in the method is provided, according to as defined by independent claim 15.

Several optional features are defined in the dependent claims.

Claims

1. A letter-weighing device comprising:

- a first part (10a, 30a) having receiving means (12a, 12b, 12c, 32) for receiving a letter (B);
- a second part (10b, 30b) acting as a counterweight;
- a fulcrum (14a, 24a, 34a), about which the letter-weighing device tilts, when the weight of a letter held in the receiving means (12a, 12b, 12c, 32) exceeds a given threshold,

characterized in that:

the receiving means (12a, 12b, 12c, 32) can hold a letter at different distances from the fulcrum (14a, 24a, 34a), each distance defining a different threshold value for the weight of the letter.

2. A letter-weighing device according to claim 1, wherein the receiving means are defined by multiple slits (12a, 12b, 12c) arranged each at a different distance from the fulcrum.

3. A letter-weighing device according to claim 2, wherein the first part (10a) and the second part (10b) are formed in the same body.

4. A letter-weighing device according to claim 3, wherein the fulcrum (14a) is formed by a step (14) between the first part (10a) and the second part (10b) of the body.

5. A letter-weighing device according to claim 3, wherein the fulcrum is defined by lateral feet (24a) supporting the body.

6. A letter-weighing device according to claims 3 to 5, wherein the body is hollow.

7. A letter-weighing device according to claims 3 to 5, wherein the body has a triangular shape.

8. A letter-weighing device according to claim 1, wherein the receiving means are defined by a single slit (32), whose distance from the fulcrum can be adjusted.

9. A letter-weighing device according to claim 8, wherein the first part (30a) and the second part (30b) are formed each by a separate body, so that the distance between the slit and the fulcrum can be adjusted by sliding the first part (30a) relative to the second part (30b).

10. A letter-weighing device according to any preceding claim, wherein the first part (10a, 30a) further comprises a scale, indicating the threshold value for each distance between the letter and the fulcrum.

11. A letter-weighing device according to any preceding claim, and manufactured with sheet-like metal, such as stainless steel.
12. A method for manufacturing the letter-weighing device of claim 1, characterized in that the first part (10a, 30a) and the second part (10b, 30b) are obtained by cutting and folding a foldable material along pre-determined lines, and the letter receiving means are obtained by cutting at least one slit in the foldable material along pre-determined lines.
13. A method according to claim 12, wherein a single blank of foldable material is used.
14. A method according to claim 12, wherein multiple blanks of foldable material are used.
15. A blank of foldable material for use in the method of claim 12, characterized in that:
 - cutting and folding lines corresponding to the outline of the first and second part of the device of claim 1 are pre-formed in the blank;
 - cutting lines corresponding to at least one slit defining the receiving means of the device of claim 1 are pre-formed in the blank.
16. A blank according to claim 14, wherein the pre-formed lines are printed, perforated or scored.
17. A blank according to claim 14, wherein the foldable material is cardboard.