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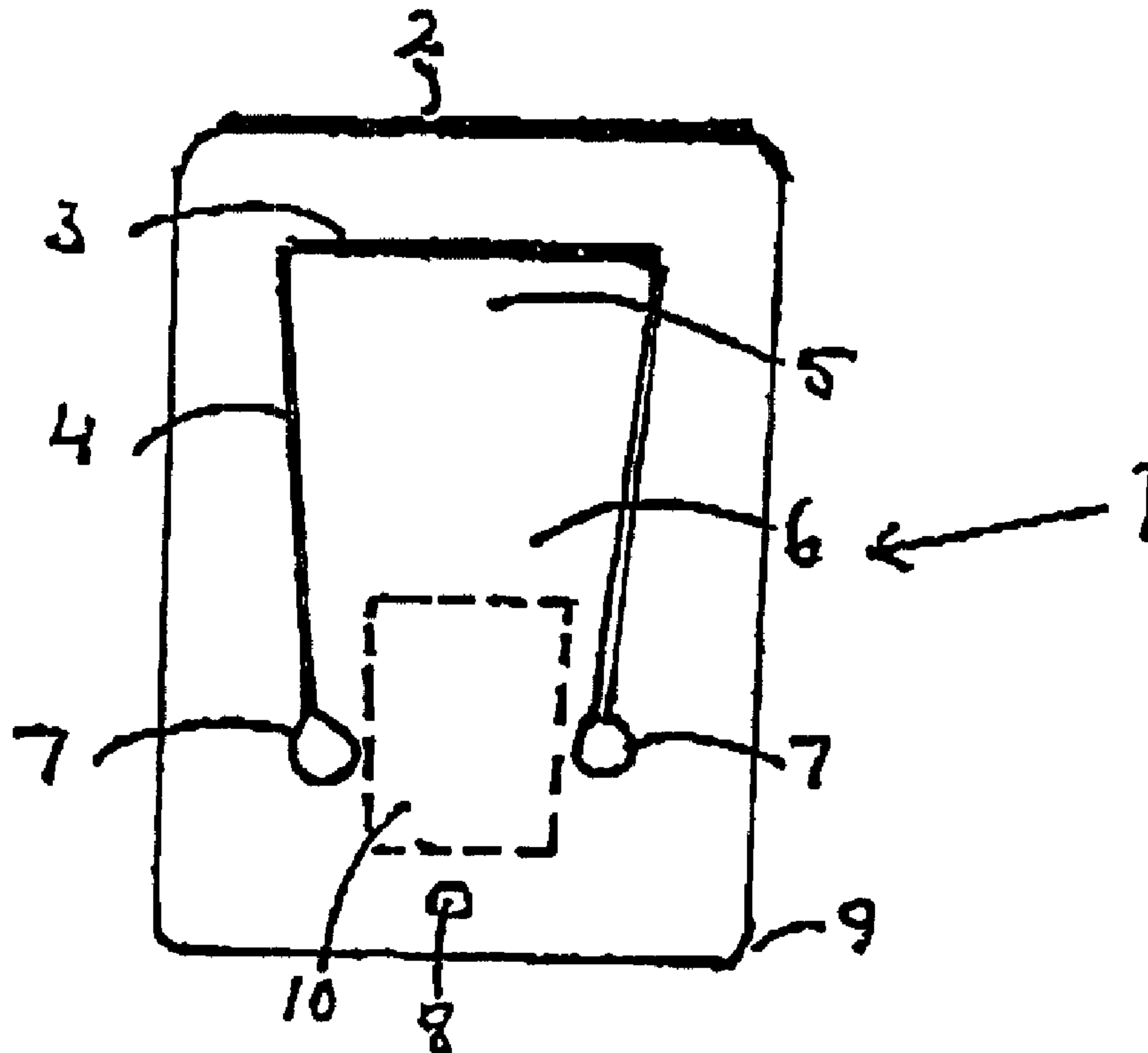
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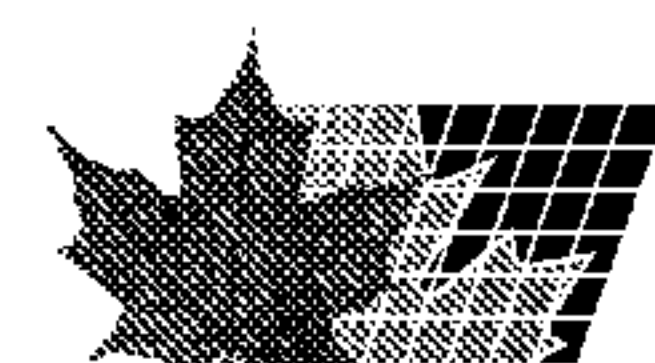
(54) Titre : GRATTOIR

(54) Title: SCRAPING TOOL



(57) Abrégé/Abstract:

The invention relates to a scraping tool (1) for removal of a coating on a surface. The tool has a plate with a first scraping edge (2) that is a straight outer edge of the plate. The plate has an inner part with a slit (4) defined therein to form a tongue-like element (5). The element has a straight edge and is bendable when in use. The edge is a second scraping edge (3) that may bear against the surface substantially parallel to the first scraping edge for simultaneous scraping of the surface. This provides a more powerful scraping effect.



Abstract

The invention relates to a scraping tool (1) for removal of a coating on a surface. The tool has a plate with a first scraping edge (2) that is a straight outer edge of the plate. The plate has an inner part with a slit (4) defined
5 therein to form a tongue-like element (5). The element has a straight edge and is bendable when in use. The edge is a second scraping edge (3) that may bear against the surface substantially parallel to the first scraping edge for
10 simultaneous scraping of the surface. This provides a more powerful scraping effect.

SCRAPING TOOLTechnical field

The present invention relates to a scraping tool for
5 removing a coating on a surface. The tool includes a plate
with a first scraping edge that is a straight outer edge of
the plate.

Background of the Invention

10 When scraping off snow and ice layers from car
windshields during the winter, it is common to use a hand-held
scraping tool that has a scraping edge used to scrape away
both snow and ice. Such a scraping tool can include a plate
where one or many outer edges function as scraping edges.

15 Some of the different scraping edges have different sharpness.

The drawback of the previously known scraping tools is that
they require much effort and time to effectively remove both
snow and ice from the windshield and the remaining windows of
the car. It is therefore common to first scrape off the snow
20 from all the windows and then scrape off the ice by using more
pressure or a sharper edge to be able to remove the ice.

Summary of the Invention

One object of the present invention is therefore to
25 provide an improved scraping tool to, for example, be able to
remove both snow and ice from windshield with only one
scraping.

The present invention provides a scraping tool that

achieves the above outlined object. The scraping tool include
a plate made of plastic or metal. It is preferably shaped
like a credit card so that it can easily be stored in a
wallet. The plate has a first scraping edge that is a
5 straight outer edge of the plate. The distinguishing features
of the present invention are detailed in the subsequent
claims.

Thanks to this invention, a scraping tool is
provided that, in an excellent way, achieves the above-
10 outlined object. The scraping tool of the present invention
is a plate made from plastic or metal. It is preferably
shaped in a credit card format so that it can easily fit into
a wallet. The plate has a first scraping edge that is a
straight outer edge of the plate. The plate has an inner part
15 with a slit defined therein to form a tongue-like element.
The element has a straight edge and is bendable when in use.
The edge is a second scraping edge that is substantially
parallel to the first scraping edge. When the scraping tool
is not in use it is thus plate shaped and easy to handle and
20 takes up little space. When it is used, the second scraping
edge is bent so that the two substantially parallel scraping
edges simultaneously bear against the surface. When a
scraping movement is made, the two scraping edges scrape the
surface one after the another. In this way, an enhanced
25 scraping effect is achieved that makes it possible to, for
example, remove both snow and ice layers with one scraping
movement.

According to a preferred embodiment of the invention, an even more effective scraping may be achieved by making the second bendable scraping edge sharper than the first scraping edge. It could be made sharper than
5 conventional scraping tools since conventional tools are prone to injuring the user when the scraping edges are the outer edges of the plate. When removing snow and ice layers from car windshields the first edge removes the snow and the subsequent sharper scraping edge removes the ice layer.

10 To make the outwardly bending easier of the tongue-like element and to avoid cracking at the end points of the slit, substantially circular openings may be arranged that compensate for any tension.

To make the scraping tool visible in the dark, a
15 portion of the plate may be provided with a reflective surface and even a space for advertisements. The reflective surface makes it possible to use the tool as a conventional reflector because it may be attached to clothes and strollers with the tongue-like element.

20 As an extra safety feature, the four corners of the plate may be rounded to avoid cutting injuries.

The plate may also be provided with a hole for a key ring and with a magnet to make the scraping tool attachable to a metal surface such as a car or a refrigerator.

25 The present invention is not limited to be used as an ice scraper. Instead it may be used to remove different types of coatings from different types of surfaces such as

wax, paint, frying layers and insects.

Brief Description of the Drawings

5 The invention is described in more detail below with the help of a preferred embodiment and with reference to the attached drawings of which:

Fig. 1 shows a scraping tool from above when it is not in use and the tongue-like element with the second scraping edge is not bent outwardly, and

10 Fig. 2 shows a perspective view of a scraping tool when it is in use with the tongue-like element outwardly bent so that both scraping edges can bear against the surface for simultaneous scraping.

15 Detailed Description of a Preferred Embodiment

With reference to Fig. 1, a rectangular plate shaped scraping tool 1 is shown. The tool 1 has a first scraping edge 2 that is the outer edge of one of the short sides of the plate. An inner surface of the plate is a slit 4 so that a tongue-like element 5 is formed. The element 5 is bendable when used and has a straight edge that constitutes a second scraping edge 3. The edge 3 is substantially parallel to the first scraping edge 2. When using the scraping tool both scraping edges may bear against the surface at the same time and scrape the surface one after another to achieve a powerful scraping effect. By making the second bendable scraping edge sharper than the first a further enhanced scraping effect is

20

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provided.

In the illustrated example, the surface of the plate is provided with a reflective surface 6 to be visible in the dark. The surface 6 may also have a surface for
5 advertisements.

To make it easier to bend out the tongue-like element and to reduce the risk of cracks, the end points of the slits have substantially circular and tension compensating openings 7.

10 The plate also has a hole 8 in which a key ring may be attached.

In the illustrated example, the corner 9 of the plate is rounded for improved safety.

The underside of the plate has a magnet 10 so that
15 the scraping tool may easily be attached to a metal surface such as on a refrigerator or a car.

Fig. 1 show the plate shaped rectangular scraping tool 1 when the tongue-like element 5 is not outwardly bent and the tool is not in use. The illustrated example that is
20 shown in the figures is dimensioned in a credit card format and is thus small and handy and can be kept in a wallet. In the illustrated example, the first scraping edge 2 is the outer edge of one of the short sides of the plate. The inner surface of the plate is a slit 4 to form a tongue-like
25 element 5 that has a straight edge that constitutes a second scraping edge 3. The edge 3 is substantially parallel to the first scraping edge 2. The second scraping edge may be made

sharper than the first scraping edge.

Fig. 2 shows the plate shaped rectangular scraping tool 1 as it may look when the tool is used so that the tongue-like element 5, that has a straight edge that constitutes a second scraping edge 3, is outwardly bent. The second scraping edge may bear against a surface and be substantially parallel to the first scraping edge 2 that is one of the short side of the plate in the illustrated example.

Claims:

1. A scraping tool for removal of a cover on a surface, comprising a plate having a first scraping edge, the edge being a straight outer edge of the plate, the plate having an inner part having an inner slit defined therein for forming a tongue-like element, the element having a straight edge and being bendable when in use, the straight edge being a second scraping edge that is bearable against the surface and being substantially parallel to the first scraping edge for simultaneous scraping of the surface.
2. The scraping tool according to claim 1 wherein the second scraping edge is sharper than the first scraping edge to achieve a more powerful scraping effect.
3. The scraping tool according to claim 1 or 2 wherein a surface of the plate is coated with a reflective surface.
4. The scraping tool according to any one of claims 1 to 3 wherein end points of the slit have circular pressure compensating openings arranged to make an outward bending of the tongue-like element easier.
5. The scraping tool according to any one of claims 1 to 4 wherein the plate has a substantially circular opening defined therein.
6. The scraping tool according to claim 5 wherein a key ring is attached to the circular opening.
7. The scraping tool according to any one of claims 1 to 6 wherein the plate has a rounded corner.
8. The scraping tool according to any one of claims 1 to 7 wherein the tool has a magnet for attachment to a metal surface.
9. The scraping tool according to claim 8 wherein the metal surface is a car or refrigerator.

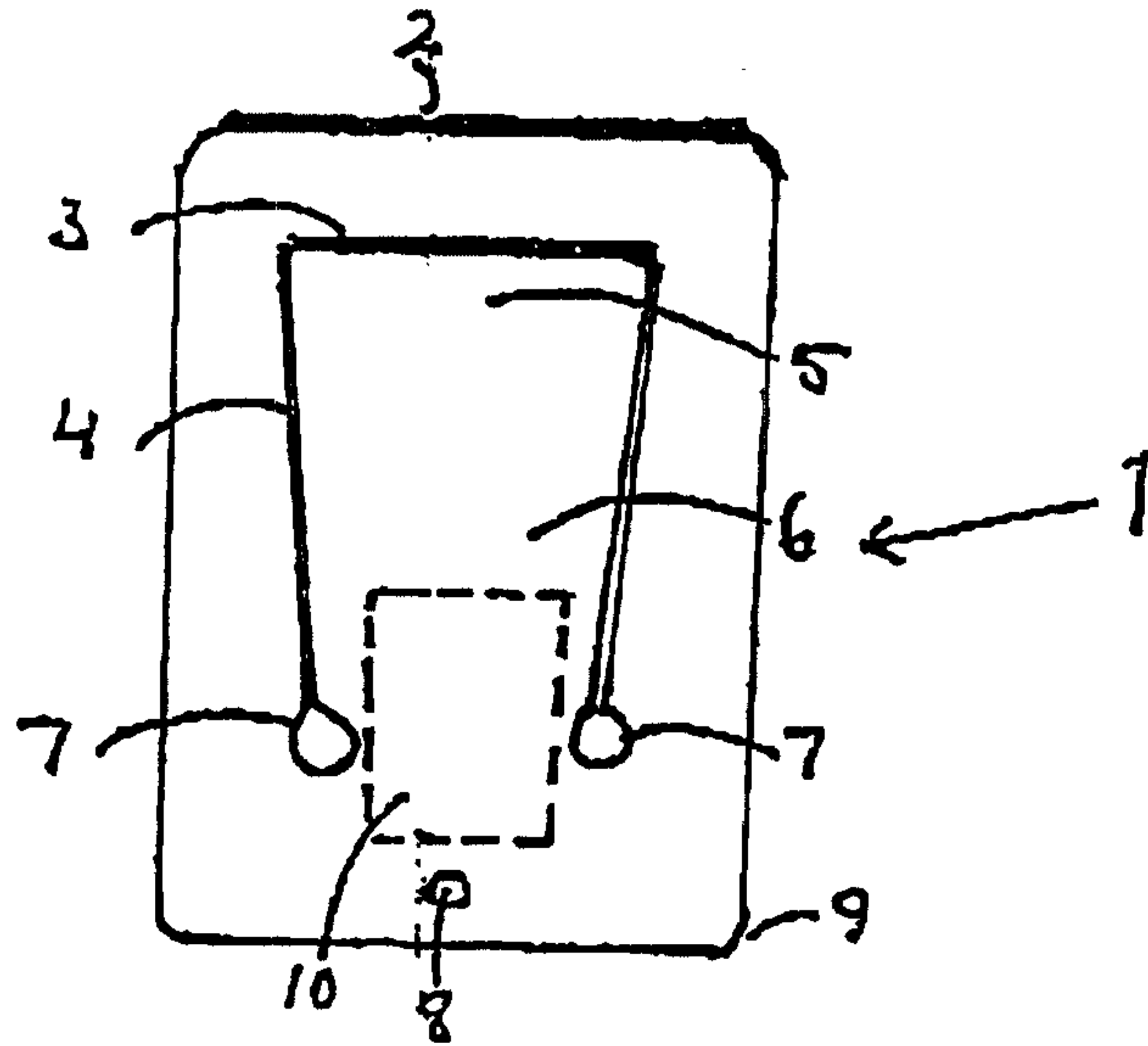


Fig. 1

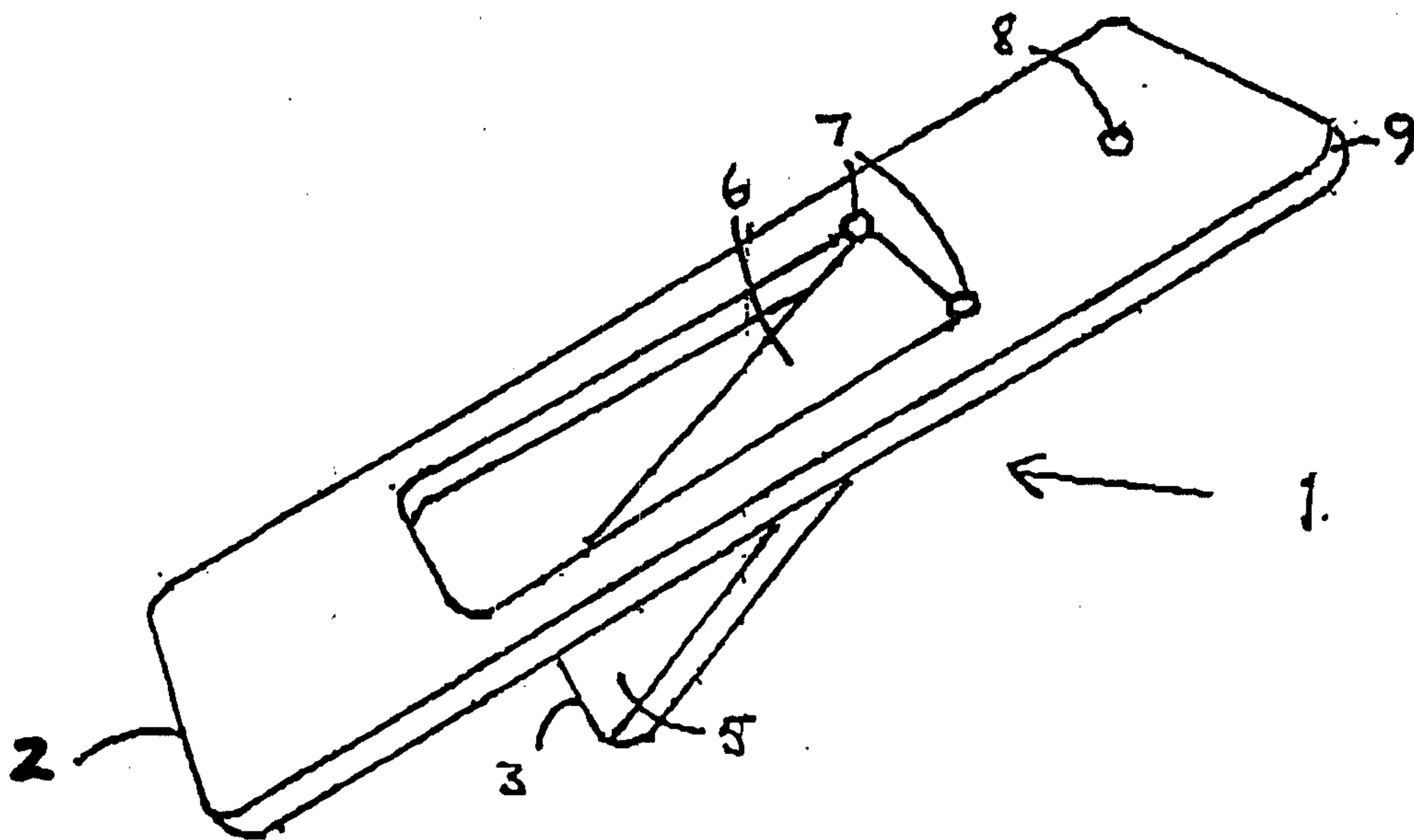


Fig. 2

