

AMENDED

FORM 1



APPLICATION ACCEPTED AND AMENDMENTS  
ALLOWED 12-2-90

596753

G.R. CULLEN & CO.

COMMONWEALTH OF AUSTRALIA

PATENTS ACT 1952

21901/88

CONVENTION APPLICATION FOR A STANDARD PATENT

I/We, BRUTE LIMITED of Unit 1, Hayes Lane Industrial Estate, Folkes Road, Lye, West Midlands, DY9 8RN, England hereby apply for the grant of a standard patent for an invention entitled:

SWEEP MOP PAD HOLDER

which is described in the accompanying complete specification.

DETAILS OF BASIC APPLICATION(S):-

Number of basic application(s):-  
87 21439

Name(s) of Convention Country(ies) in which Basic Application(s) was/were filed:-  
United Kingdom

Date(s) of Basic applications(s):-  
11 September, 1987

The address for service is:-

G.R. Cullen & Co.,  
79 Eagle Street,  
Brisbane, Queensland, 4000,  
Australia.

DATED this eighth day of January, 1990

BRUTE LIMITED

By:

Registered Patent Attorney

AUSTRALIA

Patents Act

DECLARATION FOR A PATENT APPLICATION

INSTRUCTIONS

(a) Insert "Convention" if applicable
(b) Insert FULL name(s) of applicant(s)

In support of the (a) Convention application made by (b) Scot Young Service Systems Limited

(c) Insert "of addition" if applicable
(d) Insert TITLE of invention

(hereinafter called "applicant(s) for a patent (c) for an invention entitled (d) "SWEEP MOP PAD HOLDER"

(e) Insert FULL name(s) AND address(es) of declarant(s) (See headnote\*)

I/We (e) Ronald Alexander Young, of 4 Anderson Street, London SW3, GB

do solemnly and sincerely declare as follows:

- 1. I am/We are the applicant(s). (or, in the case of an application by a body corporate)
2. I am/We are authorized to make this declaration on behalf of the applicant(s).
3. I am/We are the actual inventor(s) of the invention. (or, where the applicant(s) is/are not the actual inventor(s))

(f) Insert FULL name(s) AND address(es) of actual inventor(s)

2. (f) Anthony Michael Jones, of 37 Marquis Drive, Lodgefield Park, Halesowen, West Midlands, B62 8TE, GB

(g) Recite how applicant(s) derive(s) title from actual inventor(s) (See headnote\*\*)

is/are the actual inventor(s) of the invention and the facts upon which the applicant(s) is/are entitled to make the application are as follows:

(g) The said SCOT YOUNG SERVICE SYSTEMS LIMITED is the assignee of the said ANTHONY MICHAEL JONES.

(Note: Paragraphs 3 and 4 apply only to Convention applications)

(h) Insert country, filing date, and basic applicant(s) for the/or EACH basic application

3. The basic application(s) for patent or similar protection on which the application is based is/are identified by country, filing date, and basic applicant(s) as follows:

(h) Great Britain, 11 September 1987
Scot Young Service Systems Limited

4. The basic application(s) referred to in paragraph 3 hereof was/were the first application(s) made in a Convention country in respect of the invention the subject of the application.

(k) Insert PLACE of signing

Declared at (k) Stourbridge, GB

(l) Insert DATE of signing

Dated (l) 5th September 1988

(m) Signature(s) of declarant(s)

(m) Ronald Alex Young

Notes: No legalization or other witness required

To: The Commissioner of Patents

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**(12) PATENT ABRIDGMENT (11) Document No. AU-B-21901/88**  
**(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 596753**

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(54) Title  
**SWEEP MOP PAD HOLDER**

International Patent Classification(s)  
(51)<sup>4</sup> **A47L 013/258**

(21) Application No. : **21901/88**

(22) Application Date : **07.09.88**

(30) Priority Data

|                |                 |                          |
|----------------|-----------------|--------------------------|
| (31) Number    | (32) Date       | (33) Country             |
| <b>8721439</b> | <b>11.09.87</b> | <b>GB UNITED KINGDOM</b> |

(43) Publication Date : **16.03.89**

(44) Publication Date of Accepted Application : **10.05.90**

(71) Applicant(s)  
**BRUTE LIMITED**

(72) Inventor(s)  
**ANTHONY MICHAEL JONES**

(74) Attorney or Agent  
**G.R. CULLEN & COMPANY, BRISBANE.**

(57) Claim

1. A collapsible mop pad holder comprising two opposite end leaves pivotally mounted on a central support connected or connectible to a handle, and catch means operative to latch the end leaves in an erected condition of the holder, wherein the catch means comprise a latch member mounted on one of the leaves and depressible from a latching position, in which it engages the other leaf to latch both leaves together and thus maintain the erected condition of the holder, to an unlatching position in which it is retained until the mop pad holder is collapsed with the arrangement being such that on re-erection of the mop pad holder the latch member automatically assumes said latching position.

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This is a copy of the original specification and drawings of the invention as amended under Section 49

1

and is correct for printing.

COMMONWEALTH OF AUSTRALIA

The Patents Act 1952-1969

Name of Applicant(s): BRUTE LIMITED

Address of Applicant(s): Unit 1,  
Hayes Lane Industrial Estate,  
Folkes Road,  
Lye,  
West Midlands, DY9 8RN,  
England



Actual Inventor(s): Anthony Michael Jones

Address for Service: G.R. CULLEN & COMPANY,  
Patent & Trade Mark Attorneys,  
79 Eagle Street,  
Brisbane, Qld. 4000,  
Australia.

COMPLETE SPECIFICATION FOR THE INVENTION ENTITLED:

SWEEP MOP PAD HOLDER

The following statement is a full description of the invention including the best method of performing it known to us:

"SWEEP MOP PAD HOLDER"

The invention relates to sweep mops which  
comprise a mop pad mounted on a pad holder attached through  
an articulating joint to a handle, so that the operative  
5 area of the pad lies flat on the floor as the mop is used  
with a sweeping action. Such mops are in general use for  
mopping of large floor areas, such as in hospitals and  
offices for example.

Particularly for use in a wet mopping system,  
10 including a mopping unit comprising a mop bucket combined  
with a wringer having two squeeze rollers between which the  
mop pad can be wrung out, collapsible pad holders are known  
which comprise two wing-like leaves hinged to a central  
support connected to the handle so that, when collapsed,  
15 the pad hangs down and can be pulled through the wringer.  
Locking of the leaves, in a generally aligned position,  
when the holder is erected is achieved by releasable catch  
or latch means. Prior arrangements in which the end leaves  
are each latched to the central support are complex, and/or  
20 inconvenient or difficult to operate, in respect of the  
catch or latch means.

It has been proposed that the catch arrangement  
should be operative to latch the two leaves directly one to  
the other in the region of the central support, thereby  
25 maintaining the erected condition of the holder. According

to this proposal the catch arrangement comprises a catch block provided as an inner end extension of one leaf and engaging the side limbs of a wire frame forming the other leaf, thus  
5 utilizing the flexibility and resilience of that frame for resilient catch engagement.

Although the foregoing proposal has advantages, particularly that of reduced handling, as compared with prior catch arrangements it requires that at least one of the leaves  
10 be a wire frame and has a further drawback in that the effective catch engagement depends on the weight of the mop pad used, such pads being available in a range of thicknesses or weights.

The present invention has the aim of providing the advantages of latching the two leaves one to the other, rather than separately to the central support, without the  
15 drawbacks of said prior proposal.

According to the invention a collapsible mop pad holder comprises two opposite end leaves pivotally mounted on  
20 a central support connected or connectible to a handle, and catch means operative to latch the end leaves in an erected condition of the holder, wherein the catch means comprise a latch member mounted on one of the leaves and depressible from a latching position, in which it engages the other leaf to  
25 latch both leaves together and thus maintain the erected condition of the holder, to an unlatching position in which it is retained until the mop pad holder is collapsed with the



arrangement being such that on re-erection of the mop pad holder the latch member automatically assumes said latching position.

5 Preferably the catch member is pivotally mounted



on said one leaf and resiliently urged, as by a return spring, towards the latching position. In that position it may project upwardly from an aperture in the other leaf adjacent the inner end of the latter which is extended inwardly beyond its pivot mounting. Preferably the inner end extension of said other leaf partially overlaps the inner end of said one leaf on which the latch member is pivotally mounted, and the projecting latch member may have latching engagement with an edge of said aperture.

10           The latch member may be pivotable about an axis disposed laterally of the pad holder, that is parallel to the respective pivotal axes of collapsing movement of the two leaves. It may be retained in the depressed position, until the pad holder is collapsed, by engagement with a retaining formation on the central support which formation it clears, on re-erection of the pad holder after the latch member has been spring-returned to the latching position.

15  
20           The latch member, the central support and both end leaves are conveniently plastics mouldings, to provide a pad holder consisting substantially entirely of a snap-together assembly of plastics mouldings. Such a plastics assembly, particularly employing the hand operation of the catch means which is achievable with the invention, is especially suitable for a mop to be used for the cleaning of wall surfaces, as in corridors for example, and large window areas.

25           The invention will now be further described with reference to the accompanying drawings which illustrate, by



way of example, a collapsible sweep mop pad holder in accordance with the invention. In the drawings:

Fig. 1 is a top perspective view showing the mop holder in erected condition;

5 Fig. 2 is a similar view showing the mop holder in collapsed condition;

Figs. 3 is a plan view with a handle mounting assembly removed;

10 Fig. 4 is a partial side view of one end of the pad holder;

Fig. 5 is a plan view of a central support block;

Fig. 6 is a longitudinal sectional view on the line VI-VI in Fig. 3;

15 Fig. 7 is a lateral sectional view on the line VII-VII in Fig. 3 to a larger scale; and

Figs. 9 and 10 are illustrative perspective views of a latch member of the pad holder.

20 The mop pad holder illustrated comprises a central support block 1, in the form of a plastics moulding, to which a handle (not shown) is attachable by means of a universally-jointed handle mounting 2 which is shown only in Figs. 1 and 2 and which clips into a mounting aperture 3 in the block 1. Opposed end leaves 4 and 5, also plastics mouldings, are pivotally mounted on the block  
25 1. The leaves 4 and 5 are of rectangular shape in plan view with outer ends to which the ends of a mop pad (not shown) can respectively be secured. In the erected operative condition of the holder the leaves 4 and 5 are

aligned, as shown in Figs. 1, 3 and 6 with the pad held stretched in flat configuration below the pad holder.

In the present embodiment the mop pad is wrapped around the ends of the leaves 4 and 5 to which it is secured by hook-and-loop fastening strips 6 and 7 of "Velcro" type. The ends of the pad are held down by spring loaded clip members, 8 and 9, which are pivotally mounted on the leaves and prevent the ends of the pad curling up away from the securing strips 6 and 7. The block 1 is moulded with oppositely projecting pivot stubs 10 which snap into respective pivot bores 11 moulded in the leaf 5, to define the lateral pivotal axis of the latter. In a similar but converse manner, the leaf 4 is moulded with opposed and inwardly projecting pivot stubs (not shown) which snap into pivot bores 12 in the block 1.

The inner end of the leaf 5 is extended beyond the handle mounting 2, which projects through a rectangular aperture 13, so as partially to overlap the inner end of the leaf 4. A latch member 14 is pivotally mounted on the overlapped portion of the leaf 4, being pivotal about a lateral axis and projecting through a smaller rectangular aperture 15 in the leaf 5 adjacent the inner end thereof. The latch member 14 is resiliently urged by a return spring (not shown) to the latching position illustrated more particularly in Fig. 6 in which it has latching engagement at 16 over the inner end edge of the aperture 15. This latches the leaves 4 and 5 one to the other, maintaining them in alignment and the pad holder in erected condition.

The detailed shape of the moulded latch member is illustrated particularly in Figs. 8 and 9, and the function thereof will now be described with particular reference thereto and to Figs. 6 and 7. The latching function is clearly illustrated in Fig. 6 and has already been described. To release the latch and allow the mop holder to collapse the latter is rested on the floor, for example, and the latch member 14 depressed by foot or hand. It pivots at 17 about a lateral axis defined by opposed projecting pivot stubs which snap into pivot bores in the leaf 4 on assembly of the pad holder. The downward pivotal movement of the latch member 14, as it is depressed, causes it to move into the aperture 15 and the latching surface clears the previously engaged edge of that aperture.

As the latch member 14 is depressed and moves out of latching engagement, two opposite side ears 20 on the moulded latch member 14 engage and slide along inclined side faces 21 of a rectangular end cut-out in the moulded block 1. The inclination of these faces 21 and the curved under surfaces of the ears 18 cause the latter to be cammed inwards, against the resilience provided by two slits 22 which allow the moulding 14 to flex and accommodate the inward movement of the ears 20. At the end of pivotal movement of the latch member 14 the ears 20 leave the side faces 21 and snap out, under the natural recovery of the moulding 14, to engage beneath the under surfaces 23 of the block 1 disposed alongside the faces 21 and which provide a latch retaining formation. This engagement retains the

latch member 14 in the unlatching position, leaving the pad holder free to collapse when it is lifted by the handle, as shown in Fig. 2. In the collapsed condition of the pad holder, with the mop pad draped in a loop below the leaves 4 and 5, the mop can be wrung out with the mop pad being doubled to pass through a wringer. Thus collapsing of the mop and wringing out can be accomplished without handling of the wet mop.

During the free collapsing movement of the leaf 4, the path of arcuate movement of the latch member 14 takes the ears 20 free from the retaining engagement with the block 1 and hence the latch member is returned to the normal latching position under the influence of its return spring. To erect the pad holder the handle is positioned as shown in Fig. 2 so that the handle mounting 2 can be held so that it engages the edge of the aperture 13 in the leaf 5 to support and hold the latter at a suitable inclination for it to be engaged with the floor with the leaves 4 and 5 suitably mutually inclined, whereupon pressing the collapsed mop down upon the floor will move the leaves 4 and 5 apart and back to the erected condition. As they approach mutual alignment, the curved nose 24 of the latch member 14 engages the radiused under-surface of the latching edge of the aperture 15, which displaces the latch member 14 from the latching position sufficiently to clear that edge. When the aligned condition is reached, the return spring moves the latch member 14 back to the latching position and into latching engagement with the



The claims defining the invention are as follows:

1. A collapsible mop pad holder comprising two opposite end leaves pivotally mounted on a central support connected or connectible to a handle, and catch means operative to latch the end leaves in an erected condition of the holder, wherein the catch means comprise a latch member mounted on one of the leaves and depressible from a latching position, in which it engages the other leaf to latch both leaves together and thus maintain the erected condition of the holder, to an unlatching position in which it is retained until the mop pad holder is collapsed with the arrangement being such that on re-erection of the mop pad holder the latch member automatically assumes said latching position.

2. A collapsible mop pad holder according to claim 1, wherein the latch member is pivotally mounted on said one leaf and resiliently urged, as by a return spring, towards the latching position.

3. A collapsible mop pad holder according to claim 1 or claim 2, wherein the latch member when in the latching position, with the holder erected, projects upwardly from an aperture in the other leaf adjacent the inner end of the latter which is extended beyond its pivot mounting.

4. A collapsible mop pad holder according to claim 3,



wherein the inner end extension of said other leaf partially overlaps the inner end of said one leaf on which the latch member is pivotally mounted.

5. A collapsible mop pad holder according to claim 3 or claim 4, wherein the projecting latch member has latching engagement with an edge of said aperture when the mop pad holder is erected.

6. A collapsible mop pad holder according to any one of the preceding claims, wherein the latch member is pivotable about an axis disposed parallel to the pivotal mounting axes of the end leaves of the mop pad holder.

7. A collapsible mop pad holder according to any one of the preceding claims, wherein the latch member is retained in the depressed position, until the mop pad holder is collapsed, by engagement with a retaining formation on the central support which formation it clears on re-erection of the mop pad holder after the latch member has returned to the latching position.

8. A collapsible mop pad holder according to claim 7, wherein the latch member is resiliently compressible laterally of the holder between two side projections of the latch member, the central support has an end recess with inwardly and downwardly inclined side walls engaged by said



projections as the latch member pivots to said depressed position, and the projections then engage beneath the central support to retain the latch member in the depressed position until the holder is collapsed.

9. A collapsible mop pad holder constructed and arranged substantially as herein particularly described with reference to the accompanying drawings.

DATED this 3rd day of October, 1988.

BRUTE LIMITED  
~~SCOT-YOUNG-SERVICE-SYSTEMS-LIMITED~~

By their Patent Attorneys

G.R. CULLEN & CO.

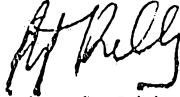




We hereby certify that the attached pages form the original specification, claims and drawings for Australian Patent Application No 21901/88 dated 7 September, 1988 in the name of SCOT YOUNG SERVICE SYSTEMS LIMITED.

DATED this thirtieth day of January, 1990

SCOT YOUNG SERVICE SYSTEMS LIMITED  
By their Patent Attorneys  
G.R. CULLEN & COMPANY



Registered Patent Attorney

21901/88

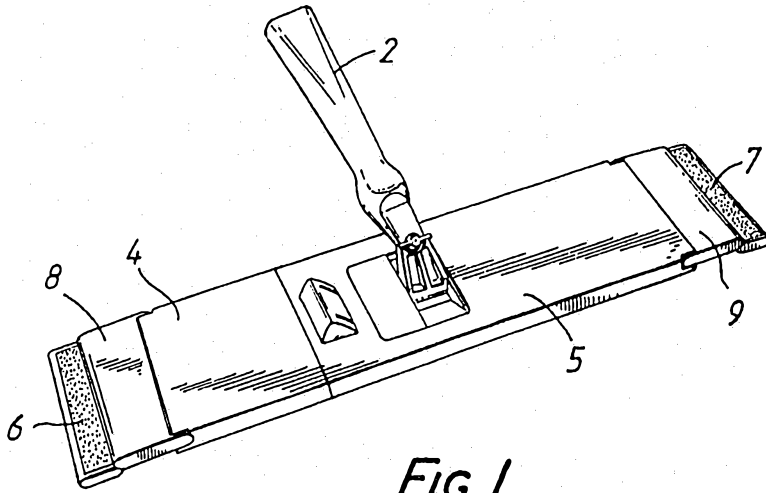


FIG. 1.

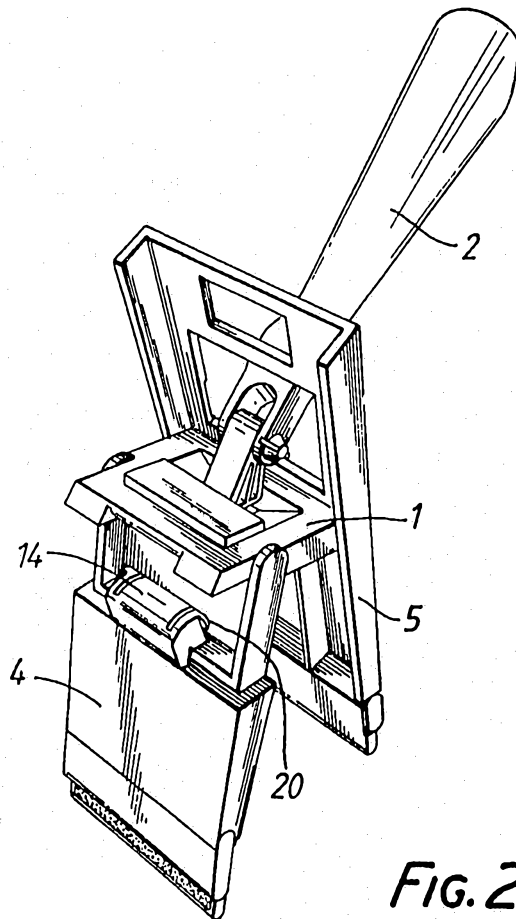
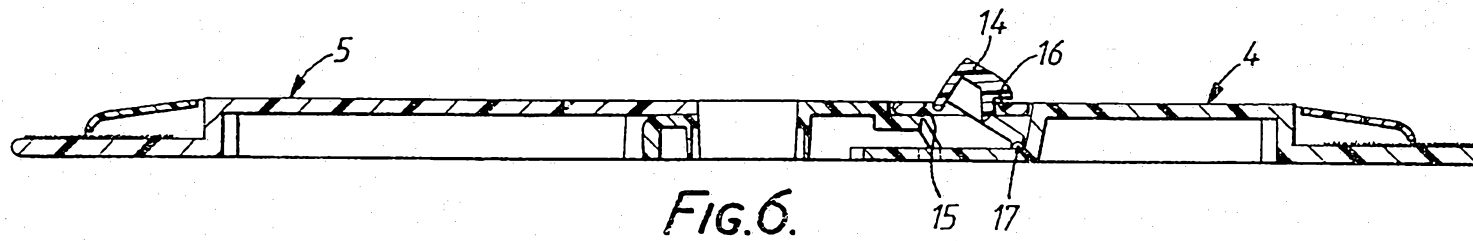
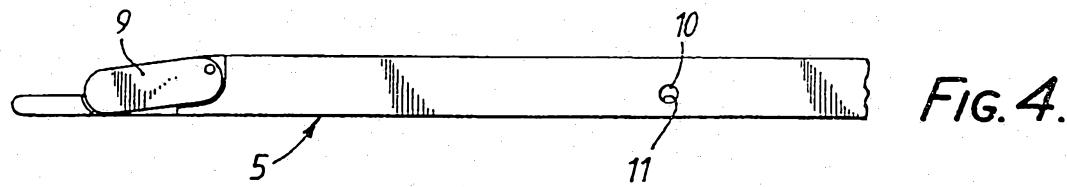
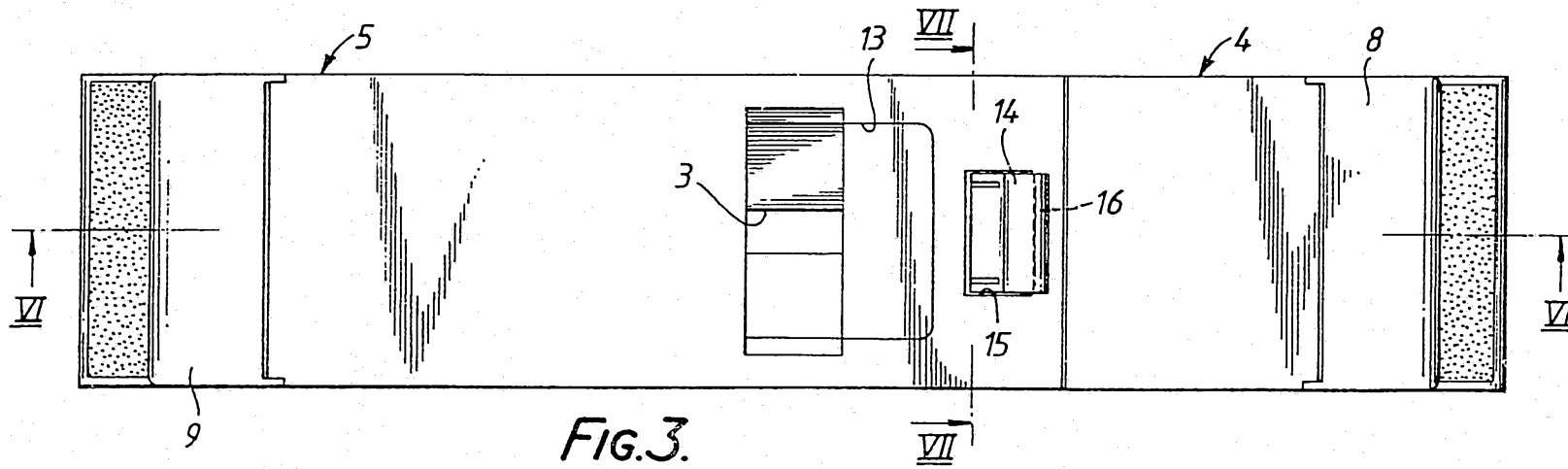


FIG. 2.

5 10 20 30 40 50



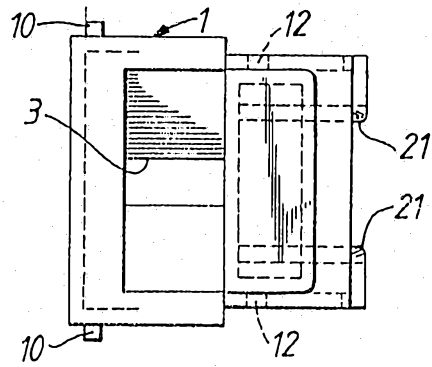


FIG. 5.

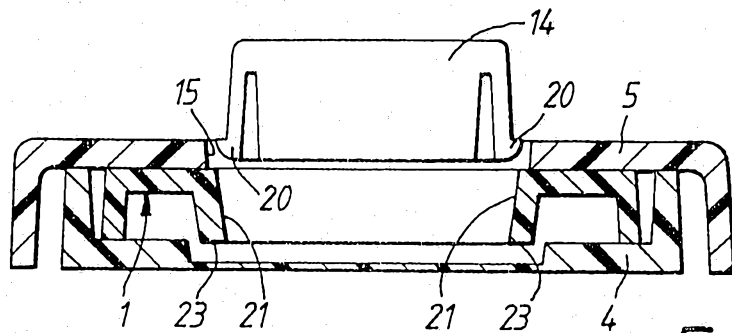


FIG. 7.

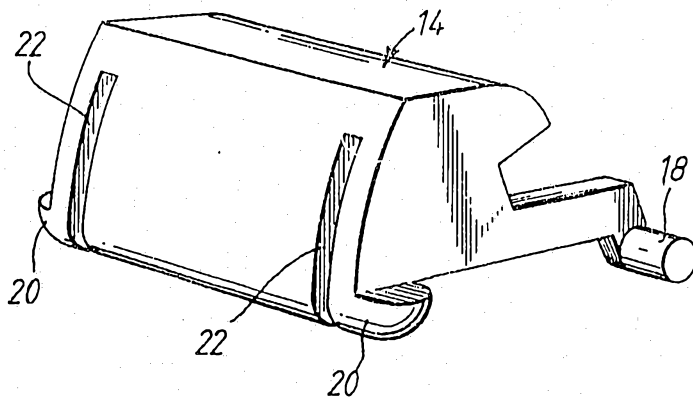


FIG. 8.

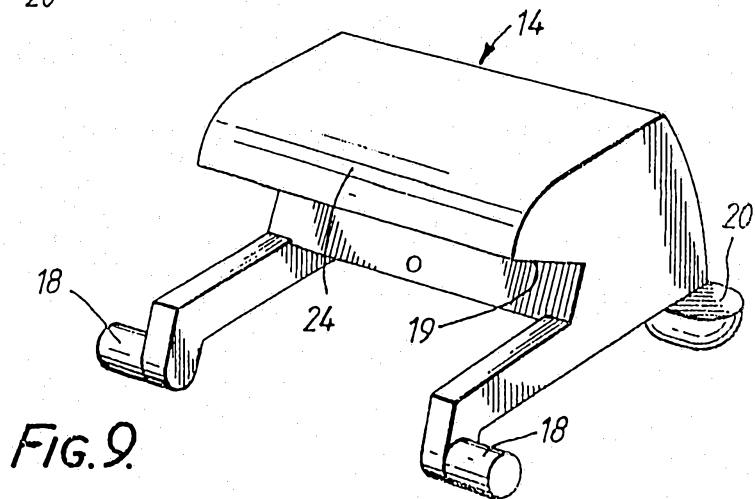


FIG. 9.