(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 108 495**
A1

(12) # EUROPEAN PATENT APPLICATION

(21) Application number: **83305981.9**

(22) Date of filing: **03.10.83**

(51) Int. Cl.³: **B 05 B 15/00**
B 05 C 17/00, E 01 C 23/16
B 65 D 83/14

(30) Priority: **02.10.82 GB 8228198**

(43) Date of publication of application:
16.05.84 Bulletin 84/20

(84) Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

(71) Applicant: **Yates, Alfred**
223 Lower Green Lane
Astley Lancashire(GB)

(71) Applicant: **Partington, Gordon Stewart**
50, Gibwood Road
Northenden Manchester 22(GB)

(72) Inventor: **Yates, Alfred**
223 Lower Green Lane
Astley Lancashire(GB)

(72) Inventor: **Partington, Gordon Stewart**
50, Gibwood Road
Northenden Manchester 22(GB)

(74) Representative: **Whalley, Kevin et al,**
Wilson Gunn Ellis & Co. 41-51 Royal Exchange Cross Street
Manchester M2 7DB(GB)

(54) **Hand held aerosol dispenser.**

(57) Apparatus according to the present invention comprises a continuous resilient member (2), a first portion (6) of which is adapted to engage the body of an aerosol container, a second portion (7) of which is adapted to engage the actuator of the aerosol container, and a portion (3) of the member extending between said first and second portions being arranged to form a handle wherein grasping of the handle urges said first portion towards said second portion. Urging of the first portion towards the second portion has the effect of pressing the nozzle (8) towards the body of the container (1) causing release of a spray from the nozzle.

EP 0 108 495 A1

./...

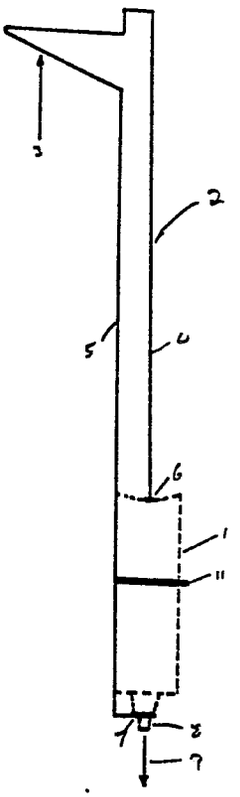

FIG 1

HAND HELD AEROSOL DISPENSER

This invention relates particularly to marker devices of the kind used for marking a line on surface areas, for example in factories, warehouses, public buildings, car parks, roads and sportsgrounds. This invention also relates to devices which may be used for dispensing paint or other materials from aerosol containers.

According to the present invention apparatus comprises a continuous resilient member, a first portion of which is adapted to engage the body of an aerosol container, a second portion of which is adapted to engage the actuator of the aerosol container, and a portion of the member extending between said first and second portions being arranged to form a handle wherein grasping of the handle urges said first portion towards said second portion.

The actuator of the aerosol container usually comprises the nozzle or outlet. Urging of the first portion towards the second portion has the effect of pressing the nozzle towards the body of the container, causing release

of a spray from the nozzle.

The handle may comprise a portion of the resilient member which has been bent back upon itself so that the member may be completely grasped adjacent the point of bending back. The handle portion may, for example, take the form of a V-shaped fold in the member.

The handle may be disposed either alongside the container or remote from it. When the handle is disposed alongside the container the apparatus may be held in the hand for use in spraying at close quarters. The handle may alternatively be located remote from the container to provide access for spraying in inaccessible places or for spraying ground surfaces without the user needing to bend over.

Apparatus in accordance with this invention may further comprise means for securing the container. This may comprise one or more clips, loops, guides or catches attached to the member and arranged to engage the container.

The invention is further described by way of examples with reference to the accompanying drawings, of which:-

Figure 1 shows an apparatus in accordance with the invention;
Figure 2 is an alternative apparatus;
Figure 3 is a perspective view of the apparatus shown in Figure 1; and
Figure 4 illustrates a second alternative apparatus.

Figure 1 shows in dotted lines an aerosol container 1 disposed in apparatus in accordance with the invention. The apparatus comprises a continuous length of resilient

metal rod 2 shaped to form a handle 3 and a portion 4 extending to a point 6 of engagement with the rear of the container 1, and a second portion 5 extending to a point of engagement with the nozzle 8 of the aerosol container. The engagement with the nozzle 8 may be by means of a ring 7 attached to the rod 2 and surrounding the nozzle or by any other convenient means. Grasping of the handle 3 by a user causes the ring 7 to bear against the nozzle 8 and the engagement 6 to bear against the rear of the container, causing release of spray from the container. This apparatus is adapted for use in spraying a ground surface by a standing user. The container 1 is secured to the rod 5 by a loose fitting clip 11.

Figure 2 illustrates similar apparatus for use in spraying at close quarters. The handle 10 is located between the engagement with the rear of the container 12 and the ring 13 which engages the nozzle of the container. A clip 14 serves to engage the aerosol canister. The clip 14 may fit tightly around the canister although a loose fitting ring may also be used. The clip may take the form of a spring clip 15 as is shown in Figure 3. Alternatively, a circular loop may be provided to prevent undue lateral movement of the canister.

Apparatus in accordance with this invention may be constructed from any resilient material including metals or plastics material.

Figure 4 illustrates a modification of the invention. The resilient rod 16 comprises two portions 17, 18 slidably fastened together by means of a slidable adjustment comprising a collar 19 provided with a

wing nut 20. This allows the apparatus to be adjusted to accommodate aerosol containers of various lengths. The portion 18 is provided with a hinge 21 permitting articulation of the tip 18 which in use engages the nozzle of an aerosol container. A tube 23 is arranged to slide along the portion 18 to lock the hinge 21. An alternative apparatus for spraying the ground by a standing user may be provided with an elongated handle similar to that shown in Figure 1.

CLAIMS:

1. Marker apparatus
characterised in
comprising a continuous resilient member 2 a first portion 6 of which is adapted to engage the body of an aerosol container, a second portion 7 of which is adapted to engage the actuator of the aerosol container, and a portion 3 of the member extending between said first and second portions being arranged to form a handle wherein grasping of the handle urges said first portion towards the second portion.

2. Apparatus as claimed in claim 1,
characterised in that
grasping of the handles causes the nozzle of the aerosol container to press towards the container, causing release of spray from said container.

3. Apparatus as claimed in claim 1 or 2,
characterised in that
the handle 3 comprises a portion of the resilient member bent back upon itself.

4. Apparatus as claimed in claim 3,
characterised in that
handle 3 comprises a V-shaped fold in the member.

5. Apparatus as claimed in any preceding claim,
characterised in that
the handle 3 is disposed alongside the container.

6. Apparatus as claimed in any of claims 1 to 4,
characterised in that
the handle 3 is disposed remote from the container.

7. Apparatus as claimed in any preceding claim,

characterised in
comprising means 11 for securing the container thereto.

8. Apparatus as claimed in any preceding claim, characterised in
comprising a hinged portion 22 movable to facilitate attachment of said aerosol container.

9. Apparatus as claimed in any preceding claim, characterised in that
the member 16 comprises a slidable adjustment 19, 20.

0108495

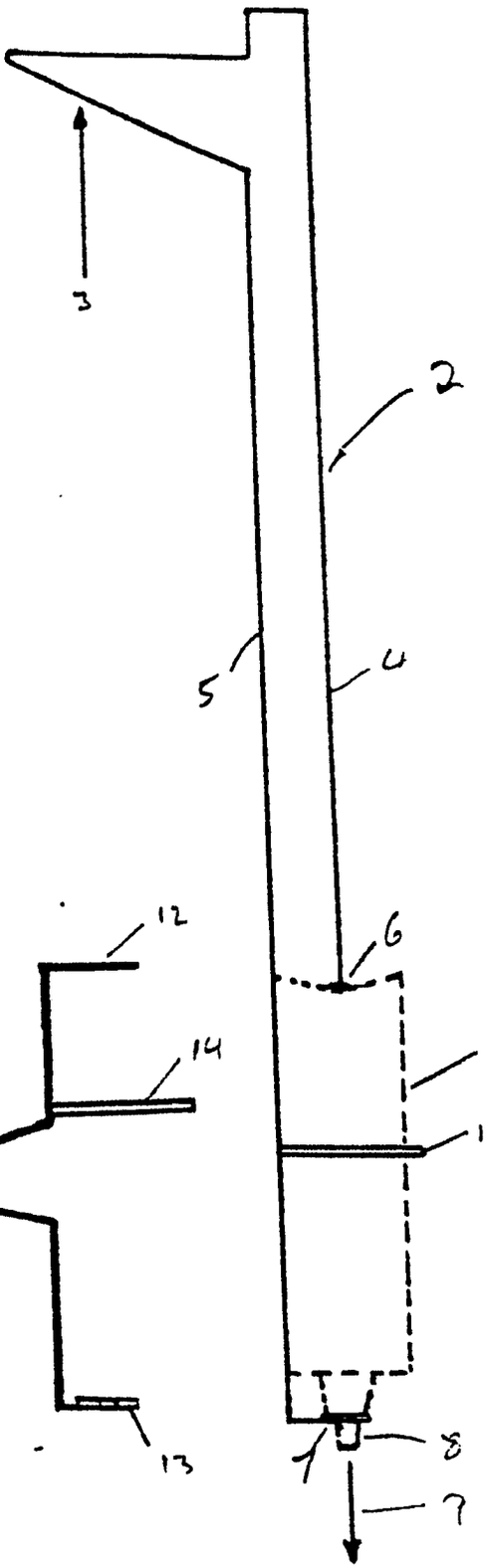

FIG 1

FIG 2

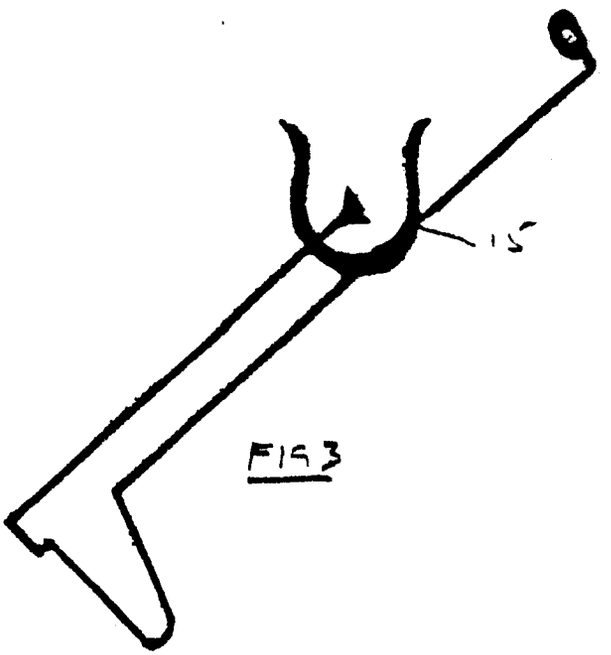

FIG 3

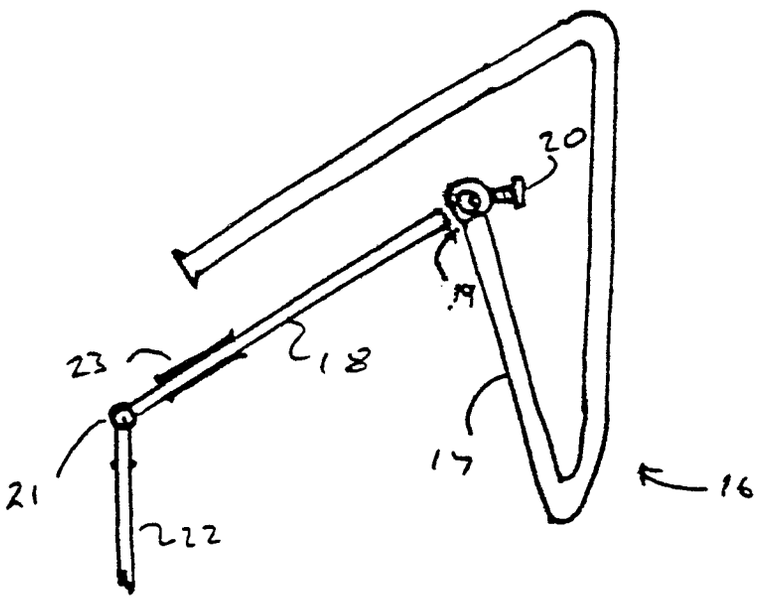

FIG 4

0108495

European Patent Office

EUROPEAN SEARCH REPORT

Application number

EP 83305981.9

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	US - A - 3 485 206 (SMRT) * Claim; fig. 1,2 * --	1,2,6,7	B 05 B 15/00 B 05 C 17/00 E 01 C 23/16 B 65 D 83/14
A	DE - A1 - 2 436 887 (SMRT) * Claims; fig. 3,4 * --	1,2,6,7	
A	US - A - 4 099 482 (SMRT) * Abstract; fig. 1 * --	1,2,6,7	
A	GB - A - 1 549 917 (LEE) * Fig. 14 * --	1,2,6,7	
A	US - A - 3 977 570 (SMRT) * Claims; fig. 1 * --	1,2,7	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
A	US - A - 4 248 360 (CRUMP) * Fig. 3 * --	1,2,6,7	B 05 B B 05 C E 01 C A 63 C B 65 D
A	US - A - 3 149 761 (HARRIS) * Totality * --	1,2,5,7	
A	GB - A - 2 072 754 (GILBEY) * Fig. 1 * ----	1,2,5,7	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
VIENNA	30-12-1983	SCHÜTZ

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO Form 1503 03 82