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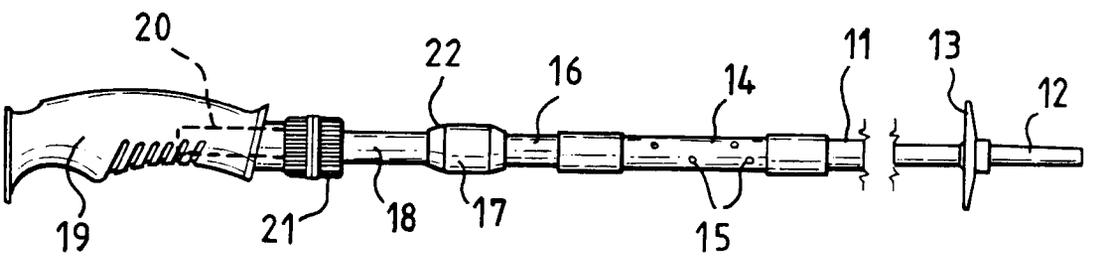
(54) A stick

(57) The invention provides a stick which comprises a rod (11) with a spike for engaging packed snow, ice or loose ground, a serial series of tubes (14,16,18) secured together by sleeves (17) and a handle portion (19). The tubes (14,16,18) and the handle include a light source (15), a power supply therefore and means (17) for controlling the energisation of the light source.



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Description

[0001] The present invention relates to sticks, used by persons to aid in walking or other movement. Such sticks comprise an elongate body and a handle portion on the body. Typically, they are used by aged and infirm people to steady the upper part of the body relative to the ground by pressing on the ground at a location remote from the user's feet. There is a special class of walking stick used by a different type of person, namely the ski stick used by skiers to steady themselves on slippery surfaces and assist their movement. All of such uses may be carried out in circumstances which may leave the user relatively poorly visible, and aged and infirm users often use sticks painted white to assist visibility. It is the aim of the present invention to provide a stick which draws attention to the user.

[0002] According to the invention there is provided a stick comprising an elongate body having a handle portion, a light source mounted on the body, a power supply for the light source mounted on the body and means on the body for controlling the energisation of the light source by the power supply. The light source and/or the power supply is or are preferably mounted within the body. The controlling means may control whether the light source is energised or not and also control the mode of energisation, such as steady/intermittent energisation.

[0003] An example of the invention will now be described with reference to the accompanying drawing which is a side elevation of a ski pole.

[0004] The body of the ski pole is elongate and its lower portion comprises a rod 11 which in this embodiment tapers to a minimum diameter at the base region 12. A short distance above the base region is mounted a flange piece 13 which leaves the base region 12 of the rod to act as a spike for engaging packed snow, ice or loose ground, the flange 13 preventing the rod from sinking too far into this substance when pressure is applied to the ski pole.

[0005] The majority of the rod 11 is solid but towards its upper region there are mounted a serial series of tubes secured together by sleeves. The lowermost tube 14 is of polymethylmethacrylate containing a series of light emitting diodes 15. The tube and/or the diodes may be coloured so that the light from the diodes as seen from outside the pole will be coloured, for example red to indicate danger.

[0006] The next higher tube 16 carries an outer sleeve 17 which has limited axial movement relative to the tube thereby to operate an electrical switch on or off. The sleeve 17 can also be twisted thereby to select the operation of an oscillating circuit (not shown) to control whether the energisation of the light emitting diodes 15 is steady or intermittent.

[0007] At the top end of this sleeve is mounted a further hollow tube 18 around which is moulded a handle 19 and within which is a battery chamber 20. The top tube 18 is secured to the adjacent tube 16 by a locking collar 21 to allow easy access to the batteries for replacement purposes.

[0008] When the sleeve 17 is in a suitable axial position, electrical contact is made between the batteries mounted within the handle 19 and the light emitting diodes 15 to cause their energisation. When the sleeve 17 is in one rotational position, the energisation is steady and when it is in the other rotational position the connection between the batteries and the light emitting diodes is made through an oscillation circuit contained within the tube 16 for causing the light emitting diodes to flash. The steady or flashing light from the light emitting diodes draws attention to the user and may thus prevent injury caused by collisions in poor visibility. The stick might be stuck in the ground or snow and the light source energised so that the stick acts as a beacon to warn skiers of a hazard other than a fellow skier. The sleeve 17 is easily operated by a user even when wearing bulky gloves.

[0009] It would be possible to include more than one group of light-emitting diodes in the walking stick, the groups being spaced longitudinally. The groups might be mounted in a single tube or in respective individual tubes.

[0010] The ski pole described above is self-contained with its own light source, power supply and energisation control means. The light emitting diodes 15 can be cast into a solid tube of transparent material so as to provide high strength for the pole and to avoid the danger of loose connections. In another alternative, the diodes could be mounted in or behind apertures in the tube 14 which could be opaque and integral with the tube/rod above and below the diodes in order to provide an integral high-strength pole body.

[0011] It will be seen from the figure that the sleeve 17 used to control the energisation of the diodes has bevelled ends 22 so that it does not provide any undue projection from the pole which might cause injury or cause the sleeve 17 to be operated accidentally.

Claims

1. A stick, characterised by an elongate body having a handle portion, a light source mounted on the body, a power supply for the light source mounted on the body and means on the body for controlling the energisation of the light source by the power supply.

2. A stick according to claim 1, wherein the light source and/or the power supply is or are mounted within the body.

3. A stick according to claim 1 or claim 2, the controlling means being adapted to control whether the light source is energised or not.

4. A stick according to any preceding claims, the controlling means being adapted to control the mode of energisation of the light source.

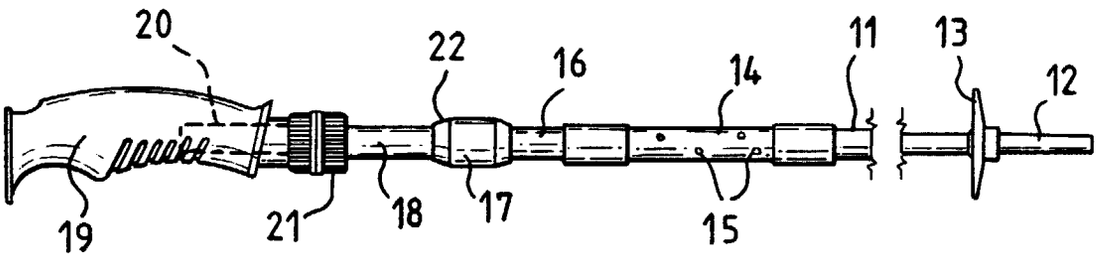
5. A stick according to any preceding claim, the light source comprising a series of light emitting diodes.

6. A stick according to any preceding claim, the body including a serial series of tubes secured together by sleeves.

7. A stick according to any preceding claim, the controlling means comprising a sleeve of the body moveable axially relative thereto to control energisation of the light source.

8. A stick according to claim 7, wherein the sleeve can be twisted to select the operation of an oscillating circuit to control the mode of energisation of the light source.

9. A stick according to any preceding claim, the handle portion comprising a battery chamber.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