United States Patent [19]

Symmes

[11] **3,889,163**

[45] **June 10, 1975**

[54] **MEANS TO ASSIST A PERSON IN OVERCOMING HABITS**

[75] Inventor: **Eliot Norman Symmes,** Seattle, Wash.

[73] Assignee: **Habi-chek Corporation,** Campbell, Calif.

[22] Filed: **Jan. 14, 1974**

[21] Appl. No.: **433,344**

[52] **U.S. Cl.**..... **317/262 S;** 131/170 A; 128/419 S

[51] **Int. Cl.**..... **A61n 1/38**

[58] **Field of Search** ..... 317/262 S; 272/27 R, 27 N; 128/418, 419 S, 24.1, 381, 406; 131/170 A; 35/22 R

[56] **References Cited**

UNITED STATES PATENTS

765,926	7/1904	Kelly	272/27 R
3,482,580	12/1969	Hollabaugh	272/27 N

FOREIGN PATENTS OR APPLICATIONS

256,744	11/1926	Italy	317/262 S UX

OTHER PUBLICATIONS

"A Simple Battery-Powered Stimulator for Aversion Therapy," Med. & Biol. Engng., Vol. 6, pp. 445–446, Pergamon Press, 1968.

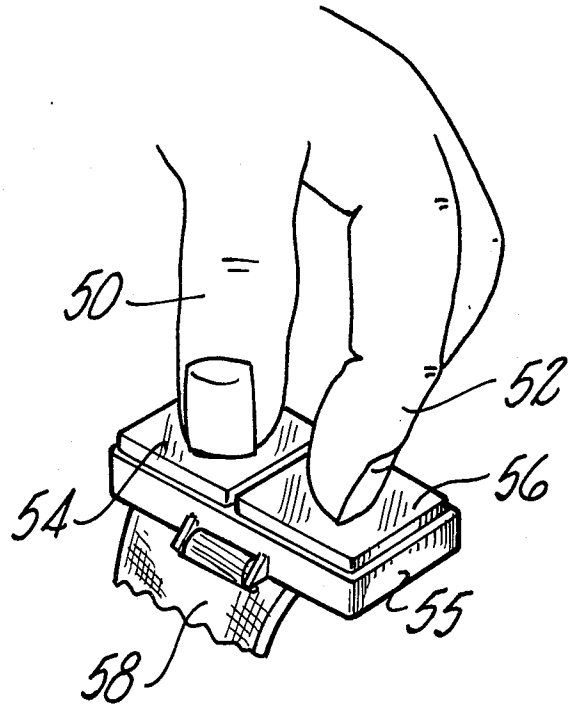
Primary Examiner—J. D. Miller

Assistant Examiner—Harry E. Moose, Jr.

[57] **ABSTRACT**

An article small enough to be carried by a person includes a source of power for inducing an electric shock in the person whenever it is consciously touched by the person to permit a shocking sensation to be associated with an undesirable habit whenever the person has a desire to do the act involving the habit.

1 Claim, 7 Drawing Figures



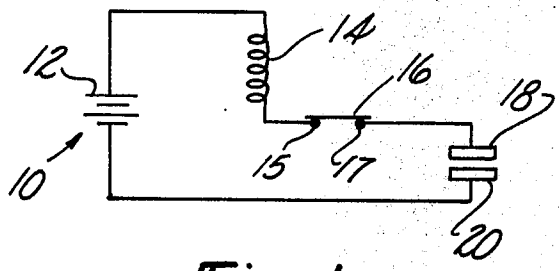


Fig-1

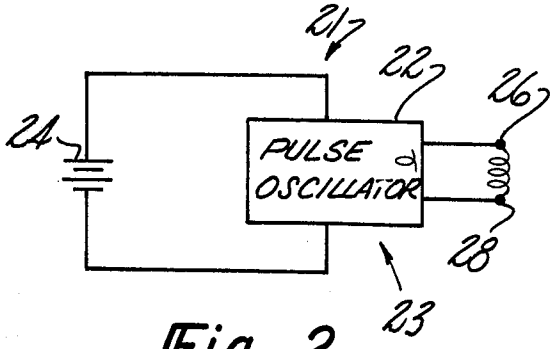


Fig-2

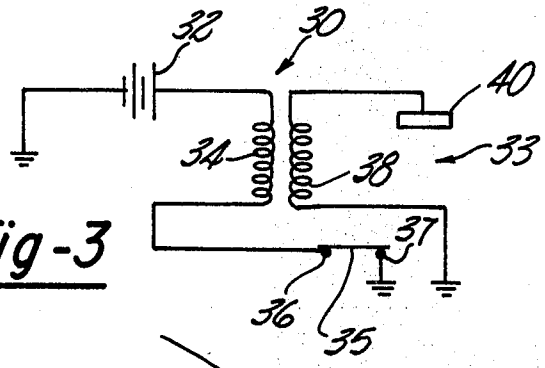


Fig-3

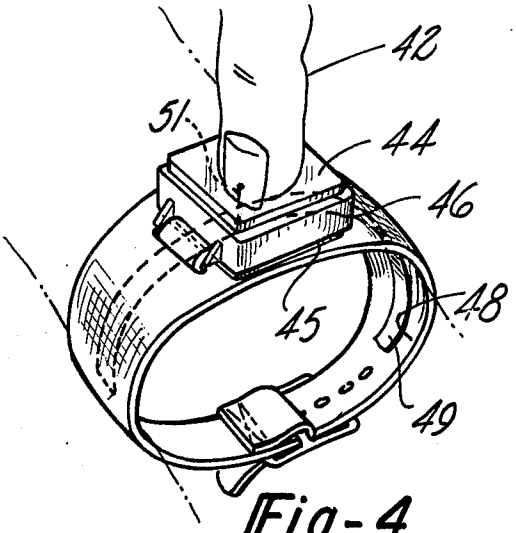


Fig-4

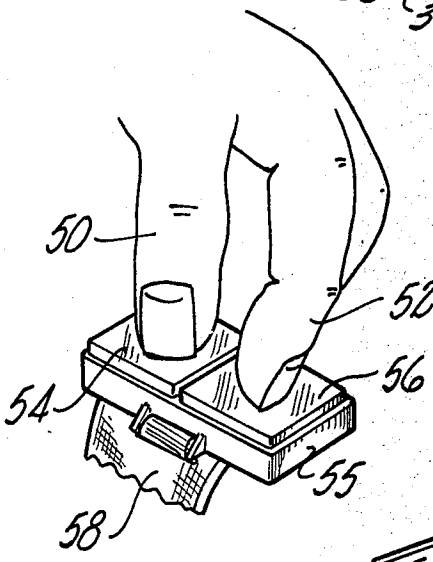


Fig-5

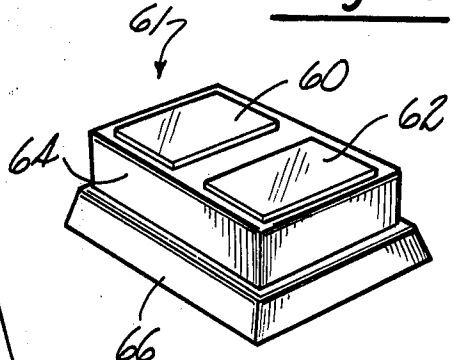


Fig-6

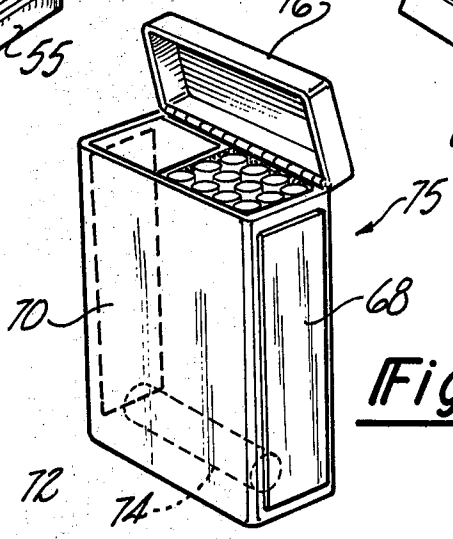


Fig-7

MEANS TO ASSIST A PERSON IN OVERCOMING HABITS

In recent years, it has been recognized that habits, such as smoking, drinking, or the like adversely affect the health, state of mind and general well being of certain persons. While totally aware of the adverse effects they produce, many persons are still often incapable of breaking the undesirable habit without the aid of some treatment by another person or some external device. For example, hypnosis and other means have been employed to assist persons in breaking the habit of smoking.

One of the methods employed in treating persons to assist him in breaking a bad habit is to provide means for associating the habit with something unpleasant. For example, if smoking were associated with an electric shock or if an electric shock were applied to the person whenever he desired to smoke, the craving for smoking would tend to diminish. Likewise, this would apply to drinking and other undesirable habits.

Various means and methods for assisting people in building up aversions to undesirable habits are described in a copending patent application of applicant, Eliot Symmes, Ser. No. 254,786, filed May 26, 1972, now U.S. Pat. No. 3,782,006.

The present invention contemplates using one of the techniques disclosed in the aforementioned application, i.e. electric shock, to assist a person in overcoming various habits. However, the invention does not require clinical treatment and, in effect, permits a person to cure himself to a great extent after receiving some initial clinical treatment and instructions.

Electric shock inducing devices are well known. Many such devices have included electrical circuitry associated with personal articles which, when handled by a person, causes a shock to be induced in the person. One such article is disclosed in a U.S. Pat. to Wilson et al No. 2,667,350.

Other such devices including electrical circuits for inducing electrical shocks have been specifically directed towards anti-smoking. Such a device is disclosed in a U.S. Pat. to Hollabaugh No. 3,482,580.

It is an object of this invention to provide improved means for assisting a person in overcoming an undesirable habit.

In accordance with the present invention, means to assist a person in overcoming an undesirable habit such as smoking includes an article adapted to be engaged by the hand of the person. An electrical circuit including a battery within the article is connected to a pair of open terminals. When the terminals are physically engaged by the hand of the person, the terminals are closed to cause current to flow and an electric shock to be induced in the person. The person closing the circuit does it consciously in connection with his desire relating to the undesirable habit so that the unpleasantry of shock is associated with the habit.

Other objects and advantages of the present invention will be apparent and suggest themselves to those skilled in the art, from a reading of the following specification and claims, in conjunction with the accompanying drawing, in which:

FIGS. **1, 2** and **3** are schematic diagrams illustrating types of electrical circuits which may be employed in practicing the present invention, and

FIGS. **4, 5, 6** and **7** illustrate some of the articles which may incorporate an electrical circuit such as illustrated in FIGS. **1, 2** and **3,** in accordance with the present invention.

Referring particularly to FIG. **1,** an electrical circuit **10** includes a battery in serially connected across a vibrator, including a coil **14** and a movable contact arm **16,** contacts **15, 17,** and a pair of output terminals **18** and **20.** The circuit **10** is normally non conducting and becomes conducting when the terminals **18** and **20** are shorted, as by a person's hand physically contacting both terminals. When current flows through the coil **14,** it causes the arm **16** to move away from the contacts **15** and **17** to open the circuit and discontinue the flow of current even when the terminals **18** and **20** are shorted. Continuous opening and closing of the contacts **15** and **17** results in a vibrating action. A person contacting the terminals **18** and **20** will therefore receive a shock in the form of vibrations.

Referring to FIG. **2,** an electrical circuit **21** includes a battery **24** for supplying power to a pulse generator or oscillator **22.** The oscillator **22** is connected to an output transformer **23** having its secondary winding connected across a pair of output terminals **26** and **28.** The oscillator **22** may be a resistance-capacitor oscillator of a well known type capable of generating pulse signals. The frequency of the generated signals may be made variable by varying the RC constants. A person contacting the terminals **26** and **28** would receive electrical signals developed across the secondary winding of the transformer. These signals induce electrical shocks in the form of pulses. The amplitude of the shock pulses may be made variable in a well known manner, by potentiometers or the like.

Referring particularly to FIG. **3,** an electric circuit **30** includes another form of vibrator circuit. A battery **32** is connected across a coil **34,** which comprises the primary winding of a transformer **33,** a pair of contacts **36** and **37** normally closed by a movable contact arm **35.** The negative terminal at the battery **32** and the contact **37** are returned to a point of reference potential, designated as ground. The point of reference potential may be the wrist or other part at the body of a person, as will be described.

The secondary winding **38** is connected across a terminal or electrode **40** and ground. If ground is connected to the body of a person, that person need only physically contact the terminal **40** to receive shocks from the electrical signals developed across the secondary winding **38.** The nature of the shocks will be in the form of vibrations as a result of the opening and closing of the arm **35.** This vibrator action was described in connection with FIG. **1.**

FIGS. **4** to **7** illustrate various articles which may be physically engaged by a person for shock inducing purposes. In a normal situation, a person undergoing treatment to overcome smoking or other undesirable habit will have normally received a certain amount of clinical treatment by a qualified person.

This treatment could include various visual or oral presentations relating to smoking, for example. The presentations, if the present invention is to be subsequently used, would be accompanied by electric shocks. Thus the person being treated will associate smoking with an electric shock, an unpleasant experience. At the time of treatment, the person being treated would be instructed as to the use of a shock in-

ducing article, such as one of the types illustrated in FIGS. 4, 5, 6 and 7. Such instructions, for example, could be that each time the person gets a craving to smoke a cigarette that he consciously touch the article and receive a shock. Thus the original association of smoking with electric shock will be reinforced, with the person involved actually helping in his own treatment. Of course, it is possible that a person use the device without prior treatment or extensive instructions.

In describing FIGS. 4, 5, 6 and 7, it will be understood that anyone of similar type circuit illustrated in FIGS. 1, 2 and 3 may be incorporated in the articles described. The advent of transistor and integrated circuitry has made possible relatively complex circuit in a small amount of space and a size of the type that can be carried or worn by a person.

Referring particularly to FIG. 4, a band 48 is adapted to be worn on the wrist of a person in much the same manner as a watch. A housing 46 having suitable electrodes 44 and 45 is secured to the band 48. The bottom electrode 45 is connected to a conductive strip 49 through a conductive element or lead 51.

The electrodes 44 and 45 may be the normally open output terminals 18, 20 or 26, 28 or 40 and ground illustrated in FIGS. 1, 2 and 3, respectively. The housing 46 includes a suitable electrical circuit such as, for example, one of the circuits illustrated in FIGS. 1, 2 or 3. The source of power may be included in the housing or may be carried separately by the person in his clothing, with suitable leads (not illustrated) being connected to the housing and electrodes involved. Such connections are well known to those skilled in the art.

The conductive strip 49 engages the wrist of the person and is connected to one of the output terminals or electrodes 45. In order to complete the circuit, the person wearing the band 48 need only touch the electrode 44 with his finger 42. When this occurs, a shock is induced in the person as a result of current flow in the manner described in connection with FIGS. 1, 2 and 3.

Referring particularly to FIG. 5, an arrangement, somewhat similar to FIG. 4, includes an insulated housing 55 mounted to a band 58 adapted to be worn on the wrist of a person. A pair of electrodes or terminals 54 and 56 is connected to electrical circuitry disposed inside of the housing 55. Because the housing 55 is insulated, a person must touch both electrodes 54 and 56 with his fingers 50 and 52, respectively, to short out the electrical circuit and cause a shock to be induced in the person, in a manner previously described.

Referring particularly to FIG. 6, an article 61, which may simulate a cigarette holder or the like, includes a housing 64 on a base 66. The housing 64 includes the electrical circuitry and includes a pair of output electrodes 60 and 62. A shock is induced in a person by touching both electrodes 60 and 62 to close an electrical circuit as previously described.

Referring to FIG. 7, a package 75 simulates a package of cigarettes. Electrodes 68 and 70 are secured to the sides of the package which may also include a top lid 76. A battery or electrical circuit 74 is disposed within the package 75. When a person lifts the package 75, he contacts the electrodes 68 and 70 to close an electrical circuit causing a shock to be induced. The circuit could be such so as to become operative only when the lid is opened. Alternatively, the lid 76 may include one of the electrodes 68 or 70 so that a shock is induced when a person holds and opens the package 75.

Providing the electrical shock inducing circuit in a small portable article wherein current is caused to flow by a relatively simple act of touching by the fingers makes it possible for a person to apply almost continuous treatment to himself. Placing the article on a wrist band makes it possible for the person to conveniently carry the shock inducing means everywhere inconspicuously. The circuitry described may be inserted in small articles normally worn or carried by a person. Such articles, for example, could include cigarette lighters, cuff links, necklaces and the like.

The electric shock may be in the form of vibrations, pulses or, in some cases, a continuous direct current. It is possible that just a battery with appropriately connected contacts may be used. Numerous circuit variations may be employed which would also include having the unit in the "on" condition continuously.

What is claimed is:

1. Means to assist a person in overcoming an undesirable habit comprising a wrist band adapted to be worn on the wrist of said person, a housing secured to said wrist band, a source of power capable of inducing an electric shock, an electrical circuit within said housing connected to said source of power and including a pair of open terminals to maintain said electrical circuit normally non conducting, a pair of relatively spaced electrodes connected to said terminals, said electrodes being disposed sufficiently close to each other to be physically engaged by two fingers of the hand of said person to close said electrical circuit causing current to flow to induce an electric shock in said person whereby a person may consciously self induce an electric shock to assist himself in building up an aversion to said undesirable habit.

* * * * *