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VIBRATORY LOCK PICK
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6 Claims. (Cl. 81—3)

This invention relates to a lock pick, and more particularly to an electrically actuated lock pick including a vibratory needle which is adapted to be inserted into the key opening of a pin tumbler or wafer locks to facilitate the work of a locksmith in the unlocking of such locks.

A primary object of this invention is the provision of an improved lock pick of this character having means whereby upon connecting the device to a source of alternating current the pick will be automatically vibrated or oscillated at a relatively high rate of speed in order to facilitate the alignment of the pin tumblers or wafer, so that the lock may be readily opened by means of a conventional turning wrench.

An additional object of the invention is the provision of such a device which may be readily adapted for insertion into a six volt converter which in turn is connected to a portable battery so that the device may be used in any location.

A further object of the invention is the provision of such a device which is provided with a body in the form of a compact handle, the latter being provided with an external telltale light and an actuating switch in a position readily accessible to the operator.

A still further object of the invention is the provision of a device of this character which is provided internally with an electromagnetic coil, which, when connected to a source of alternating current, will impart oscillatory vibration to a bar, which in turn impart such vibration to a lever, at the end of which is mounted the needle comprising the lock pick per se.

A still further object of the invention is the provision of a device of this character which is sturdy and durable in construction, relatively compact and easy to handle, and manipulate, reliable and efficient in operation, simple and inexpensive to manufacture, and simple and efficient in use and operation.

Still other objects will in part be obvious and in part be pointed out as the description of the invention proceeds, and disclosed in the accompanying drawings where-in there is shown a preferred embodiment of this inventive concept.

In the drawing:
FIGURE 1 is a side elevational view of the lock pick of the instant invention.
FIGURE 2 is a longitudinal sectional view taken substantially through the center line thereof; and
FIGURE 3 is an end elevational view of the devices of FIGURES 1 and 2 as viewed from the right.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Having reference now to the drawings in detail, there is generally indicated at 10 an electric lock pick constructed in accordance with the instant invention which includes a body 11 comprised of two separable halves 12 which are secured together as by means of screws or bolts 13. A centrally positioned cavity in the center of the body contains a wire wound coil 15 surrounding a laminated core 16, adjacent which is a U-shaped magnet 17, having its poles projecting upwardly. The magnet ends have positioned thereacross a metallic bar 18, one end of which extends beyond one leg of the magnet into an adjacent cavity 19, and extending outwardly of a horizontal arm 19 comprising a part of a lever 20.

The lever includes an upwardly and rearwardly inclined portion 21 and a central portion 22, through the midpoint of which a pivot 23 extends. The lever also includes an outwardly extending tapered portion 24 which projects through a narrow slotted opening 25 in the front of the casing and terminates in a socket 26. The socket contains in the shank 27 of a pick lock needle 28 which is held in position in the socket by means of a set screw 29. The needle 28 is adapted for insertion in the key opening of a pin tumbler lock, for a purpose to be more fully described hereinafter.

A depending lug 29 adjacent arm 19 engages one end of a coil spring 30 which is set in a socket 31, and which serves normally to bias the upper portion of horizontal arm 19 into engagement with the lower side of the extending end of bar 18.

A set screw 32 extends through a threaded opening 33 in the top wall of the casing may be adjusted to limit the range of the oscillatory vibration imparted to the bar, and hence the pivotal oscillation of the lever 20 and its associated needle 28.

Current is supplied to coil 15 through a first wire 35, which extends through a switch 36 operated by a button or slide 37 located exteriorly of the casing, and thence through the filament 38 of a telltale or indicator bulb 39. From the other end of the filament 38 a wire 40 leads directly to the coil 15, from which a wire 41 returns to a common wire conduit 42. The conduit 42 terminates in a conventional electric plug, which may be inserted in any wall outlet for a source of alternating current. Alternatively, the plug may be connected to an inverter and employed in conjunction with a battery supplying direct current to the inverter.

In the use and operation of the device the needle or pick is inserted in the key opening of a tumbler lock, the switch 37 moved to circuit closing position, after connection of the conduit 42 to a suitable source of alternating current, and the operation of the device occasioned by the vibration of the bar 18 and the consequent oscillatory pivotal vibration of the lever 20 agitates the pin tumblers into alignment so that the lock may be turned or opened after aligning the tumblers by means of an ordinary or conventional locksmith's turning wrench.

Obviously, the use of such a device facilitates and expedites the work of a locksmith, since the rapid vibratory movement has the effect of aligning the pin tumblers with extreme rapidity and simplicity, and requires no particular skill in its use and operation.

From the foregoing it will now be seen that there is herein provided an improved lock pick which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative, and not in a limiting sense.

I claim:
1. A lock pick comprising, in combination, a body forming a handle, a laminated core surrounded by a coil in said body, a magnet adjacent said coil and selectively energizable thereby, an elongated bar mounted for oscillating movement in said body adjacent said magnet, an electric circuit connected to said coil, means for connecting said circuit to a source of alternating current to impart oscillating vibration to said bar, a lever pivoted in said body having one end in contact with said bar for oscillating vibration thereby and its other end extending outwardly through an opening in said body, and a needle adapted to be inserted into the key opening of a tumbler lock for vibrating the tumblers thereof fixed to said other end.
2. The structure of claim 1 wherein said circuit includes an electric switch, and means exteriorly of said body for closing and opening said switch.

3. The structure of claim 2 wherein said circuit includes an indicator light visible from the exterior of said casing, and illuminated when said circuit is closed by said switch.

4. The structure of claim 1 wherein a compression spring in said body engages said lever to bias said one end into continuous contact with said bar.

5. The structure of claim 4 wherein said lever includes a central portion through which the pivot extends, an upwardly extending portion terminating in a horizontal arm abutting the underside of said bar, an adjacent vertical lug engaging the end of said coil spring, and a downwardly extending tapered portion extending outwardly through said opening and having a socket at its outer end, said needle seating in said socket, and a set screw for retaining said needle in said socket.

6. The structure of claim 1 wherein a set screw is threaded through the wall of said body adjacent one end of said bar for regulating the oscillation thereof.

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