My invention relates to improvements in locks in particular of the cylinder type and has for its object to provide means to insert the key in the keyhole without the necessity of seeing the lock exactly.

It is very annoying to try to insert the key in dark hallways or when the hands are occupied and the present invention aims to provide means to overcome this disadvantage.

Further objects will be disclosed in the specified description.

In the main the invention consists of a guide with a substantially straight guiding surface at about a right angle, located in front of the lock beneath the cylinder so that the key placed straight on the guide reaches with its pointed end the keyslot sufficiently to slip in when moved forward.

In the drawing two embodiments of the invention are illustrated. Fig. 1 is a front view of a cylinder lock with the guide in front. Fig. 2 is a side elevation, Fig. 3 is a sectional view thru lines A—B of Fig. 1 with the key inserted. Fig. 4 is a perspective view of the guide, Fig. 5 is a side view of a cylinder lock with the guide partly in section with the key in the starting position. Fig. 6 is a front view of a cylinder lock with a guide of another modification in front of it. Fig. 7 is a sectional view thru lines C—D of Fig. 6, with the key in position to slip into the keyhole. Fig. 8 is a section thru the cylinder ring itself, Fig. 9 is a front view of the guide of the second modification. Fig. 10 is a side view of the guide. Fig. 11 is a front view of a cylinder ring of the modification Figs. 6–10.

In the modification as shown in Figs. 1–5 the guide consists of a hollow metal punching 1 with extensions 2 parallel to the lock surface and fastened to the door with screws 3. The guiding surface touches the cylinder housing and the back parts of the guide 15–16 partly embrace the cylinder housing and ring 5. The cylinder housing 4 rests with its head on ring 5 and is held in its place by the threaded bolt 7 and disc 6 in the usual manner. The guide is preferably of one-sidedly open wing form so that it will lead the key 24 placed anywhere within its ends 8 to the deepest spot 10 before the keyhole. This spot 10 is located beneath the cylinder 12 at such a distance that the key placed on the guide will reach with its pointed end 17 in the keyslot 13 sufficiently to raise itself when moved forward and on leaving the guide slip into the keyslot. The key bottom 18 will be then at a sufficient distance from the guide to allow the lug 9 of the key to turn around above the depression 10 of the guide. The cylinders 12 operate the lock in the usual manner, and the cylinder housing is provided as usual with a shallow depression 14 for the key end. The guide can best be fastened to the door in the proper position by placing the key in the lock first and then putting the guide against the lug 9 of the key and fastening the guide with the screws 3 in this position, as shown in Fig. 1. In the drawing only a few pin tumblers are shown the rest are omitted so as not to interfere with the illustration of other parts. A part of the lock mechanism is indicated at 25–28, the rest of the lock itself is omitted not being an essential part of the invention.

In Figs. 6–10 another modification of the invention is illustrated which differs from the foregoing as well in the form of the guide as in the fastening of the same. While the first one is fastened to the door and can be added to locks already in the door, the second modification is combined with the ring of the cylinder lock so that it can be used on doors where no fastening screws can be used on the door.

A cylinder lock fastened to a lock body in the usual manner by threads or otherwise, holds a ring 5 by means of its head 4A resting against the edge 23 of the ring. The ring 5 is preferably of a form having an outer flat surface 23 upon which the guide is fastened. The guide consists of a base 19 which has a rim 21 of a wing form similar to the first modification, that is, it follows at its deepest spot 10 the cylinder and extends with its wings 8 to the periphery of the ring. The guide is fastened thru holes 20 to corresponding threaded holes 30 in the ring 5 by screws 3.
Also in this modification the guide can be added to locks already in use, by exchanging the cylinder ring and after the cylinder housing is placed in the ring, the guide is fastened in place by screws.

In both modifications the effective part respectively 1 and 21 of the guide is straight at about right angle to the cylinder surface so that it provides a sufficient rest for the key to in order to hold the key in such a position that the tip of the key will reach the slot.

While many variations of form of the guide and the way of its fastening can be made within the spirit of this invention it is an important feature of having the guide of a surface and location that it is suited to lead the key in the slot and the same time avoiding any chance to use it for turning the lock by force.

What I claim is:

1. In a cylinder lock of the type comprising a cylinder housing and a cylinder rotatable therein having a key slot in the front thereof, the combination therewith of a key guide having a body member rigidly disposed with respect to said cylinder housing, straddling the lower part of said key slot with its lowermost part spaced below the lower end of the key slot whereby the usual cylinder lock key with its bevelled end and insertion limiting lug will readily be guided into the key slot.

2. In a cylinder lock of the type comprising a cylinder housing and a cylinder rotatably mounted therein having a key slot at its forward end; the combination therewith of a key guide having a V shaped surface and rigidly affixed against movement relative to the cylinder housing and disposed symmetrically in straddling relation under said key slot with the apex of said guide spaced below the lower end of the key slot by a distance substantially equal to the height of the key limiting lug of an ordinary cylinder lock key.

3. A key guide for locks of the cylinder lock type comprising a body member having a V shaped guiding surface having unitary therewith mounting appurtenances adapted to be affixed to a door and to space the V shaped guiding surface from the door by a distance sufficient to accommodate the thickness of the protruding part of the cylinder lock, said key guide when closely associated with the periphery of the cylinder lock having the apex of its V shaped conformation disposed with suitable clearance below the lower end of the key slot.

4. A key guide for locks of the cylinder lock type comprising a body member having mounting means, a V shaped guiding edge and structure unitary therewith spacing said guiding edge vertically and laterally with respect to said mounting means for accommodation of the periphery and of the outer thick-