This invention relates to keys of conventional pins, tumblers, or ball locks wherein protuberances on an edge of a key align pins, or other devices to permit a cylinder in which the key is positioned to rotate, and in particular a key in which the protuberances are formed on a separate bar which is keyed to the shank of the key making it possible for the shank or body of the key to be secured by a chain to a door frame or other fixture or device and only the insert or removable bar is carried by the individual.

The purpose of this invention is to provide a key that is substantially impossible to duplicate. Keys used in conventional pin and tumbler locks are readily duplicated by machines and an experienced locksmith may readily supply as many keys as may be desired. Furthermore, keys occupy considerable space in a pocket folder or handbag and the weight of a bunch of keys is objectionable. With these thoughts in mind this invention contemplates a key formed into pieces wherein a body is provided with tongues and grooves in which an insert on which the irregular surface or protuberances are formed is readily inserted in and also readily removed from the body of the key.

The object of this invention is, therefore, to provide an improved key having a conventional body portion with a head and shank in which an insert having an irregular edge to correspond with pins or tumblers of a lock is removable mounted on the body.

Another object of the invention is to provide a key in which the body portion remains on a staple or hasp adjacent a lock and only the irregular edge portion is removed for carrying by the individual.

Another important object of the invention is to provide a removable insert for a key in which the insert may be used in keys of different designs.

A further object of the invention is to provide a key having a removable insert on which conventional protuberances are formed in which the key is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a key having a body with a shank extended from a head and an insert having an irregular edge portion formed to be positioned on the body of the key so that the key may be used in the conventional manner.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings, wherein:

Figure 1 is a side elevation view showing the key with the parts assembled.

Figure 2 is a view illustrating the use of the key wherein the body of the key, from which the insert has been removed, is suspended from a hasp by a chain, the parts being shown on a locker door and the body of the key being shown in broken lines.

Figure 3 is an exploded view showing the insert removed from the body of the key.

Figure 4 is a side elevational view showing, in particular, the head of the key with part of the shank broken away and with the parts shown on an enlarged scale.

Figure 5 is a cross section through the shank of the key being taken on line 5—5 of Figure 4.

Figure 6 is a similar cross section through the head portion of the key being taken on line 6—6 of Figure 4 and showing, in particular, a spring actuated ball for locking the insert in the body of the key.

Referring now to the drawings wherein like reference characters denote corresponding parts the improved two piece key of this invention includes a head 10 with a shank 11 extended therefrom, and an insert 12 having protuberances 13 in the extended edge and having a T-shaped slot 14 in the lower edge and positioned to receive a T-shaped tongue 15 on the shank 11 of the key. As shown in Figure 5 the groove 14 slides over the tongue 15 retaining the insert on the shank and the insert is retained in position on the shank by a ball 16 in a substantially semi-circular recess 17 in the end of a finger 18 extended from one end of the insert 12, the ball being urged downwardly by a spring 19 which is positioned in an opening 20 in the extended end of the finger 18.

The finger 18 extends over a shoulder 21 on the head of the key and the ball 16 extends into a recess 22 positioned inside of the shoulder 21.

The head 10 of the key is provided with a conventional key ring receiving opening 23 and by this means the body of the key may be suspended from a staple or clasp 24 by a chain 25, as illustrated in Figure 2.

With the parts assembled as illustrated and described the finger 18 of the insert 12 slides through a slot 26 between the upper edge of the head of the key and the shoulder 21 and after passing over the shoulder 21 the ball 16 is snapped downwardly into the recess 22 whereby the insert is locked in the key. Upon drawing the insert outwardly the ball 16 compresses the spring 19 whereby the ball rides over the shoulder 21 permitting the removal of the insert.

With a key formed in this manner each member of a family may be provided with an insert and the body of the key may remain on the outer surface of the door or frame, as illustrated in Figure 2, whereby each member of the family may insert the insert in the body of the key, open the door, and remove the insert. By the same means locks, such as in schools, closets, and the like are provided with bodies of the keys and the owner of the locker may insert the insert when it is desired to open the locker. After use thereof the owner may remove the insert, permitting the body of the key to be suspended by a chain or other device, as shown.

It will be understood that modifications, within the scope of the appended claims, may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

In a two piece key, the combination which comprises a head having a recess with a shoulder therein in one side and a shank with a T-shaped tongue thereon extended therefrom, an insert having pin aligning protuberances
in one edge, a T-shaped groove in the opposite edge for receiving the tongue of the shank, and a finger extended from one end and positioned in the recess of the head, said finger having a substantially semi-circular recess in the end thereof, and an opening extended inwardly of said recess and communicating therewith, a spring positioned in said opening, and a ball in the recess in the finger in engagement with said spring and actuated thereby for locking the insert in position on the key.