No. 878,740. PATENTED FEB. 11, 1908.

A. A. NEWMAN.

KEY FOR WATCHMEN'S CLOCKS AND SECURING DEVICE THEREFOR.

APPLICATION FILED SEPT. 19, 1906.

Fig. 1.

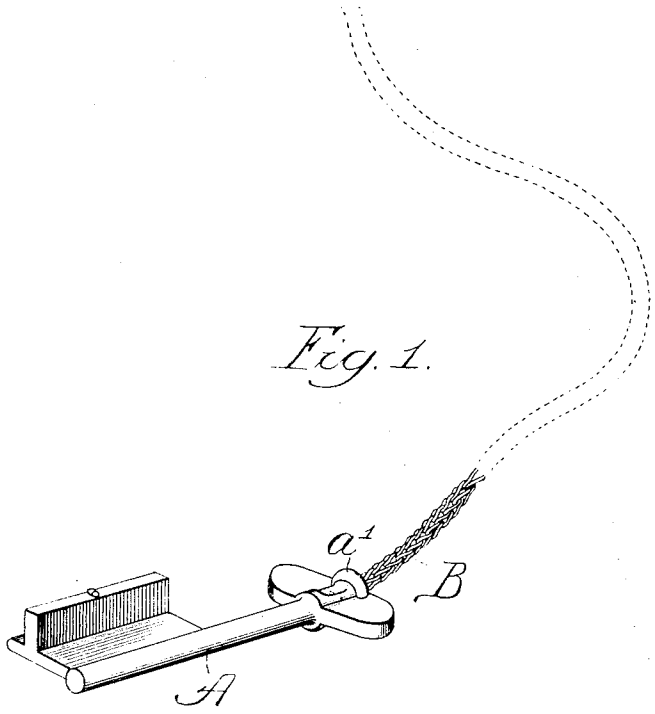


Fig. 2

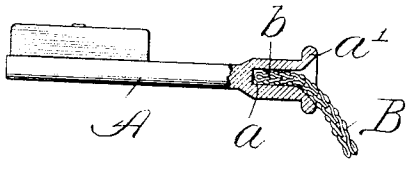
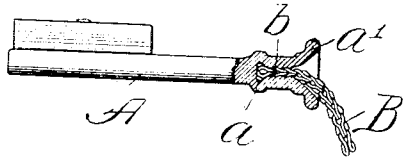


Fig. 3.



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UNITED STATES PATENT OFFICE.

ABRAHAM A. NEWMAN, OF CHICAGO, ILLINOIS.

KEY FOR WATCHMEN'S CLOCKS AND SECURING DEVICE THEREFOR.

No. 878,740. Specification of Letters Patent. Patented Feb. 11, 1908.

Application filed September 19, 1906. Serial No. 335,248.

To all whom it may concern:

Be it known that I, ABRAHAM A. NEWMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Keys for Watchmen's Clocks and Securing Devices Therefor, of which the following is a specification.

My invention relates to improvements in key for watchman's clock and securing device therefor, and is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of one of my keys supplied with the securing device; Fig. 2 is a view partly in elevation and partly in longitudinal section showing the manner in which the keys and securing devices are assembled; and Fig. 3 is a similar section showing the completed key.

Referring to the drawings, A, is a suitable key such as is in common use in connection with watchmen's clocks of the type wherein the watchman carries the clock from place to place and marks upon a dial therein contained by means of keys which are stationarily mounted at various points on his beat. The upper end of this key, A, is provided with a central cylindrical opening, *a*, which flares out at its upper end to a rather broad funnel shape, the metal of the key being correspondingly flared on its outer side to produce a funnel-shaped flange, a^1. In the opening thus formed I slip one end, *b*, of a length, B, of "fox-tail" or other close-link chain. A number of chains of this general type are in common use for various purposes, and they may be defined in a general way by stating that they are all composed of short and fine links, the links being packed closely together so that the chain has the appearance of a rope or other very close fabric. At the same time the closeness of the links prevents twisting of the chain to any considerable extent and also makes sharp bends in it practically impossible, so that the chain has a peculiar and characteristic feeling when taken in the hand, it being termed, in common parlance, "snaky." After the end of this chain is placed in the opening in the upper end of the key the metal of the key is clenched down upon it, as shown in Fig. 3, making the removal of the chain from place impossible. Inasmuch as the clench is usually made behind the end of the chain, a shoulder is formed so that extremely strong fastening is secured.

In the use of watchmen's clocks it is obviously necessary that the keys be fastened in place in such a way as to be incapable of removal from position without immediate detection. It has heretofore been customary to use for securing keys what is termed "plumbers'" or safety chain. While this type of chain is extremely useful for the purpose the keys are occasionally removed by dishonest watchmen who cut one of the links of each chain and bend them back into position after replacing the keys. A reasonably careful inspection will at once detect such mutilation of the chain, but an inspection which is superficial may not discover the fraud for a considerable period. It is therefore particularly desirable to afford a connection for the key which cannot be mutilated at all without the mutilation being extremely conspicuous. The "fox-tail" chain such as is shown in the drawings, and the other chains closely allied thereto in construction and in appearance, which I have already described, possess all the features necessary for making a perfect supporting device for coöperation with a watchman's key. In the ordinary use of a "fox-tail" and similar chains, the principal feature is one of appearance, and the fact that it is practically impossible to repair it when broken is a feature which has never been turned to practical account, and which has heretofore been a detriment, rather than an advantage. By combining this chain with the key of a watchman's clock, I turn to advantage the feature which has heretofore been neglected and has even made the chain undesirable for other processes.

In the use of such a chain the fact that it is incapable of making a sharp bend has made its use difficult, for the chain has had a tendency to break off close to the key where there was a sharp bending strain upon the chain. To avoid this difficulty, I flare the opening at the upper or rear end of the key so as to make it impossible for the chain to be bent into a sharp angle at this point.

In the claims hereto appended, for want of a better generic term, I have used the word "fox-tail" to define the chain which I use; but I wish it to be understood that when I use this term I intend to cover not only the chain herein shown, but other chains

partaking of the characteristics which I have already set forth in the specification as belonging to this chain and others which are closely allied to it in construction, appearance, operation, and feeling.

What I claim as new and desire to secure by Letters Patent, is—

1. The combination with a key having an opening at its upper end, of a length of fox-tail chain having one end inserted in said opening and being permanently held in place by the metal of the key, whereby the removal of said key from the chain and its subsequent replacement without detection is prevented.

2. The combination with a key for a watchman's clock having an opening, of a length of fox-tail chain having one end inserted in said opening, the metal of the key being brought down upon said chain beyond its end, whereby the removal of said key from the chain and its subsequent replacement without detection is prevented.

3. The combination with a key for a watchman's clock having a flaring opening, of a length of fox-tail chain having one end inserted in such opening and permanently held in place therein, the flaring opening in which the chain is secured preventing it from sharp bends adjacent thereto.

4. The combination with a key for a watchman's clock having a flaring opening, of a length of fox-tail chain having one end inserted in said opening, the metal of the key being brought down adjacent to said end.

5. The combination with a key for a watchman's clock having an opening larger at its outer end than at its inner end, of a length of fox-tail chain having one end secured in the smaller end of said opening, whereby the chain is permitted to bend to a limited extent only within the opening.

In witness whereof I have signed the above application for Letters Patent at Chicago, in the county of Cook and State of Illinois, this 17th day of September, A. D. 1906.

ABRAHAM A. NEWMAN.

Witnesses:
L. HEISLAR,
J. H. LANDES.