United States Patent

Boswell

[15] **3,657,909**

[45] **Apr. 25, 1972**

[54] KEY HOLDER

[72] Inventor: **George T. Boswell,** 6710 Kenmont Place, Springfield, Va. 22151

[22] Filed: **Feb. 27, 1970**

[21] Appl. No.: **15,046**

[52] **U.S. Cl.** **70/457,** 150/37, 206/.81

[51] **Int. Cl.** **A44b 15/60**

[58] **Field of Search** .....70/456 A, 456 R, 457, 458, 70/459; 24/237; 206/.81, 38 K, 37 K; 150/37

[56] **References Cited**

UNITED STATES PATENTS

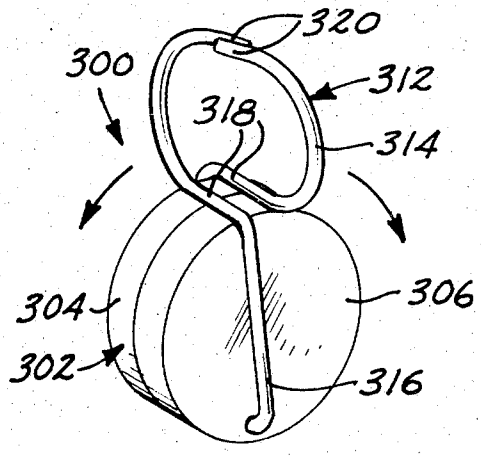
159,403	2/1975	Foster	24/237
629,224	7/1899	Watkins	24/237
868,004	10/1907	Post	24/261
1,936,273	11/1933	Segal	206/38
2,209,475	7/1940	Rawlings	24/237
2,810,176	10/1957	Goefer	24/237
3,141,546	7/1964	Leopoldi	206/.81

Primary Examiner—Robert L. Wolfe
Attorney—Frank P. Presta

[57] **ABSTRACT**

A key holder comprising a deformable and resilient wire member in the form of two loops. The end portions of the wire member are overlapped in one of the loops and are adapted to be separated for the removal or addition of one or more keys therefrom or thereto by the manual torsional deformation of the wire member. This is accomplished by the pressing together of separated cross portions of the wire member joining the loops, which results in the torsional deformation of the wire member and the separation of the overlapped wire ends. When the cross portions of the wire member are released, the resiliency of the wire member causes the separated overlapped end portions to again engage each other to close the one loop. An article container adapted to contain coins or the like may be movably mounted on the other loop for movement between a first position wherein a portion thereof is disposed between the cross portions of the wire member to prevent torsional deformation thereof and a second position wherein the container is remote from the cross portions to enable the wire member to be torsionally deformed and the container to be opened.

9 Claims, 9 Drawing Figures



PATENTED APR 25 1972

3,657,909

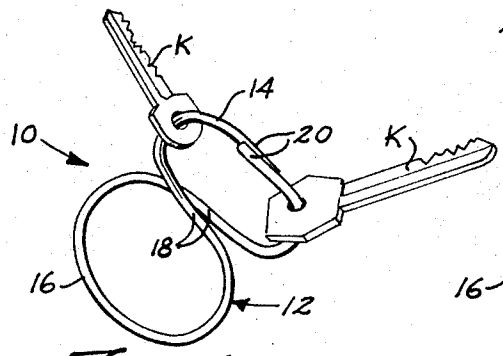


Fig. 1

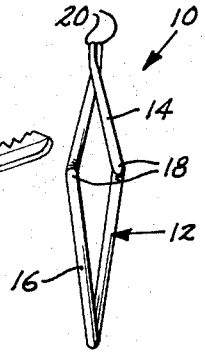


Fig. 2

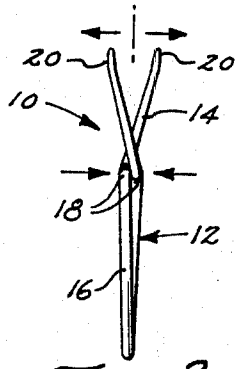


Fig. 3

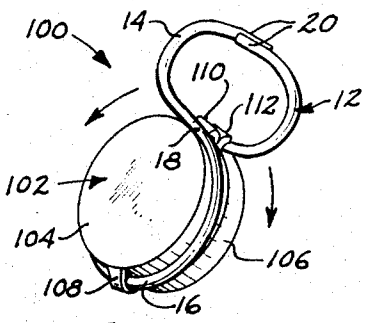


Fig. 4

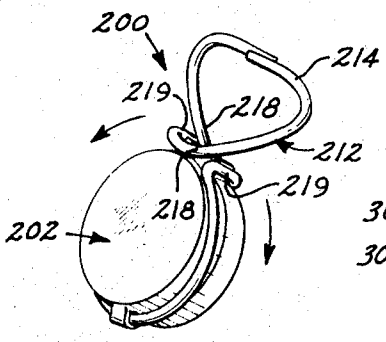


Fig. 6

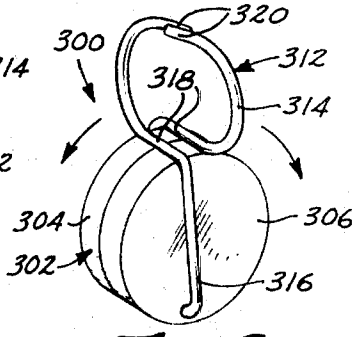


Fig. 8

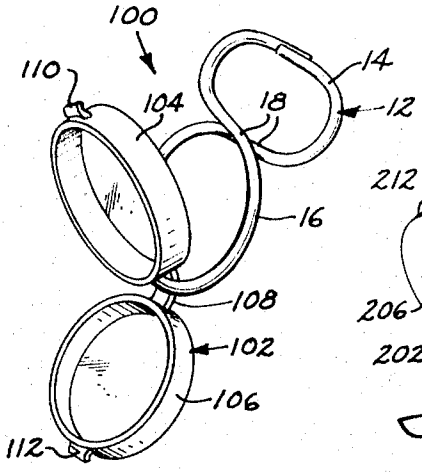


Fig. 5

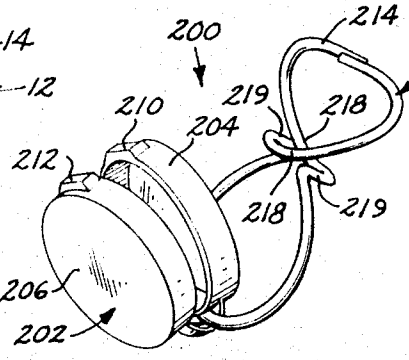


Fig. 7

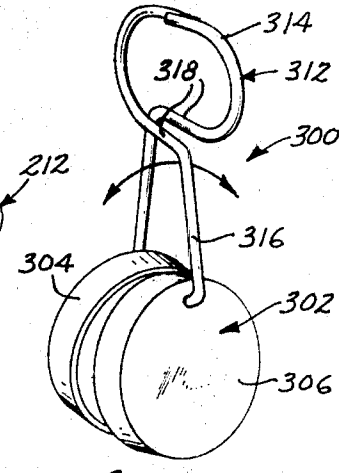


Fig. 9

INVENTOR

GEORGE T. BOSWELL

BY Frank P. Presta

ATTORNEY

KEY HOLDER

BACKGROUND AND SUMMARY OF THE INVENTION

This invention relates to a key holder and, more particularly, to a key holder formed of a flexible and resilient wire member which can be readily deformed to enable one or more keys to be mounted thereon or removed therefrom, and which may be combined with a container adapted to contain coins or the like.

Heretofore, many different types of key holders have been utilized, and many of these have been subject to one or more of the following disadvantages:

1. It is difficult to remove keys therefrom or to add keys thereto;
2. They have been so constructed that a number of keys must be removed before a particular key can be removed therefrom, and all of the other removed keys must thereafter be replaced on the keyholder;
3. They have been complicated in construction and/or bulky and thus difficult or inconvenient to carry in one's pocket;
4. They have been difficult and/or expensive to manufacture;
5. They have not been adapted to contain coins, pills or other articles in addition to the keys retained thereon;
6. Owing to their construction, they have been subject to breakage or wear after extended use; and
7. They have been subject to opening accidentally when dropped or when in normal use, with the result that keys can be lost. The keyholder of the present invention is not subject to any of the aforementioned disadvantages, and, additionally, incorporates other advantages not present in prior art key holders or cases.

It is accordingly an object of the present invention to provide a key holder which is simple in construction, compact and easy to use.

An additional object is to provide such a key holder from which a selected key may be removed without requiring the removal of any other keys mounted thereon.

Another object is the provision of such a key holder which is so constructed as to be easily opened for the removal of keys therefrom or the addition of keys thereto.

A further object is to provide such a key holder which is combined with a means for containing articles such as coins, pills or the like, the containing means also being utilized as a locking means for the key holder to prevent accidental opening thereof.

Numerous other objects and advantages of the present invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawings, discloses preferred embodiments thereof.

The above objects are accomplished by providing a key holder comprising a deformable and resilient wire member in the form of two loops. The end portions of the wire member are overlapped in one loop and are adapted to be separated for the removal or additional of one or more keys therefrom or thereto by the manual torsional deformation of the wire member. This is accomplished by the pressing together of cross portions of the wire member joining the loops, which results in the torsional deformation of the wire member and the separation of the overlapped wire ends in the one loop. When the cross portions are released, the resiliency of the wire member causes the separated overlapped end portions in the one loop to again engage each other to prevent the removal of keys therefrom or the addition of keys thereto. A container adapted to contain articles such as coins, pills or the like may be movably mounted on the other loop of the wire member for movement between a first position wherein an unbreakable locking portion thereof is disposed between the cross portions of the wire member to prevent torsional deformation thereof and a second position wherein the container is remote from the cross portions to enable the wire member to be torsionally deformed and the container to be opened.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a key holder comprising a flexible and resilient wire member constructed in accordance with the principles of the present invention;

FIG. 2 is a side elevational view of the key holder shown in FIG. 1, showing the overlapped end portions of the wire member in a closed position;

FIG. 3 is a side elevational view similar to FIG. 2, showing the overlapped end portions of the wire member in an open position;

FIG. 4 is a perspective view of a key holder comprising a wire member and an article container constructed in accordance with the principles of the present invention, showing the article container in a locked position;

FIG. 5 is a perspective view similar to FIG. 4, showing the article container in an open position;

FIG. 6 is a perspective view of a second embodiment of a key holder comprising a wire member and an article container, showing the article container in a locked position;

FIG. 7 is a perspective view similar to FIG. 6, showing the article container in an open position;

FIG. 8 is a perspective view of a third embodiment of a key holder comprising a wire member and an article container, showing the article container in a locked position; and

FIG. 9 is a perspective view similar to FIG. 8, showing the article container in an open position.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGS. 1 through 3 disclose a key holder **10** comprising a wire member **12** formed of any suitable flexible and resilient material. The wire member **12** is in the form of two loops **14** and **16** disposed in substantially the same plane and joined by cross portions **18**. The end portions **20** of the wire member **12** are overlapped in the one loop **14**, and the wire member **12** is so formed that the overlapped end portions **20** are normally in engagement and the cross portions **18** are normally separated, as shown in FIGS. **1** and **2**. The end portions **20** are disposed on sides relative to each other opposite to the sides on which the cross portions **18** to which they are directly connected are relatively disposed.

When it is desired to remove one or more keys K from the loop **14** or to add keys thereto, the engaged overlapped end portions **20** of the wire member may be separated by pressing together the cross portions **18**, as shown in FIG. **3**, which results in the torsional deformation of the wire member **12** and the separation of the end portions **20**. When the end portions **20** are separated, one or more of the keys K may be conveniently removed from or placed onto the loop **14**. Upon subsequent release of the cross portions **18**, the resiliency of the wire member **12** causes the cross portions to separate to the position shown in FIG. **2** wherein the end portions **20** are again in engagement to retain the keys K on the loop **14**.

The construction of the key holder **10** is advantageous in that it may be conveniently opened for the removal or addition of keys by merely pressing the cross portions **18** together. Also, since the overlapped end portions **20** of the wire member **12** are located in the center portion of the loop **14**, a selected key or keys may be conveniently removed from the loop **14** without requiring the removal of any other keys on either side of the overlapped end portions.

FIGS. **4** and **5** disclose a first embodiment of a combined key holder and article container **100** comprising the wire member **12**, as shown in FIGS. **1** through **3**, and an article container **102** movably mounted on the loop **16** of the wire member **12**. Preferably, the article container **102** has an exterior shape corresponding to that of the loop **16** and is adapted to be received therewithin. The container **102** comprises a pair of cup shaped members **104** and **106** that are adapted to be snap-fitted together in any suitable or conventional manner (not shown) and are connected by a flexible hinge portion **108** which also serves to retain the container **102** on the loop **16**.

On the side opposite to that of the hinge portion **108**, each of the members **104** and **106** comprises an outwardly extending locking tab **110** and **112**, respectively. The locking tabs **110** and **112** extend upwardly and outwardly a sufficient distance to engage the cross portions **18** of the wire member **12** when the container **102** is in the position shown in FIG. **4**. In this position, the locking tabs **110** and **112** prevent the cross portions from being pressed together to thus prevent the overlapped end portions **20** in the loop **14** from being separated, and also prevent the article container **102** from being opened. When it is desired to remove keys from or to add keys to the loop **14** of the wire member **12**, or to open the article container **102**, the container **102** is grasped and moved in the direction of the arrows shown in FIG. **4** to move the locking tabs **110** and **112** out of the space between the cross portions **18** of the wire member **12**. Thereafter, the cross portions are adapted to be pressed together to separate the end portions **20** in the loop **14**, in the manner described above, and the container **102** may be opened, as shown in FIG. **5**, to remove or add articles such as coins or pills therefrom or thereto.

Without departing from the scope of the present invention, the locking tabs **110** and **112** may be of any suitable construction other than that disclosed in FIGS. **4** and **5**. For example, each of the locking tabs might comprise an outwardly extending portion having a laterally outwardly extending cam section formed which is adapted to be moved past the adjacent portion of the loop **14** and to be snap-engaged within the space between the cross portions **18** of the wire member **12**. Also, one of the locking tabs might comprise a laterally outwardly extending portion which is sufficiently large to prevent movement of the container past one side of the loop **14**, thereby requiring that the container be moved into and out of the space between the cross portions **18** only from one side of the wire member **12**.

A second embodiment of a combined key holder and article container **200** is shown in FIGS. **6** and **7**. In this embodiment, the cross portions **218** of the wire member **212** are provided with transversely bent sections **219** that are adapted to be engaged by upstanding locking tabs **210** and **212** on the cup-shaped members **204** and **206**, respectively, as the container **202** is moved to a position wherein the locking tabs **210** and **212** are disposed between the cross portions **218**. In this manner, the locking tabs **210** and **212** will be removably retained in their locking position between the cross portions **218** until the container **202** is moved in the direction of the arrows in FIG. **6** with sufficient force to snap the locking tabs **210** and **212** past the transverse sections **219** to thereby enable the loop **214** of the wire member **212** to be opened and the container **202** to be opened, as shown in FIG. **7**. This embodiment, therefore, provides for a positive snap-engagement of the locking tabs **210** and **212** with the transverse sections **219** of the cross portions **218** during movement of the locking tabs into and out of the closed position shown in FIG. **6**.

A third embodiment of a combined keyholder and article container **300** is shown in FIGS. **8** and **9**. In this embodiment, the wire member **312** is provided with the first loop **214** adapted to receive keys thereon and comprising overlapped wire end portions **320**, and a second loop **316** which is of less width than the first loop **314**. An article container **302** comprising two cup-shaped members **304** and **306** is pivotally mounted on the lower end of the narrow loop **316** and is adapted to be moved between a first position shown in FIG. **8** wherein the container **302** is frictionally retained between the cross portions **318** of the wire member **312** and a second position shown in FIG. **9** wherein the container **302** is removed from the cross portions **318** and is adapted to be opened. In the first or locking position shown in FIG. **8**, the frictional engagement between the container **302** and the cross portions **318** prevents the cross portions from being pressed together to separate the wire end portions **320** in the loop **314**, thereby preventing the removal of keys from or the adding of keys to the loop **314**. When the container **302** is moved out of engagement with the cross portions **318**, they may be pressed together to torsionally deform the wire member **312** and open the loop **314** in the manner described above.

Although an article container is shown in FIGS. **4** through **9**, it should be understood that any other suitable means, such as a solid disc-like member, may be movably mounted on the wire member in a manner to be removably positioned between the cross portions of the wire member to prevent the opening of the key retaining loop.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit or scope of the invention or sacrificing all of its material advantages, the forms hereinbefore described being merely preferred embodiments thereof.

I claim:

1. A key holder, comprising a flexible and resilient wire member in the form of two loops connected by normally spaced cross portions, said wire member having normally engaged end portions that are overlapped in one of said loops and adapted to be separated when said cross portions are pressed together to torsionally deform said wire member; whereby keys may be removed from or placed on said one loop when said cross portions are pressed together to separate said engaged end portions, and locking means mounted on said wire member and adapted to be positioned between said cross portions to prevent them from being pressed together.

2. The key holder of claim **1** wherein said end portions are disposed on sides relative to each other opposite to the sides on which the cross portions to which they are directly connected the relatively disposed.

3. The key holder of claim **1** wherein said loops are disposed in substantially the same plane.

4. The key holder of claim wherein said locking means is movably mounted on the other of said loops.

5. The key holder of claim **4** wherein said locking means is movable between a first position wherein it is disposed within said other loop and between said cross portions, and a second position wherein it is disposed outwardly of said other loop and spaced from said cross portions.

6. The key holder of claim **5** wherein said locking means comprises an article container which is adapted to be opened when it is in said second position.

7. The key holder of claim **6** wherein said article container comprises connected cup-shaped members adapted to be releasably fitted together to retain articles therebetween, and locking tabs on each of said members adapted to be positioned between said cross portions when said container is in said first position to prevent opening of said first loop and said container.

8. The key holder of claim **7** wherein said cross portions have transverse sections that are adapted to be snap-engaged by said locking tabs when said container is moved into and out of said first position.

9 The key holder of claim **6** wherein said article container is pivotally mounted on said other loop.

* * * * *