July 7, 1970 A. N. BOLTE 3,518,853

SKI LOCK

Filed May 27, 1968

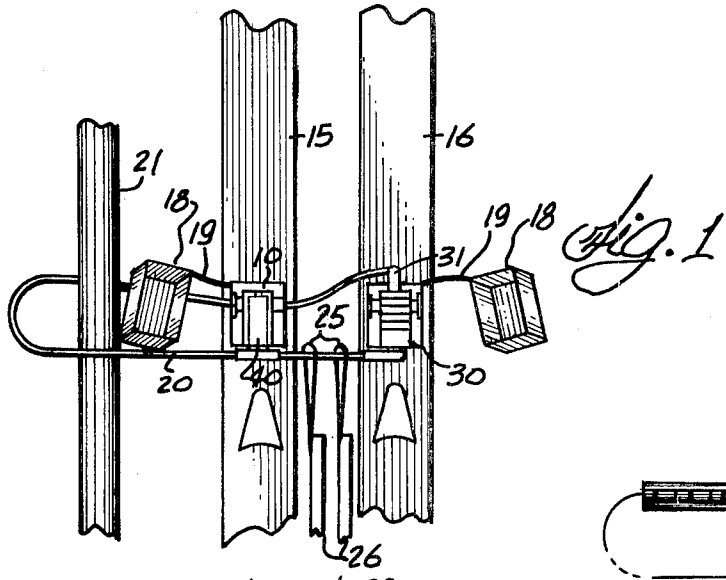


Fig. 1

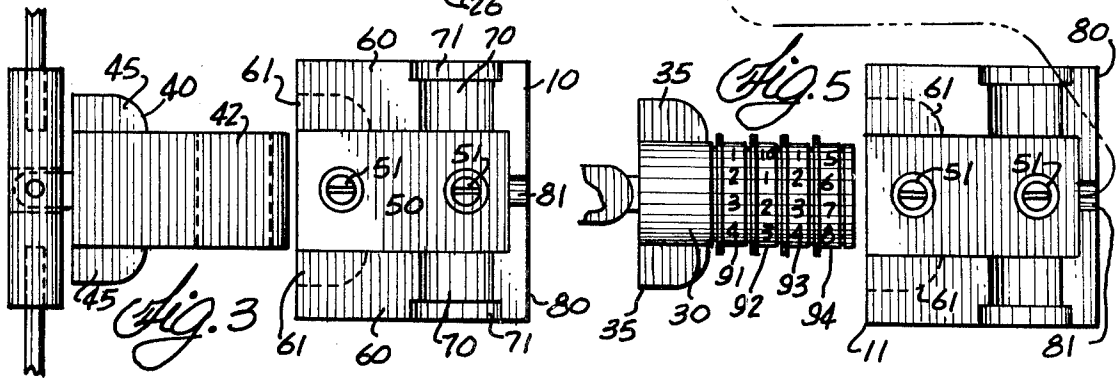


Fig. 3

Fig. 5

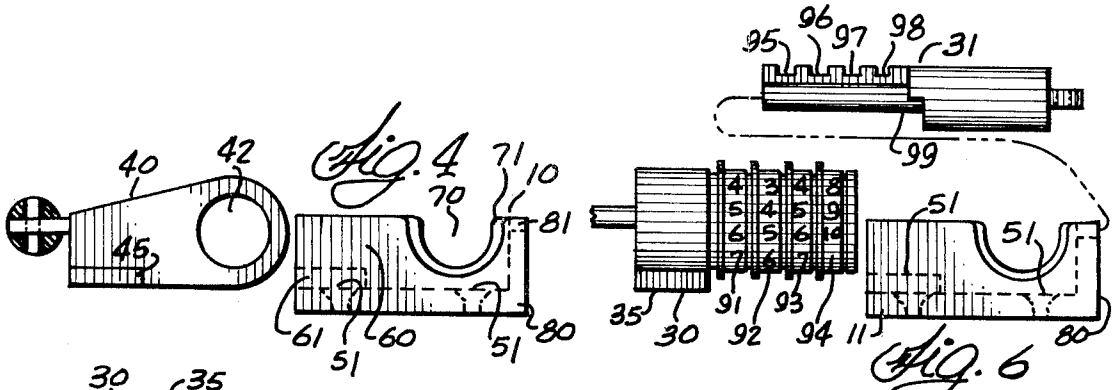


Fig. 4

Fig. 6

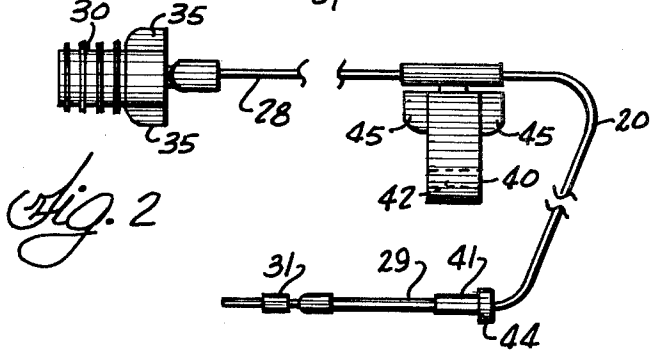


Fig. 2

INVENTOR.
Allen N. Bolte
BY Pendleton, Neuman, Seibold & Williams
Attorneys

United States Patent Office 3,518,853 Patented July 7, 1970

3,518,853

SKI LOCK

Allen N. Bolte, 8440 Kessler, Overland Park, Kans. 66212

Filed May 27, 1968, Ser. No. 732,166
Int. Cl. E05b 73/00; A63c 11/02
U.S. Cl. 70—58 8 Claims

ABSTRACT OF THE DISCLOSURE

A ski lock, which includes brackets rigidly attached to two skis and a cable having mating and locking end portions which cooperates with the brackets, is described in detail. The brackets are designed to be rigidly attached to the cable and the cable is designed to be wrapped around a suitable stationary object such as a ski rack. When the cable is attached to the brackets, the screws which secure the brackets to the skis cannot be reached by a screwdriver and, therefore, the brackets cannot be removed from the skis.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to locking devices and particularly to a novel ski lock.

Brief description of the prior art

There have been a number of ski locking devices proposed for skis and ski poles but all have suffered from one or more disadvantages, the most common being failure to insure a positive lock and difficulty in handling. For example, the simple cables with mating and locking end portions which are frequently used as ski locks must be threaded through a portion of the ski bindings on both skis. This operation is cumbersome and does not always provide a secure lock.

SUMMARY OF THE INVENTION

The principal object of the present invention is to provide a convenient, easily operated and secure lock for skis and ski poles. Briefly, the present invention includes a bracket on each ski and a cable having members which cooperate with the brackets to positively attach each bracket to the cable. The cable is simply placed around a suitable stationary object such as a ski rack. The poles may be locked by placing the cable through the pole straps or brackets. It is desirable to construct the cable and brackets so that in the locked condition the fasteners which secure the brackets to the skis cannot be reached with a conventional tool. In the preferred embodiment, a conventional multi-ring combination lock is employed.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a diagrammatical view showing a ski lock constructed according to the present invention. FIG. 2 is a diagrammatical view of the cable employed with the ski lock shown in FIG. 1. FIGS. 3 and 4 are a plan and a side view respectively of one portion of the ski lock shown tively of another portion of the ski lock shown in FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

in FIG. 1. FIGS. 5 and 6 are a plan and side view respec-

The preferred embodiment of the invention is illustrated in FIG. 1. Two brackets **10**, **11** are attached to two skis **15**, **16** at a convenient location; for most purposes a location just forward of the toe piece is suitable. A cable **20** is positively attached to both brackets **10**, **11** and wrapped around a suitable stationary member such as a ski rack **21**. The cable **20** passes through the straps **25** of two ski

poles **26**. The portion of the cable in the bracket **11** includes a conventional multi-ring combination lock **30**, **31**. As will be described in more detail below, when the skis are in a locked condition as illustrated in FIG. 1, the screws which are used to fasten the brackets **10** and **11** to the skis **15**, **16** are covered by cable members **30**, **40** so that the brackets cannot be removed from the skis **15**, **16**. Covers **18** are attached to the brackets **10**, **11** by cables **19** and are designed to cover the brackets **10**, **11** when the lock is not being used. The covers **18** prevent any inconvenience which might result if snow and other materials were allowed to fill the spaces in the brackets **10**, **11**.

The FIG. 2 shows the unattached cable **20** which the skier will carry when it is not used to lock the skis. Cable **20** is terminated at its two ends with two mating portions **30**, **31** of a conventional multi-ring combination lock similar to that used on conventional cable ski locks. The mating portions, which may be attached to the cable in any suitable manner, are shown in more detail in FIGS. 5 and 6 and will be described in more detail below.

Two intermediate members **40**, **41** are also suitably secured by conventional means to the cable **20**. The member **40** is constructed to cooperate with the bracket **10** as described below. The intermediate member **41** is a cylindrical element designed to fit through a hole **42** in the member **40** and it has an enlarged portion **44** to limit entry into the hole **42**. The total length of the cable between the two intermediate members **40** and **41** is desirably several feet. The length of cable **28** between the intermediate member **40** and the lock portion **30** is considerably shorter and may be approximately eight inches. The length of cable **29** between the end portion **31** and the intermediate member **41** is about the same. However, the diameter of the length of cable **29** between the portions **31** and **41** is preferably larger than the diameter of the rest of the cable. While the increased diameter of the cable **29** is a preferable feature, it is by no means necessary. Indeed, the intermediate member, while convenient, is not necessary for the operation of the lock.

Referring to FIGS. 3 and 4, the bracket **10** is illustrated adjacent to the intermediate member **40**. The bracket **10** is desirably a one-piece construction having a flat central section **50** with screws **51** attaching the bracket **10** to the ski **15**. The tops of the screws **51** are flush with, or below, the base of the central portion **50**. Two side portions **60** extend upwardly and have two undercut portions **61** adjacent to the flat central section **50**. The undercut portions **61** are approximately the same size and shape as two flanges **45** on the member **40**. Thus, when the member **40** is inserted into the bracket **10**, the flanges **45** register with the undercut sections **61**.

The side portions **60** also include two semicircular cuts **70** which extend from the outer sides of the portions **60** into the space above the central section **50**. The diameter of the cut portions **70** is slightly greater than the diameter of the member **41** (FIG. 2) and approximately equal to the diameter of the hole **42**. The outermost portions **71** of the two cut portions **70** are slightly larger in diameter to receive the large portion **44** on the intermediate member **41**.

The side portions **60** are joined together at the end **80** which has a small semicircular cut **81** near its top portion.

When the skis are to be locked, the member **40** is inserted into the bracket **10** so that the flanges **45** register with the undercut portions **61** and the hole **42** registers with the semicircular cuts **70**. The intermediate member **41** is then inserted through the hole **42** to secure the member **40** in place.

The bracket **11** shown in FIGS. 5 and 6 is identical to the bracket **10** shown in FIGS. 3 and 4. The member **30** shown in FIGS. 5 and 6 includes flanges **35** which are the same as the flanges **45** shown in FIG. 3. The member **30**

includes a conventional multi-ring combination lock having four rings **91, 92, 93, 94**. The combination lock cooperates with a mating member **31** having four notches **95, 96, 97, 98** which co-act with the four rings **91, 92, 93, 94**.

The member **30** is inserted into the bracket **11** from the left so that the flanges **35** register with the undercut portions **61** in the bracket **11**. The mating member **31** is inserted into the member **30** from the right through the semicircular cut **81**. In the locked condition, the surface **99** of the member **31** abuts the end wall **80** of the bracket **11** so that the members **30** and **31** cannot be removed from the bracket **11** unless the combination rings **91, 92, 93, 94** are operated to release them.

As already noted, the skier carries the cable **20** until he is ready to lock the skis. The locking process is briefly as follows. The member **40** is inserted into the bracket **10** so that the flanges **45** register with the undercut portions **61**. The portion of the cable **20** intermediate the member **40** and the member **41** is then wrapped around some stationary object, such as a ski rack **21** (FIG. 1), and both the end member **31** and the portion **41** are threaded through the semicircular cut **70** and the hole **42** until the portion **44** contacts the edge of the side member **60**. The member **40** cannot now be removed from the bracket **10**. The end member **30** is then inserted into the bracket **11** so that the flanges **35** register with the undercut portions **61**. Next, the mating member **31** is inserted through the semicircular cut **81** into the member **30** and the rings **91, 92, 93, 94** are rotated to lock the device. The ski poles may, of course, be attached at any portion along the cable **20**. It should be noted that while the member **41** is free to move slightly to the left of the bracket **10**, the short section of cable between the member **41** and the end piece **31** will prevent the member **40** from being removed from the bracket **10**. To further insure that the member **40** cannot be removed from the bracket **10**, the portion of cable **29** is made larger in diameter than the remainder of the cable.

While a preferred embodiment of the invention has been described in detail, the invention is in no sense limited thereto. The scope of the invention is set forth by the following claims.

What is claimed is:

1. A ski lock for use with a pair of skis comprising first and second brackets secured respectively to the two skis of said pair, a cable adapted to be connected to said brackets, said cable including two mating portions having means for locking the mating portions whereby a loop may be formed by said cable around an object for the purpose of securing the skis, at least one of said brackets having means for rigidly securing both mating portions whereby said cable is securely attached to said bracket when said mating portions are locked together and secured to said bracket.

2. The ski lock of claim **1** further including means for covering said brackets when not in use.

3. The ski lock of claim **1** wherein said cable includes first and second interlocking means intermediate said mating portions, at least one of said brackets having means for securing said interlocking means to said bracket whereby said cable is securely attached to both bracket means when said first and second interlocking means are interlocked with each other and with said bracket, means and the mating portions are locked together and secured to the other bracket.

4. The ski lock of claim **3** wherein said first and second interlocking means are located intermediate said mating portions.

5. The ski lock of claim **4** wherein the distance along the cable between each interlocking means and the adjacent mating portion is relatively short compared to the distance between the interlocking means.

6. The ski lock of claim **1** wherein said cable includes interlocking means intermediate said mating portions, at least one of said brackets having means for securing said interlocking means to said bracket whereby said cable is securely attached to both brackets when said interlocking means and bracket means are locked with each other and the mating portions are locked together and secured to the other bracket.

7. The ski lock of claim **6** wherein said interlocking means is located intermediate said mating portions.

8. The ski lock of claim **7** wherein the distance along the cable between the interlocking means and one of the mating portions is relatively short compared to the distance between the mating portions.

References Cited

UNITED STATES PATENTS

3,091,011	5/1963	Campbell	70—58 X
3,272,526	9/1966	Rumaner	280—11.37
3,335,585	8/1967	Stratton	70—58
3,354,675	11/1967	Quigg	70—58

FOREIGN PATENTS

234,013	6/1964	Austria.
1,406,920	6/1965	France.

RICHARD E. MOORE, Primary Examiner

E. J. McCARTHY, Assistant Examiner

U.S. Cl. X.R.

280—11.37

UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,518,853 Dated July 7, 1970

Inventor(s) ALLEN N. BOLTE

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Col. 1, line 50, "brackets" should be --baskets--;

Col. 1, line 61, the following words were omitted and should be added:

"in FIG. 1. FIGS. 5 and 6 are a plan and side view respec-"

[This line later misplaced as line 65];

Col. 1, omit line 65; and

Col. 4, line 11, remove comma.

SIGNED AND SEALED OCT 13 1970

(SEAL)
Attest:

Edward M. Fletcher, Jr.
Attesting Officer

WILLIAM E. SCHUYLER, JR.
Commissioner of Patents

USCOMM-DC 60376-P69
U.S. GOVERNMENT PRINTING OFFICE : 1969 O—368-334