



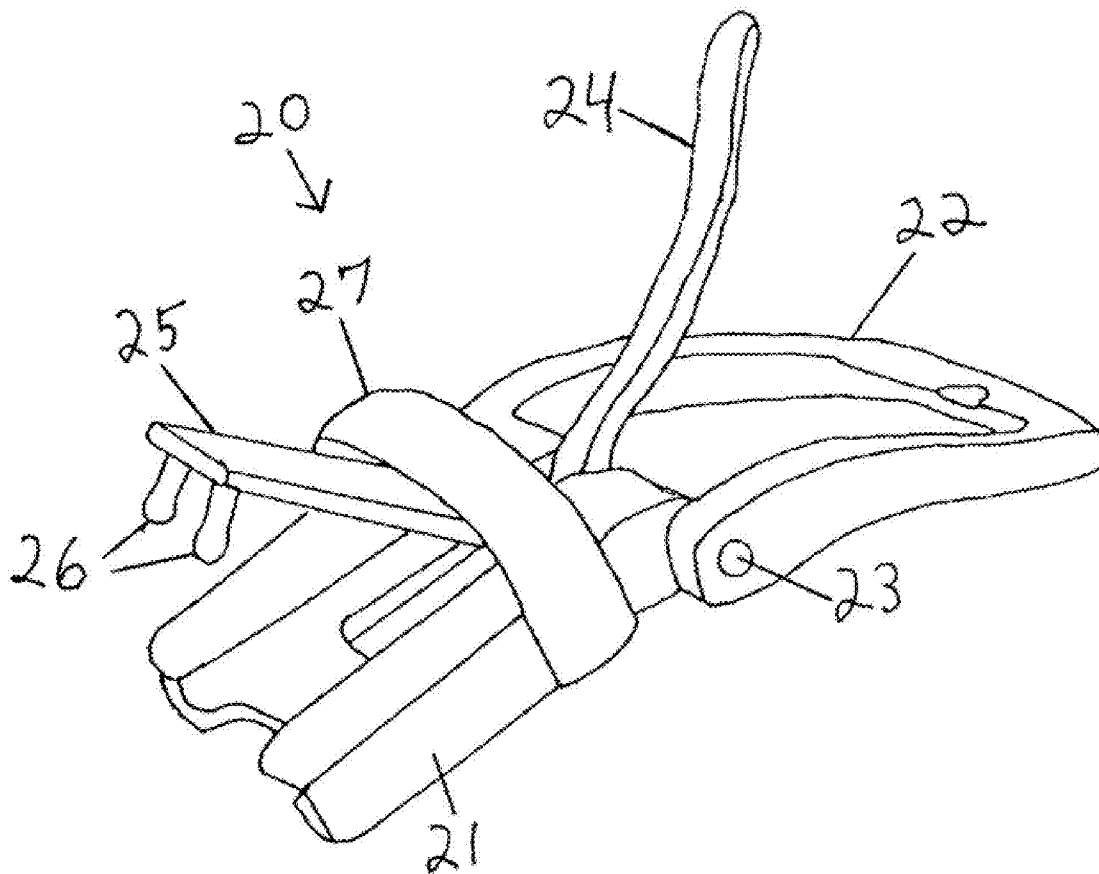
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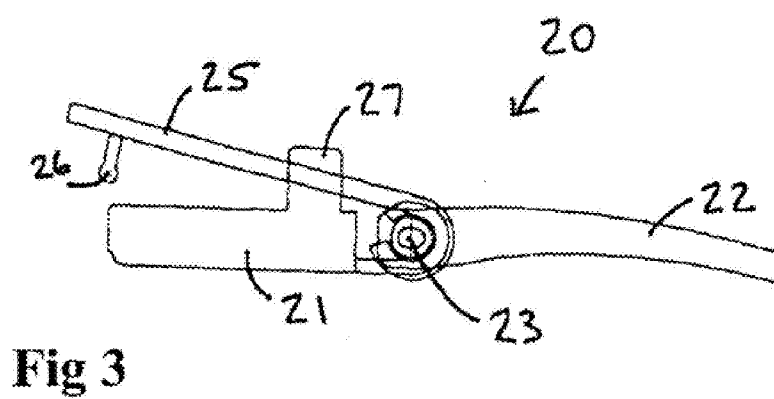
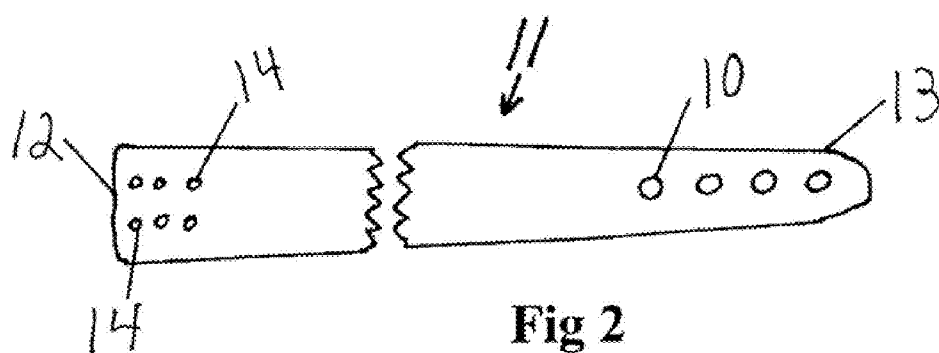
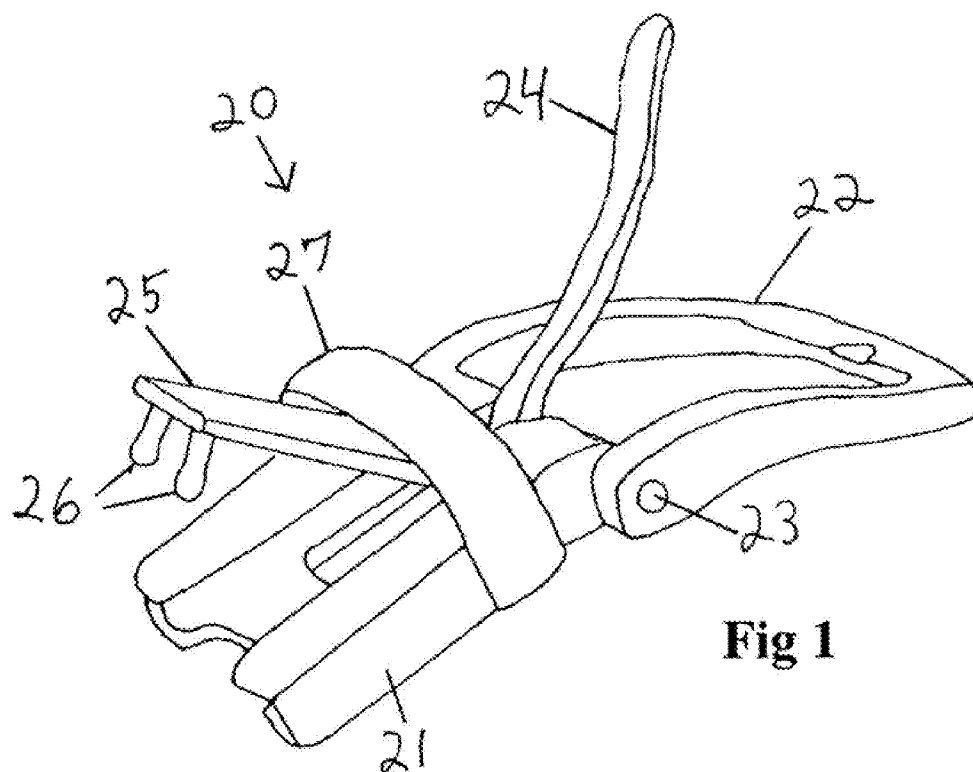
(19) **United States**(12) **Patent Application Publication**
Burch(10) **Pub. No.: US 2010/0071116 A1**(43) **Pub. Date: Mar. 25, 2010**(54) **ADJUSTABLE BELT****Publication Classification**(76) Inventor: **Clem D. Burch**, Birmingham, AL
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Minneapolis, MN 55402 (US)(57) **ABSTRACT**(21) Appl. No.: **12/561,688**(22) Filed: **Sep. 17, 2009****Related U.S. Application Data**(60) Provisional application No. 61/098,251, filed on Sep.
19, 2008.

An adjustable belt having a U-shaped buckle attached to a buckle rod and a belt receptacle attached to the buckle rod, wherein the U-shaped buckle and the belt receptacle are rotatable with respect to each other. The belt receptacle has a latch member attached rotatably to the belt receptacle or to the buckle rod. The latch member has one or more spikes. One end of a belt is reversibly insertable into the belt receptacle and is retained therein by one or more spikes engaging one or more spike holes in the belt. The circumference of the belt is adjustable around the waist of a user by the extent of insertion of one end of the belt into the belt receptacle and by the extent of insertion of the other end of the belt into the U-shaped buckle. A variety of buckle designs can be used interchangeably with a variety of belt designs.





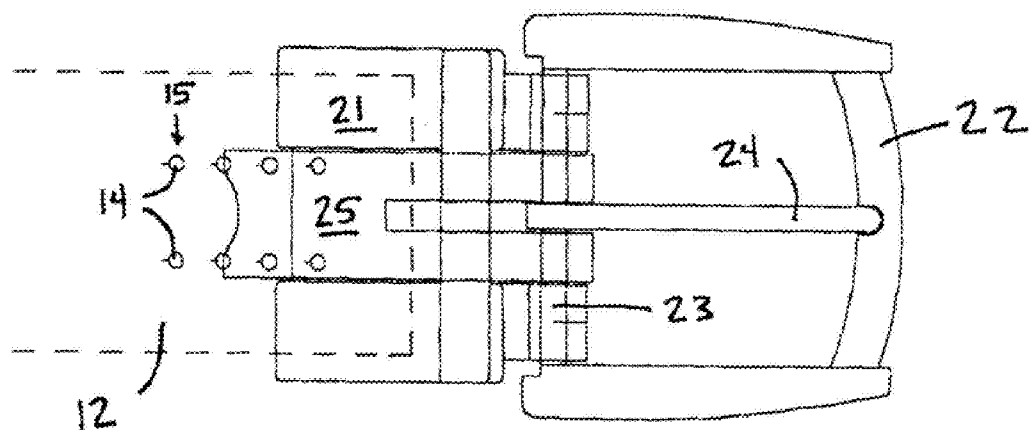


Fig 4

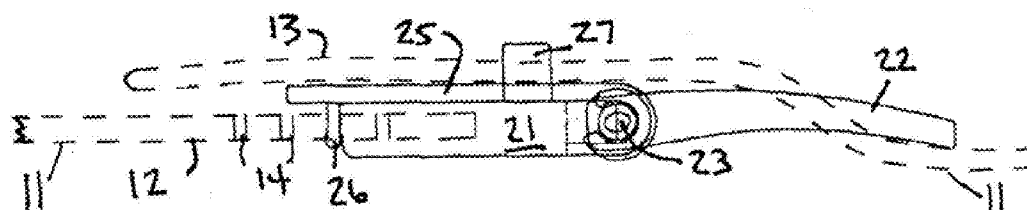


Fig 5

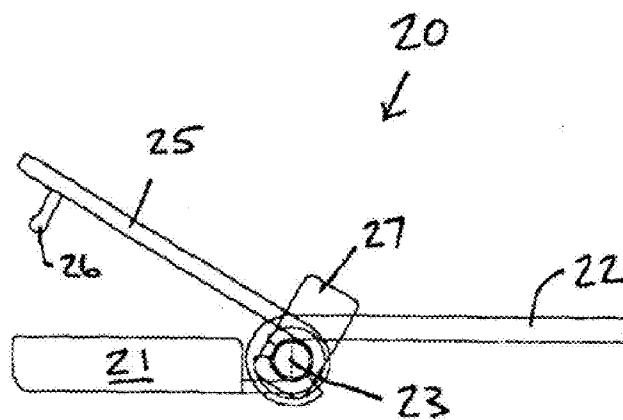


Fig 6

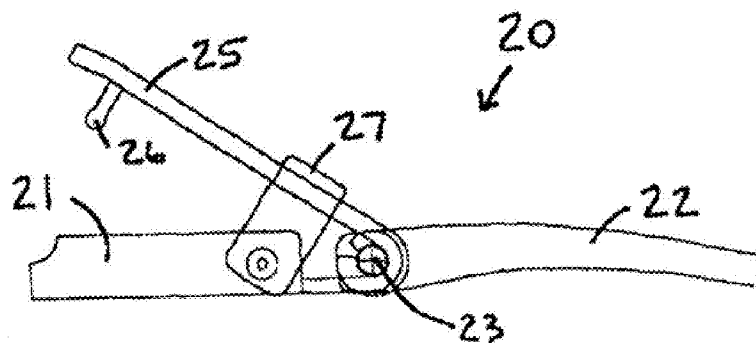


Fig 7

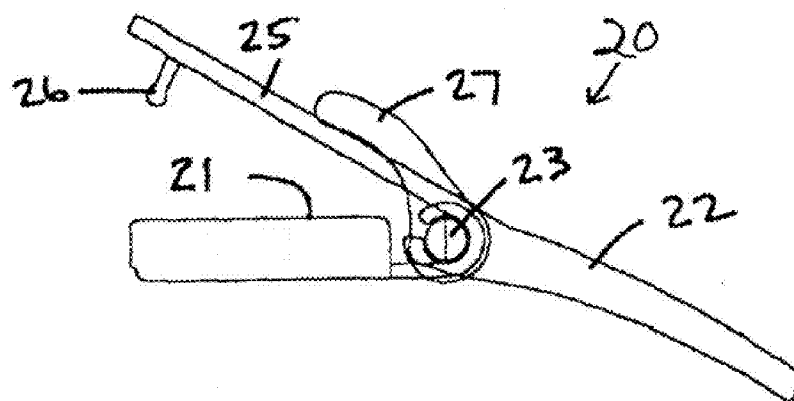


Fig 8

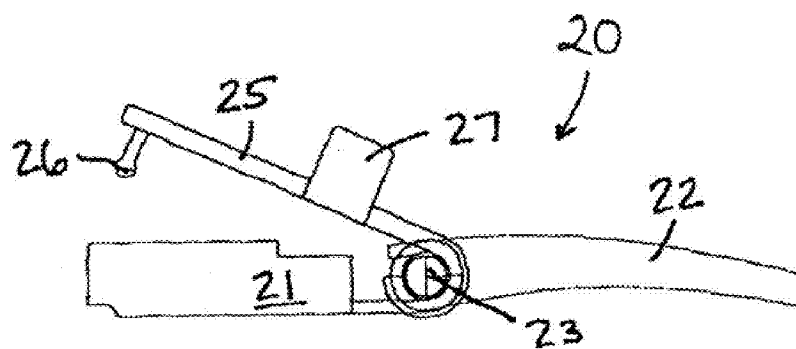


Fig 9

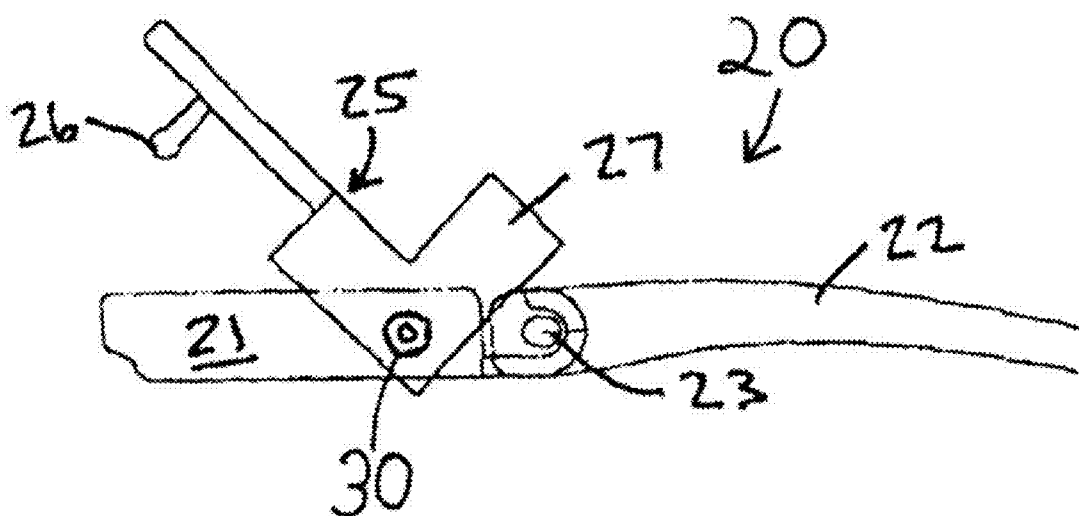


Fig 10

ADJUSTABLE BELT

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority to U.S. Provisional Patent Application No. 61/098,251, filed Sep. 19, 2008, the disclosure of which is incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to waist belts and, more particularly, to a waist belt wherein the belt is adjustable at both ends of the belt.

BACKGROUND OF THE INVENTION

[0003] A typical waist belt has a belt buckle affixed at a first end of the belt wherein the second end of the belt is threaded through the belt buckle and is secured therein via a pivotable prong so that the belt forms a circle with a specific circumference. The pivotable prong engages one of a plurality of holes at the second end of the belt. This type of belt buckle usually also has a belt keeper. The holes through the second end of the belt are typically spaced linearly at one inch intervals, which allow the belt to be adjusted in circumference by one inch increments. However, these one inch increments can result in a belt being either slightly tight or loose, either of which can be uncomfortable. Belt buckles that use a prong to fasten the belt in the belt buckle are not constructed for fine adjustment of the belt circumference around the waist of a user. Accordingly, what is needed is a belt with a prong-type buckle that is adjustable at both ends of the belt.

SUMMARY OF THE INVENTION

[0004] The present invention is an adjustable belt having a U-shaped buckle attached to a buckle rod and a belt receptacle attached to the buckle rod, wherein the U-shaped buckle and the belt receptacle are rotatable with respect to each other. One or more belt prongs are attached rotatably to the buckle rod. The belt receptacle has a latch member attached rotatably to the belt receptacle or to the buckle rod. The latch member has one or more spikes. The belt portion of the adjustable belt has a first end with spike apertures spaced at one-fourth inch to one-half inch intervals and a second opposite end with prong holes. The first end of the belt is insertable into the belt receptacle and is retained therein by one or more spikes engaging one or more spike holes. The second opposite end of the belt is insertable into the U-shaped buckle and is retained therein by one or more belt prongs engaging one or more prong holes. The circumference of the belt is adjustable around the waist of a user at the first end of the belt by the extent of insertion of the first end into the belt receptacle, and at the second end of the belt by the extent of insertion of the second end into the U-shaped buckle. The adjustable belt has a belt keeper rigidly formed as part of the belt receptacle or U-shaped buckle or as part of the latch member. The belt keeper may also be pivotably attached to the buckle rod or to the belt receptacle.

[0005] An advantage of the present invention is a belt that uses a standard belt buckle with a belt prong that allows fine adjustment of the circumference of the belt around the waist of a user.

[0006] Another advantage is the use of a belt receptacle having a latch with spikes which reversibly engage one end of

the belt so that the length of the belt can be varied by fine adjustment and the belt is replaceable in the belt receptacle. **[0007]** Another advantage is the ability to have a variety of buckle designs that can be used interchangeably with a variety of belt designs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 shows a perspective view of an embodiment of the belt buckle of the present invention.

[0009] FIG. 2 shows an example of a belt that is used with the belt buckle of the present invention.

[0010] FIG. 3 shows a side view of the belt buckle.

[0011] FIG. 4 shows a top view of the belt buckle with the belt inserted into the belt receptacle.

[0012] FIG. 5 shows a side view of the belt buckle with the belt inserted into the belt receptacle and into the buckle member.

[0013] FIG. 6 shows the belt keeper attached rotatably to the buckle rod.

[0014] FIG. 7 shows the belt keeper attached rotatably to the belt receptacle.

[0015] FIG. 8 shows the belt keeper attached rigidly to the buckle member.

[0016] FIG. 9 shows the belt keeper attached rigidly to the latch member.

[0017] FIG. 10 shows the belt keeper attached rigidly to the latch member wherein the latch member is attached rotatably to the belt receptacle.

DETAILED DESCRIPTION OF THE INVENTION

[0018] The present invention comprises an adjustable waist belt and a clothing accessory kit comprising various combinations of the adjustable waist belt. FIG. 1 illustrates the belt buckle 20 of the adjustable waist belt. The belt buckle 20 is constructed of a belt receptacle 21 and a preferably substantially U-shaped buckle member 22. The belt receptacle 21 is coupled to the U-shaped buckle member 22 via a rod 23 so that the belt receptacle 21 is rotatable with respect to the U-shaped buckle member 22. A belt prong 24 is preferably rotatably attached to the center of the rod 23, as is known in the art. More than one belt prong 24 may be attached to the center of rod 23. A latch member 25 preferably having two spikes 26 is pivotably attached to the rod 23 or to the belt receptacle (see FIG. 10). A belt keeper 27 can be rigidly formed as part of the belt receptacle 21.

[0019] FIG. 2 shows an example of an elongated belt 11 having a first end 12 with spike apertures 14 therethrough, and a second opposite end 13 having a plurality of prong holes 10 therethrough as is known in the art. FIG. 3 shows a side view of the belt buckle 20,

[0020] FIG. 4 shows top view of belt buckle 20 with first end 12 of belt 11 inserted reversibly into belt receptacle 21, and FIG. 5 shows a side view of belt buckle 20 with first end 12 of belt 11 inserted reversibly into belt receptacle 21 and the second opposite end 13 of belt 11 inserted reversibly into U-shaped buckle member 22. The spike apertures 14 are in a plurality of substantially parallel linear rows 15 that are preferably spaced at one-fourth inch to one-half inch intervals with each row 15 preferably having two apertures 14 (FIGS. 4 and 5). FIG. 5 further shows the second end 13 of belt 11 inserted through the belt keeper 27.

[0021] The belt keeper 27 may be attached in alternate ways to the belt buckle 20. It may be pivotably attached to the rod

23 (FIG. 6) or the belt receptacle **21** (FIG. 7) for securing the second end **13** of the belt **11**. The belt keeper **27** is shown as rigidly formed as part of the belt receptacle portion **21** in FIGS. 1, and 2-5, but can also be rigidly formed as part of the buckle member **22** (FIG. 8), and the latch member **25** (FIGS. 9 and 10). FIG. 10 further shows that the latch member **10** can be attached rotatably to belt receptacle **21** with latch rod **30**. [0022] The first end **12** of the belt **11** is insertable into the belt receptacle and is retained therein by one or more of the spikes **26** engaging one or more spike holes **14**. The second opposite end **13** of the belt **11** is insertable into the U-shaped buckle member **22** and is retained therein by one or more belt prongs **22** engaging one or more prong holes **10**. The circumference of the belt **11** is adjustable around the waist of a user at the first end **12** of the belt **11** by the extent of insertion of the first end **12** into the belt receptacle **21**, and at the second end **13** of the belt **11** by the extent of insertion of the second end **13** into the U-shaped buckle member **22**. Thus, in use, the first end **12** of the belt **11** can be inserted into the belt receptacle **21** a desired distance, after which, the latch member **25** can be pivoted downward until the spikes **26** engage the spike apertures **14** to reversibly attach the belt receptacle **21** to the belt **11**.

[0023] Because the belt **11** is completely detachable from the belt buckle **20**, the belt **11** can have different colors and/or designs on each side so that the wearer can change the side of the belt **11** to be displayed. A clothing accessory kit can include a plurality of belt buckles **20** having different colors and/or designs and a plurality of belts **11** having different colors and/or designs to provide a variety of combination options.

[0024] The foregoing description has been limited to specific embodiments of this invention. It will be apparent, however, that variations and modifications may be made by those skilled in the art to the disclosed embodiments of the invention, with the attainment of some of all of its advantages and without departing from the spirit and scope of the present invention. For example, belts may be constructed of any suitable textile, cloth, or plastic. Buckle members may be constructed of any type of suitable metal or plastic. The belts and buckle members may be constructed in any suitable type of shape or design.

[0025] It will be understood that various changes in the details, materials, and arrangements of the parts which have been described and illustrated above in order to explain the nature of this invention may be made by those skilled in the art without departing from the principle and scope of the invention as recited in the following claims.

1. An adjustable belt, comprising:

- a) a U-shaped buckle member attached to a buckle rod;
- b) a belt receptacle attached to said buckle rod;
- c) one or more belt prongs attached rotatably to said buckle rod;
- d) said belt receptacle having a latch member attached rotatably to said belt receptacle or to said buckle rod, said latch member having one or more spikes; and
- e) a belt having a first end with spike apertures and a second opposite end with prong holes, wherein said first end is insertable into said belt receptacle and retained therein by said one or more spikes engaging one or more said spike holes, and wherein said second opposite end is insertable into said U-shaped buckle member and is retained therein by said one or more belt prongs engaging one or more said prong holes.

2. The adjustable belt of claim **1** further comprising a belt keeper rigidly formed as part of said belt receptacle or U-shaped buckle member or as part of said latch member, or pivotably attached to said buckle rod or to said belt receptacle.

3. The adjustable belt of claim **1** wherein a circumference of said belt is adjustable at said first end of said belt by the extent of insertion of said first end into said belt receptacle, and at said second end of said belt by the extent of insertion of said second end into said U-shaped buckle member.

4. The adjustable belt of claim **1** wherein said U-shaped buckle member and said belt receptacle are rotatable with respect to each other.

5. The adjustable belt of claim **1** wherein said spike holes are spaced at one-fourth inch to one-half inch intervals.

6. An adjustable belt, comprising:

- a) a U-shaped buckle member attached to a buckle rod;
- b) a belt receptacle attached to said buckle rod, wherein said U-shaped buckle member and said belt receptacle are rotatable with respect to each other;
- c) one or more belt prongs attached rotatably to said buckle rod;
- d) said belt receptacle having a latch member attached rotatably to said belt receptacle or to said buckle rod, said latch member having one or more spikes; and
- e) a belt having a first end with spike apertures spaced at one-fourth inch to one-half inch intervals and a second opposite end with prong holes, wherein said first end is insertable into said belt receptacle and retained therein by said one or more spikes engaging one or more said spike holes, wherein said second opposite end is insertable into said U-shaped buckle member and is retained therein by said one or more belt prongs engaging one or more said prong holes, and wherein a circumference of said belt is adjustable at said first end of said belt by the extent of insertion of said first end into said belt receptacle, and at said second end of said belt by the extent of insertion of said second end into said U-shaped buckle member.

7. The adjustable belt of claim **6** further comprising a belt keeper rigidly formed as part of said belt receptacle or U-shaped buckle member or as part of said latch member, or said belt keeper being pivotably attached to said buckle rod or to said belt receptacle.

8. A belt buckle, comprising:

- a) a U-shaped buckle member attached to a buckle rod;
- b) a belt receptacle attached to said buckle rod;
- c) one or more belt prongs attached rotatably to said buckle rod;
- d) said belt receptacle having a latch member attached rotatably to said belt receptacle or to said buckle rod, said latch member having one or more spikes; and
- e) said belt buckle being constructed for attachment to a belt having a first end with spike apertures and a second opposite end with prong holes, wherein said first end is insertable into said belt receptacle and retained therein by said one or more spikes engaging one or more said spike holes, and wherein said second opposite end is insertable into said U-shaped buckle member and is retained therein by said one or more belt prongs engaging one or more said prong holes.

9. The belt buckle of claim **8** further comprising a belt keeper rigidly formed as part of said belt receptacle or

U-shaped buckle member or as part of said latch member, or said belt keeper being pivotably attached to said buckle rod or to said belt receptacle.

10. The belt buckle of claim **8** wherein a circumference of said belt is adjustable at said first end of said belt by the extent of insertion of said first end into said belt receptacle, and at said second end of said belt by the extent of insertion of said second end into said U-shaped buckle member.

11. The belt buckle of claim **8** wherein said U-shaped buckle member and said belt receptacle are rotatable with respect to each other.

12. The belt buckle of claim **8** wherein said spike holes are spaced at one-fourth inch to one-half inch intervals.

13. The belt buckle of claim **8** further comprising a belt keeper rigidly formed as part of said belt receptacle or U-shaped buckle member or as part of said latch member, or said belt keeper being pivotably attached to said buckle rod or to said belt receptacle.

14. A belt buckle, comprising:

- a) a U-shaped buckle member attached to a buckle rod;
- b) a belt receptacle attached to said buckle rod, wherein said U-shaped buckle member and said belt receptacle are rotatable with respect to each other;
- c) one or more belt prongs attached rotatably to said buckle rod;
- d) said belt receptacle having a latch member attached rotatably to said belt receptacle or to said buckle rod, said latch member having one or more spikes; and
- e) said belt buckle being constructed for attachment to a belt having a first end with spike apertures spaced at one-fourth inch to one-half inch intervals and a second opposite end with prong holes, wherein said first end is

insertable into said belt receptacle and retained therein by said one or more spikes engaging one or more said spike holes, wherein said second opposite end is insertable into said U-shaped buckle member and is retained therein by said one or more belt prongs engaging one or more said prong holes, and wherein a circumference of said belt is adjustable at said first end of said belt by the extent of insertion of said first end into said belt receptacle, and is adjustable at said second end of said belt by the extent of insertion of said second end into said U-shaped buckle member.

15. The belt buckle of claim **14** further comprising a belt keeper rigidly formed as part of said belt receptacle or U-shaped buckle member or as part of said latch member, or said belt keeper being pivotably attached to said buckle rod or to said belt receptacle.

16. A kit for an adjustable waist belt, comprising:

- 1) a plurality of adjustable belts according to claim **1**;
- 2) one or more of said adjustable belts having a belt keeper rigidly formed as a part of said belt receptacle; and
- 3) one or more of said adjustable belts having a belt keeper pivotably attached to said buckle rod.

17. The kit of claim **16** further comprising:

- 1) one or more of said adjustable belts having a belt keeper pivotably attached to said belt receptacle.
- 2) one or more of said adjustable belts having a belt keeper rigidly formed as a part of said U-shaped buckle member; and
- 3) one or more of said adjustable belts having a belt keeper rigidly formed as a part of said latch member.

* * * * *