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(54) **SKIPPING ROPES**

SPRINGSEILE

CORDE A SAUTER

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WO-A-01/56660 WO-A-99/38574
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Description

[0001] This invention relates to skipping ropes.

[0002] The skipping rope is one of the oldest and best-known human exercise devices. As a child's plaything, it maintains popularity through the ages and across cultures. However, it is also used as a serious exercise device by many who wish to keep healthier and fitter, and particularly by those for whom the exercise of skipping develops particular muscle strength and tone, most notably (but not exclusively) boxers.

[0003] International Publication WO 01/56660 discloses skipping ropes which have, in place of the conventional generally elongate handle in line with each end of the rope, a T-shaped handle with the rope attached in swivellable fashion to the bottom of the vertical stroke of the T. The crosspiece of the T is held essentially in the palm of the hand with the fingers curled round it, and the vertical portion of the T extends between two of the skipper's fingers. This enables skipping to be carried out with the hands held at the sides of the skipper in a comfortable position, i.e. with the palms essentially facing inwards towards the skipper's thighs. This is much more comfortable than the conventional posture which needs to be adopted when using a classical skipping rope where the skipper has to turn his or her hands outwards into a somewhat awkward position.

[0004] Although the skipping ropes with T-shaped handles described in the above-noted specification work well for many users, some find the manipulation of a T-shaped handle uncomfortable and specifically some people do not like the feel of the shaft passing between their fingers. The present invention seeks to alleviate these disadvantages and provide skipping ropes with handles which, while they differ from numerous prior art suggestions, retain the ease of use of the skipping ropes described in the publication noted above.

[0005] WO-99/38574 discloses a skipping rope consisting of a length of rope having a handle on each end wherein each handle has a non-linear elongate axis, the ends of which point in different directions, i.e. the handles are generally curved. These handles are held in the usual way between the fingers and palm of each hand, and accordingly fail to provide a comfortable skipping position for the skipper's hands.

[0006] According to the present invention, the skipping rope is provided with an L-shaped handle on each end, as set out in the characterising portion of the main claim.

[0007] The ends of the L-shaped handles are preferably angled one relative to the other by at least 75°, more preferably at least 85°. The handle of the skipping rope according to the present invention is used with the shorter portion of the L-shaped handle directed laterally outwards from the skipper's body and with the longer portion of the L-shaped handle held snugly between the palm and curled up fingers, but with the hands in a comfortable position with the palms facing inwards towards the body of the skipper.

[0008] Such a construction may be used conveniently and comfortably with the angled shorter portion extending directly outwardly across the first carpal of the first finger, but the provision of the narrowing or neck enables the handles to be grasped with the narrowing or neck located between adjacent fingers of the hands of the user. This provides a somewhat snugger fitting and reduces the risk that the handle can slip out of the skipper's hand generally in the direction of the elongate portion of the handle which lies within the hand. The most comfortable position is usually with the neck or narrowing between the first and second fingers.

[0009] The handles of skipping ropes in accordance with the present invention may be made of any suitable material and by any convenient manufacturing process. Likewise, the swivel connection of the rope itself to the handle may take any convenient known form, for example that of a rotating ball in a socket as illustrated in Publication WO 01/56660.

[0010] The precise cross-section of the portions of the handle may vary. A circular cross-section is generally easy to manufacture, but not always ideal to grip. The external contours of the handle may be configured to match better the contours of the hand which grips it. It is conceivable to manufacture the handles in two pieces, for example a curved or angled tubular metallic base with a slip-on grippable cover, e.g. made of a soft plastics or rubbery composition and dimensioned to be a snug press fit over the tubular base, in the fashion of a handlebar grip for a bicycle.

[0011] The precise shape and size of the handle are matters of design. A variety of designs is illustrated by way of example in the accompanying drawings. In each of these, just one handle is shown, from which extends a piece of flexible rope. The other handle matches the one shown and the majority of the rope between them extends over a suitable length - of which just one end is shown.

[0012] Referring to Figure 1, this shows a simple L-shaped handle consisting of a longer section 1 and a shorter section 2. Sections 1 and 2 merge together at a moulded angled corner generally indicated at 3.

[0013] Extending from the free end of section 2 is a rope 5 which is held captive, e.g. by means of a knot in a ball 6 which is freely rotatably mounted in a cup-like socket at the end of section 2. The rope 5 is shown extending in the same direction as the end portion of section 2 and the axis of the rope, and accordingly the end portion of the handle, is denoted 8. The axis of the main portion of the handle 1 is denoted 9 and preferably the angle between axes 8 and 9 is around 90°.

[0014] In use, the two handles, one at each end of rope 5, are grasped by the user with the sections 1 curled between their palm and fingers and sections 2 pointing outwardly. If desired, the handle can be used with section 2 passing between the fingers of the user's hands, for example if Figure 1 is taken as showing a perspective view from above of the handle held in the skipper's left

hand, the skipper's left forefinger can be located in position A and the middle finger of their left hand located in position B as indicated on the drawing.

[0015] Figure 2 shows an alternative embodiment where the main portion of the handle is somewhat more broadly curved. Like portions to those shown in Figure 1 bear like reference numbers. In contrast to the relatively angular L-shape of Figure 1, however, the handle shown in Figure 2 is more gently rounded. Thus, from the rope, the handle consists of a short socket section 10, a waisted section 11, then a gently curved section 12 and finally a relatively straight tail section 13. As before, the angle between the axis of 8 of the section 10 and the axis 9 of the section 13 is preferably at least 75°, more preferably at least 85°. Likewise as before, if desired, the user may put two of his or her fingers either side of section 11, in the positions marked A and B.

Claims

1. A skipping rope consisting of a length of rope having a handle on each end wherein each handle is an elongate member bent or angled through at least 60° and having

- a shorter part (2) adjacent to the end of the rope (5)
- a curved or angled intermediate part (3), and
- a relatively straight longer tail portion (1),

the end of the rope (5) being mounted for free rotation about the axis (8) of the shorter part (2) and **characterised in that** the handle is substantially L-shaped and between the portion of the handle adjacent the end of the rope (5) and the tail portion (1) is a narrowing or neck (11) which may be located comfortably between the fingers of the hand of a user, so that when the axis of the longer tail part (1) is held horizontal and extending along an axis transverse to the plane of the skipper's body, the shorter portion (2) may point substantially horizontally outwards away from the skipper's body and at an angle of at least 60° to that transverse axis

2. A skipping rope according to Claim 1 wherein the ends of the handle are angled one relative to the other by at least 75°.
3. A skipping rope according to Claim 2 wherein the angle is at least 85°.
4. A skipping rope according to any one of Claims 1 to 3 wherein the swivel connection of the rope itself to the handle includes a rotating ball (6) in a socket.
5. A skipping rope according to any one of Claims 1 to 4 wherein the external contours of the handle are

configured to match the contours of the hand.

Patentansprüche

1. Springseil, das aus einem Seilstrang mit einem Griff an jedem Ende besteht, wobei ein jeder Griff ein längliches Element ist, das um mindestens 60° gebogen oder gewinkelt ist, und das aufweist:

- einen kürzeren Teil (2) benachbart dem Ende des Seiles (5);
- einen gebogenen oder gewinkelten Zwischen- teil (3); und
- einen relativ geraden längeren Endabschnitt (1);

wobei das Ende des Seiles (5) für eine freie Drehung um die Achse (8) des kürzeren Teils (2) angebracht ist, und **dadurch gekennzeichnet, dass** der Griff im Wesentlichen L-förmig ist und zwischen dem Abschnitt des Griffes benachbart dem Ende des Seiles (5) und dem Endabschnitt (1) eine Verengung oder Einschnürung (11) vorhanden ist, die bequem zwischen den Fingern der Hand eines Benutzers angeordnet werden kann, so dass, wenn die Achse des längeren Endabschnittes (1) horizontal gehalten wird und sich längs einer Achse quer zur Ebene des Körpers des Springers erstreckt, der kürzere Abschnitt (2) im Wesentlichen horizontal nach außen weg vom Körper des Springers und unter einem Winkel von mindestens 60° zu jener Querachse zeigen kann.

2. Springseil nach Anspruch 1, bei dem die Enden des Griffes eines relativ zum anderen um mindestens 75° winkelig sind.
3. Springseil nach Anspruch 2, bei dem der Winkel mindestens 85° beträgt.
4. Springseil nach einem der Ansprüche 1 bis 3, bei dem die Schwenkverbindung des Seiles selbst zum Griff eine sich drehende Kugel (6) in einer Aufnahme einschließt.
5. Springseil nach einem der Ansprüche 1 bis 4, bei dem die äußeren Konturen des Griffes so ausgebildet sind, dass sie zu den Konturen der Hand passen.

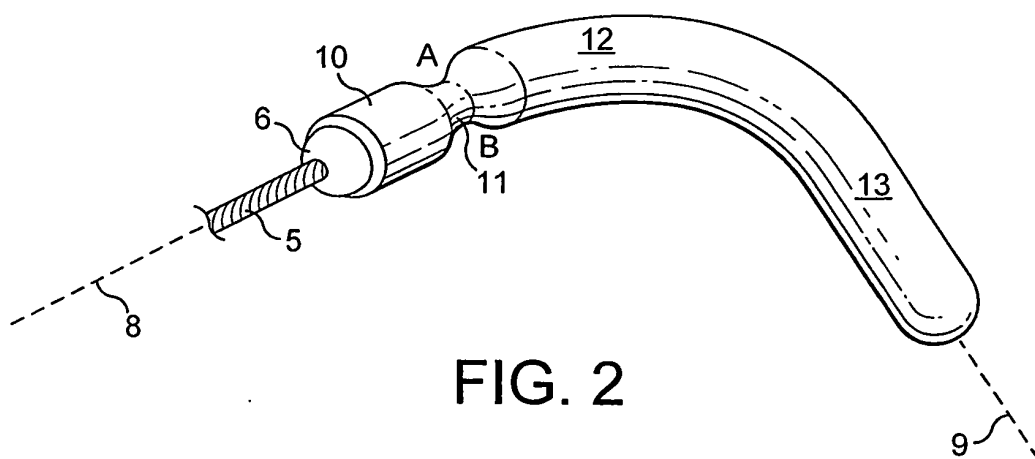
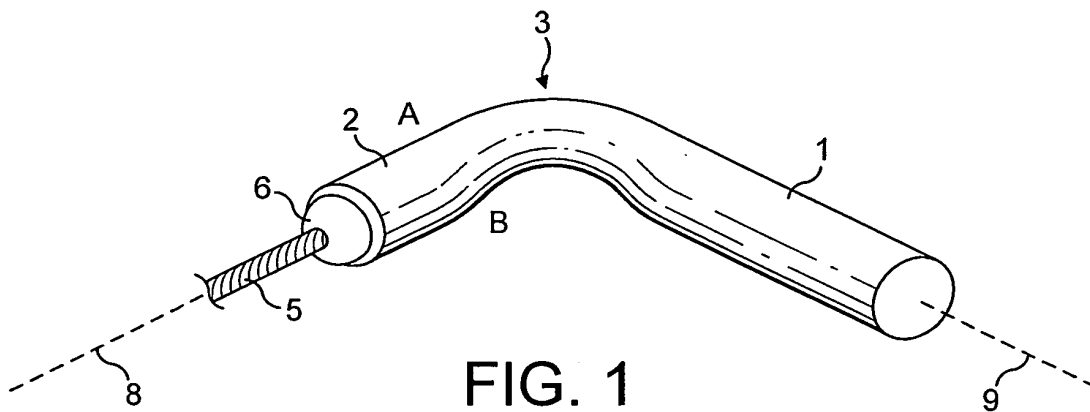
Revendications

1. Une corde à sauter constituée d'un morceau de corde ayant une poignée à chaque extrémité dans laquelle chaque poignée est un élément allongé plié ou oblique formant un angle d'au moins 60°, et présentant

- une partie courte (2) adjacente à l'extrémité de la corde (5)
- une partie intermédiaire incurvée ou angulaire (3), et
- une partie distale plus longue et relativement rectiligne (1),

l'extrémité de la corde (5) étant montée pour rotation libre autour de l'axe (8) de la partie plus courte (2) et **caractérisée en ce que** la poignée est sensiblement en forme de L et qu'entre la partie de la poignée adjacente à l'extrémité de la corde (5) et la partie distale (1) est formé un rétrécissement ou gorge (11) qui puisse être disposé de façon confortable entre les doigts de la main d'un utilisateur, de sorte que, lorsque l'axe de la partie distale plus longue (1) est maintenue de façon horizontale et s'étendant le long d'un axe transversal au plan du corps de l'utilisateur, la partie la plus courte (2) soit dirigée sensiblement horizontalement vers l'extérieur en s'écartant du corps de l'utilisateur et selon un angle d'au moins 60° par rapport à cet axe transversal.

2. Une corde à sauter selon la revendication 1, dans laquelle les extrémités des poignées forment l'une par rapport à l'autre un angle d'au moins 75°.
3. Une corde à sauter selon la revendication 2, dans laquelle l'angle est d'au moins 85°.
4. Une corde à sauter selon l'une quelconque des revendications 1 à 3 dans laquelle le raccord pivotant entre la corde elle-même et la poignée comprend une rotule (6) en rotation dans une douille.
5. Une corde à sauter selon l'une quelconque des revendications 1 à 4, dans laquelle les contours extérieurs de la poignée sont configurés pour correspondre aux contours de la main.



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- WO 0156660 A [0003] [0009]
- WO 9938574 A [0005]