

(No Model.)

E. E. DENLER.
SKIPPING ROPE.

No. 512,815.

Patented Jan. 16, 1894.

Fig. 1.

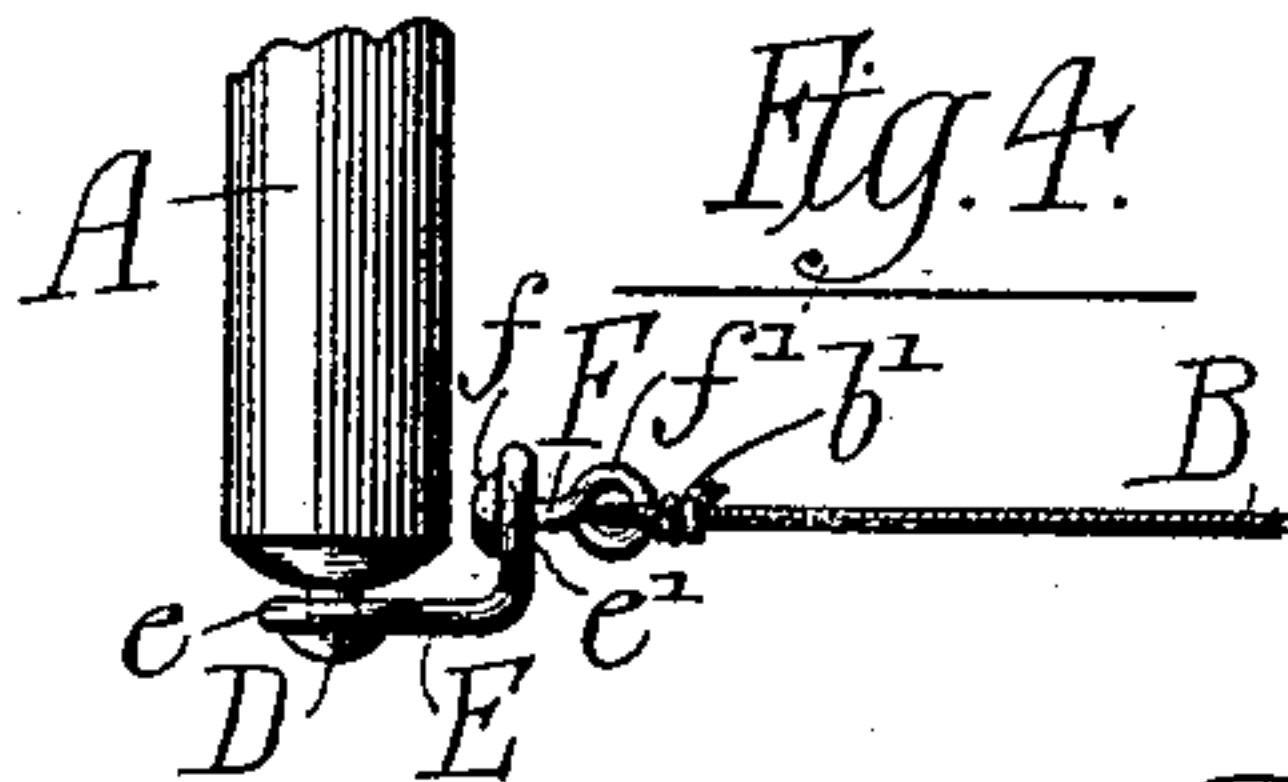


Fig. 3.

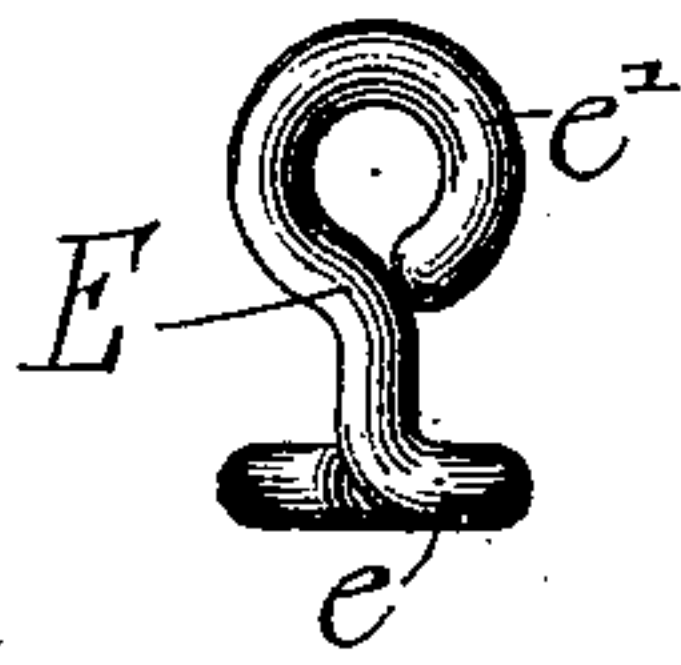
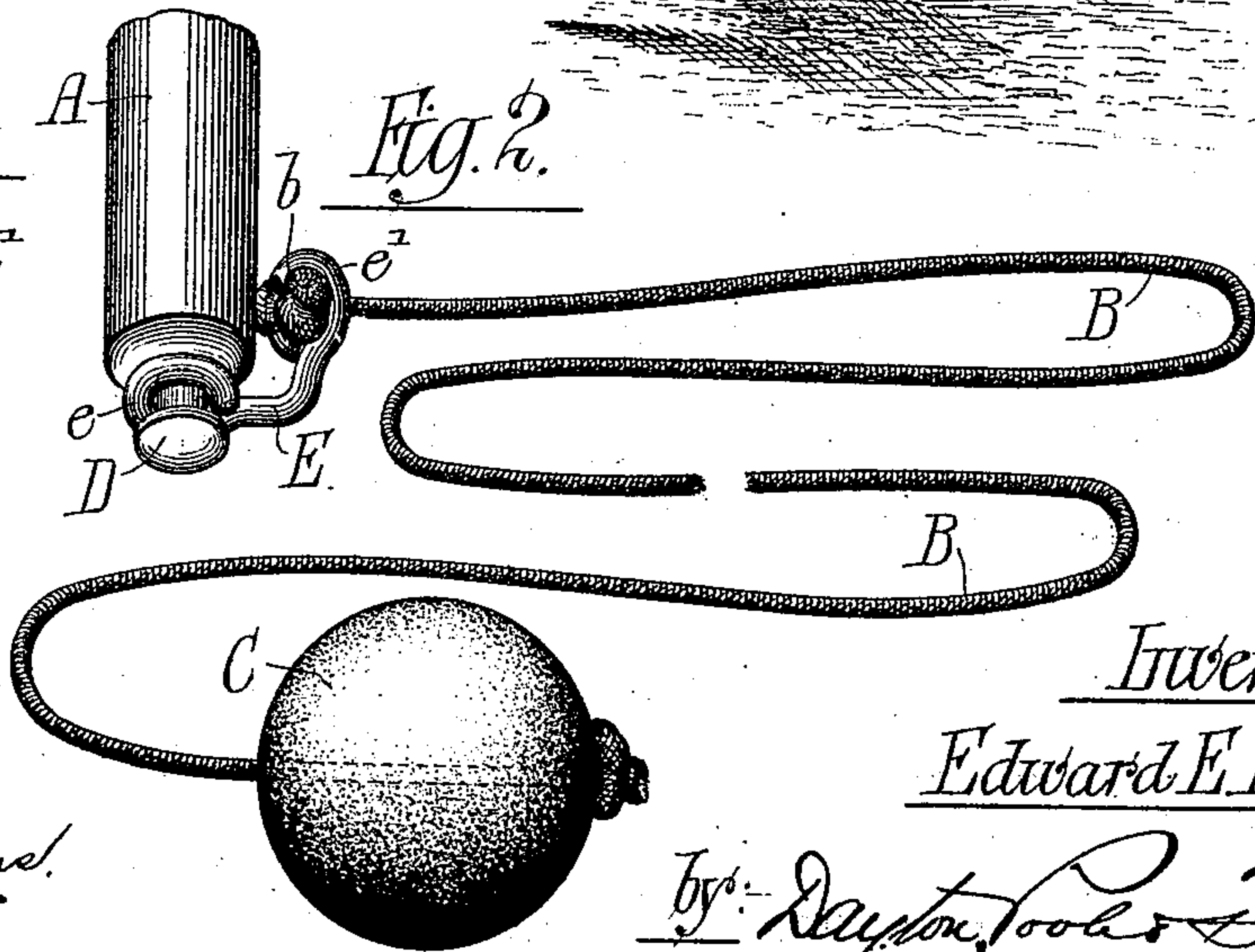


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD E. DENLER, OF CHICAGO, ILLINOIS.

SKIPPING-ROPE.

SPECIFICATION forming part of Letters Patent No. 512,815, dated January 16, 1894.

Application filed April 11, 1893. Serial No. 469,862. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. DENLER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Skipping-Ropes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which
10 form a part of this specification.

This invention relates to improvements in rope-skipping devices and it consists in the matters hereinafter set forth and particularly pointed out in the appended claims.

15 A device embodying my invention consists essentially of a stiff rod or staff, a cord or flexible strand attached to one end of said rod, and a heavy body or weight attached to the outer end of the cord or strand, the heavy
20 body being adapted to keep the cord taut when swung about the end of the rod to which the cord is attached, and the cord being connected with the staff by a swiveled connection permitting the cord to swing freely
25 around the end of the staff and at the same time allowing the cord to freely turn or rotate at its point of connection with the staff so that when the weight is swung around the staff in the use of the device rotary motion
30 given to the weight by occasional contact of the same with the ground will not tend to twist the cord and thereby prevent proper operation of the device.

The invention may be more readily understood by reference to the accompanying drawings in which—

Figure 1 is a perspective view showing the device as it appears in the hand of the user. Fig. 2 is an enlarged perspective detail showing the lower part of the staff, the cord and the weight. Fig. 3 is a detail view of the connecting link by which the cord is pivotally connected with the staff. Fig. 4 is a detail view of a swivel connection slightly modified
45 from that shown in Figs. 1, 2 and 3.

As shown in said drawings, A designates a stiff rod or staff which is ordinarily made of wood although it may be made of any other suitable material, and which is of such length
50 that when held at its upper end in the hand of the user its lower end will reach nearly to

the ground, supposing the person to be in a standing position. A flexible cord B is attached to the lower end of the staff, said cord being of suitable length and ordinarily about 55 as long as the staff, although it may be longer or shorter as desired.

To the outer end of the cord B is secured a heavy body or weight C which, when the staff is moved so as to swing the weight 60 around the staff by its centrifugal force, serves to maintain the cord taut. This weight is made circular in cross section so that it will roll upon the ground whenever it comes into contact therewith in the use of the device. 65 The weight is herein shown as having the form of an ordinary rubber ball which is permanently secured to the cord in any suitable manner.

The connection between the cord and the staff consists in a stud or headed nail D secured in the lower end of the handle and a wire link E which is provided with two eyes or loops *e e'* and is bent at right angles at a point between the loops so that said loops 75 stand in planes at right angles with each other. One of the loops *e* encircles the stud D while through the other is inserted the cord B the end of which is provided with an enlargement *b* by which the cord is held in en- 80 gagement with the eye or loop *e'* while at the same time the cord is permitted to turn freely in said loop. It will of course be understood that the enlargement of the cord may be formed in any other manner or that the cord 85 may be constructed in any other way to secure a swiveled connection between the same and the link E.

In the use of the rope-skipping device above described the rod or staff A is grasped 90 at its upper end and held in a substantially vertical position with its lower end in proximity to the ground. By suitable manipulation of the staff the weight C is made to revolve in a substantially horizontal plane 95 about the lower end of the staff A, and as the cord B (which is held taut by the centrifugal action of the weight) approaches the feet of the operator the latter jumps or skips over said cord. Obviously at the beginning of the 100 movement of the weight and at other times the said weight will strike and roll upon the

ground, but when the movement becomes sufficiently rapid the centrifugal action will maintain the weight clear of the ground, as shown in Fig. 1. Inasmuch, however, as the weight is likely to be often in contact with the ground, the cord will soon become twisted by the rolling of the weight on the ground were it not for the pivotal or swiveled connection of the cord with the staff afforded by the eye e' through which the cord is passed and in which it is adapted to freely rotate. Such twisting of the cord would soon shorten the same and result in its parts becoming twisted together or entangled as soon as the cord was slackened. Such swiveled connection of the cord with the link E is therefore highly important in order to secure action of the device and to keep the same always in condition for efficient use.

Fig. 4 shows a form of swivel connection slightly modified from that shown in Figs. 1, 2 and 3. In this construction I have inserted a short swivel F between the link E and cord B instead of connecting said link and cord directly. Said swivel F extends loosely through the loop e' and is provided with a head f which prevents its withdrawal therefrom, and the other end of said swivel is formed with an eye f' to which the cord B is tied as shown at b' . Obviously in this case, as in the previous construction, the cord is left free to turn upon its own axis and cannot become twisted and kinked by the rolling of the weight upon the ground.

I claim as my invention—

1. As an improved article of manufacture, a skipping rope device, comprising a staff, a flexible strand connected with one end of the staff and a heavy circular body attached to the strand, said strand being connected with the staff by a swiveled connection the rotating part of which turns about an axis located in a plane perpendicular to the central axis of the staff, thereby permitting the strand to freely rotate when the heavy body is turned by coming in contact with the ground, substantially as described.

2. As an improved article of manufacture, a rope skipping device comprising a staff, a cord or flexible strand connected at one end with the said staff, and a heavy body of circular form attached to the outer end of the cord, the connection between the cord and staff consisting of a stud in the end of the staff and a link having two eyes or loops at right angles with each other, one of which loops is engaged with the stud and the cord being inserted through the other loop and engaged therewith by an enlargement or knot on its end, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

EDWARD E. DENLER.

Witnesses:

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