

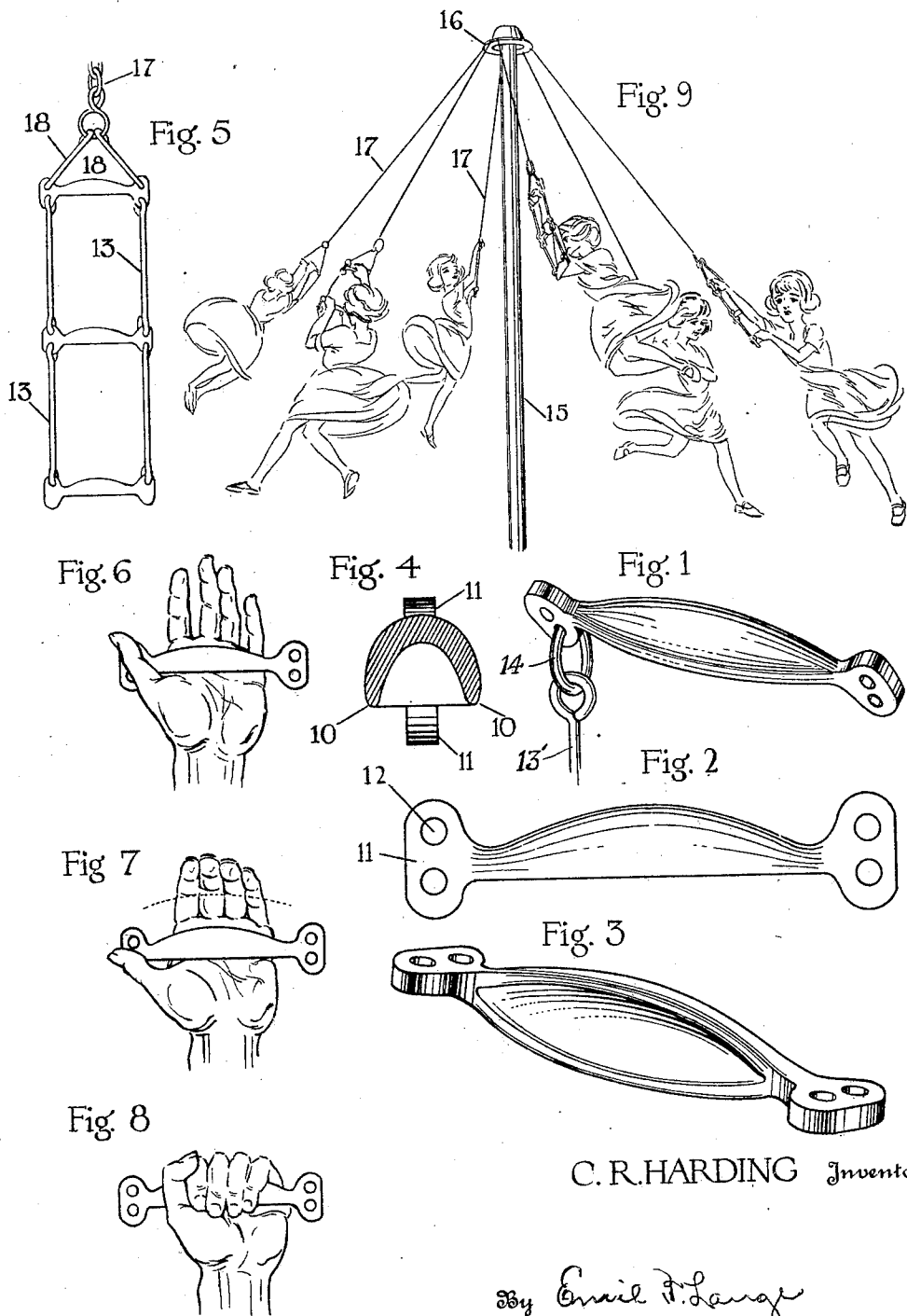
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LADDER RUNG

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LADDER RUNG.

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My invention relates to the general class of playground equipment, and more particularly to the kind of playground equipment known as giant strides. Specifically, the invention in this particular instance relates to rungs used on the ladders of giant strides and it has for its object the provision of a rung which is simple in construction, which is easy to manufacture, which will not kink in the ladder, and which above all will be safe and reliable when in use.

Having in view these objects and others which will be mentioned in the following description, I will now refer to the drawings, in which

Figure 1 is a view in perspective of the rung looking at its upper side.

Figure 2 is a side elevational view of the rung.

Figure 3 is a view in perspective of the ladder rung showing its under side.

Figure 4 is a median transverse sectional view of the rung.

Figure 5 is an elevational view of the entire ladder of which the rungs are a part.

Figure 6 is a view of the ladder rung showing the position of the hand when first engaging the rung.

Figure 7 is a view similar to that of Figure 6 but showing the position of the hand in closing down on the rung.

Figure 8 shows the position of the hand when grasping the ladder rung.

Figure 9 is an illustration of the giant stride of which the ladder shown in Figure 5 is a part.

The ladder rung is elongated as shown in all of the figures, the length being somewhat greater than the width of the child's hand. On its upper surface it is rounded in all directions. The under surface is concave and also rounded. The two exposed edges on the under side of the rung are rounded and made smooth as shown in Figure 4. The size and shape of the rung are such that it will be convenient to the users regardless of the size of their hands. Very small children will find the length of the rung to be such that they can grasp any part of it and with the tips of their fingers thrust into the cavity in the lower side of the rung. The largest children will find that their finger tips will occupy the position shown in Figure 8.

The rung is provided with two ears 11 one at each end and occupying a vertical position. Each ear is provided with two aper-

tures 12. In assembling the ladder in the manner shown in Figure 5, links 13 connect the rungs with the eyes of the links engaging the rungs through the apertures 12. This construction is non-kinkable, which is a very important factor in the use of the giant stride. If, however, it is desired to form a ladder by passing ring members 14 through the eyes 12 and then connecting the ring members by means of links 13', this may be done as shown in Figure 1. It is also possible to connect the rungs by means of chains of uniform lengths.

The giant stride on which these rungs are used comprises a standard or support 15 with a bell 16 at its upper end, the bell having a spindle bearing in the support. The ladders are connected by means of chains 17 to the bell 16, two relatively short links 18 connecting the upper rung of the ladder to the chain 17.

In the use of the giant stride, the child grasps two of the rungs of a ladder with his two hands. These two rungs may be any two rungs in the ladder. As a general rule the ladder is made up of three rungs which afford the child opportunity for considerable shifting on the ladder while in motion. Children frequently let go of one rung and reach for another, and they sometimes swing from one ladder to another. The exercise is vigorous and rather strenuous, and it develops quickness of movement along with muscular strength. In order to be safe the rung must be so formed that it may be quickly and easily grasped and it must have no rough edges which would cause the child to release his hand from the rung immediately after he has grasped it, since such an action might result in a dangerous fall.

The rung is made from any suitable material, preferably from aluminum by the casting process. This insures a rung of ample strength which will not deteriorate under outdoor conditions. The rung is cast and the apertures are drilled after casting. Before they are applied, they are finished by simply grinding off any rough edges which might be left in the cast metal. Their form is simple enough to make the casting an easy matter so that the entire cost of the rung is relatively low because of the absence of any complicated processes. At the same time the rung will sustain any weight to which it is normally subjected and it cannot rust or corrode and become weakened from atmos-

pheric conditions. It may thus always be relied upon.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

10 An elongated ladder rung having a convex outer surface and a concave inner sur-

face enclosing a wall having lower rounded edges in a common plane at the bottom of said rung, both of said surfaces having gradual curvatures in the direction of the length 15 and having abrupt curvatures transversely of said rung, and said wall having greater thickness in the middle portion than at edge portions thereof.

In testimony whereof I affix my signature.

CLYDE R. HARDING. 20