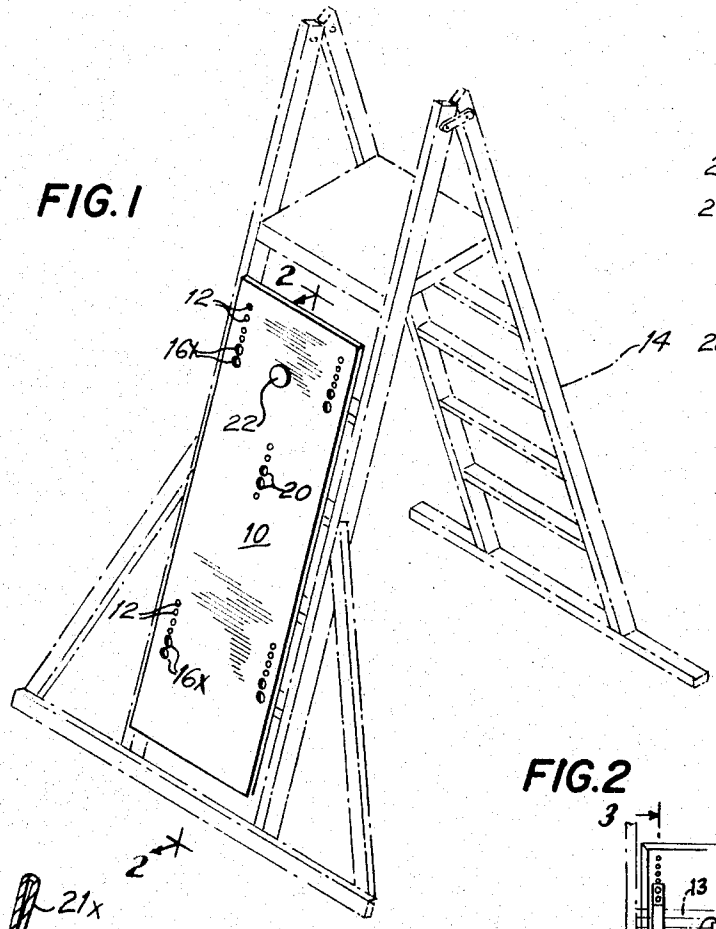
March 12, 1968 M. SINGER 3,372,772

SAFETY GUARD

Filed May 9, 1966

FIG. 1



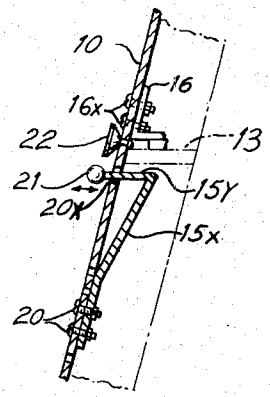


FIG. 5

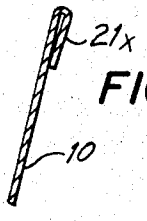


FIG. 4

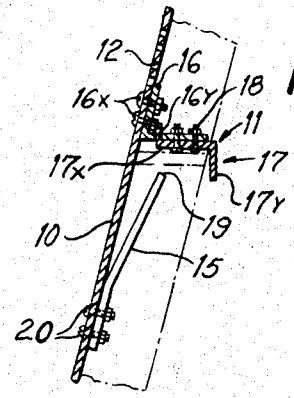
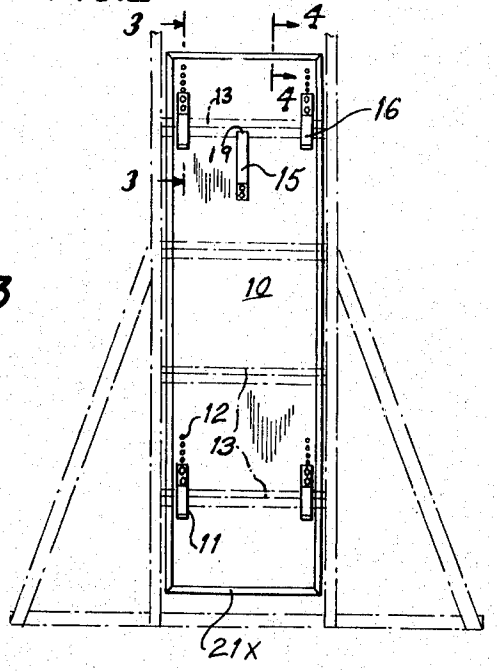


FIG. 3

FIG. 2



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SAFETY GUARD

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1 Claim. (Cl. 182—230)

ABSTRACT OF THE DISCLOSURE

This invention relates to a self-locking guard for a swimming pool ladder wherein the self-locking feature is a spring loaded tongue adapted to engage the underside of a swimming pool ladder step.

This invention relates to a safety guard for swimming pool ladders.

Swimming pool ladders are a hazard to small children inasmuch as they are attracted by them and after climbing them they may fall into the swimming pool.

It is an object of this invention to provide a self locking safety guard for such swimming pool ladders such that a small child is incapable of releasing.

This invention is illustrated by an embodiment thereof shown in the accompanying drawing in which:

FIG. 1 is a perspective view of the safety guard shown disposed on a conventional pool ladder for above ground pools having plastic liners,

FIG. 2 is a rear view of the safety guard of FIG. 1 showing the manner of securing the guart to the steps of the ladder,

FIG. 3 is a section view taken on line 3—3 of FIG. 2, and showing the manner of self-locking a leaf spring to the underside of a ladder step,

FIG. 4 is a section view taken on line 4—4 of FIG. 2 showing the manner of obtaining a bevel edge on the periphery of the safety guard, and

FIG. 5 is a section view of a modified locking spring.

The safety guard device of this invention is essentially a sheet or flat plate having securing means thereon to engage a plurality of spaced-apart ladder steps and having also a spring locking means to engage the underside of a ladder step to prevent removal of the guard except by a deliberate manual operation performed on said spring.

Turning to the drawing, the plate or sheet **10** is generally of a size and rectangular shape as to cover many steps of a pool ladder when disposed thereupon. The sheet **10** may be of galvanized or enameled sheet metal, fiberglass, aluminum or other corrosion resistant material.

The sheet **10** is provided preferably with four adjustable somewhat L-shaped brackets **11** disposed suitably at the respective corners of the rear side of said sheet.

The sheet **10** is also provided with a plurality of linearly disposed apertures **12** to be used in co-action with said brackets **11** to permit selective movement of a bracket **11** in order to suitably engage a ladder step **13**.

The brackets **11** are used in spaced-apart pairs, so that each pair of transversely disposed brackets engages respective step **13**. Such an arrangement permits the four brackets **11** to engage the ladder **14** at two steps and thus at four widely separated points to prevent rotational movement of the guard on the ladder when the leaf spring **15** is lockingly engaged underneath a ladder step **13**. The spring **15** is bolted to sheet **10** by means of bolts **20**.

As shown in FIG. 3, the brackets **11** are made from two substantially L-shaped elements, namely a top element **16** and a bottom element **17**. The top element **16** is bolted by means, of a pair of bolts **16X** within apertures **12** selectively to sheet **10**. The horizontal bottom leg **16Y** (FIG. 3) of the top element **16** is provided with a plurality of apertures. Similiarly the top horizontal leg **17X** of the

bottom L-shaped element **17** is provided with a plurality of apertures. The bottom leg **17X** is bolted selectively by means of bolts **18** to leg **16Y** of the top element **16** so as to accommodate ladder steps **13** of various widths.

In placing a safety guard onto a ladder, the guard is carefully pushed toward the ladder so that the depending leg portions **17Y** of the brackets **11** pass over the respective steps **13**.

Next the sheet **10** is pushed against the ladder causing the top edge **19** of the spring **15** to be pushed against the rear face of the sheet **10**.

The guard is then pushed downwardly causing the top edge **19** of spring **15** to push outwardly after sliding passed the engaging step **13**. In this manner the spring **15** locks the guard to a step since mere upward movement of the guard will not free it from the ladder **14**.

In order to remove the guard, the spring edge **19** must be deliberately and manually pushed flat against the rear face of the sheet **10** and a simultaneous upward and outward movment of the pulled away guard must be made.

In order to prevent injury where sheet metal is used the peripheral edge of the sheet is provided with a folded over edge **21X**. A handle **22** is provided to facilitate the handling of the guard.

As shown in FIG. 5, the locking spring **15** may be modified to permit release from locking engagment from the front side of the guard plate **10**. To attain this end the modified spring **15X** is provided with an integral angularly disposed portion **15Y** which is disposed through a suitable aperture **20X** located in plate **10**. A knob **21** is secured by conventional means to the end of the portion **15Y** that continuously protrudes through aperture **20X**. Pulling of the knob **21** in the direction of the arrow (FIG. 5) permits the spring **15X** to be disposed parallel to and against the rear surface of plate **10** to permit removal of the guard from the ladder **14**.

Various obvious modifications of this invention are possible within the scope thereof.

Thus where tapered pool ladders are used, clearly the sheet **10** may be tapered adjacent its bottom edge to cover the bottom larger ladder steps.

Also brackets other than the type of brackets **11** may be used for example, brackets of a clip-on configuration.

I claim:

1. A safety guard for above ground swimming pool ladders comprising a flat rectangular sheet element adapted to overlay a plurality of ladder steps, a plurality of at least four substanially L-shaped brackets disposed in pairs on said sheet and adjacent each of the corners to gravitationally engage a pair of spaced-apart ladder steps, and 7-shaped leaf spring locking means having a horizontal disposed top handle portion protruding at one end through an aperture in said sheet and having a downwardly directed stem portion at its other end, said leaf spring being secured at the base of said stem portion to the rear side of said sheet element, said spring having its top edge continuously urged away from said sheet element and adapted to be adjacent to the underside of a ladder step.

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