

His Goal: A New Way to Help Ladder Injuries Fall

ACCIDENT LEADS TO INVENTION OF ATTACHMENT TOOL

BY EDITH G. TOLCHIN

When inventor Lawrence Ayala approached me to write about his line of ladder attachments, I learned a bit about them. One of my first questions was, “Are they safe?”

The most recent statistics I could locate for ladder accidents were more than five years old; however, I believe they would still be fairly close today. According to the Centers for Disease Control and Prevention, “Work-related falls from ladders caused 113 deaths and almost 15,500 non-fatal injuries that resulted in at least one day away from work in 2011.”

Ayala learned the hard way about ladder safety. Fortunately, he overcame his on-the-job injuries to create a series of ladder attachment tools called the Monkey Rung® that help workers and anyone who uses a ladder to execute their jobs more safely and efficiently.

Edith G. Tolchin: Did you always have an inventive mind?

Lawrence Ayala: Yes. When I was growing up, my generation didn't have the distractions of advanced technology as we have today. I'd always loved tinkering around with my bike, building a treehouse, and so on. As a kid, I can recall my grandma saying, “Here's a hammer and nails. Go build something.” This type of activity carried on into my adulthood.

At age 16, on the weekends I would paint for extra money. This was fun and interesting. I loved the final outcome of taking a house, cabinets and furniture and bringing them back to life. Fast-forward 31 years later and I've painted for some well-known movie actors, professional athletes, inventors and famous artists (in the Guggenheim Museum). I've worked on the restoration of landmark homes and have donated my time to Habit for Humanity.

EGT: When did you experience that first “aha!” moment?

LA: I had a devastating ladder fall in which I pretty much broke the whole left side of my body. After rehabilitating from this accident, I got back into painting.

Once, I was on a 32-foot ladder spraying stain and backrolling the stain into the cedar siding. That day, the winds were gusting and I was scared of falling again. There were too many tools in my hand, so I told my son to go look on the internet and find me an extension ladder accessory. The accessories he showed me were big, bulky and all designed around a tray. I grabbed a (thin) “weenie roller” frame and did some adjusting to the handle so it could fit into the ladder rung. This actually worked; it held the spray gun and paint roller. It freed up one of my hands to hold onto the ladder rung. This was my “aha!” moment! I finished up that wall and left for the day.

EGT: How many Monkey Rung products are there, and what are the various uses for each?

LA: The Monkey Rung offers two products with four interchangeable attachments—and still, four more products are waiting to be designed. The Monkey Grip is designed for all major brands of extension ladders. The tool will be inserted into the ladder rung, and the rubberized grip is form-fitted to the rung. The locking feature will appear on the other side of the rung. You slide the hitch pin clip into the closest hole and lock the Monkey Grip in place.

The Monkey Klamp is designed for all major brands of step A-Frame ladders. The Klamp is installed toward the top of the ladder frame. Tighten the vises, and the product is very secure.

The four interchangeable attachments will assist you in a variety of tasks. There are two more attachments in the process of being designed. Monkey Rung products can be stored on your ladder; just remove the attachment. They are all about safety in helping the consumer achieve three-point contact (either two hands and one foot on the ladder, or one hand and two feet).

EGT: Do you have any patents? If so, tell us about the patent process.

LA: The Monkey Rung is a registered trademark, has two patents pending, and one that has been recently

PHOTOS COURTESY OF LAWRENCE AYALA



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“Monkey Rung products can be stored on your ladder; just remove the attachment. They are all about safety in helping the consumer achieve three-point contact.” —LAWRENCE AYALA



accepted for the Grip (extension ladder tool). The excitement is overwhelming to achieve this goal on my first patent filing. I would recommend finding a really good patent attorney, and that process took me months. The patent search was the next step. That was interesting, and I received positive feedback. We then proceeded to file a non-provisional and started the same process with the Klamp and the attachments. I can say this is a lengthy process, so pack your patience.

EGT: Where are you manufacturing?

LA: To find the right manufacturer for my tools was very difficult. I had to find a plastic injection company, a fabrication shop, an anodizing and laser etching company. The person-to-person contact was a real

plus at the beginning of the design stages.

I started the manufacturing here in the United States but could never get my prices low enough for the consumer. We did have sales and had several interested stores, but the fabrication prices increased steadily. I later had contact with a company to get pricing in China and received several prototypes. The price differences were mind-blowing, but if you want to get into the big-box stores you have to meet certain price points. I was really bummed about going overseas, but consumers want lower prices.

EGT: What about product safety issues?

LA: The idea was to use the most durable material on the market. The 5/8ths solid aluminum rod is used in

both tools. The anodizing of the tools will prevent electrical current. The form-fitted rubberized grip is made from 90 durometer rubber. Then there's the strength of the stainless steel attachments. The Klamp and the Grip will lock onto your ladders very securely. The bigger base of a step A-Frame (ladder) or the larger extension ladders will hold heavier weights.

I've been working on ladders for 30 years, and the average weight of tools, paint in a bucket, tool bags, etc., being used on a ladder is around 4 lbs. to 8 lbs. The DIYer, tradesman or woman doesn't usually carry up that much weight when performing a task. The whole idea was to develop the safest, most durable and simplest ladder accessories on the market. Ladder (injury) statistics are high, so please use common sense and be safe.

Attachments
(top to bottom):
Universal Holder,
Bucket Holder,
Tool Holder
and Bag Holder.

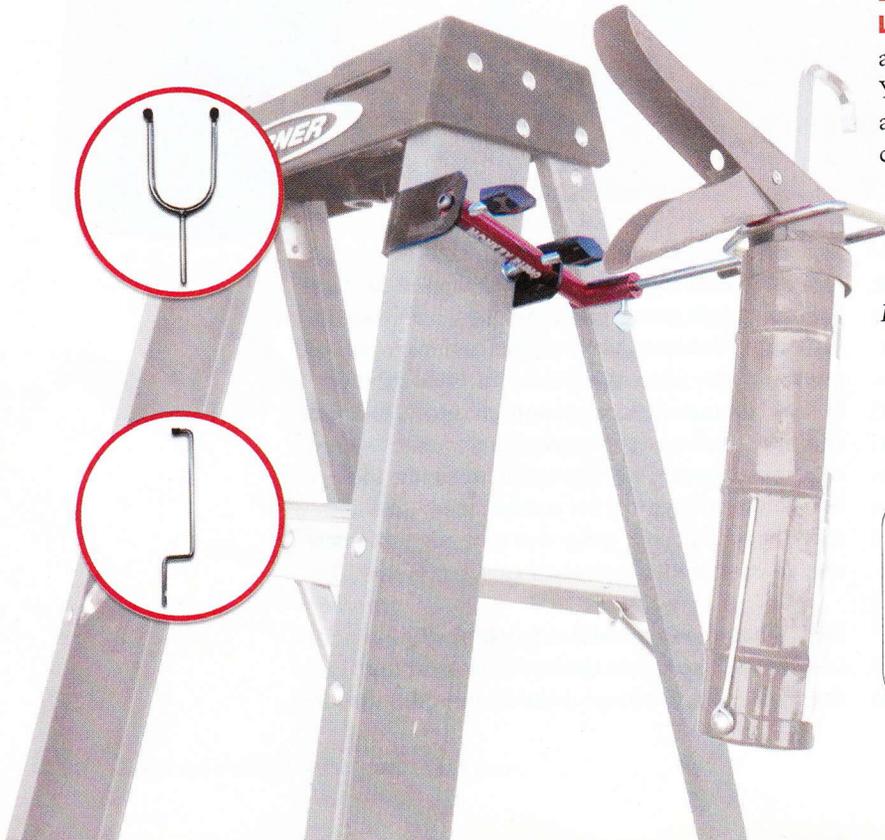


EGT: How is your product packaged? Did you work with a graphic artist or packaging designer?

LA: The Monkey Grip and Klamp, along with the attachments, was a challenge for packaging. I used a graphic designer, and we decided on flat cardboard packaging. The products would be zip-tied to the flats, and this was the least expensive packaging.



Also at that time, I was working with a company interested in the Monkey Rung, and their package designer submitted a mock package to me. They used the cardboard box with pictures of the Klamp in use, with the fading colors of blue. The background colors made the product and logo really pop. It also showed several pictures (in bubbles) with the tools in use.



EGT: Are you selling to retail or just on your website for now?

LA: This is a very hard question for me right now, as I'm not selling in retail or on the website. The manufacturing company that I had been using to develop the products is no longer located in Arizona (where I live). Long story, short: My mother passed away from breast cancer. When I got back into town, I found out through another client that the manufacturing company's house was already in escrow, so they sold the shop. I still don't know the full story. I received one text message saying, "Do you still want these attachments?" I replied, "No, because they were inadequate." I haven't heard from the manufacturer since. We had stores, a catalog and individuals ready for sales. As a result, I am currently open to all offers for manufacturing or licensing.

EGT: Have you encountered any obstacles in developing your products?

LA: The entire process is very challenging when developing a product, starting from when the light bulb goes off in your head. You'll have to find the right patent attorney, CAD designer, fabrication shop, plastic injection, the right team in the office and/or the right company for licensing. The prototype stage was a lot of trial and error, as was the development of both tools to fit all major brands and sizes of ladders—aluminum and fiberglass. All of this was definitely a challenge, but I wasn't satisfied until I had the safest tools developed for the consumer.

EGT: Do you have any advice for readers?

LA: Inventing a product is like a roller-coaster ride, and you will also feel like you're stuck in a corkscrew. Your mind-set will have to be a one-way road: straight ahead. Don't let the bumps slow you down. I think specializing or having a background in the field of your invention will help you tremendously. Don't stop studying, and pack your patience. To you and your loved ones: Be safe on those ladders! Good luck! 🍀

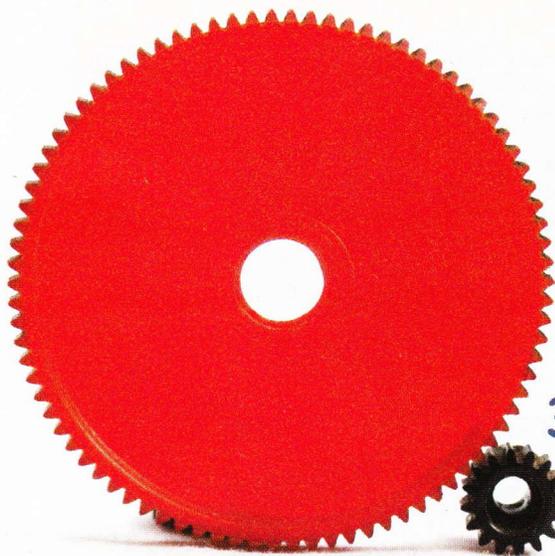
Details: monkeyrung.com

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