

# SlingBaron

If you were a harmonica player, and you could double the life of your harmonicas with the world's first such device to extend the life of your harmonicas, would you buy one? Inventor Mike J. Baron considers it a no-brainer.

A 50+ year harmonica and guitar player, Mike has also been a tinkerer and inventor since he was a kid. He was nicknamed "Gadget Man" in college, and every time his sister-in-law saw something at his place that had been "changed" or "improved," she'd say "Ah, that's been MICHAELIZED!"



Mike received his first U.S. patent for Gerber Scientific, where he gained design, engineering and manufacturing experience as a Product Development Manager.

But back to the harmonica invention. As an avid player himself, he recognized a problem that shortened the life of harmonicas, so he set out on a quest to develop a solution. The problem was that the saliva that collects in the harmonica, along with solids (enzymes, acids, potato chips, etc.) remain inside the harp, and the organic material begins to rot.

The mix begins to decay, and the acids cause corrosion and break down the brass reeds. When the reeds get damaged, they fail and "go dead." Once this happens, the player is forced to throw it in the trash and buy another harmonica.

*Why not just bang it on your knee? NOOOO!*

Ever since the harmonica was invented in 1820, the standard method of ejecting saliva out of the harp was to bang it on the player's knee. Not only is banging only marginally effective, it also causes damage to the instrument in another way. The shock from the constant banging is like repeated "concussions" to the paper-thin reeds, and it damages them over time.

Mike had a solution: If you could twirl the harmonica and remove the saliva and solids with centrifugal force, it would remove the matter much more effectively, and spare the harp from the long-term damage of repeated banging.



## Enter the World's First Twirling Harmonica Dryer

That's when the SlingBaron was born – the world's first harmonica dryer. This new device would prevent corrosion, and double the life of the harmonica!

The invention process wasn't easy. Mike spent a year building and testing three different prototypes. He applied for a patent on his invention, and was awarded U.S. Patent #10127898 for his twirling harmonica dryer.

The process also wasn't easy on Mike financially. He spent his own money for the patent application fee, prototype materials, and, eventually, made a substantial investment for the injection mold tooling when the final production method was chosen. The financial burden has been great, as Mike has large medical bills for receiving chemotherapy for a form of incurable cancer. But he believes in the SlingBaron, and fully expects sales to ramp up following the initial online sale.



## The Prototyping Process



### Prototype #1 – Started July 2017

Mike made the very first SlingBaron prototype out of PVC pipe because it was cheap, and easy to cut and drill. It was pretty clunky compared to the final injection-molded product, and didn't really accomplish his goal of designing a pocket-sized product that was low-cost, easy to use and easy to carry. It did, however, prove his concept of using centrifugal force for drying a harmonica.



### Prototype #2 – Design Goal: One-size-fits-all

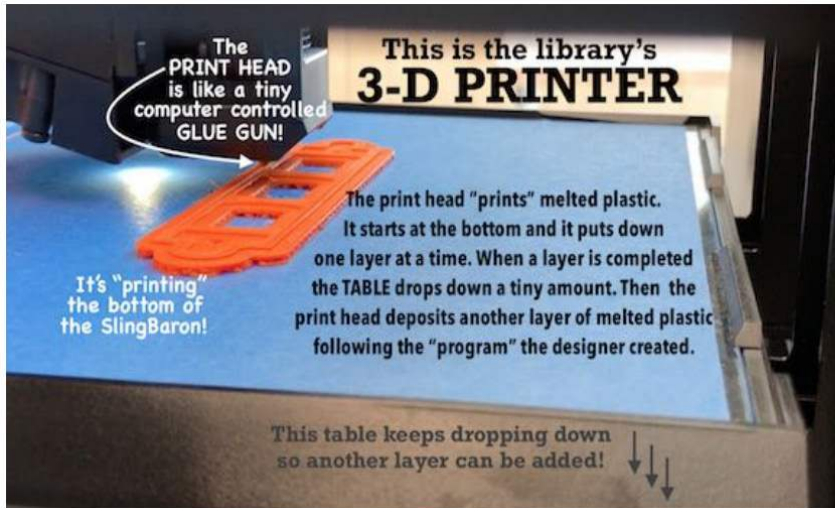
For the second prototype, Mike moved from PVC pipe to a 4-piece wooden assembly, with the goal of giving it the flexibility of accommodating all sizes of 10-hole harmonicas. The obvious advantage of this is that it could have the biggest potential market if all brands and models would fit into it. Smaller harps would not fall out, because the centrifugal force would hold them in while twirling. The assembly, sanding and painting of the wooden prototype proved to be way too labor-intensive, so Mike realized that ABS plastic would ultimately be the material of choice.

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## Prototype #3 – 3D Printed Plastic

A design improvement added “bridges” to the bottom (outside surface when being twirled) of the SlingBaron which held the parachute twirling cord inside the dryer when not being used, plus they formed a support bridge to hold a paper saliva catcher in the bottom. (The replaceable paper in the bottom prevents the saliva from escaping the dryer when it’s being twirled). The design had now been finalized, and new prototypes were 3D printed. Mike was now ready to go into production, so he started working with ICOMold to get pricing for injection molding the SlingBaron in production volumes.



3-D PRINTING leaves the surfaces pretty rough! →  
Even after doing some sanding the “lines” → between each layer can be seen. But it gives you a SCALE MODEL that reveals exactly what your finished product will look like!



## Production Run

The first production run went well, and the quality of the plastic part was a big improvement over the last 3D printed prototypes. Mike was now ready to put his SlingBarons on the market and start selling them, so he proceeded to make them available online as the first sales channel, and expects additional channels and word-of-mouth to grow sales.

We enjoyed working with Mike on this project, and wish him much success in life, and in selling his invention, the SlingBaron Twirling Harmonica Dryer.

## Links

**YouTube Channel:** <https://www.youtube.com/channel/UCjlsPmrzfyUrzUy6KzWPccQ>

**Facebook:** <https://www.facebook.com/SlingBaron-1153862771454052/>