# The Shape of Things to Come?

MAN'S ICE SCRAPER ENABLES USERS TO CHIP AND CLEAR AT THE SAME TIME BY EDITH G. TOLCHIN

T NEVER HURTS to be prepared for ice and snowstorms. Here's the Better Ice Scraper, invented by Hal Greenberger of Natick, Massachusetts.

He owns the innovative business Better Stuff®, and as a seasoned product developer provides sage advice here for budding inventors.

# Edith G. Tolchin (EGT): When did you invent the Better Ice Scraper?

Hal Greenberger (HG): Many years ago, I identified the problem that car windows were curved but frost edges on traditional ice scrapers were straight. However, I didn't really start developing The Better Ice Scraper until about five years ago, after I was fortunate enough to receive an early retirement buyout from my employer at the time. Once formal work started, it took about two years to get first samples off tool.

#### EGT: How did the idea come about?

**HG:** I was using some random ice scraper as I had to scrape off some heavy frost on a cold morning in Chicago. The scraper had this extra wide blade and I thought: "Great! This will make quick work of the frost!"

Then, I started scraping. The frost only came off in small strips, substantially narrower than the width of the blade. This made no sense to me.

That's when it hit me that the frost edge needed to deform so its shape could match the varying curvature of car windows. It wasn't until I started working diligently on product development that the overall design came together. I have notebooks filled with various approaches I considered before finalizing what you see today.

#### **EGT:** Why is this better than other ice scrapers?

**HG:** As mentioned earlier, the frost edge deforms when the scraper is pressed against the windshield to conform to the glass shape, regardless of its curvature. This increases efficiency and makes scraping frost faster.

The Better Ice Scraper places the frost edge and the ice chipping teeth against the glass at the same time. First, you can chip ice and clear it away in the same motion, making chipping and clearing ice much faster. Traditional ice scrapers force you to flip the scraper over to use the ice teeth, then flip it over again to clear the chipped ice away with the frost edge.

The unusual shape, in addition to contributing to the patented "Shape Shifting" behavior described above, also provides incredible stability that leads to further benefits.

With greater stability, users can apply substantially greater power to chip ice without fear of slipping. You can really lean into The Better Ice Scraper to get through thicker ice faster. The design also always orients the edges at the correct angle for scraping.

Placing two edges against the glass simultaneously also significantly improves ergonomics.

To use a traditional ice scraper, you must apply a torque to press an edge against the glass. You must grip the scraper tightly in one hand, and pull up on the handle with one part of your hand while pressing down on the handle with another.

With The Better Ice Scraper, you simply need to press down. No torque required. This substantially reduces hand and wrist strain and the need to grip the scraper tightly. The Better Ice Scraper is even usable by individuals with reduced grip strength due to conditions such as arthritis or carpal tunnel.

#### EGT: Have you invented anything before?

**HG:** Yes. I've been an engineer for over 35 years. I have invented numerous technical solutions to engineering problems, as well as a number of complete products.

Earlier in my career, while working as a product development consultant, during periods of down time I would work on my own technologies and products. During that time, I invented and patented an active noise cancelling stethoscope and methods to improve passive noise reduction in stethoscopes. I also developed and patented a spatial audio technology which was acquired by a future employer.

## **EGT:** Have you received a patent?

**HG:** Yes, I am a named inventor on somewhere over 25 patent families. Some of these families I control, and others are assigned to former employers and consulting clients.

I am quite familiar with the patent process. In my last corporate role, I was manager of IP and technology strategy for a major consumer electronics company—where, among other responsibilities, I managed their research IP portfolio. I am a registered patent agent and have worked on hundreds of patents and patent applications over my career.

# **EGT:** Please share your experience with Joy Mangano's "America's Big Deal" TV show.

**HG:** I can't say enough great things about being part of "America's Big Deal." It was a fantastic experience to be part of. Everyone I met was extremely professional and great to work with.

I had a blast doing the show! I also think it's

for entrepreneurs like me. Getting noticed is probably the hardest thing to do, starting up a small product company, and specifically getting noticed by big box retail. The exposure to great major retailers like Lowe's, Macy's and HSN/ QVC was priceless to me.

EGT: Are you manufacturing overseas or in the United States? If overseas, have you had any glitches with production, shipping, logistics? HG: I work with a U.S.-based company with an overseas factory that produces goods solely for them under their control.

This year, logistics were very challenging. This season's shipment was delayed on the water for an extended period. Ultimately, I received my goods before selling through existing inventory (but I was getting nervous).

The shipping delay caused a scheduling problem with "America's Big Deal," though, as I couldn't guarantee when I could supply goods to the show. Of course, shipping costs this year were also through the roof.

The long lead times with overseas supply causes difficulties for a seasonal product like mine. It's not practical to re-buy in season, as any in-season order would not arrive until after the selling season has ended.

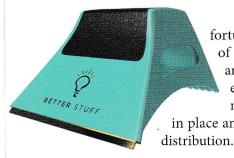
EGT: Where are you selling?

**HG:** Currently I only sell through

With The Better Ice Scraper, the frost edge deforms when the scraper is pressed against the windshield to conform to the glass shape, regardless of its curvature. This increases efficiency and makes scraping frost faster.



# INVENTOR SPOTLIGHT



The Better Ice Scraper won Episode 9 of "America's Big Deal" on the USA Network. fortunate enough to win my episode of "America's Big Deal," I received an offer from Lowe's that I am very excited about. I am also putting my own e-commerce capability in place and am working to further expand istribution.

# **EGT:** Have you tried crowdfunding?

**HG:** No, I funded development of The Better Ice Scraper myself.

There is a cost to crowdfunding (in actual expenses and time). When comparing the funds I thought I could raise with the cost of the campaign, it didn't make sense for The Better Ice Scraper.

#### EGT: Are you planning any new products?

**HG:** I have a few different products in development. I can't say too much about them other than that some will help build out a Better Stuff winter weather product line, while others will be more useful during the warmer months.

### **EGT:** Can you offer guidance for inventors?

**HG:** Don't fall in love with an idea just because it's yours.

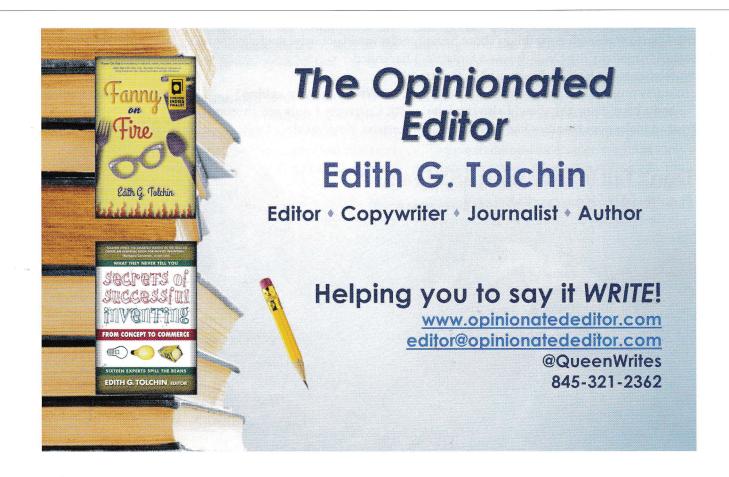
Get opinions from others but evaluate them carefully. Many more people will tell you why you shouldn't do something than will tell you why you should. Try to figure out when to listen to them and when to discount them.

Don't just focus on the product. Figure out a plan for getting into distribution and acquiring customers before committing large resources.

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**Edith G Tolchin** has written for *Inventors Digest* since 2000. She is an editor (opinionatededitor. com/testimonials), writer (edietolchin.com), and has specialized in China manufacturing since 1990 (egtglobaltrading.com).





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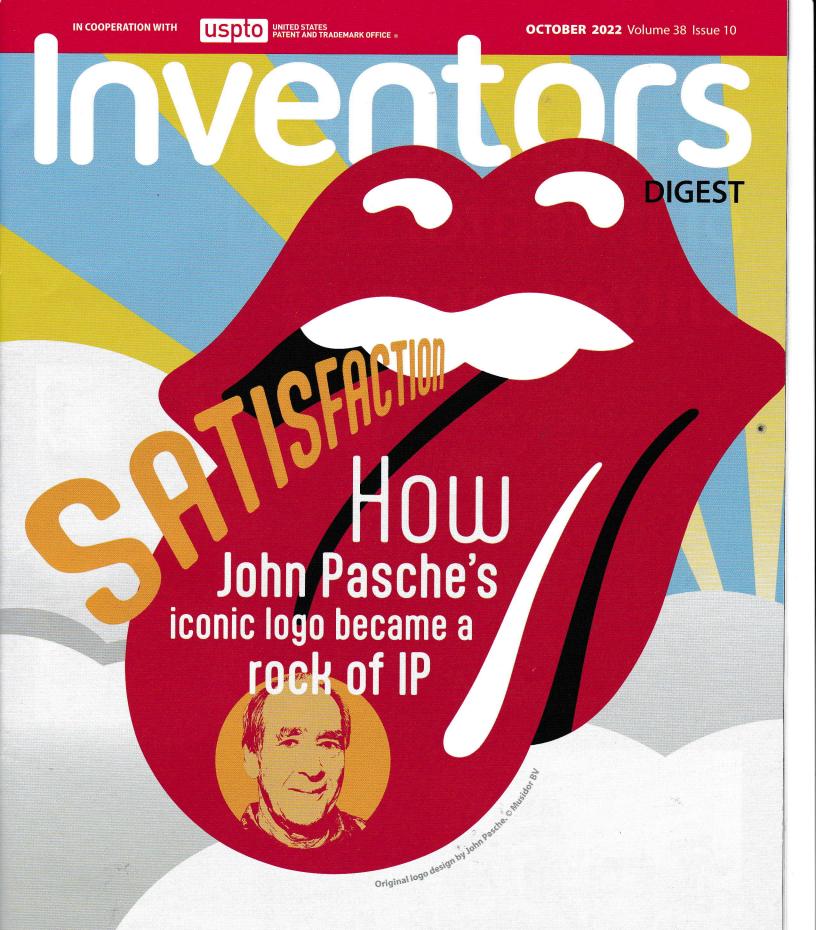
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