

A Breath of Fresh Air

Samuel Hall Makes Portable Oxygen Tank Use Safer **BY EDITH G. TOLCHIN**

INPEX, America's largest invention and new product trade show, held its 30th annual exposition in Pittsburgh, Penn., this past June. I have participated in the event for the past 15 years and always leave in awe of the imaginations and minds of the inventors who attend. This year, I was impressed with Samuel Hall, inventor of the O2 Safety Strap.

In 2003, Hall was diagnosed with sarcoidosis, a rare auto-immune disease, and bronchiectasis, an abnormal widening of the bronchi, which necessitated the use of supplementary oxygen and the accompanying tanks, as he awaits a lung transplant. Hall experienced problems common to those who require oxygen—the cannula line caught on doors and other objects, and he often tripped over it. After tearing his patellar tendon, Hall decided it was time to remedy his problem.

Edith G. Tolchin: How does the O2 Safety Strap work?

Samuel Hall: The O2 Safety Strap is a very simple yet effective medical device. The strap is designed especially for supplementary oxygen users. Traditional cannula lines hang from the nose and straight down in front of the wearer. The O2 Safety Strap basically reroutes one cannula from its original position to the back of the wearer for safer carrying or transporting of the oxygen tank.

EGT: How did you create the prototype?

SH: My very first prototype was created from the arm straps I took off of a backpack.

EGT: Who are the consumers you had in mind for this product?

SH: The O2 Safety Strap is uniquely versatile. It allows a supplementary oxygen user to transition from portable oxygen concentrators and oxygen cylinder bags to stationary home concentrators by means of a cannula. Ideal buyers would be oxygen concentrator companies, medical facilities, pharmacies, retail stores and home medical equipment stores.

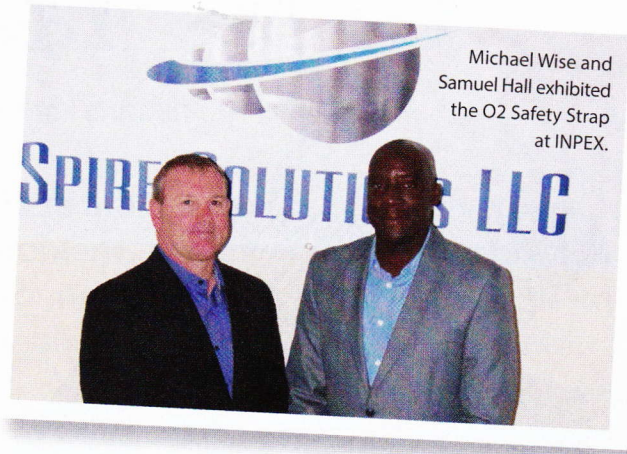
EGT: What is your plan for development, manufacturing and sales of this product?

SH: I formed a company in 2012, Spire Solutions, LLC, with Michael Wise, who is CEO and the company's primary financial backer. With good strategic planning, we hope to raise enough revenue through crowdfunding to soon have the O2 Safety Straps manufactured and ready to market.

EGT: What are your product's advantages over similar products used for oxygen portability?

SH: There is nothing else that helps provide improved safety for mobile supplementary oxygen users on today's market.

EGT: Did exhibiting at INPEX help you advance the development of your product?



SH: Spire Solutions, LLC received a Gold Medal Award of Merit at INPEX 2015, and it has permitted us to network and meet some wonderful people. INPEX was educational for us, as well.

EGT: I understand that the O2 Safety Strap was endorsed by the Chronic Obstructive Pulmonary Disease Foundation.

SH: In 2012, I submitted the O2 Safety Strap to the Edison Nation Medical inventors' site. Edison Nation Medical is an open innovation marketplace to help inventors and small businesses. The company thought that the strap had great potential. Spire Solutions, LLC entered into an agreement with Edison Nation with the hopes of the strap taking off. It took some time, but Edison Nation did acquire an endorsement for the strap by the COPD Foundation. With the COPD Foundation's endorsement, we decided to withdraw from the original licensing agreement (to pursue developing the product on their own.)

EGT: What are your long-term goals for this product? Where do you see your company within five years?

SH: Statistically there are more than two million people in the United States that are on supplementary oxygen. Twelve million, like me, suffer from COPD; 132 million people globally have COPD. Spire Solutions, LLC's goal is to reach and help as many people as we can to live a full and productive life by making supplementary oxygen users feel safer and as mobile as possible. Within five years, Spire Solutions, LLC would like to be recognized for revolutionizing the way all supplementary oxygen is carried. We are hoping for a licensing deal, a buyout, or to connect with a major company with our patent-pending O2 Safety Strap. 📍

Author **Edie Tolchin** focuses her work on the process of inventing. She is also the owner of EGT Global Trading, through which, for over 25 years, she has helped hundreds of inventors bring their products to market. Contact Edie at egt@edietolchin.com.

