

Utility Workers' Ideas Are Brought to Life

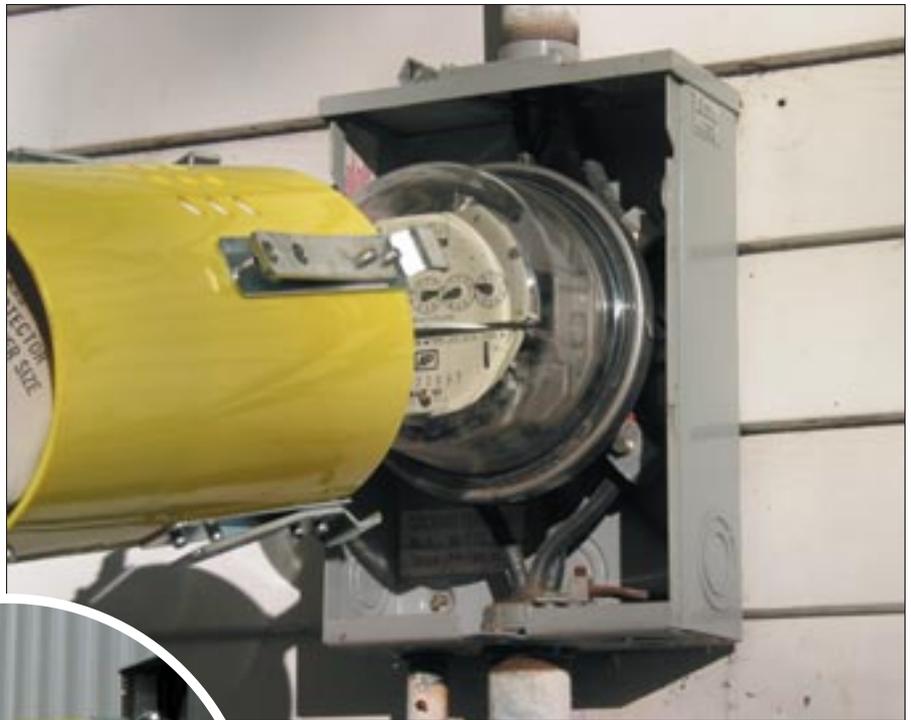
It's a long road from bright idea to commercially viable product—a road consisting of proper and professional design, production and promotion.

A History of Evaluating Inventions

Jim Rauckman has heard and seen a lot of ideas dreamed up by utility workers trying to make their jobs safer and more efficient. He spent 16 years with AB Chance Company in application engineering, sales management and marketing management.

"One of my roles was to act upon ideas that utility personnel would submit to us in hopes that we would commercialize their ideas and market their products," Rauckman said. "Believe me, we received some great ideas. But we also received some that were pretty wild."

"One of the most unique submissions that I remember was from an inventor that designed a huge breakaway hinge to be fitted at the base of a wood utility pole. The idea was that in an ice storm or hurricane the poles would drop in a controlled way rather than snap off in the storm. The restoration workers needed only to tilt the poles back up and reset the breakaway mechanism. The major drawback was that the utility company would be intentionally



dropping what could be an energized line into a public environment, so the inventor attempted to provide an interlock that would only allow the pole to drop when de-energized. But, then, there was no guarantee that the line would not get re-energized, and by the time all of the safety factors were embodied into the invention, each pole would have cost over \$35,000 to install."

"My all-time favorite, though," Rauckman said, "was an invention someone submitted to make a hotstick stronger by placing a long steel rod inside of it. The challenge was to not hurt the guy's feelings when I explained to him why we weren't going to pursue the idea."

"Occasionally, though, those rare ideas would come along where we would look at each other and say those coveted words— 'why didn't we think of that?'"

In the early 80's some utility workers in Houston, Texas came up with such an idea— a simple tool for installing and removing revenue meters.

Installing a Meter



Insert meter into Meterpuller until locking clips snap onto meter's base.



Align meter's contacts with socket and push meter into place.



Depress locking clips to release meter and remove Meterpuller from installed meter.

An Idea Brought to Life

Utility companies have long recognized the potential of their employees' inventions, but few ever helped the would-be inventors bring their ideas to reality. Even fewer companies have provided inventors with ways to benefit from those ideas that are acted upon. In fact, employees are often required to sign an agreement stating any ideas developed on-the-job are the property of the company.

In 1982 Houston Lighting and Power reversed that trend by instituting a program to actually reward employees who developed tools, materials and processes on the job. The company ultimately created a product development division to commercialize some of those products to the benefit of both the power company and the inventor.

"Most of the products were developed by employees seeking ways to make their work easier, safer or more efficient," said Russel Stanley, then-director of Houston Industries Products, the patenting and marketing arm of the Houston-based utility. For the remainder of the 1980's and into the 1990's this subsidiary of the power company was responsible for manufacturing, marketing and distributing the products to other electric utilities worldwide. Thanks to this program many inventors were paid a royalty on each product sold.

In 2000 the power company decided to sell Houston Industries Products, and they contacted Jim Rauckman, who had recently left AB Chance Company. Rauckman, recognizing the tremendous benefits of these safety devices to elec-

tric utility personnel, immediately created Rauckman Utility Products, LLC to purchase the assets of Houston Industries Products including a very popular tool for installing and removing revenue meters.

Rauckman, along with Kevin Clizer (former Product Manager of Hotline Tools at Chance), was already operating Rauckman High Voltage Sales—a firm representing manufacturers of products supplied to the electric utilities in Illinois, Missouri and Kansas. At that time Rauckman elected to market the former Houston Industries Products through a North Carolina company. In September of 2002 that relationship was terminated and Rauckman Utility Products now offers these products including the well known "Meterpuller" directly to the electric utility, gas and rescue industries.

The Meterpuller

The "Meterpuller" as it has come to be known is a tool that is used to safely and quickly remove and install a utility company's revenue meters. The removal and installation is done quickly and smoothly, placing force on the parts of the meter designed to withstand it. No more banging and pushing on breakable glass or plastic covers to install meters, and no more prying, wiggling and jerking to remove them.

A meter calibrated to the utmost precision can be put out of acceptable tolerances with one good jolt. The Meterpuller tool replaces the jolts with a pushing motion on the base of the meter. The pushing motion can be as slow or fast and with as much force as the operator desires.

Rather than use his hands a utility

worker can quickly snap the tool onto the base of the meter and remove it from its socket. Installation is just as quick and safe. To install a meter a utility worker need only place the meter in the tool and push the meter into its socket.

The Meterpuller has a built-in solid barrier creating a chamber to contain arcing and gases, should the meter be closed into a fault or an unexpectedly large load. The barrier prevents arcing and gases from passing through the tool to the operator. Vent holes are incorporated to vent the gases away from the operator.

Today many utilities are using contractors to perform service connects and disconnects. Many times these contractors do not have the years of experience enjoyed by many utility workers. The Meterpuller does not replace those years of experience, but it does lend greater confidence and protection to workers. Many utilities mandate that anyone—contractor or utility personnel—must use the tool unless the meter base is absolutely and positively known to be de-energized.

The Meterpuller works on both ring-type and ring-less bases. The tool is lightweight and extremely durable.

Gas companies, fire departments and rescue workers have grown to rely on the Meterpuller to be certain that a house is "dead" from an electrical standpoint. Most of these personnel do not have the training and experience to feel comfortable grabbing and pulling a meter from its energized socket.

It truly is a long road from bright idea to commercially viable product, and someone undoubtedly will invent a meter that has operating handles—but until that time the Meterpuller provides the best way to remove and install revenue meters in a safe and efficient manner. □