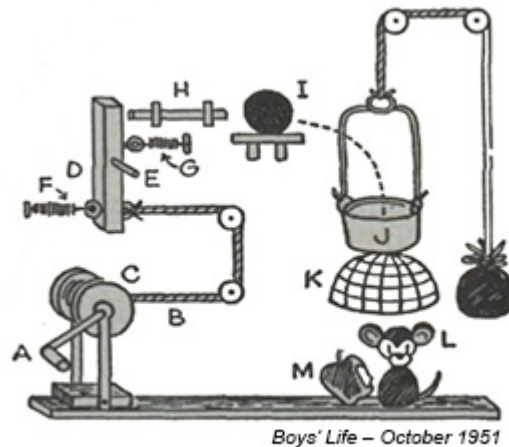


MERITS OF INVENTION EDITION

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“Build a better mousetrap,” goes an old saying, “and the world will beat a pathway to your door.” That’s all good, unless you happen to be a mouse.



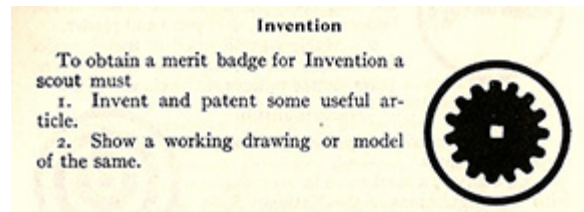
Inventing things captures the imagination of young people. Find some tools, boards, pipes, wires, and before long they are nailing, pounding, shaping, bolting, gluing, and imagining what to make next. It’s an impulse Scouting has encouraged since the BSA’s earliest days.



THE LAST INVENTOR

This year marks a tiny Scouting anniversary. A hundred years ago in 1915, exactly one person earned the Invention merit badge. He was also the tenth and last to receive what has become the BSA’s least-earned award and rarest embroidered patch.

Invention was one of the original 57 merit badges listed in the 1911 Boy Scout Handbook. It had just two requirements.



1911 Boy Scout Handbook

Inventing something is one thing. Getting it patented is quite another. To protect an invention from use by others without permission, an inventor must file with the United States Office of Patents and Trademarks and then wait to learn if a patent has been granted. Many early BSA emblems show evidence of being patented.



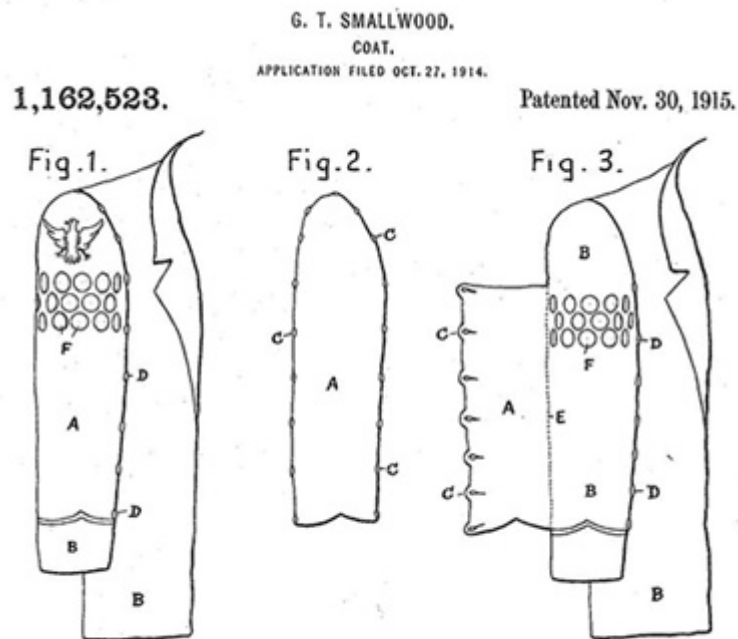
First Class hat pin embossed with 1911 patent

A Scout who did earn the Invention merit badge was Graeme Smallwood of Troop 32, Washington, DC. It was his 38th merit badge. He filed for his patent on October 27, 1914, and received it thirteen months later on the last day of November, 1915.

“I have invented a new and useful Improvement in Coats,” he wrote in his patent proposal. “The object of this invention is to afford a means whereby the coat of a suit of clothes, preferably a uniform, may be worn with badges thereon, displayed or concealed as desired.”

The problem Graeme saw was that early Scouts sewed all their merit badges onto the right sleeves of their uniforms. If they changed uniforms, they would have to snip the badges from the first uniform and stitch them onto the new one.

Graeme Smallwood's invention was a sleeve cover. A Scout could sew his merit badges to the cloth cover and button it onto any uniform he wanted to wear. He could also use an unadorned cover to conceal the badges underneath.



Graeme Smallwood's Patent Diagram for a Sleeve Cover

Even with a transferable sleeve cover, managing merit badges got to be too much. The Boy Scouts of America introduced an inventive solution – the merit badge sash.



MERIT BADGE SASHES

Sashes became an official part of the Boy Scout uniform in 1924. For many years they were tan, then khaki, matching the colors of early Scout uniforms. The current olive green sash appeared in 1979. Most Scouts today show their merit badges on sashes, though they are still allowed to wear up to six merit badges on an official long-sleeved uniform shirt.



Displaying Merit Badges Today – BSA Guide to Awards and Insignia

Merit Badge Sashes

Telling the stories of those who wore them, merit badge sashes are prized possessions of many Scouts. Boys of earlier generations sometimes included badges of rank, medals, and other awards. Today, only merit badges and the Varsity Scout letter should be worn on the front of a sash. Temporary patches can be displayed on the back.



Rank Pins on a Vintage Sash



Merit Badge Sashes Share Scouting Histories



Front and Back of a Missouri Scout's Merit Badge Sash



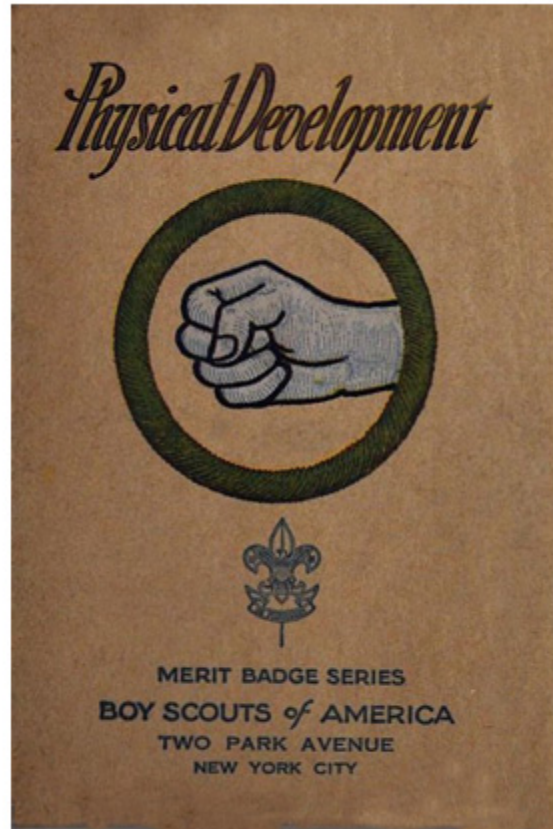
EARNING THEM ALL

As Graeme Smallwood was completing the requirements, the Invention merit badge was discontinued, probably because so few Scouts were earning it. An announcement in the June, 1914, Scouting magazine added that, "All those who intend to file claim for a Merit Badge for Invention are requested to take the matter up with the National Headquarters at this time, giving full details."

To keep the merit badge total at 57, Invention was replaced by a new badge for Physical Development.



Physical Development merit badge



The number of merit badges grew slowly through the decades until there were around 120. After that, if a new merit badge was introduced, the existing badge receiving the least amount of interest would be discontinued.

A Sampling of Discontinued Merit Badges



Masonry



Beekeeping



Blacksmithing



Bookbinding



Dairying



Cement Work



General Science



Hog Production



Pigeon Raising



Nut Culture



Taxidermy

In recent times, the BSA has been slower to remove the less popular awards, and the total number of merit badges today stands at 131. Scouting's National Office does not acknowledge the achievement of Scouts earning every merit badge, though a rough estimate is that over the years there have been about two hundred.

BSA's Guide to Awards and Insignia allows merit badges to be stitched to the front and back of a sash, but prohibits wearing more than one sash at a time. In fact, as the number of merit badges a Scout has earned nears a hundred, there is simply not room on one sash to sew them all.

Some Scouts have found unofficial ways to display their abundance of badges. One is Clay Wood of Jackson, Ohio, who earned every merit badge offered during the years he was a Scout.



Clay Wood



REINVENTING THE INVENTION MERIT BADGE

After an absence of 95 years, the Invention merit badge returned to active duty in 2010 as Inventing, much to the enthusiasm of Scouts eager to explore opportunities to invent things.

The Inventing merit badge pamphlet explains the subject this way:

“Inventing involves finding technological solutions to real-world problems. Inventors understand the importance of inventing to society because they creatively think of ways to improve the lives of others. Explore the world of inventing through this new merit badge, and discover your inner inventiveness.”

Scouts earning the Inventing merit badge can learn about intellectual property and build a model of a potential invention, but they aren't required to apply for a patent. More than 2,000 Scouts each year are completing the requirements.

The emblem on the 1911 Invention merit badge was a gear wheel. The Inventing badge shows a wheel that a prehistoric inventor might have carved from stone.



Inventing Merit Badge

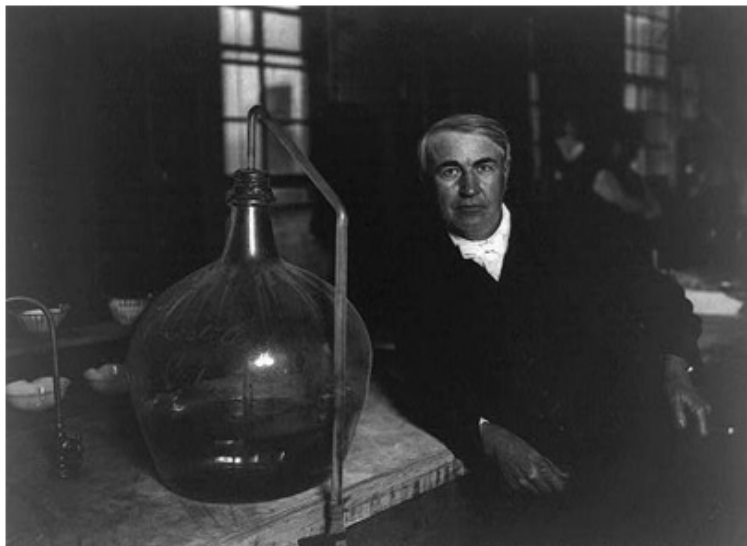
An equally effective icon would have been a light bulb. Often used as a cartoon symbol over the head of someone coming up with a new idea, the light bulb was the creation of America's most famous inventor, a man with ties to the BSA.



THOMAS EDISON AND SCOUTING

With more than a thousand patents to his name, Thomas Alva Edison was known around the world for inventing everything from the light bulb and phonograph to a motion picture system and an electronic voting machine.

In 1919 Edison accepted an invitation from the Boy Scouts of America to serve as advisor to the National Court of Honor for the Electricity merit badge.



Thomas Edison in His Laboratory

Thomas Edison in His Laboratory

Mr. Edison joined an elite group the BSA cited as being "of notable achievement." They were a Who's Who of illustrious Americans at the tops of their fields. Along with the merit badges they represented, they included:

Theodore Roosevelt – President of the United States – **Civics**
William T. Hornaday – Founder of the Bronx and National Zoos – **Bird Study**
John Phillip Sousa – Band director and composer – **Music and Bugling**
Gifford Pinchot – First Chief of the US Forest Service – **Conservation**
Luther Burbank – Eminent botanist- **Agriculture**
Charles M. Schwab – Steel magnate – **Business**
Charles W. Eliot – President Emeritus of Harvard University – **Scholarship**
General George Wingate – Military leader - **Marksmanship**
Rupert Blue – United States Surgeon General – **Public Health**
Horace Kephart – Outdoor expert and author - **Cooking**
Charles Dana Gibson – Celebrated graphic artist – **Art**
Augustus Post – Early aviator – **Aviation**
Dillon Wallace – Explorer and author – **Pathfinder**

A 1919 *Boys' Life* listing of the names noted that the BSA was still searching for experts for merit badges in Blacksmithing, Botany, Craftsmanship, Interpreting, Leather Working, Wireless, and Plumbing. The magazine asked readers to suggest candidates, if they knew of any.



THOMAS EDISON SUPERNOVA AWARD

Edison has returned to Scouting in the present age, honored with his name on the Thomas Alva Edison Supernova Award. That's one of the highest achievements in the STEM/NOVA program.



Thomas Edison Supernova Award

STEM is a BSA initiative encouraging Scouts to explore *Science, Technology, Engineering, and Math* through existing programs. The Nova Awards recognize youth members for their efforts. To learn more, check out STEM and the Nova awards at www.scouting.org/stem.



(This edition of the *Be Prepared Newsletter* was developed and written by Robert Birkby, author of the current editions of the *Boy Scout Handbook*, *Fieldbook*, *Scout Stuff*, *The Conservation Handbook*, and *Eagle Scouts: A Centennial History*.)

