've been a tinkerer since I was a little kid," Alfred Smith says. Always inquisitive, he would constantly take things apart and do some research, then put them back together. "I got myself in a lot of trouble a few times when I was a kid doing that."

By his 20s, he was taking apart cars. When Smith began his 20 years of service in the Navy, there were cars that didn't run well. "There was a guy [who] used to fix everyone's cars," he said of his friend in the military. "And I used to inquire of him a lot to fix my car when it was down. And so, he told me to come and help him. 'Just watch,' he says, 'You'll learn ... some of the simpler things.' So, I did, and I caught on pretty quick. And sooner or later, I was taking engines out of Volkswagens."

After Smith retired from the military, he tried to enter the Postal Service but couldn't, due to a hiring freeze, so he instead turned to his area of expertise as a Navy medic and worked as an optician for a few years. He was later able to apply to USPS, and has served as a letter carrier for the past 21 years.

The Bradenton, FL Branch 1753 member's mind is always churning ideas to make people's lives easier. In the 1980s, during his early years in the military when he had a young family and little money for "extra stuff," Smith submitted some ideas he had come up with to invention companies. "I had good response as to, you know, getting them going, but I didn't have any money to get the process started initially, so they kind of buzzed away," he said. "And some of the same things I thought of, I see them being used today."

With the ideas still coming, he thought about trying again, but nerves held him back. "That was the hardest part of the whole thing ... actually sitting in front of someone and saying it and not feeling like I was the most foolish person in the world," he said.

Steeling his nerves, he approached an invention company a few years ago with

one particular idea, but with three others in his mind. Smith was told that he probably wouldn't want to pursue all of them at once, rather he should run with the one and come back to the rest later.

So, they began focusing on that one idea: a device called a wheel lift, a rolling and portable structure, that he envisions will not only help auto companies, but also any car owner. Using it, anyone can get a tire on and get a tire off of a car with just a little bit of effort, he said.

He figured that having to change tires was a difficulty that many people grappled with. "First off, it's the weight of the tire. So, you have to roll it wherever you want to go, versus picking it up. And once you get it up onto a car that is lifted ... you have to not only hold up that heavy tire, but you gotta—at the same time—spin it so the holes on the rim of the tire will fit the studs on the car," he explained. "And so, with that, I'm thinking, like, 'Man, there's got to be a better way to do it, because, you know, it wears your back out."

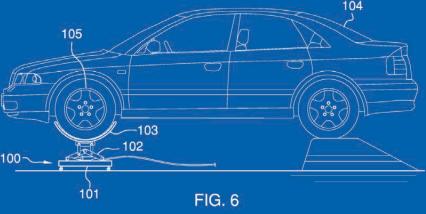
"After I explained this whole concept, I was just waiting for the ball to drop and just being embarrassed and going home feeling less about myself and wanting to give it all up and throwing everything into the trash," he said. "But this idea, they said, 'Hey, let's see what we can do with it.' They took me, and they sent it through their process."

That process included going through engineers who are well versed in this type of machinery and the concept of how it's to be used, as well as the impact it would have on the industry, Smith said.

"They showed me how to get the patent. They showed me the front end of getting all the paperwork and legal stuff done," he said.

While he doesn't have a prototype of the wheel lift, he's put in the effort





Alfred Smith with the plaque of his patent

to make sure it is feasible. Smith has approached engineers about it, including some retired NASA employees with businesses fabricating items using machines such as 3D printers. One engineer to whom Smith showed his idea told him, "Well, I'll buy one."

"When he said that, I almost passed out," Smith said. "Now somebody that works in this field can see that it's a proper piece of machinery, now they've validated that in my heart."

Once it was declared a unique idea that wasn't duplicative and would be useful, he could proceed to try to secure a patent. Smith soon selected a patent attorney in North Carolina to try to secure a patent. "The lawyers, the patent people, they go and search and they put a legal binding stamp on it that this idea is unique, this idea is authenticated by the United States government, that there's only one, and that you cannot do anything that looks like it or works like it," Smith said.

He continued: "That's a whole 'nother set of time that you gotta wonder. ... After all of these years and all this ingenuity, all these smart people that are smarter than me, they have [to have] come up with something greater than this that's already out there that'll make changing a tire easy. But there wasn't. I couldn't believe it."

"So it went through the process, time passed and it came back and everything was OK," Smith said. "There was a thumbs-up."

The working title for his invention is the "AEJ tire-changing unit," with the A, E and J standing for the first initials of his daughters. He submitted his application for a patent in July 2020, and the patent, complete with a gold-plated patent certificate, was issued in May 2022.

Smith says his family has told him how proud they are of him achieving



his patent, which "I'll have for the rest of my life, to share with my kids, my grandkids."

Smith said he's employed a few marketing companies "that deal specifically in the hip-hip-hooray," getting ideas out into the public eve and advertising it to the right people. "And that's what we're just waiting on-someone to say, 'Hey, let's sit down and talk.' That's the next thing I'm listening for."

His grand goal would be for someone to simply buy the idea, and for him to get a royalty (a small percentage of the total) on any product made from his patent. He'd then move on to pursue some of his other ideas.

A full-time letter carrier, Smith doesn't generally talk about his invention to many people besides his family, but he has let some customers on his route in on what he's working on. "I service some condos of some retired people that have been in technical industries and mechanical indus-

tries in their work life that I've run the idea across and they've been real receptive," he said. "So those are my cheerleaders."

Not many people in the world have patents, he said, but he doesn't want to make "a big hoopla" about everything at this point. "Not yet," he said. "We'll celebrate on the other end of this thing."

Smith encourages any budding entrepreneurs to pursue their ideas. "There are a lot of people that have ideas that are afraid to express them because of all the stops that are in the way," he said. "You have to go against the grain. ... That's what inventors do."

One thing's for sure: He'll never stop coming up with ideas.

"That's who I am," he said. "That's the core of me-seeing an issue and trying to figure out how to make it easier. I'm an inventor just looking for opportunities to get the thought processes that are in my heart ... out and get them to be a part of everyday lives." PR