

# The Inventor



By Rita Davis

It's just hard to believe that there is anything left to invent in this world. I've racked my brain on numerous occasions and the best thing I can think of is a robotic device that could clean my house while I'm at work, kind of like those things people leave in their swimming pools overnight. Unfortunately, I recently read that scientists are still having trouble creating a robot that doesn't bump into walls.

Necessity is the Mother of Invention, though, and as long as man has needs the mind of the inventor will be at work, figuring out a way to fill our requirements. Such is the way with Al Terwilliger of Clawson, Michigan, a man who saw the need to ease the bump and grind of the harness racing business over thirty years ago and has been doing so ever since.

"My dad and brothers raced harness horses and they were always getting hurt," explains Terwilliger. "My mother used to complain about it, so I came out and developed the first product - the Protecto Vest. Today you hear about the vests, several states bought them. I ended up selling the patent to Ski-Doo-Bombadier."

Terwilliger's wife Myra says her husband has more patents on harness racing products than any other human being they know of. Yet, due to man's vast experience in the field of inventions, certain patents were not obtainable. Says Terwilliger, "I developed a (plastic) wheel disk that would pop in and out. You couldn't get a patent on it because the Romans actually used them in their

chairs. I invented mud fenders - they were mandatory. That was another item you couldn't get patented because wheels were made with fenders."

The most unique protection device Terwilliger feels he's ever designed is the "Go Straight", which is good for pacers and trotters. "It takes bad-gaited or lame horses and allows them to tip their elbows out to go straight," explains Terwilliger.

Horse boots are, by far, Protecto's biggest seller though, with over 50 different styles being sold world-wide. Says Terwilliger, "Somebody once said that seven out of ten horses racing in the Midwest were wearing Protecto. I don't know how they calculated that."

When Terwilliger's two daughters grew up, his wife Myra joined the business. He says, "We're a great team, my wife and I. If I want to invent something and it's going to cost, say \$20,000, she just says go do it and have fun."

"If I holler when I'm designing, she doesn't get offended. If she did, she might interrupt my thought process. I sure don't mean to say anything bad."

Along with input from horsemen all over the world, Terwilliger himself does all of the new product development, inventing the tools as well that will be required to manufacture his concept. Once the item is ready for production, Myra takes over to prepare it for the assembly line.

It's the adventure that intrigues Terwilliger, as well as the pleasure of benefitting horses and mankind. "This business to me is an inspiration," he points out. "I get so many ideas, patents, for the benefit of horse racing. I always feel that I get these ideas beyond my smartness. I get them at night, in my sleep."

Terwilliger's contributions to the horse racing business earned him an



Al Terwilliger

unexpected reward seven years ago when he was knighted by the governor of Kentucky as an honorary Colonel. He feels extremely honored to be included in such fine company as Bing Crosby, Danny Kaye and Red Skelton.

A graduate of the Julliard School of Music in New York, Terwilliger's first work was in entertainment. "I always loved horses, loved the races," he explains of how his background helped his career. "Andy Devine insisted that I had to be hired in Never Too Late, a big Broadway show. He always insisted on me because he used to go to the races with me and I'd help him pick winners."

His most memorable experience of that life was meeting Ronald Reagan and becoming a personal friend of his. Reagan enjoyed harness racing too, and Terwilliger feels that he was instrumental in bringing the sport to California.

Maintaining ties to the entertainment industry, Terwilliger has written TV

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commercials and still sings on occasion - Broadway songs and national anthems - when he has the time and inclination. He feels that the harness racing industry could benefit from employing some aspects of that business. "There's no business like show business," he says. "The tracks for years have had a monopoly and didn't have to go out and

get business. Now, if I was in control of a track, I would be handling it like a football game. Have entertainment for young kids between races, run the races off quicker. Glitz it up!"

"We have to be a little more sophisticated," he says, mentioning how the sport needs graduate from its county fair roots. "Windsor does a better way of promoting harness racing. Tom Joy - he's making money, but at the same time, he's making harness racing more exciting. I have great admiration for Canadians. They're doing things the Yanks used to be good at and I'm tickled to see it."

Terwilliger had his own excitement at the race track throughout last season with trotter Italian Crown, who made \$150,000 in a year of racing while taking a mark of 1:55.3f.

At 60 years of age, Terwilliger is on a roll with his inventions. As he says, "I'm just getting to the point where I know what I'm doing. I'm getting smart." He currently has three new patents applied for. The Breathe E-Z improves the intake of oxygen to the horse's lungs, thus

improving performance and stamina. The Head Pole Hitch makes installing a head pole a lot easier for horsemen. And watch this spring for Protecto's New Secret Weapon. According to Terwilliger, this device helps colts get started correctly, helps the lame horse and also allows horses to go freer and faster.

