

## Did you know

# Bud Wisecarver

This month, we review the life of Bud Wisecarver, inventor of the vee roller, for inspiration and ideas.

Even as a child, Bud Wisecarver had a knack for inventing. Raised in Berkeley, Calif. after WWI, he spent much of his youth in the family garage where he built coasters, electric bicycles, even a 6-ft-long racecar with a Jeep engine. Supplies were scarce, so he created many of the parts he needed. By the time he was about 16, it was clear to his parents that he was a gifted mechanic, and they weren't necessarily happy about it.

After high school, Wisecarver enlisted in the Marine Corps and was rated highest in platoon in mechanical aptitude — and sent to the



Here, Bud works on a wire-weaving machine he built for Flo-Carri bread trays in the 1950s.

Electronic Engineering and Radio Maintenance School in Chicago. After discharge, Wisecarver immersed himself in the study of zoology and natural science. But again, he came home on weekends to earn money working for a truck-body fabricator.

After the money from his GI bill ran out, during autumn 1950, Wisecarver started his first business in a noodle plant confiscated from its Japanese owner during World War II. Here, Wisecarver continued to fabricate truck accessories.

Then he met a wealthy realtor who asked him for help building a Class K Runabout, an early cigarette boat. The realtor was also the owner of a failing venetian blind company. After the boat job, Wisecarver, who was 22 at the time, was offered the job of modernizing the plant. "From the freight area to the packaging and shipping department, I knew there was a better way," Wisecarver says. He redesigned and rebuilt the plant piece by piece so that by 1955, the linear footage produced by the mill had increased considerably. But with the mill running at full capacity, Wisecarver was out of a job.

Now a married man with a family to support, Wisecarver began work for a friend's screw machine business on a machine in his basement.



Wisecarver's first shop was a solid improvement over working in his basement. From truck parts to bread trays to linear guide systems, the company morphed several times over the 20th century.

Wisecarver's wife Judy learned how to run the machine, too: "I did get my first washing machine by saving money I earned making screw machine parts. I would work while the kids were napping."

One day, a policeman knocked at the door and informed Wisecarver he could-

# MSD

## MOTION SYSTEM DESIGN



Wisecarver designed with one question in mind: How can this industry work more efficiently? He is pictured here with his longtime business partner, Ray Bishop, right. Today, company leaders are particularly concerned with the loss of vocational programs in schools. Wisecarver has worked to bridge the gap between business and the educational community. Kan continues the tradition by supporting engineering programs for youth.

n't operate a business in a residential area without a permit. So with the help of a neighborhood boy, he moved the screw machine operation to a space in a nearby cement-manufacturing town called Cowell. Says Wisecarver: "The move gave me a chance to grow, which I never could have done in the basement."

One important client was Ray Bishop, a salesman who sold bread trays. Bishop used Wisecarver's screw machine parts for a product that secured trays during transport. Eventually, Bishop asked Wisecarver to help him design an improved version that streamlined the loading and unloading of delivery trucks, later the industry standard. Bishop also asked Wisecarver to build specialized bread trays. Making these, Wisecarver's company soon outgrew even the large Cowell shop — forcing a move to an abandoned Pittsburg, Calif., military staging area. Soon after, Bishop and Wisecarver merged their companies.

During this time, Wisecarver was asked by a local fertilizer packaging company to create a machine that would fill boxes with product. Once finished, Wisecarver arrived to set up the new machine, but noticed how filthy the stations were. Machinery was constantly clogged with fertilizer that rained from overhead conveyor lines. Sensing the potential for problems, Wisecarver took the machine he built back to his shop and redesigned it to run on vee-shaped guide wheels instead of flat rollers.

Soon after that, Wisecarver designed a two-sided vee guide wheel that is easier to machine — and began to sell the product in large quantities. Designed track quickly followed.

The company's main product today is fully designed vee-guide systems, but as Pamela Kan, Wisecarver's daughter and company president, explains, "Being open to solving problems, even when the solution goes outside of linear motion, gives us the ability to broaden our product base and grow the company into new markets." Wisecarver's most recent patents — a self-locking trailer hitch and a portable/foldable scooter — are two examples.

Thanks to Gina Gotsill for this story. For more information, visit Bishop-Wisecarver Corp. at [www.bwc.com](http://www.bwc.com).

**BISHOPWISECARVER**