

'The Cash' cranked up historic partnership

By Rich Johnson

Edward Deeds was on the rise at The Cash. Still in his twenties, he was responsible for power and heat in all National Cash Register buildings. His duties included maintenance of buildings and grounds and the planning for new factories.

In what little spare time he had, Deeds increased the potential of the cash register by developing a rough model of a machine that could be cranked by electricity rather than by hand.

To move the idea of an electric register forward while he designed new buildings, Deeds needed a second college-trained electrical man. He asked for a recommendation from his former physics professor, professor Alfred D. Cole, who had taught Deeds at Dennison College but was by then at Ohio State University. Cole recommended another former student, **Charles F. Kettering**, who had gone on to work for a rural telephone company.

Kettering, who came from a farm outside of Loudonville, about 50 miles north of the Deeds farm, was raw, brilliant and tireless.

Before Deeds hired Kettering to run "Invention 3," an idea factory for NCR, he had no one to talk with. They were different in style. Deeds could accommodate, compromise and organize. Kettering was flinty, a



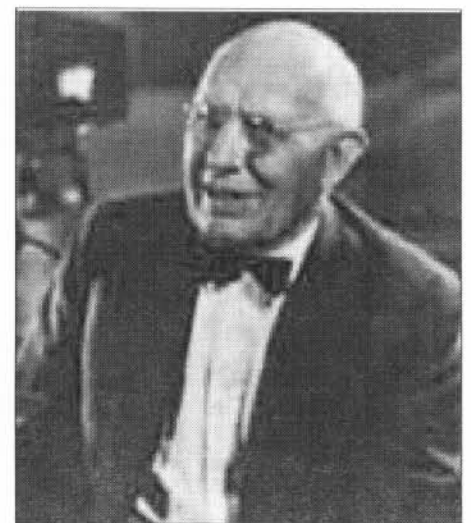
Edward Deeds

hammer-and-tongs inventor. Both were convinced that "the one who pays for our dinners is the satisfied customer."

Late at night, on the old red davenport in Deeds' house at 319 Central Ave., they talked of opportunities in the new business of making and selling automobiles. Their need to talk was probably the original seed from which our Engineers Club grew.

To learn more about automobiles, Deeds bought a kit to build a Suburban 60. He hired a mechanic to help him, and the two successfully assembled the machine in Deeds' barn behind his house.

The Suburban 60 started hard and stalled a lot. All cars had to be cranked by hand, and all cars stalled a lot. Deeds



Charles Kettering

believed there was a "river of gold out there," and that customers would line up to pay for the dinners of the people who improved starting and reduced stalling. He proposed that he and Kettering start their own "Idea Factory" in their spare time — in Deeds' barn.

With encouraging results in developing more dependable sparks, Deeds in 1909 convinced Kettering to resign from The Cash to work full time in the barn with part-time help from Bill Chryst, Bill Anderson and a few others from "Invention 3." They called themselves The Barn Gang, and they worked at the center of the revolution in transportation.

The final installment of Rich Johnson's summation of the Barn Gang's history will appear in the next Engineers Club Newsletter.

Help needed on club exhibit at September car and truck show

There will be a car and truck show at the Airport Expo Center on Sept. 25-26. We have been offered the opportunity to showcase the Engineers Club and the achievements

of our members in Dayton's automotive industry.

We need people to plan and carry out our exhibit at the show. We also need people who can identify artifacts,

pictures, etc., that we can use in our exhibit. If you're willing to help or know of something that might be used, please contact **Joe Martino** at (937) 492-4729, or leave a message at the club.

Cadillac order turns Barn Gang from ideas to manufacturing

By Rich Johnson

In the first installment, Edward Deeds of NCR brought Charles Kettering to Dayton to help electrify the cash register and invent other products and advancements. Deeds then brought Kettering and a team of machinists, electricians and others from his NCR "Idea Factory" to his carriage house in their spare hours to share ideas and develop better systems for automobiles, which were dangerous to start by hand, hard to keep running with ignition systems that didn't recharge, and risky to drive at night due to weak lighting systems. This group called itself The Barn Gang.

With a Barn Gang-installed ignition system in a Packard, Edith and Edward Deeds in 1909 drove their car to New York and back with no ignition problems, a remarkable feat.

For some time, Deeds had been writing to Henry M. Leland, the head of Cadillac, about the Barn Gang ignition. Leland, known as "Little Henry, the dean of motordom," had his engineers examine the system and order 5,000 ignition kits. The offer caught the young Idea Factory by surprise. The group had no company name. Its aim had been to produce ideas, not auto parts.

Bill Chryst came up with the name "Dayton Engineering Laboratories Company." The Barn Gang liked the

name because it stressed research and ideas rather than manufacturing, and thus "Delco" was born. Kettering thought back to his days with the phone company. He knew and trusted the Kellogg Switchboard Company of Chicago. It agreed to make the kits and ship them to Cadillac.

By 1910, Hudson and Packard wanted the Delco ignition, so Deeds, Kettering and their wives used every cent they could scrape up or borrow to rent floor space for production nearby. Olive Kettering brought buckets of coffee and baskets of sandwiches from their Dayton View apartment. Edith Deeds did all the typing and office work.

Kettering's overriding thought had been to have electricity work the ignition, self-starter and headlight. Headlights with a filament that could stand up to the jolting of an automobile on bad roads were the only "easy" part of the experience. After a final test of the new system, with 100 stops and starts, they were ready for production.

An order of 12,000 kits for the 1912 Cadillac pushed Delco into building a five-story factory on First Street. The Barn Gang was surrounded by 1,200 new Delco employees, and Deeds left NCR to preside over the fast-growing company.

In 1915 Delco made its first profit,

and in 1916 Deeds and Kettering each pledged \$150,000 to build our Engineers Club to assure future Dayton-area professionals "someone to talk with." This also was the year the legendary and erratic automobile promoter, William C. Durant, bought Delco for \$9 million and combined it with three other companies to form United Motors. In 1918, United became part of General Motors, as did the original Barn Gang.

The Barn Gang of today

Many of us grew up in the Depression, but didn't know we were poor. Many served in World War II, finished college, married and hit the job market running. We worked hard and succeeded.

Within a few years of each other, we got our gold watches and began to gather here at the Club with Wilson Charbonneaux and Chuck Dempsey. In a salute to the old guard, we called ourselves The Barn Gang.

Like the originals, each of us had dreamed of what could be done, and we have willed those dreams into reality.

If you could ask any of us, from either group, to sum up our lives, you would hear this: "I am the luckiest person who ever lived. I did work that was right for me, and I relished it."

Enjoy sunny San Antonio, Leonard

A special farewell and best wishes to **Leonard Rawson**, a 57-year member of the Engineers Club who is now a resident of San Antonio, Texas.

Leonard lived through a lot of history that was reflected in the club

membership through the 20th century. And as former chief engineer and then vice president of Engineering for the Kurz Kasch Company, Leonard saw a lot of Ohio and neighboring states while traveling on business to company plants.

Now he has settled in the Lone Star State to be near his daughter, one of his four children. Thanks, Leonard, for your lifelong loyalty. When you're in town, the club is waiting for you.