

Checkerboard Square

I paid for the first two years of college at the Missouri School of Mines and Metallurgy, now known as the Missouri University of Science and Technology (MST), by shoveling manure for the Ralston Purina Company. I was paid eighty-five cents per hour, but through a fortunate set of circumstances, multiplied my savings by a factor of five during my freshman year in college. I know what you're thinking, "How could anyone turn manure into money at such an outlandish rate?"

Well, here's how it happened. My dad was the veterinarian for the Ralston Purina Research Farm in Grey Summit, Missouri, about forty miles west of St. Louis. He got me a job doing the dirty work during summers before and during my first two years of college. From my earnings I was able to save about \$400 and bought stock in Ralston Purina to invest for my tuition. During my Freshman year the company divided its stock five ways and within months, the stock price rose back to its original price, and I had \$2,000 almost overnight. That was enough to pay all my tuition, room, and board for two years in the '60s. I never invested in stock again, fearing I had already used up my "karma."

I generally worked in the cattle barn cleaning stalls that contained a dozen head of cattle each. My job involved mucking out the manure and urine-soaked bedding and replacing it with dry sawdust and wood chips. I occasionally worked on other parts of the farm cleaning pens for hogs, turkeys, sheep, etc.

The research farm was the location where Ralston Purina tested the supplements they sold to small farmers, ranchers, and even corporate farms. They performed statistical analyses on growth rates, healthiness, and other characteristics of the animals by combining supplements they were developing with various grains and ruffage. For example, they would feed 16 lots of 12 head of cattle each, with their supplements mixed with corn, wheat, barley, or oats and combinations of alfalfa or grass hay. Sometimes, they would add exotic ruffage for farmers who had access to other ruffage like orange peels, grapefruit peels, wood pulp, etc. The lots of cattle were fed different combinations of feed and hay and weighed weekly, for up to six months or more, to optimize the quality of yield and weight gains.

My job, mostly on the weekends, typically only involved cleaning the pens. However, observing the experimental and statistical procedures in action, prepared me for conducting experiments in cloud seeding research, years later in my chosen field of cloud physics and cloud seeding.

My dad was responsible to keep the animals on the thousand-acre research farm healthy and avoid any epidemics among the animals. He also, helped evaluate the digestion processes in cattle by installing plastic windows in the stomachs of cows and inserting samples of a test supplement in large "teabags" through a door in their side. This always reminded me of the TV commercial I remember seeing as a child, where a large door in a hungry child's stomach would be opened and a box of Kix cereal poured in. But, when my dad opened the door to a cow's stomach to extract the feed sample for analysis, the odor was horrendous.

Part of my dad's responsibility as Farm Veterinarian was to entertain special guests. We often had scheduled tour groups, many from long distances such as Canada, England, and Japan. He would describe his role in containing disease and evaluating nutrition uptake with his plastic window technique.

One year he was asked to entertain a group of visiting veterinarians and "hatched" a special treat for them. He operated on about a dozen chickens several months before the conference and inserted a personal note into several dozen egg embryos to each doctor. He then waited for the chickens to grow and lay the eggs. He "candled" each egg to locate the eggs with notes inside.

When the visiting "docs" were having lunch, he served hard-boiled eggs to each one with a hand-written note still inside. Each guest was asked to shell their egg, find the note, and read it to the combined luncheon group. My father's surprise was the "hit" of the conference.

Prior to assuming his role as Farm Veterinarian my dad worked downtown at the St. Louis headquarters of Ralston Purina in the pathology laboratory as a veterinary pathologist. He did post mortems on animals that had died on farms using Purina supplements. A service was provided to large farms to help identify what may have contributed to the animal's death and threatened the health and wellbeing of the farmer's other stock. He would also attempt to assess any contribution the supplements may have contributed to their death. My father also

helped evaluate any injuries claimed in lawsuits brought against the company. He served as an expert witness for Ralston Purina in numerous lawsuits.

While he still worked "downtown" at Checkerboard Square, I occasionally visited him at work. Once, soon after joining Ralston Purina, when I was about twelve, he took me to lunch in the company cafeteria and introduced me to William H. Danforth, the founder of Ralston Purina. I remember him as a distinguished, but frail, older, white-haired gentleman. He died within a year or so of meeting him. Mr. Danforth shook my hand and gave me a Checkerboard pocket knife. The knife was distinctive because it was covered with red and white checkers. This was the trademark of Ralston Purina. The headquarters building in downtown St. Louis was also covered in red and white checkers that matched the knife, including granaries, water towers, and elevators.

Ralston Purina's checkerboard logo evolved from a personal development concept Danforth put forth in his book, "I Dare You!" in which he used a checkerboard to explain it. He proposed that four key components in life need to be in balance. In the illustration of a checker, "Physical" was on the left, "Mental" on top, "Social" on the right and "Religious" on the bottom. To be healthy, you needed the four squares to stay in balance and one area was not to develop at the expense of any other.

Danforth's son was Donald Danforth, chief executive of the company. His grandsons include former U.S. Senator John Danforth and former Washington University chancellor William "Bill" H. Danforth. Through the Danforth Foundation, he subsidized the construction of 24 Danforth Chapels on college campuses around the United States, and one in Japan.

I still have my Checkerboard Square pocket knife and treasure the example my father and William Danforth had in my life. Ralston Purina provided me a financial and moral foundation for my life.