

The Cleaver Brooks Boiler Company

By: Todd R. LaPlant

The Cleaver- Brooks Boiler Company was the brainchild of a true American optimist named John C. Cleaver. At age 23, in the 1920's John Cleaver created the J.C. Cleaver Company Inc, in Oregon, Illinois and thus began the start of a boilerhouse giant. He worked tightly with Milwaukee Reliance Boiler Works, to fabricate parts from his own design, which he would assemble into small portable heaters at his little shop in Oregon. He had always had an interest in the sciences, especially Physics, and was fond of his high school Physics instructor, Frank G. Taylor of whom explained to him the theory of water/steam conversion.

John always had an interest in the concept of what would soon become a packaged steam boiler and was constantly trying to create a smaller, more powerful boiler, while tinkering in his friend's machine shop. Within this shop he developed a small boiler, only 18 inches high and 8 inches in diameter and tried to build a head of steam with a kerosene burner, which he said was all right for lamps, but not for firing a steam boiler. His next design was a larger boiler that spurred the interest of a local street asphaltting contractor. The asphaltter stated that he could put the boiler on wheels to replace his clumsy old wood fired boiler used to power threshing machines. The asphaltter offered John \$300.00 for the boiler. John asked for 400.00, but before the sale the boiler proved to be a failure. Not admitting defeat, this set a "fire" in John's veins, to keep trying to design what would prove to be today's packaged boiler.

John's first success was a boiler similar to the old scotch marine design except it used fuel oil instead of coal or wood. THIS design would finally be that old asphaltter's dream rig, and placed on wheels, it began paving roads and highways. This development soon became the start of the portable tank car heater with more and more railroad cars hauling asphalt across America. With borrowed money from his uncle and his persuasion of two friends, in 1929, the J.C. Cleaver Company was born. Even during the depression, the J.C. Cleaver Company was booming and these heaters were SELLING!!!!

The J.C. Cleaver Company worked hand in hand with Milwaukee Reliance Boiler Works and the new design sparked the interest of Raymond E. Brooks when he spoke with one of the directors of Reliance Boiler Works. Brooks had come to Milwaukee from NY, where he learned the art of "human relations" from his father's general store before "human relations" was a popular word in America. He became the premier and first salesman for these boilers, as a direct result of his willingness to deliver a quality product, on-time, just as he learned in his Dad's little store.

The J.C. Cleaver Company wasn't in Milwaukee where Milwaukee Reliance was located, so Brooks left from Milwaukee to Oregon, to see what the boys at the boilerhouse were doing. Brooks bought out Cleaver's partners and moved the business to Milwaukee, Thus, the Cleaver- Brooks Company was born, on December 28, 1931. With Brooks at the helm as president, general manager, and head of sales and distribution and Cleaver as vice president, Chief Engineer and head of research and production, they became a dynamic duo of hard working versatile entrepreneurs with a bond of friendship and mutual respect as their backbone. Their first unpretentious office was at the Merchants and Manufacturers Building at 740 N. Plankinton, Milwaukee, WI, where with an office assistant they made up their three member operating force. Their boilers still being fabricated at the Milwaukee Reliance Boiler Works.

Skepticism from old-timers who believed a boiler should be permanently fixed, plagued Cleaver and Brooks, but did NOT quench their Promethean Flame which eventually would become their trademark. Throughout the years to come, they would do reasonably well producing boilers on wheels for highway contractors and tank cars and a twist of luck (or fate) landed one of their portable boilers at the Kenosha Dairy during one of its large permanent boiler breakdowns.

This boiler... wheeled into the dairy plant, soon became a resident of the dairy plant and the idea of a neat little compact boiler with firetubes instead of a firebox, using fuel instead of coal, no coal dust or overheated coal tenders, and no tall smokestacks to spew smoke and soot into the four winds. THIS was COOL!!! The plant manager decided to keep it, (smart feller... wasn't he?), Cleaver- Brooks removed the wheels...

****AND THUS ****

THE FIRST CB PERMANENT PACKAGED BOILER WAS BORN!!!!

Within a year, Cleaver-Brooks installed the new boilers in dairies and laundries everywhere and orders for custom boilers became a normal day's work for the Cleaver-Brooks Company. With this breakthrough and the boom of packaged boiler business, the Dynamic Duo decided to create a high-level management team. John Cleaver took an interest in watching a young engineer named Fred W. Hainer, graduate from the University of Wisconsin Engineering School and native of Sheboygan, Wisconsin. Cleaver and Brooks recognized his technical ability as a supervisor at Wisconsin Power and Light Company and admired his "High Gear" approach as well as his approach to customers as people not profit. He joined the Cleaver- Brooks Company five years after it started, soon to be followed by James G. Brooks, son of Ray Brooks, both of them being vital contributors to the growth of Cleaver-Brooks.

Cleaver-Brooks was practically the only producer of Packaged Boilers in the US in its first 10 years of existence and in 1939 the Gentlemen were ready to fabricate their own units thus purchasing the P. Schmitt Stone Company at 5100 N. 33rd Street. They converted the stone shop into a boiler works building an office shortly thereafter. Today, this facility still exists as a research, development and training center called: The Cleaver-Brooks Boiler House

During World War II, the US Army Corps of Engineers requested Cleaver-Brooks to make various boiler designs to accommodate various uses for our forces in Europe and Asia. Cleaver-Brooks accepted the task, over 600 boilers on the battlefield, wheeled in and moved again as required. Milwaukee Reliance Boiler Works jumped on-board with Cleaver-Brooks to mass-produce the boilers for our boys overseas.

The term "Packaged Boiler" became a reality and a trade-name not only during wartime but as an identification for Cleaver-Brooks new product and became a tested, factory built boiler with the gas, oil, or gas/oil combination that would be used in factories, hospitals, office buildings, schools, laboratories, a plethora of assorted uses and designs as requested by the customer and designed by the Cleaver-Brooks design team.

In the US, Cleaver-Brooks Packaged Boilers are a mainstay in numerous facilities. The Development Team at Cleaver-Brooks is constantly testing and designing packaged boilers for a multitude of uses, implementing cost and resource research for varying conditions and applications. Cleaver-Brooks have built and bought boilerhouses in Thomasville, GA and Canada and have a team of export representatives in an excess of 60 countries all over the globe.

John Cleaver proudly boasts of his accomplishment of building over 150,000 boilers despite the fact he was discouraged by his skeptics as a young boilermaker: "Come back after you've built 20,000" in 1926. Cleaver-Brooks has packaged boilers stationed at such attractions as NY Giants Stadium and in such conditions as the Albuquerque Auditorium where the outside temperature is 100+ degrees, (steam used for absorption chilling). We as Power Engineers can probably name a plant if not our own plants as owners of Cleaver-Brooks Packaged Boilers.

Quite a journey from John Cleaver's Science/Shop project to today's world renowned premier packaged boiler. If anything in this article, I would like to encourage all Power Engineers to Learn and DREAM!!! Remember: Dreams don't come true from dwelling in your mind; they have to be put in motion. education, training, trying, failing, trying again, and getting a job done right and well is what brought John Cleaver's dream to today's reality and tomorrow's yet to come.

*****KNOWLEDGE IS POWER*****