

# Avery

## Return Flue

Peoria, IL 1914



The idea responsible for the founding of the Avery enterprise, not to be confused with B.F. Avery Co. in Louisville, Kentucky, had its inception in the Andersonville Confederate Prison when a captive Union soldier named Robert Avery spent his prison time sketching a design for a corn planter in the sand. Avery taught school for a year or two and then enlisted in the Union Army. Two years later, Sgt. Robert Avery was captured at Cedar Point, Alabama, during the battle of Mobile Bay. He was held as a prisoner of war for more than eight months, with most of that time spent at Andersonville, a hellish prison camp in Georgia. Determined to survive, Robert Avery took every precaution he could to stay healthy. Fighting to keep his mind active and his hopes alive, he spent most of his time thinking about farm tools and implements. According to legend, Avery designed a one-row cultivator in his mind. He scratched out plans for the implement in the bare earth of the prison enclosure and constructed a model of the machine from scraps of wood.

In 1868, Avery sold a piece of property and borrowed money to raise capital. He also formed a partnership with his younger brother, Cyrus, to manufacture a cornstalkcutter machine, which was patented in 1870. Unfortunately, nobody cared. The machine was ready, but the market did not respond.

Broke and in debt, Robert Avery moved to Kansas, where he farmed and tinkered with a new stalk cutter. Avery never gave

up on his dream and, by 1872, he was back in Galesburg where he and Cyrus began to manufacture a spiralknife stalk cutter.

A year later, he faced another economic crisis. The financial panic of 1873 was the worst in U.S. history up to that time. The Averys survived by giving the successful Brown Corn Planter Works in Galesburg the rights to make the stalk cutter. In 1877, Robert and Cyrus established a company bearing their names in Galesburg, Illinois. Robert had the inventive ability and Cyrus excelled in the business end of the enterprise. They engaged in the manufacture of corn planters, stalk cutters, and cultivators. Success was immediate as their products met with wide acceptance among the farmers in the area.

Because of better shipping facilities in Peoria, Illinois, the company relocated and erected a \$100,000, three-story building which still stands. Operations began there on New Year's Day in 1883 with 250 employees and an output of 200 machines per day. The factory was modern, with "(a) fine 35 horsepower (steam) engine," and electric lights.

By 1892, the Avery was very successful, making many farm implements, including threshers and steamtraction engines, yet in that same year Robert Avery fell ill and passed away. Cyrus Avery ascended to the presidency and an Avery relative, John B. Bartholomew, or J.B. as everyone called him, was made vicepresident. (No hyphen in vice

president) He was an outstanding figure in the company with inventive ability as well as business acumen. At the age of 14, he invented a grain weigher for threshing machines. He also invented what became a well-known piece of equipment called the J. B. wind stacker for threshers. Many patents on farm implements were issued to him during his productive career.



By 1891, the company began the manufacture of steam traction engines and grain threshers, and in 1914 the Avery return flue single cylinder engine was built. The Avery type of return flue boilers held an exceptional advantage over all others in having full water fronts which utilized the tremendous heat of the burning gases in the front firebox. Other return flue boilers expended this heat by burning out the shell of the boiler or the protecting plates. These engines were specially designed for delivering the greatest amount of belt power with the least consumption of fuel and water.