

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, KY, 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, on Aug. 15, 1862, enlisted in the Union Army. Two years later, Sgt. Robert Avery was captured at Cedar Point, AL, 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 1-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.

Finally released from Andersonville prison and discharged from the Army, Avery (described then as a "poor gaunt skeleton") went home to recuperate. After a bout of typhoid fever almost finished the job begun at Andersonville, Avery finally recovered enough to begin helping his brother on his farm and later rented his own farm. 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 corn stalk cutter machine, which was patented in 1870.

Unfortunately, nobody cared. As his daughter Sadie wrote later: "At last



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 spiral knife 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 Avery's survived by giving the successful Brown Corn Planter Works in Galesburg the rights to make the stalk cutter. In 1877 Robert Avery and his brother 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 immediately theirs 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 square brick 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 a modern one, with "(a) fine 35 horsepower (steam) engine," and electric lights.

By 1892 the Avery works was very successful, making many farm implements, including threshers and steam traction engines, yet in that same year Robert Avery fell ill and passed away. Cyrus Avery ascended to the presidency and John B Bartholomew or J.B. as everyone called him, a relative, was made vice-president. He was an outstanding figure in the company with inventive ability as well as business acumen. At the age of fourteen he invented a grain weigher for threshing machines. A major invention was the J. B. wind stacker for threshers, and, during his career, three large volumes of letters patents on farm implements were issued to him.

By 1891 they 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 utilize the great heat of the burning gasses in the front firebox while with other return flue boilers this heat is expended in burning out the shell of the boiler or the protecting plates. These engines are specially designed for delivering the greatest amount of belt power with the least consumption of fuel and water.

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