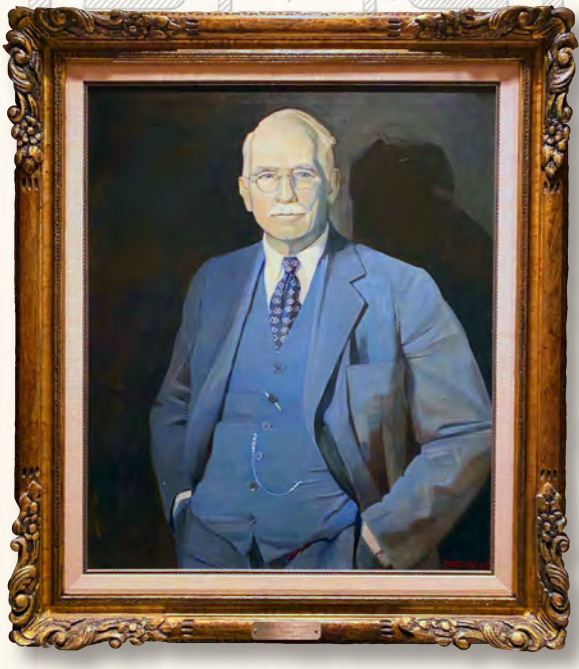
Dr. Albert Kingsbury



Inventor | Engineer | Pioneer | Founder of Kingsbury, Inc.

"The vital feature of the invention lies in the use of several independently self-adjusting bearing 'shoes'... permitting the necessary wedge-shaped oil film to form between the wearing surfaces... giving perfect lubrication."

Albert Kingsbury describing the core principle behind his invention in letter to the New London Ship & Engine Co., 1911

Kingsbury, Inc.®

Kingsbury, Inc.®

Honoring Kingsbury, Inc.'s Founder

Dr. Albert Kingsbury

Dr. Albert Kingsbury 1863 - 1943

Dr. Albert Kingsbury was a visionary engineer who invented a groundbreaking bearing designed to use a thin film of oil to support massive loads with minimal friction.

1910

In 1910, Dr. Kingsbury secured a patent for the tilting pad thrust bearing.
Resting on a thin wedge of oil, Kingsbury's design prevented metal-to-metal contact and significantly reduced wear. This breakthrough redefined the operation of heavy machinery.

1912

Bold ideas require bold testing.
In June 1912, Kingsbury took a major gamble. Using a $5,000 life insurance payout, he commissioned Westinghouse to manufacture his bearing for a hydroelectric generator at the McCall's Ferry Power Plant (now Holtwood) on the Susquehanna River in Pennsylvania. The plant's existing roller bearings on the 220-ton unit were expensive and prone to failure, and Holtwood's engineers were willing to give Kingsbury's design a try in hopes of staving off bankruptcy.

1937

The first test was unsuccessful.
The bearing failed immediately and wiped off the protective soft-metal babbitt layer. But Kingsbury remained undeterred. He identified the root cause, refined the design, and persuaded Holtwood to give him a second chance.

Today

And they did!
The reinstalled bearing ran flawlessly and remains in service to this day. When inspected 25 years later, engineers found so little wear that they estimated its remaining lifespan at 1,300 to 1,700 years. Eventually, all ten Holtwood generators were equipped with Kingsbury bearings.

From that second chance, history was made.
Nine more hydro plants soon followed. By World War I, Kingsbury bearings had become standard equipment on U.S. Navy ships, powering the nation through war and industrial expansion. Today, they continue to operate in hydropower stations, nuclear plants, oil rigs, and naval vessels around the world.

Scan to read more on the history of Albert Kingsbury