

Billings Pioneer Kept Skyscrapers Standing

Jules Breuchaud was a problem-solver. It led him west to Billings, where he helped a new city to grow. It led him back east again, where he helped a great city grow into its own. Along the way, he helped the country grow in many other ways.

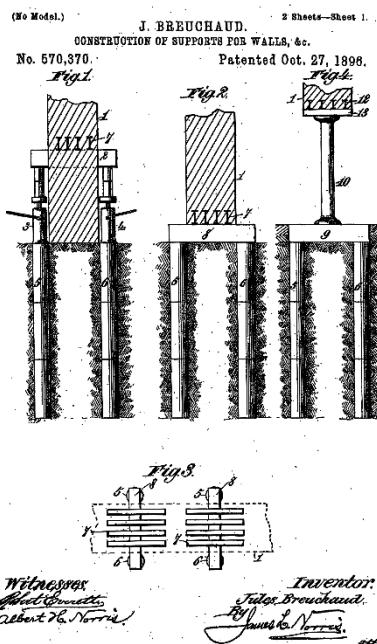
Breuchaud was born to Swiss-immigrant parents in New York City in 1857. When he was 9, his father's ship was lost in a storm off Cape Hatteras while traveling on business to New Orleans. Young Jules went to work during the day and school at night until his mother remarried. He then got a job in the office of a prominent civil engineer, and learned the practical and technical engineering lore to embark on his chosen profession.

In 1880, he became the assistant engineer with the Northern Pacific Railroad on a short stretch of track in North Dakota and Montana. A year later, he won a bid on his own contract to build another stretch in Montana, and moved to the Billings area, along with his new wife, Irene. The railroad hadn't yet reached the town, but it served as headquarters for the engineers. It was a challenge for them both living in a two room cabin, with scarce food supplies and winter temperatures nearing 40 below.

At that time, Billings was part of a vast Custer County, and the county seat in Miles City was too distant for the local taxpayers. Breuchaud and several others rode to the territorial capital in Helena with a petition to divide it. The new Yellowstone County was born, and Breuchaud became the first county treasurer after a special election in the spring of 1883. He also became a deputy sheriff. The young couple acquired land in Billings and started to settle in, especially as their son was born. In September 1883, Breuchaud was the city's representative to greet former president Ulysses Grant as he stepped out of the first train to travel the completed railroad.

Then he got a job offer. The city of New York was building a new water system, and Breuchaud was tapped as a subcontractor by a friend. The Breuchauds moved back to New York, but kept their Montana holdings. After a few years, he became a partner in an engineering firm and built bridges, aqueducts, railroads and more. He and Irene had two daughters. And in his spare time, he was developing an idea for a building innovation.

This idea was patented in 1896, and it made the great American skyscraper possible. Though buildings can have strong foundations and reach up high when built on solid rock, not all sites have that advantage. Much of Manhattan's water table is high, and the ground contains as much as 150 feet of layers of watery sand before reaching anything



Drawing from Jules Breuchaud's 1896 patent

solid. Breuchaud developed a technique of putting hydraulically driven steel cylinders down far enough to reach the rock, then filling them with concrete, making a structure strong enough to reach high into the sky.

At about the same time, New York City was outgrowing its water supply. The New Croton Dam was to be built to serve as a reservoir. It would be the tallest and largest dam ever constructed, made to hold thirty-two billion gallons of water. All sorts of mishaps prevented the progress of the dam for three years. Breuchaud bought a 1/3 interest in the project, and demanded to have complete charge of the engineering work. He and his company completed the dam in ten years, despite a general strike that required the personal assistance of Governor Theodore Roosevelt to resolve.

Breuchaud also had other accomplishments, including building subways, developing military technology for the Navy, improving food supplies, developing solid waste disposal systems and he even owned a newspaper.

The Breuchauds sold most of their Billings property to I.D. O'Donnell in 1910, except for a parcel that was deeded over to become the site for Broadwater Elementary School. The home they had built on North 27th Street became the home of A.L. Babcock, and is now the site of City Hall.

Sources:

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