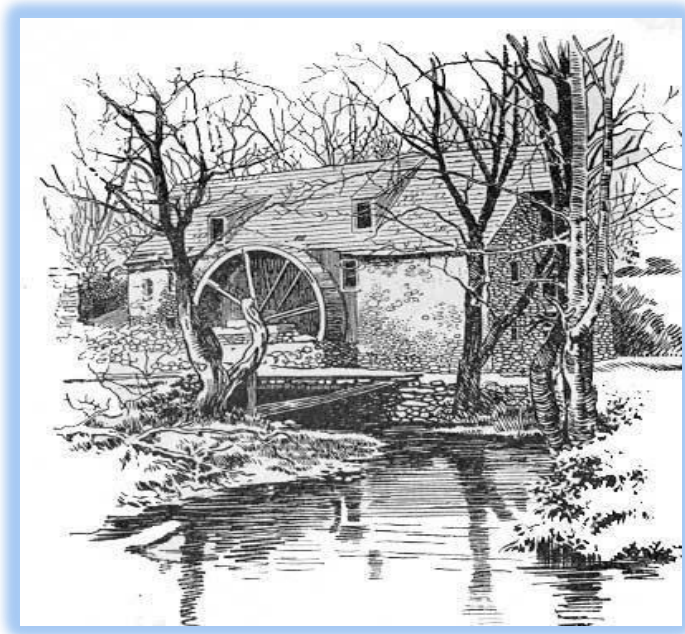




MILLS ON THE
ZACHARIAS



For centuries grain was ground by hand with a bed and runner stone

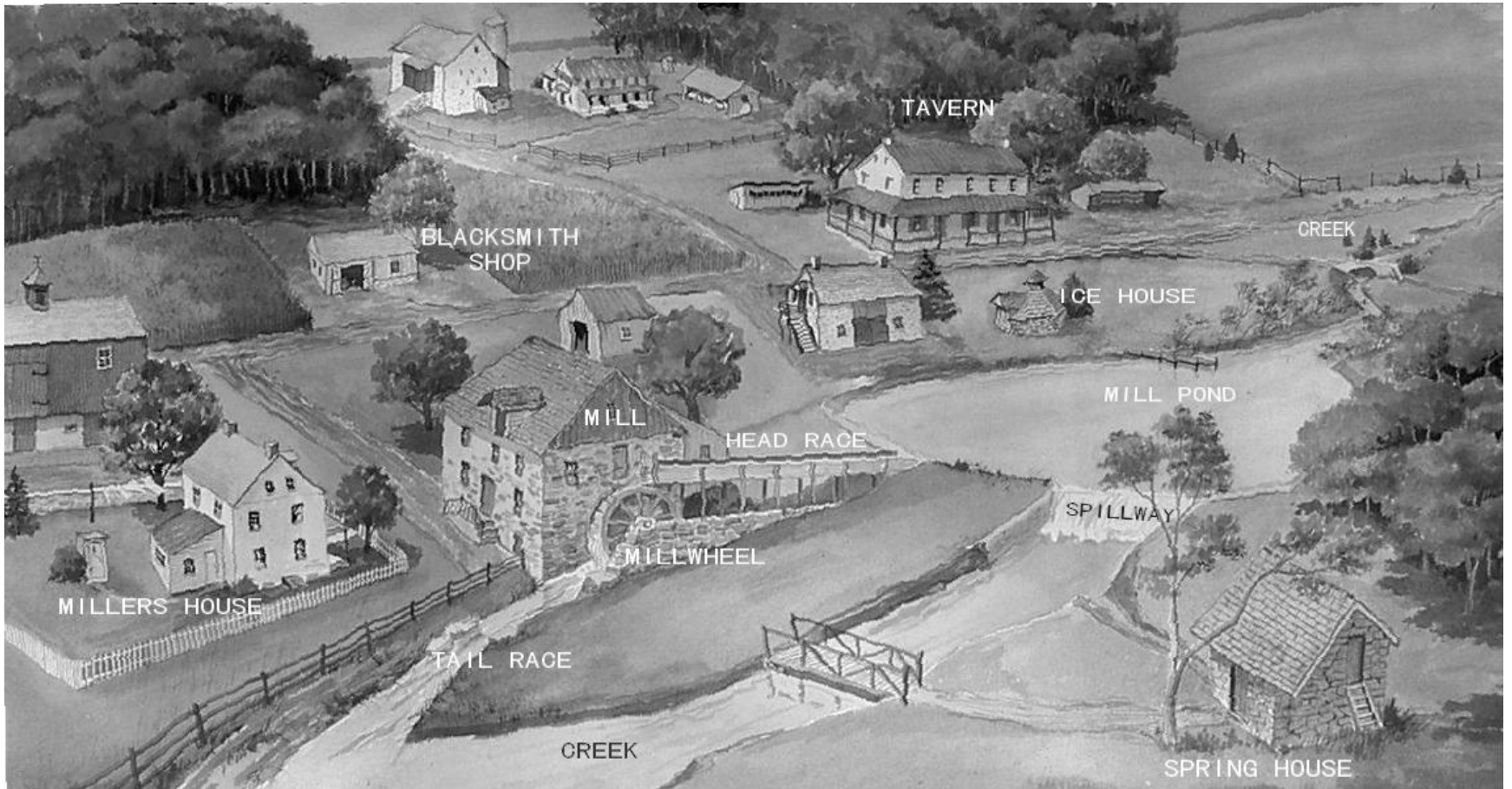


To grind large quantities of grain, more power was required. Water was the answer. It was plentiful, cheap, renewable and non polluting.



In the second half of the 19th century, mills were important to the economy of the farmers of Worcester.

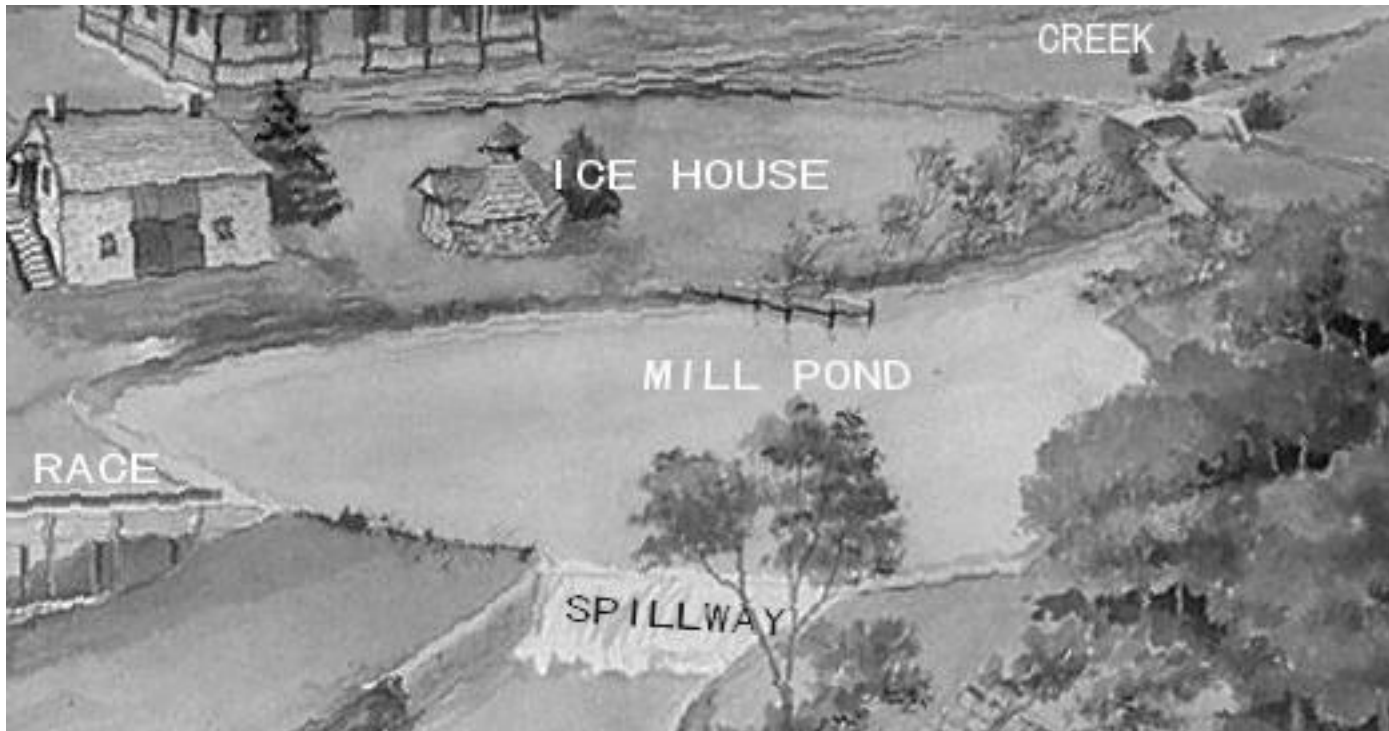
A TYPICAL MILL



CHOOSING A MILL SITE

The millwright chose a location to build his mill where there was an adequate flow of water, and topography that permitted the economical building of a dam to store the water.

THE MILL POND

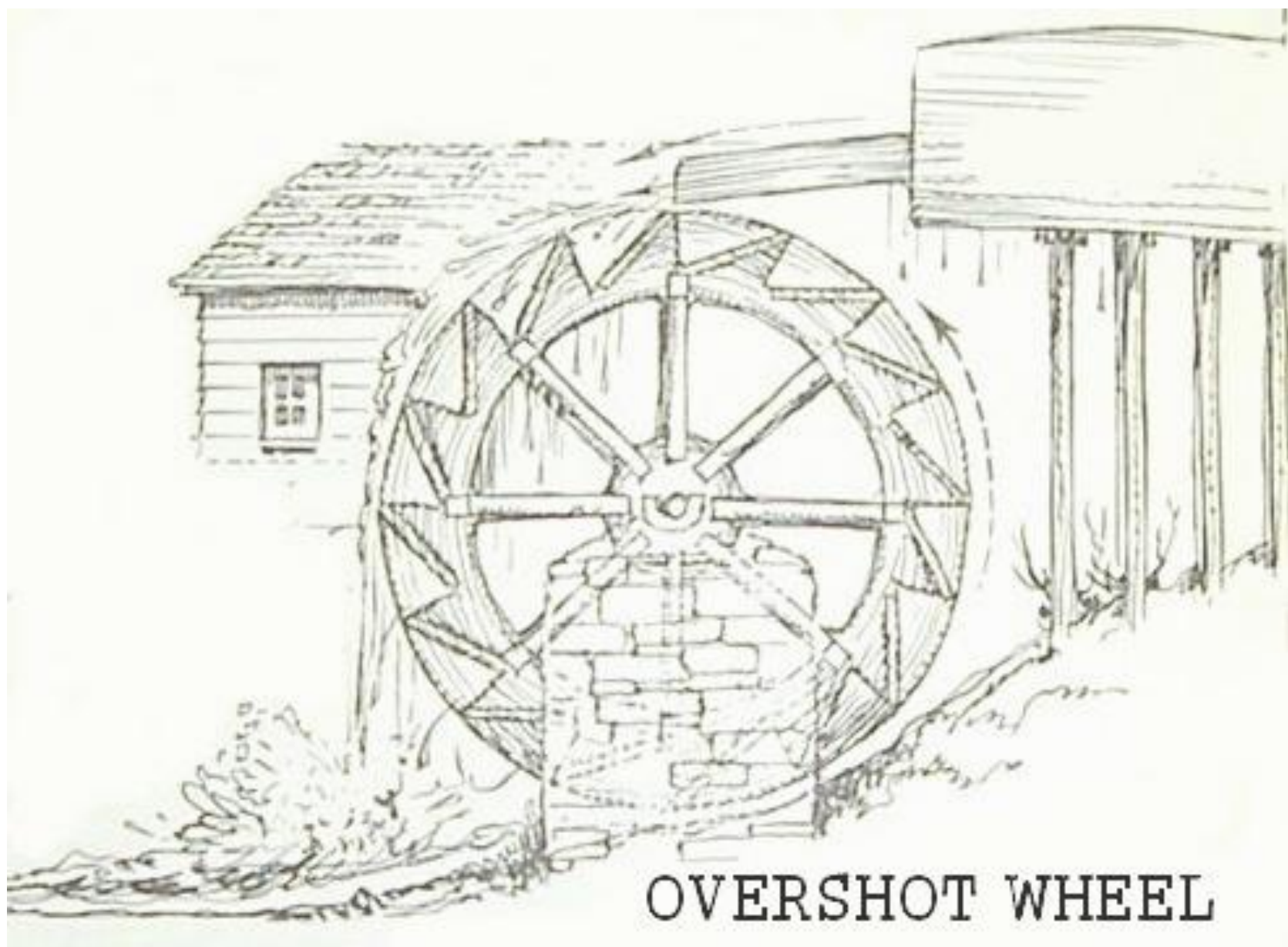


A dam was built to make a pond capable of storing the volume of water necessary to operate the mill. Water was taken from the pond by a ditch called the head race. Excess water was returned to the stream thru the spillway.

THE MILL



The weight of the water from the head race caused the mill wheel to turn. This water was returned to the stream by means of the tail race. Four different types of wheels were used depending on the head which was the height of the water in the pond above the wheel.



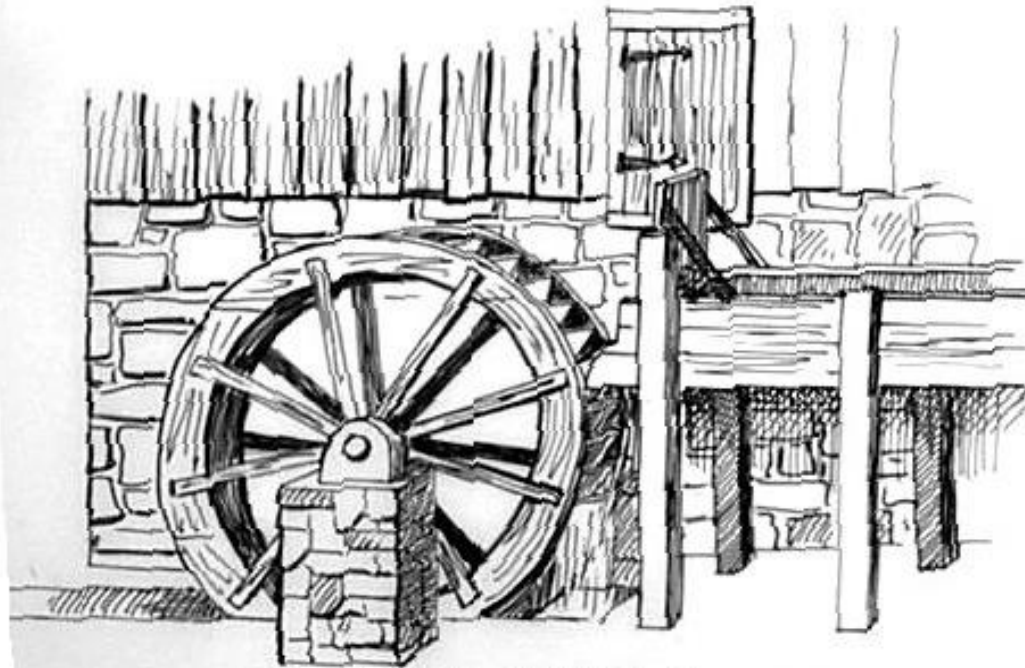
OVERSHOT WHEEL

OVERSHOT WHEEL

This was the most efficient wheel. It required a 10 foot head.

BREAST WHEEL

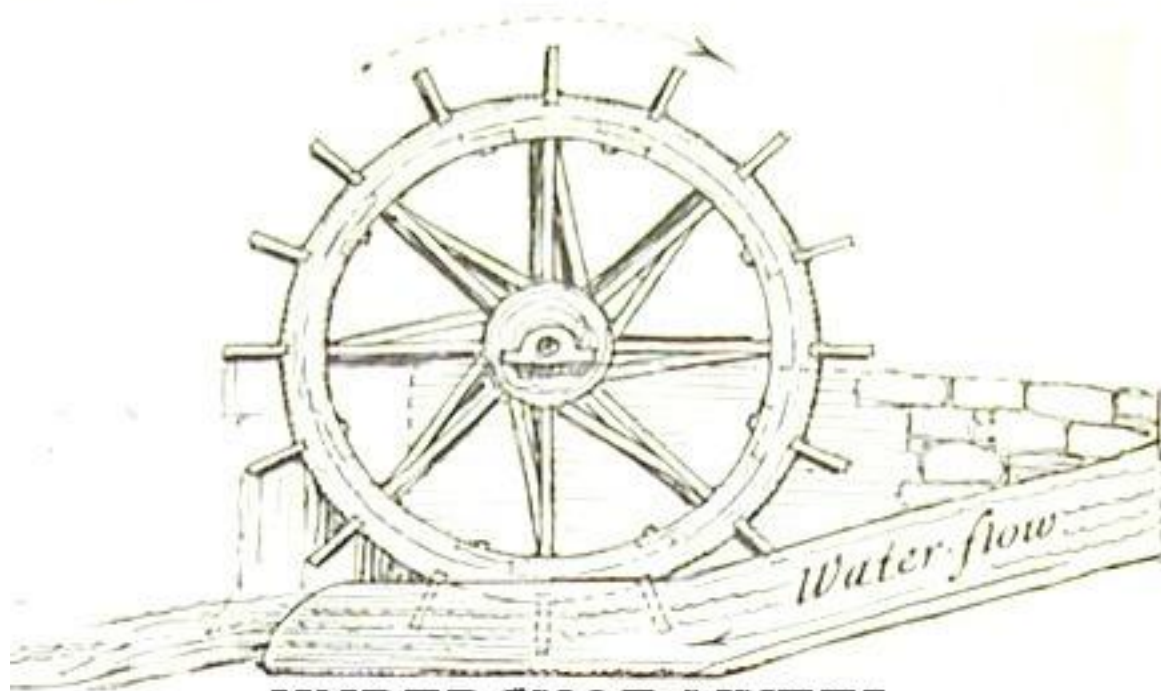
This type of wheel was required if there was less than 10 foot of head and it was less efficient.



BREAST WHEEL

UNDERSHOT WHEEL

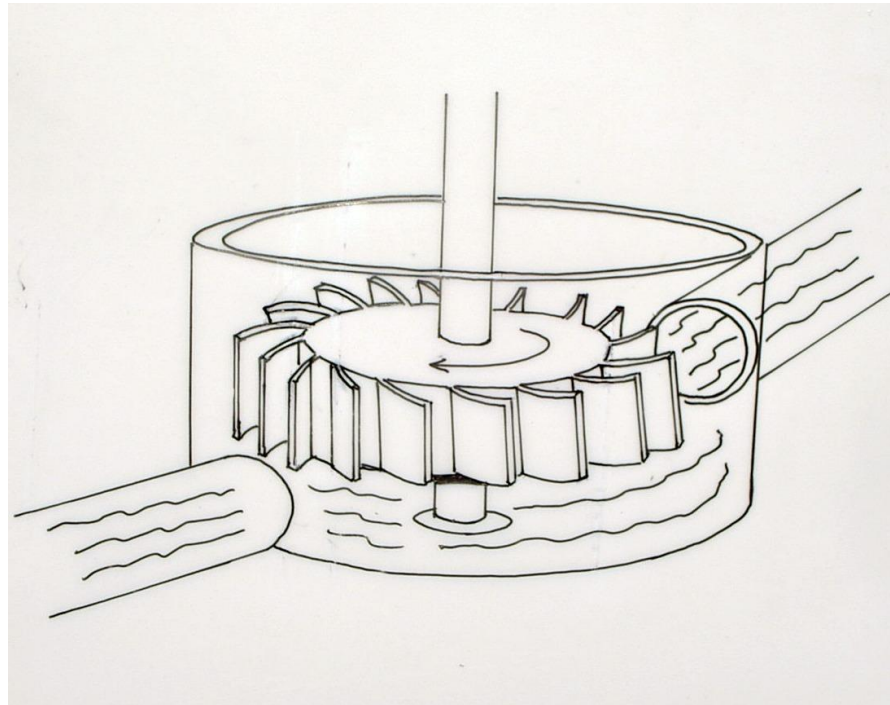
With less than a 6 ft head, an undershot wheel was employed. This was the least efficient wheel.



UNDERSHOT WHEEL

THE TUB OR TURBINE WHEEL

This wheel required the force of the water not its weight to operate. It was usually much smaller and did not require a gear arrangement to turn the mill stone



WHERE WERE THE MILLS
ON THE ZACHARIAS?

AN AERIAL VIEW OF THE ZACHARIAS CREEK



SITE OF THE WENTZ (*Schultz*) AND STONG MILLS



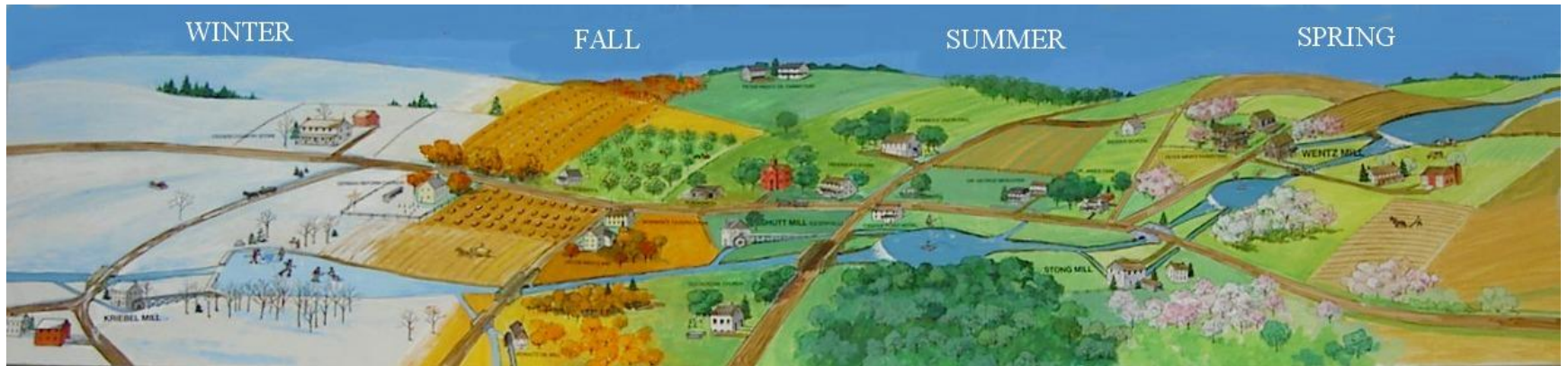
SITE OF THE SHUTT MILL



SITE OF THE KRIEBEL MILL



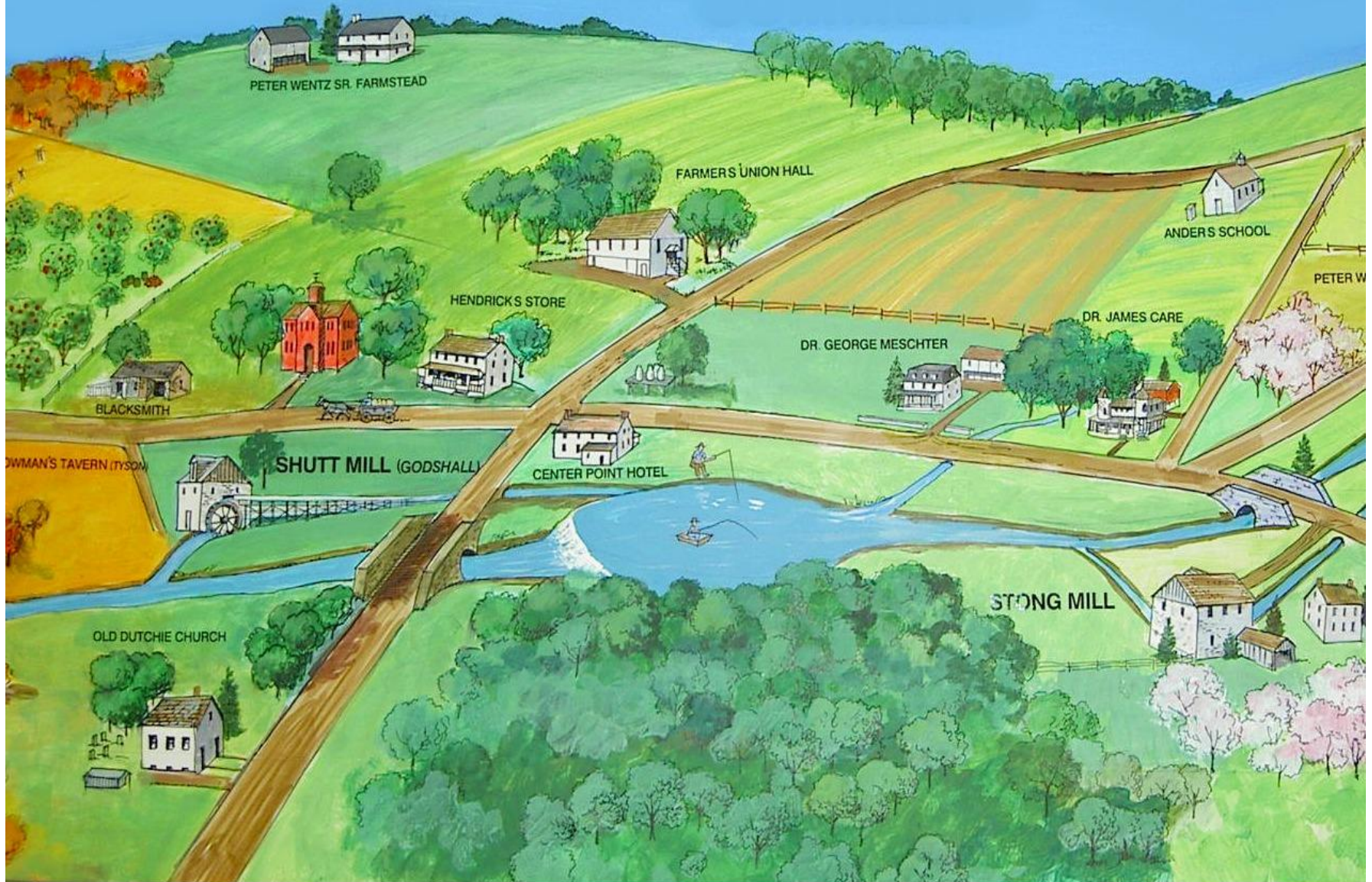
ZACHARIAS CREEK IN 1875



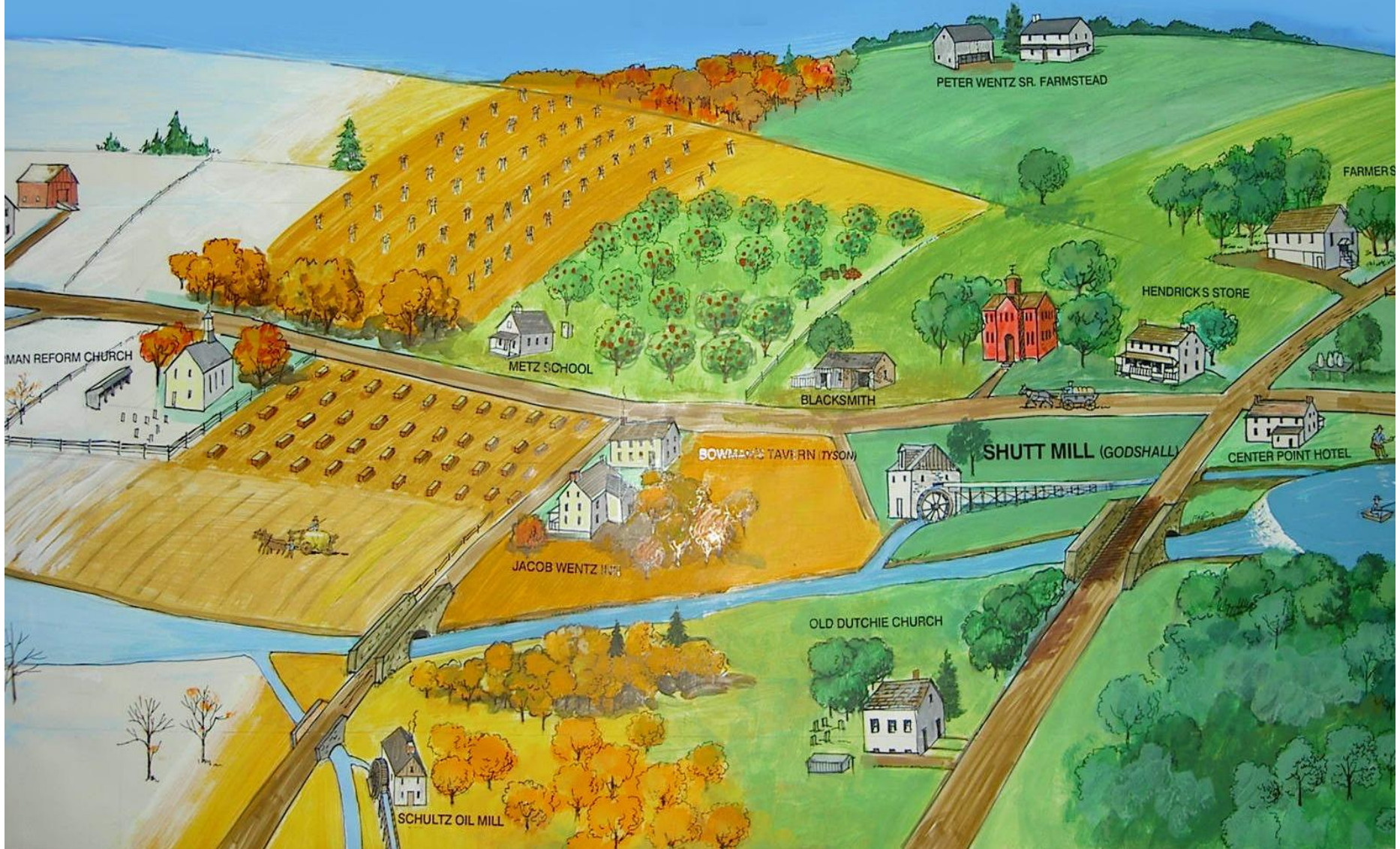
SPRING



SUMMER



FALL



WINTER



CEDARS COUNTRY STORE

GERMAN REFORM CHURCH

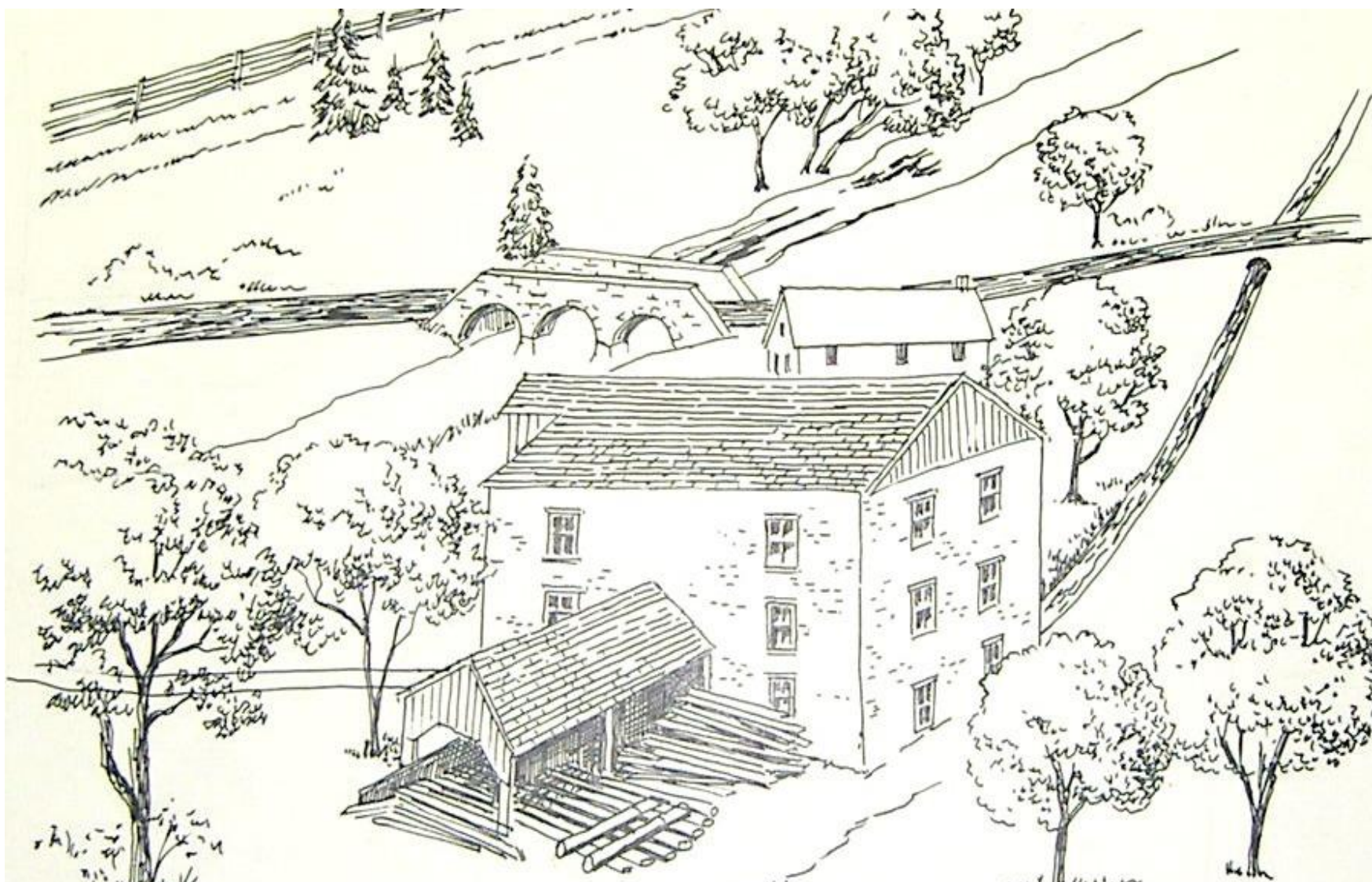
KRIEBEL MILL

THE JOSEPH SCHULTZ MILL



SCHULTZ MILL

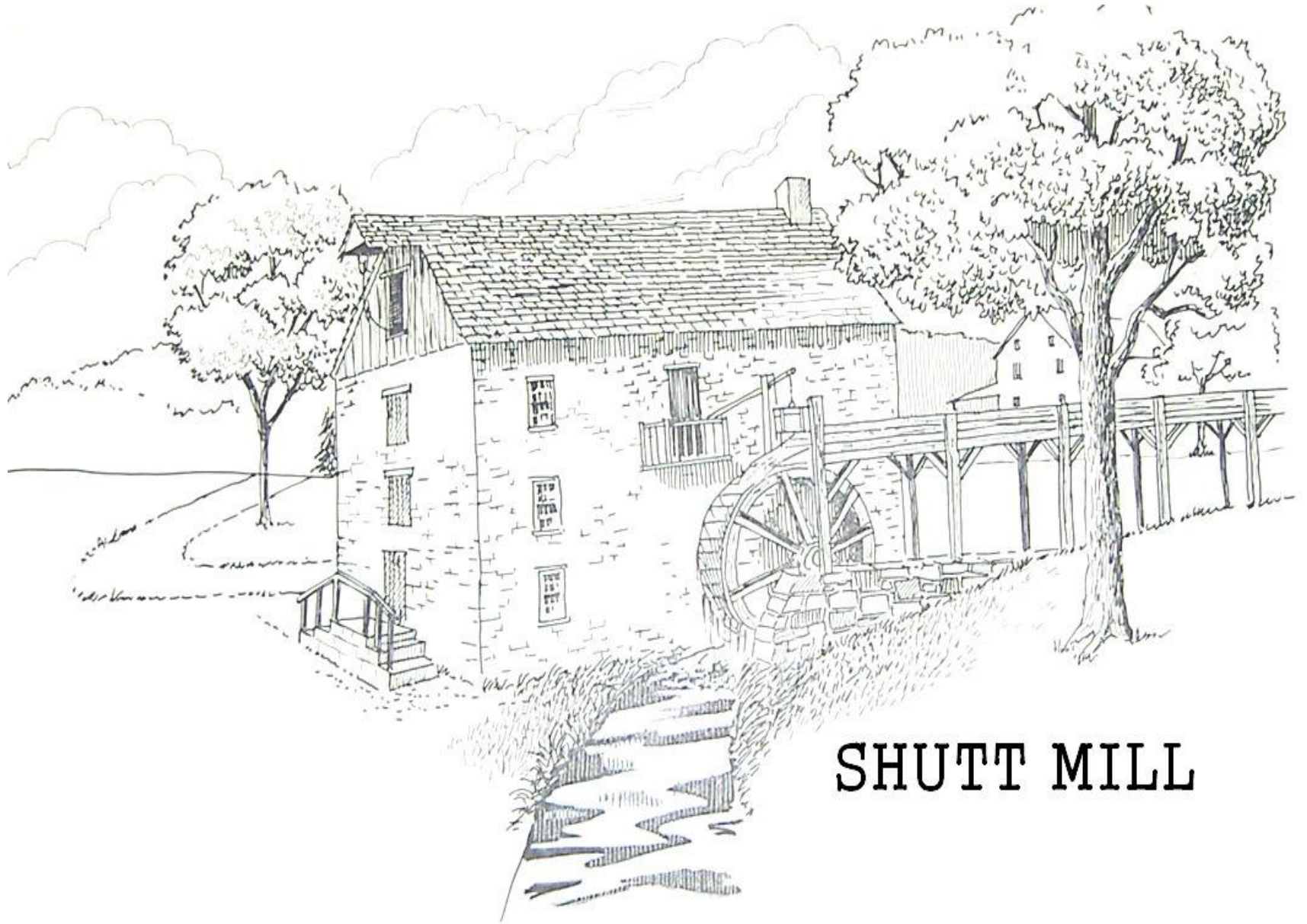
This mill was built in 1873 on the site of the original Peter Wentz log house and was the last mill to be built on the Zacharias. A 700 yard head race supplied water to operate a turbine wheel.



STONG MILL

THE STONG MILL

A saw mill was built on this site by Peter Wentz. A 3 story stone mill replaced it in 1788. It operated as a grist and saw mill into the 20th century.



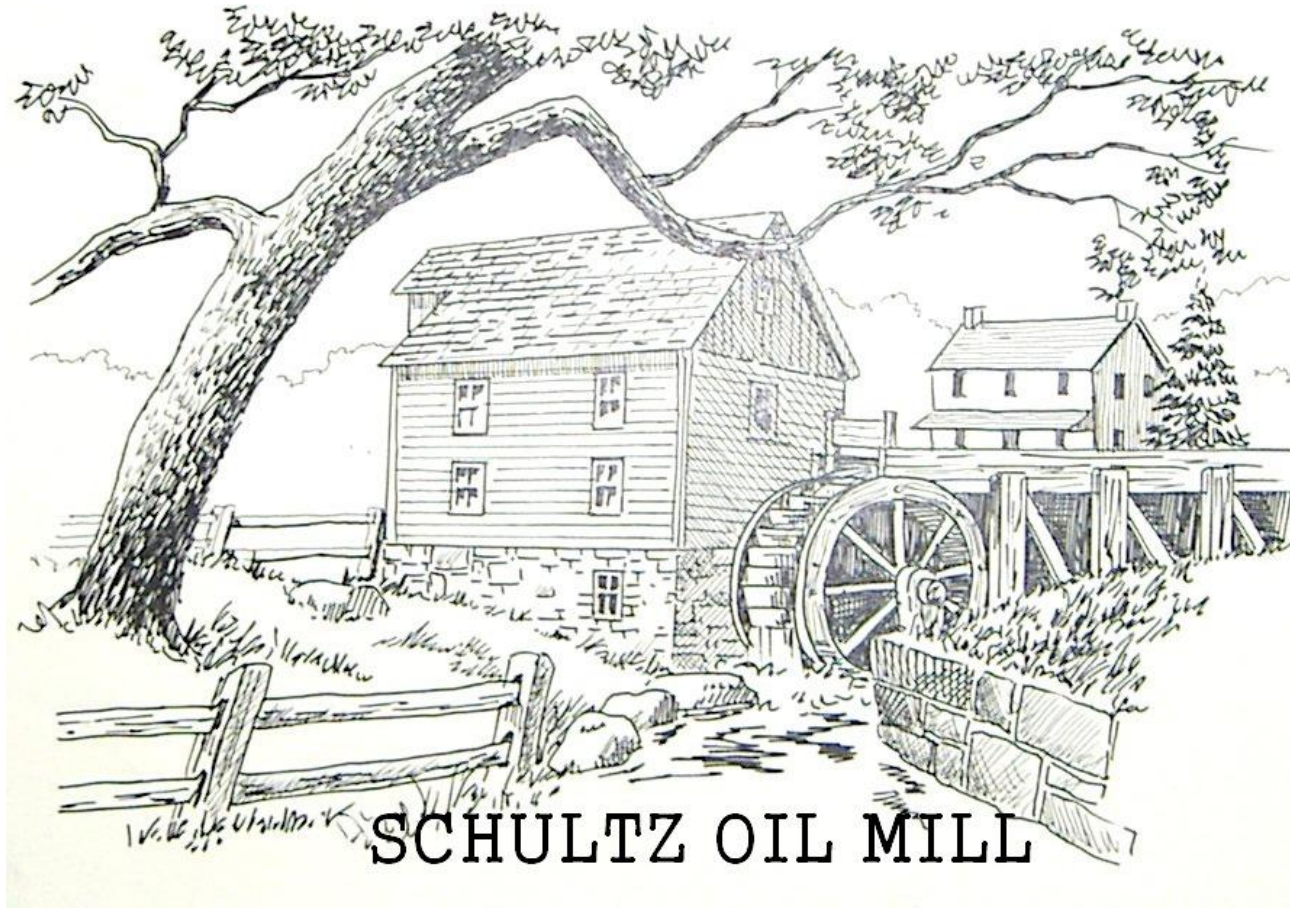
SHUTT MILL

SHUTT MILL

A mill was built on this site in 1740 by Peter Wentz. It was rebuilt in 1832 by Michael Van Fossen and later operated by Amos Shutt from 1866 to 1892.

When the mill was destroyed by fire in 1951, it was then known as the Godshall Mill.

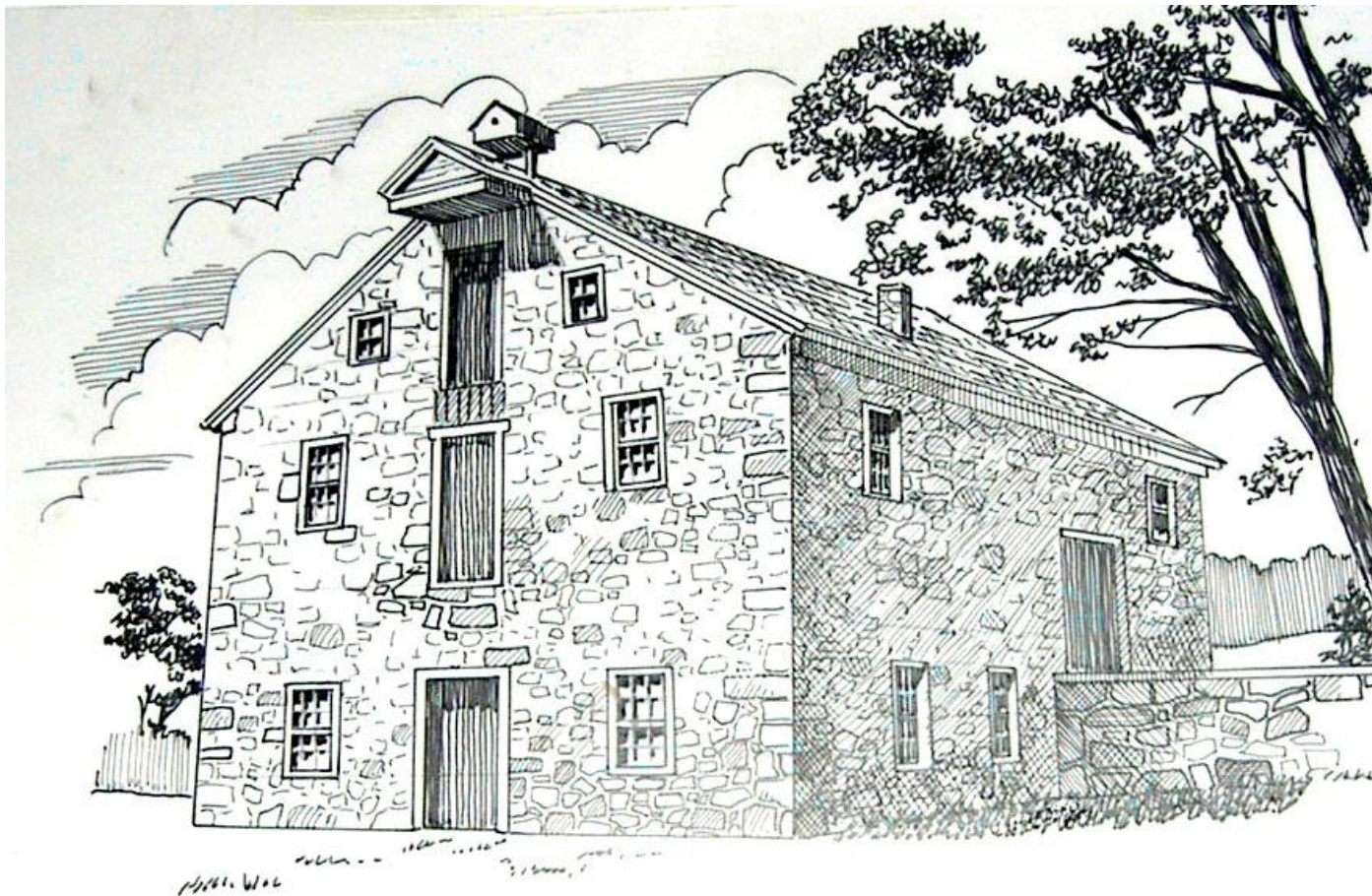
SCHULTZ OIL MILL



SCHULTZ OIL MILL

Anthony Schultz built this mill on a tributary of the Zacharias where it crosses Hollow Road. It dates from about 1848. Flax was an important crop in Worcester. Flax seeds were a by product. This mill crushed the seeds, extracting linseed oil.

THE KRIEBEL MILL



THE KRIEBEL MILL

The original mill was built by Abraham Lefevre in 1710. In 1749 it was sold to Jacob Wentz. In 1802 Sam and Abram Kriebel built a large stone mill and later added a saw mill. The mill was dismantled in 1940. The dam was washed out in 1973.

View from the Kriebel dam



Present day remains of the Kriebel dam



Valve that opened the head race



A circular stone, possibly a millstone, with a central hole and radial lines. The stone is dark grey and has a textured surface. The text "THE STONE THAT FED A NATION" is overlaid on the stone in a bold, black, sans-serif font.

**THE STONE THAT
FED A NATION**