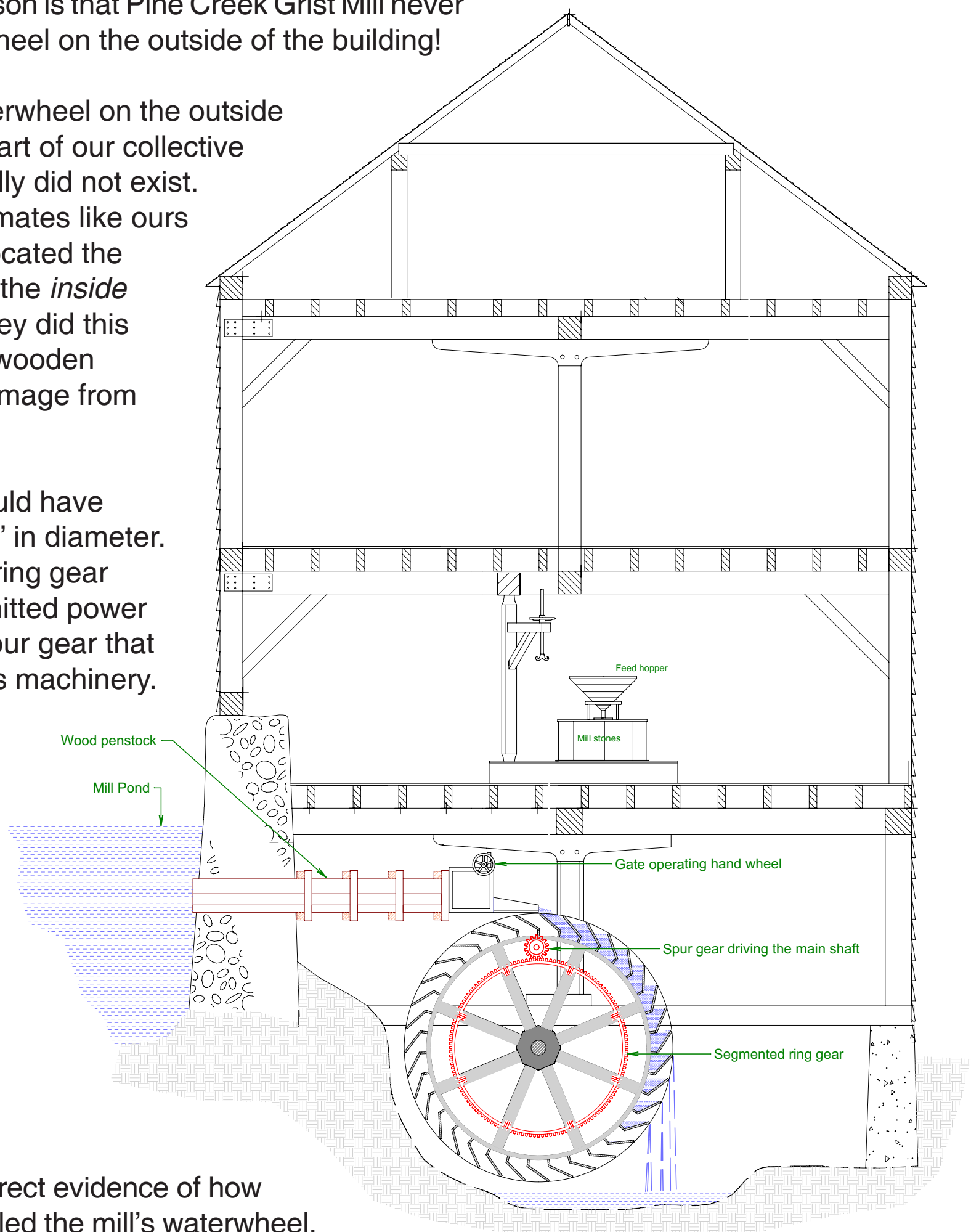


PINE CREEK GRIST MILL'S WATERWHEEL

We are often asked, “Why haven’t you replaced the old water wheel that used to be on the side of the mill?” The reason is that Pine Creek Grist Mill never had a water wheel on the outside of the building!

While the waterwheel on the outside seems to be part of our collective memory, it really did not exist. In northern climates like ours millers often located the mill’s wheel in the *inside* of the mill. They did this to protect the wooden wheel from damage from ice and floods.

The wheel would have been about 10’ in diameter. A segmented ring gear (in red) transmitted power to a smaller spur gear that drove the mill’s machinery.



We have no direct evidence of how Ben Nye installed the mill’s waterwheel.

We know it was located in the northern corner of the mill. And that during Nye’s time the millpond extended to the north side of the mill. From that and measurements made in the mill’s basement, we base the drawing above, it shows the most rational way the water wheel could have been installed.

Being built of wood, waterwheels had a limited service life of 4 to 6 years. Sometime after Nye’s death in 1852 the mill’s new owner replaced the wheel with what was then a “state of the art” modern cast iron water turbine like the one presently in the mill.