

Treadle Hammer

By Susan Parsons



Known by such names a foot operated blacksmith hammer, machine anvil hammer, blacksmith forging hammer, treadle forging hammer and pedal hammer and sometimes hammer mill, this machine was and is a handy piece of equipment.

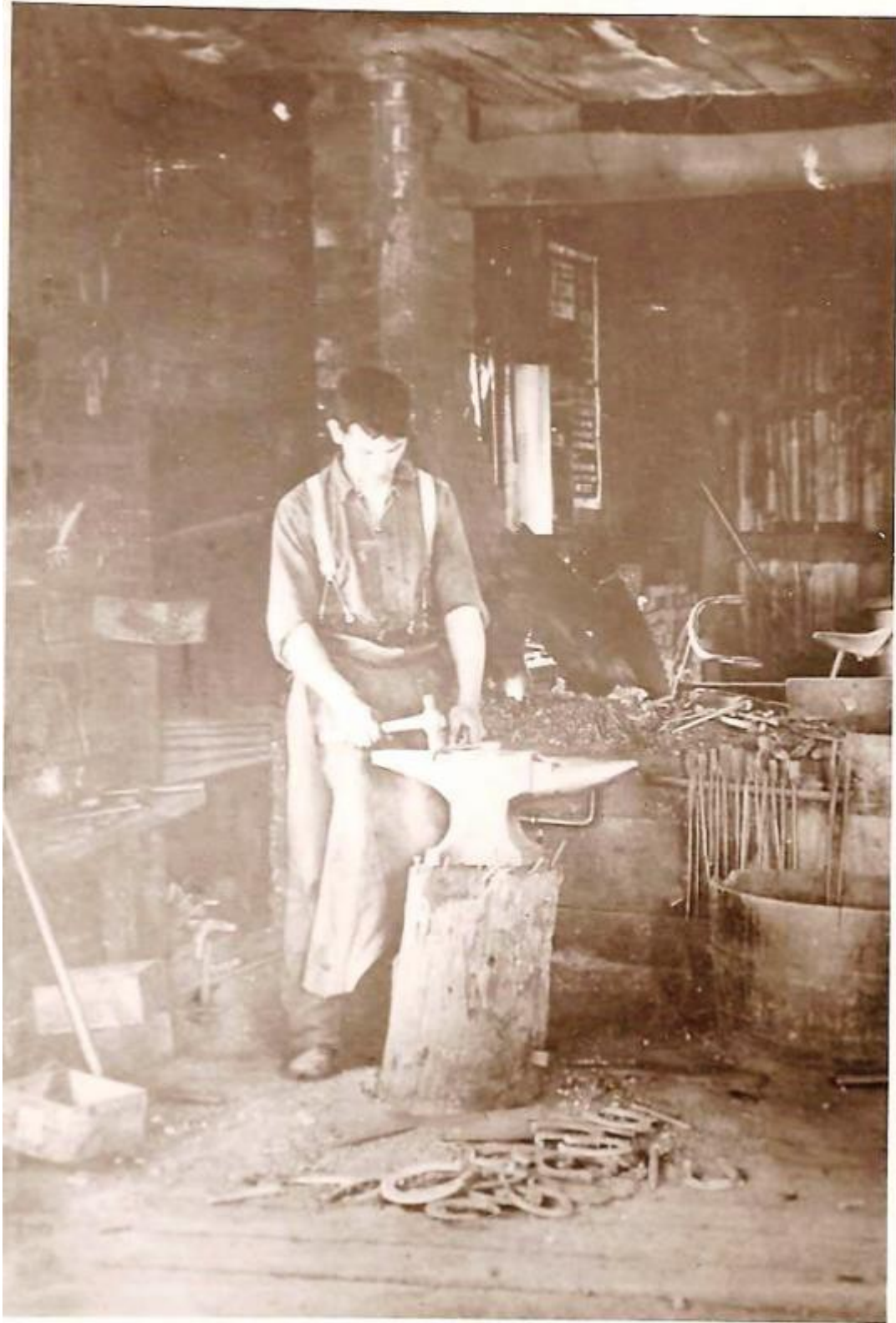
The foot pedal, also known as a treadle, uses the stepping action of the foot to create mechanical energy that slams the hammer into the iron. This mechanical striker allows the blacksmith to eliminate the blacksmith's helper in the forging of metal. In this way the blacksmith can hold the piece of metal to be forged and operate the treadle using either quick, lighter blows or slow, heavier ones according to the will of the machine's operator. The machine can change speeds simply by regulating the motions of the foot.

The blacksmith heats the metal to be forged in order to soften it. At just below 1,000° Fahrenheit the iron begins to turn a washed-out a dull red. As the temperature rises, the color becomes brighter, going from reds through shades of orange and yellow to a brilliant white. A smith needs to be able to distinguish fine color variations and to know the different properties the metal has at each of the various temperatures (colors). The need to identify these colors is why blacksmith shops are not usually as brightly lit as other workshops. Iron burns at temperatures above 2800 degrees, requiring the smith to be careful so the work is not ruined. When the metal reaches the desired color or temperature, the smith begins the forging process. In the earlier days, on some farms or in smaller shops the anvil and a forging hammer were used. The larger treadle hammer was more often used in larger or specialty blacksmith shops.

The blacksmith either made or repaired wagon parts, knives, farm tools, building hardware, fireplace and cooking tools, and horse shoes, among other items.



Hart's Blacksmith Shop, Sterling Valley



Charles Hollenbeck in his blacksmith shop, South Richmond Ave., Fair Haven



Treadle Hammer in place in the blacksmith shop, Sterling

Adam Steigerwald of Auburn generously donated this foot operated blacksmith hammer to the Sterling Historical Society in memory of Ernest Luke, Ken Spingler and Jim Kusche. It was made between 1877 and 1910. It is believed that the blacksmith hammer may have been used in Weedsport at the *Old Shoe and Shop* on what is now Route 34 in Weedsport, for creating horse shoes. This machine can be seen in the blacksmith shop section of the Raymond Arthur Waldron Building at the Sterling School House Museum site, Sterling, New York.