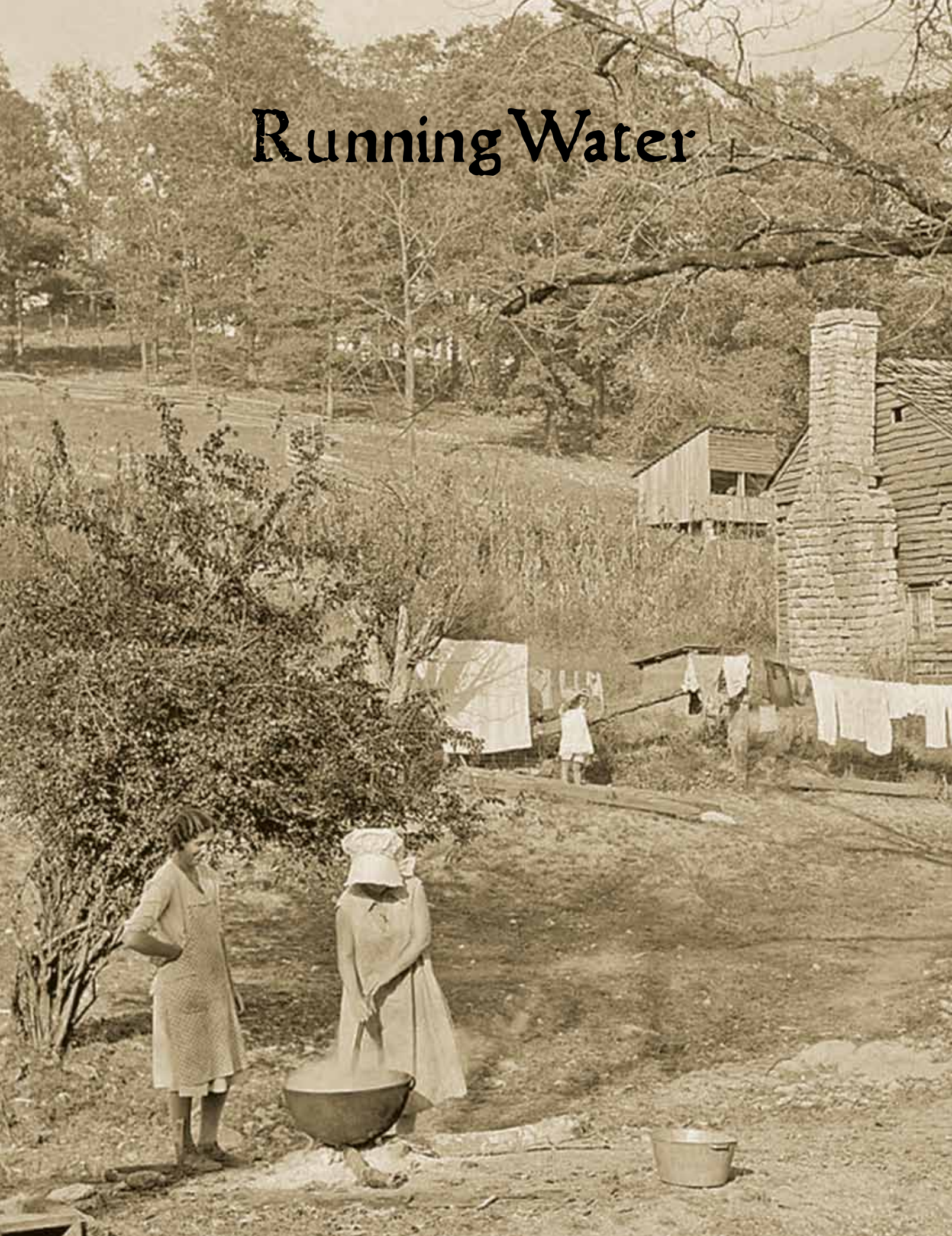
# Running Water



## *3rd in the "History of our Homes" Series*

By Greg LeFever

**PREVIOUS PAGE:** *This 1933 photo by famed Depression-era photographer Lewis Hines shows a family washday at a rural home near Andersonville, Tennessee. The water source is in the shed at the right, providing water for the boiling wash and the rinsing, while the clothes are hung to dry on the clothesline back by the house. Many isolated rural pockets still lack modern plumbing to this day.* **ABOVE:** *A woman known as Mrs. Wallace dips water from a spring in rural Tennessee in this National Archives photo from 1933. According to the photo information, the woman and her family used the spring as a water source for 30 years.*

There's an account from the North Carolina Farmers' Alliance in the late 1880s about a couple who spent forty-one years of marriage in the same farmhouse. Their home had no plumbing, but a spring flowed sixty yards away and provided all the water the family needed.

Trouble is, someone needed to carry the water from the spring to the house and – as with homes across America for more than two centuries – that chore fell mostly to the woman. Even on the easier days, this farmer's wife made at least six trips from the spring to her house, took out the dirty slops and carried her buckets back to the spring for more water.

So, on those easy days, she covered around 720 yards in all, and in a year had trudged 148 miles to the spring and back. During the four decades the couple lived in their house, she racked up 6,068 miles hauling untold gallons of water, day in and day out.

That's the same distance as walking the breadth of America, sea to shining sea – twice.

### A Long Time Coming

Today we equate that kind of grueling labor with the colonial era, when almost every household chore was backbreaking. Yet this woman in North Carolina was still hauling water by hand when the

**ABOVE LEFT:** *These two women are washing freshly picked vegetables at their Greenwich, Massachusetts, farm water pump. The year is 1910 and water pumps such as this one were common on farms across the country.* **ABOVE RIGHT:** *The woman in this Library of Congress photo is unidentified, as is the year and location. It's a good depiction of the type of water pump found throughout America in the 19th and into the 20th century on farmlands where wells had been drilled.*

20th century was just a few years away. And chances are it would be several more decades into the new century before that little North Carolina farmhouse had indoor plumbing.

Fact is, having running water and flush-toilets in American homes took a lot longer than most people realize. Indoor plumbing followed the familiar path of utilities such as gas and electricity, starting in cities and then spreading slowly into the rural areas, available first to wealthy households and afterward down the scale to middle-income and finally to poorer Americans.

But the progress was not uniform. Well-to-do neighborhoods had full plumbing sometimes a half-century before poorer neighborhoods located just a couple blocks away. Even today, new upscale housing calls for at least two full baths, while more than a million Americans living in remote deserts and mountain hollows still get by with wells, primitive pumps, and outhouses.

**Pipes and Privies**

Plumbing's real start began as far back as the 1700s in America's rapidly growing cities. The goal was to bring water closer to people's homes for two reasons. One was to remove the burden of having to haul water. The other was to fight fires. Housing back then was mostly wood-frame construction and heated by crude fireplaces and stoves prone to igniting fires that could wipe out whole neighborhoods because water was too far away.

Cities such as Philadelphia, Boston, and New York built the first municipal waterworks, inspired by early European aqueducts. For the most part, the American systems relied on hollowed-out logs

connected together and buried beneath the streets. These primitive pipelines started at springs or streams on high ground, with water flowing downhill into basins and cisterns where people could collect their household water, as well as for firemen's emergency use.

By the time of the Civil War in the 1860s, about 140 cities had some form of public waterworks with cast-iron pipes carrying water to networks of neighborhood pumps and hydrants. For countless women in the cities, gathering at the pumps and hydrants for their household water was a bright social event amidst the ongoing drudgery of daily housework.

But even with improved water supplies, city dwellers were dealing with more and more filth, noxious odors, and water-borne disease. Because cities were much slower to develop sewage systems, many millions of urban residents continued to depend on outhouses. A U.S. government report from 1893 tallied the number of families using them in major cities: 53 percent of families in New York City, 70 percent in Philadelphia, 73 percent in Chicago, and 88 percent in Baltimore.

For hundreds of thousands of these families, their quality of life suffered from living in large and congested tenement buildings with rows of privies squeezed into the small open spaces between buildings, while they obtained water from pumps and taps in crowded communal areas.

Even with America's ongoing population shift from the countryside to the cities, by 1900 only half of Americans had access to public water, and most had no sewage service at all.

**Birth of the Bathroom**

*This is John Frederick, standing at the open door of his family privy "where the flies ain't so bad," recalled Depression-era photographer John Collier, who snapped this picture in 1941 in St. Mary's County, Maryland. Privies such as this one were a common fixture for both urban and rural homes well into the 20th century.*

No room in the house combined more turn-of-the-century plumbing innovations than the bathroom. Up until about 1900, there were nearly no bathrooms as most bedrooms had bowls and pitchers for personal washing, as well as chamber pots for carrying out wastes to the privy, garden, or other dumping spot.

With bathrooms especially, wealth played a big role in who and when the plumbing could be installed. For example, the earliest flush toilets in America actually were in upscale hotels such as Boston's Tremont Hotel in 1829 and shortly afterward in 1836 at the luxurious Astor House in Manhattan with its 17 full bathrooms complete with toilets and tubs for 300 guests. It would be decades before middle-class families could afford some of the same amenities.

The kitchen had long been the heart of the American household and, in some ways, assumed several bathroom functions. Typically located toward the rear of the house, the kitchen was the home's best-heated room, was where meals were prepared and often eaten, and was where most bathing had occurred with tin tubs hauled close to where water could be heated. As

public water supplies were developed, the home's first indoor pipes went to the kitchen, often as a single faucet coming out of a wall.

During the 1870s, homeowners were treated to another appreciated convenience. By attaching coiled metal tubing to the back of coal-burning cook stoves, water was heated as it circulated past this heat source and flowed to nearby faucets. Still a few years away, homes with natural gas and electricity could be fitted with storage-tank water heaters.

With all that was demanded of them, bathrooms were more complicated than kitchens, requiring plumbing for sinks, bathtubs, and toilets, including sewage pipes for wastewater. During a 50-year period, most of the obstacles to a functioning bathroom were overcome, which set the stage for greatly improved household convenience.

Toward the end of the 19th century less-wealthy homeowners were able to create their bathrooms in remodeled first-floor spare bedrooms. Other homeowners preferred to install sinks and toilets in small, enclosed additions on back porches because they were hesitant to bring the privy's replacement too far into their living quarters.

**Plumbing Becomes Modern**

Turning the corner into the 20th century, America witnessed a surge in housing, this time with fully functioning kitchens and bathrooms. Mass-production of sinks, bathtubs, toilets, and fittings helped meet the demand. As availability broadened, prices dropped, and attractiveness improved. In 1880, Standard Sanitary Manufacturing Company – later known as American Standard – figured out how to apply pulverized enamel to cast-iron for a smooth, hard finish ideal for sinks, tubs, and toilets, and then in 1926 began providing these items in a range of popular colors.

*Children get a sponge bath in this 1897 photo of a Victorian-era bathroom. The family was probably well-off, considering the clawfoot tub, tiled walls, floor carpet, and quality of the children's clothing strewn about. For many families during this period, bathing was done in the kitchen in movable copper or tin tubs, with water heated from the stove.*

Mass-production of fixtures relied on new mass-marketing techniques, such as magazine ads. In 1879 a selection of sinks, washbasins, and urinals first appeared in the popular Sears, Roebuck and Company catalogs, sent to homes across America. By 1910, Sears was offering a package deal for a bathtub, sink, and toilet, beginning at $34 for the group.

Sears also went farther with its extraordinary Sears Modern Homes program where entire house components were bought from a catalog and shipped to the building site where local workmen constructed the house. From 1908 into the 1940s, more than 70,000 homes in 370 different designs were purchased and built across America as part of the Modern Homes program, individually costing from $360 to about $3,000 per house when the program was launched.

For many American families, their first experience with modern kitchens and bathrooms came from the catalog kit homes. Availability of public water and sewer lines, economically priced kitchen and bathroom fixtures, and housing affordable to young families meant indoor plumbing was finally available to average wage earners.

*Depression-era photographer Carl Mydans captured the feel of the urban tenement in this 1935 photo he took in Cincinnati. It shows the kitchen's single water faucet, which was the typical lone water source for urban apartments. The room houses a cook stove, washing tub, sink, and the woman's sleeping cot.*

Proving the point, a 1926 report on housing in Zanesville, Ohio, stated that 91 percent of the city's houses had running water and 61 percent had complete water and sewer systems.

**Need Amid Plenty**

As American housing kept pace with the rapidly growing population following the Second World War, adoption of uniform building and plumbing codes required all new housing to have hot and cold piped water, at least one bathtub or shower, and a flush toilet. The result was growth in plumbing products from about $500 million in 1929 to nearly $2.5 billion in 1956, close to a 400 percent increase in 25 years.

It may have taken somewhat over two centuries, but as America entered the 21st century, plumbing innovations greatly improved quality of life in most households. Running water meant no one had to venture outdoors to haul heavy buckets from wells or springs, nor did they have to contend with frozen water pumps in the dead of winter. With sewer pipes and septic tanks, no one needed to endure cold, rain, snow, or darkness to walk to a smelly and often insect-ridden privy. Hot baths or showers could be a private luxury available with the turn of a faucet.

This surely meant better lives for most Americans, but not all.

The federal Census Bureau reported in 2014 that 630,00 households still lack complete plumbing facilities. They don't have a toilet or running water or a bathtub or some combination of those things. With an average of 2.6 people in today's American household, that's 1.6 million people.

And these homes lacking full indoor plumbing are all across America, with a lot in the desert sections of the West, down into Texas, up through the Deep South, in hilly pockets of poverty across Appalachia, and up into northern New England. Native American reservations are among the worst places, as well as remote areas of Alaska.

It's even possible that the little North Carolina farmhouse where the woman carried water for forty-one years may still depend on that spring sixty yards away.