

**Women's Work-A Wash:** American educator Catharine Beecher, sister to Harriet Beecher Stowe, promoted women's education and was an early advocate of dignifying housework. She identified laundry as "the American housekeeper's hardest problem." Women rarely could stray far from their wash, their education opportunities, all but washed away.

Absent of running water, gas, or electricity, hand-laundry took astronomical amounts of time and labor. Gallons of water for each wash, had to be transported from pump or well or faucet to stove and tub, in buckets or wash boilers that might weigh fifty pounds. Women lugged these and then heavy baskets of wet laundry outside, hung each item on the clothesline, and later, took down each item. Women ironed by heating several irons on a stove, alternating them when they cooled, as dirty dishes stacked and waited. Regardless of social or economic status, women sought relief.

In the mid-19th century, machines to alleviate the endless work of washing clothes and dishes were being designed by men and women. The scrub board appeared in 1797 displacing the rock and a hard place, manual clothes washing machines appeared in 1846, and a rotary washing machine was patented in 1858. By 1875 over 2,000 patents had been issued in the United States for various washing devices. Not every invention worked.

Margaret Plunkett Colvin of Battle Creek, Michigan patented her invention of a rotary washing machine that did work very well. When presented at the Philadelphia Centennial, her Triumph Rotary Washer was deemed the "successful result of years of experiment by a practical woman." It also was presented at the Chicago's World Colombian Exposition in 1893.

Ellen Eglin of Washington, D.C. did not patent her 1880 clothes wringer invention, but sold it to an agent for \$18 in 1888. She reasoned that had it be known a Negro woman patented the invention white ladies would not buy her wringer.

A wooden machine with a hand-turned wheel that splashed water over dishes was patented by a man in 1850 as the first dishwasher. It wet, but did not truly "wash" the dishes. Josephine Garis Cochran of Shelbyville, Illinois, daughter of an engineer, and intolerant of servants breaking her fine china, wanted a dishwasher in her own home. Dismayed at the lack of progress developing such a product, Cochran declared in disgust, "If nobody else is going to invent a dishwashing machine, I'll do it myself." And she did.

Her design featured a wire crate constructed to hold dinner plates, cups, and saucers that fitted into a flat-laying wheel in a copper boiler. From the bottom of the boiler, a motor pumped up hot soapy water (truly "washing" the dishes) followed by clear hot water, while it spun in rotation, the wheel containing the dishes. Cochran patented her dishwasher in 1866 and introduced it at the World Colombian Exposition in Chicago. At the Expo, her machine won an award for "the best mechanical construction for durability and adaptation to its line of work." It was the Expo's top invention entry.

Having recognized its product potential, Cochran founded the Crescent Washing Machine Company in the 1880s to manufacture and market her mechanical dishwashing machine. Crescent built both hand and power operated dishwashers. Cochran anticipated the public would welcome her invention. However, since her machine was large and used an abundance of hot water, only hotels and restaurants could consider it because the hot water heaters in most homes could not supply ample hot water. Decades later, however, advancements in other home appliances opened the home market for dishwashers.

In the early 1900s, the Hobart Manufacturing Company had begun producing the first electrically driven machines for grinding food items, i.e., coffee beans, peanuts, and hamburger. In 1915 Hobart acquired Troy Metal Products and introduced the first model of an electric mixer designed to mix large quantities quickly. In 1924 Hobart's Troy Metals subsidiary was renamed the KitchenAid Manufacturing Company with headquarters in Dayton, Ohio. In 1926 Hobart

acquired another appliance manufacturer that would figure prominently in KitchenAid's future, the Crescent Washing Machine Company.

With the acquisition of the Crescent company, more than forty years after Cochran's design, Hobart, already recognized as a leader in the commercial dishwasher market, began to further explore the feasibility of producing a dishwashing machine for use in the home. Research and development curtailed during World War II, resumed in the late 1940s. And, in 1949 Hobart introduced a new home dishwasher to the public, the KD-10. It featured a patented washing mechanism, the KitchenAid brand name, and Cochran's design as the first home dishwasher. In the 1950s dishwashers became a product popular with the general public. The KitchenAid home dishwasher soon established a reputation for reliability.

Josephine Cochran was honorably inducted in the National Inventors Hall of Fame in 2006. The National Inventors Hall of Fame has honorably inducted 402 inventors. Thirteen inductees are women inventors, 389 are men inventors.

Sources: *Mothers and Daughters of Invention*, Autumn Stanley  
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