



Topical: Origins of the Dishwasher

by Pat Morgan

Edited by David Mahsman and Lesa Morgan

My wife, Lesa, is from a small town in central Illinois named Shelbyville. During one of our trips to visit her brother Paul and sister-in-law Bev, we were talking about her growing up in a small town. She then told me several interesting and unique things about her hometown. I hope you will learn a bit about Shelbyville as well as about one of its famous residents.

Background

Shelbyville is the county seat of Shelby County, IL, and home to just over 4,600 people, as of the 2020 census. The city sits along the Kaskaskia River, which was dammed to create Lake Shelbyville, dedicated in 1970. Shelbyville is also home to the Chautauqua Auditorium. The “Chautauqua,” as it is called around town, is a large historic icosagonal (20-sided) wooden Chautauqua meeting hall located at Forest Park and North East 9th Street. On Jan. 30, 1978, it was added to the National Register of Historic Places.



Additionally, the first commercial pick-up baler was designed and developed by Raymore McDonald, who hailed from Shelbyville. The balers were sold by the Ann Arbor Machine Company of Shelbyville. This concept of field processing farm forages made a significant contribution to the efficiency and economy of harvesting the world's agriculture. This basic field pick-up mechanism has been used in more than 15 million balers. The American Society of Agricultural and Biological Engineers designated Shelbyville as a historical landmark of agricultural engineering, of which there are only 47 in the entire United States.

Now on to the Dishwasher!

During our conversation, Lesa asked me if I knew that the dishwasher was invented by a woman from Shelbyville. I had to admit that I didn't know (but then again probably never thought about it either). After getting home, I went to look it up, like I often do when it comes to unusual facts and trivia. The other thing I do is to ask, “Is there a stamp for that?” Guess what? There is a set of stamps commemorating women inventors. One of those stamps, issued in Romania on Apr. 26, 2013, depicts Josephine Garis Cochran from Shelbyville, IL, for having invented the first mechanical dishwasher. Always looking for a collection of one, I was now ready to complete my “Dishwashers on Stamp” collection!



The story of Josephine Garis Cochran started when she was born on Mar.8, 1839, in Ashtabula County, Ohio, northeast of Cleveland. Her family influenced her to think outside of the box. Her mothers' father, John Fitch, invented the first patented steamboat in the U.S. Her father, John Garis, was a civil engineer who managed several woolen mills, sawmills, and gristmills along the Ohio River. So, it was no wonder that when she saw a problem, she looked for a way to solve it.

Without the opportunities women have today to jump into a workforce that would have allowed her to engage her inherent innovative skills, a 19-year-old Josephine married William A. Cochran. They had two children, a son, Hallie (who died at age 2), and a daughter, Katharine.



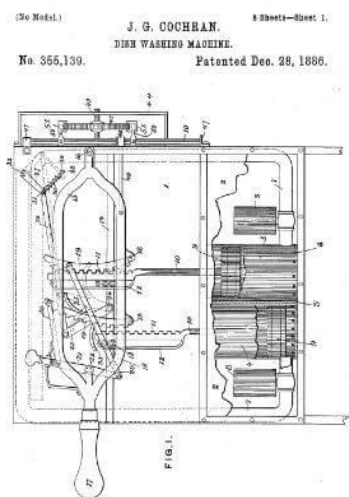
William took the family to California to strike it rich during the California Gold Rush and, like many miners, he failed. Not deterred, he turned his efforts to starting a dry goods business, which became very successful. With William's business success, the family moved to Shelbyville circa 1862 and built a mansion. Josephine became a socialite. She and William hosted many grand dinner parties, where she loved to use a collection of heirloom dishes dating back to the 1600s. After one of the parties, Josephine became very upset when she found that a servant had chipped one of her prized dishes while washing them. Initially, she chose to wash the fine china herself but

decide she was tired of this tedious task. Around 1882, she became sure that there had to be a mechanical solution to make it easier and safer to wash her china and that others would want it, too. She quickly sketched out a design and set out to build a dishwashing machine in a woodshed behind the mansion.

"If nobody else is going to invent a dishwashing machine, I'll do it myself."

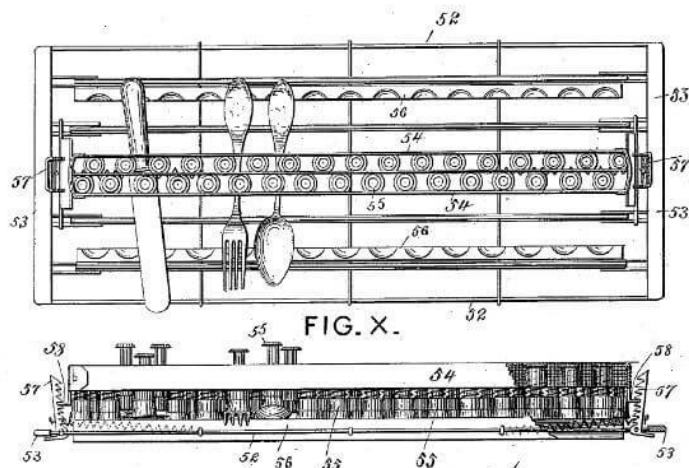
- JOSEPHINE COCHRAN

In 1883, William, who struggled with alcoholism, took ill and died, leaving her with just \$1,500 (\$43,995.59 in 2023 dollars) and a mountain of debt. Suddenly, her dream of inventing a dishwashing machine became a financial necessity. She complained that it was difficult to get men to help her by building a prototype the way she wanted, as they lacked the academic knowledge of mechanics and respect for her design. With just enough money left, she hired a young mechanic named George Butters to help her build the first successful prototype dishwasher that she had designed. She filed her first patent application on New Year's Eve 1885 as "J.G. Cochran." While she was not the first to invent a dishwashing machine, hers was the first to use water pressure and racks specifically fitted to hold the dishes. Previous washing machines required the user to pour boiling water over the dishes. In 1886, Josephine petitioned the court to pay off William's debt for 66 cents on the dollar to stop the long list of creditors seeking payment. On Dec. 28, 1886, J.G. Cochran received U.S. patent no. 355,139 for her "Dish Washing Machine," which also included a system for cleaning flatware. Cochran continued improving her dishwashing machine after receiving her initial patent, ultimately receiving a second, posthumous patent in 1917.



Attest:
Geo. W. Smallwood
J. W. Chapman

Inventor:
Josephine Cochran
By Knight & Sons



Attest:
F. A. Hopkins
Geo. Wheelock

Inventor:
Josephine C. Cochran
By Knight & Sons
Atty.

With a patent in hand and a working prototype, Josephine needed to find customers for the dishwashing machine. At that time in history, domestic tasks were divided by gender. She wanted to sell the dishwashers directly to women, but she knew that women thought of money differently and didn't make decisions about major purchases. Instead, she focused on larger institutions, like restaurants and hotels. In 1887, she was introduced to the manager of Chicago's Palmer House, one of the most famous hotels in the country at the time. At a meeting with the manager, he was impressed with Josephine's pitch, and she left with her first order.

“When it comes to buying something for the kitchen that costs \$75 or \$100, a woman begins at once to figure out all the other things she could do with the money. She hates dishwashing—what woman does not?—but she has not learned to think of her time and comfort as worth money.”

-JOSEPHINE COCHRAN

With her first sale in hand, but without an introduction, she entered the Sherman House Hotel to pitch her product. At that time a woman from her social class didn't leave home unless accompanied by a man. She later recalled it was “almost the hardest thing I ever did, I think, crossing the great lobby of the Sherman House alone. You cannot imagine what it was like in those days ... for a woman to cross a hotel lobby alone. I had never been anywhere without my husband or father—the lobby seemed a mile wide. I thought I should faint at every step, but I didn't—and I got an \$800 order as my reward.” The Garis-Cochran Company was in business.

Although sales were coming in, the company was still unable to manufacture the machines on its own, due to a lack of working capital, and growth was slow. Potential investors wanted Josephine to resign and turn the company over to the management of men. She chose to press on without investors rather than giving in to such requests. It was the right decision, as many fledgling and better-financed companies were wiped out in the Panic of 1893. The World's Columbian Exposition that same year turned out to be a major turning point in Josephine's fortunes.

World's Columbian Exposition - Chicago's World Fair

The 1893 World's Columbian Exposition (also known as the Chicago World's Fair) presented a once-in-a-lifetime opportunity for publicity and new sales. In the Machinery Hall, all forms of ingenuity were on display. The American inventions shown included the telegraph, the phonograph, and Eli Whitney's cotton gin. But a more recent invention—a strange-looking contraption of gears, belts, and pulleys, that would vanish a cage full of dirty dishes, only to reappear two minutes later as clean as if they had been hand-washed—was turning heads and getting lots of attention. The machine was called the Garis-Cochran Dishwashing Machine and was the only invention at the fair invented by a woman. During the fair, nine of the machines were in daily use at the exposition's many restaurants. The exposition's judges were so impressed with the dishwashing machine that they awarded it the highest prize for “best mechanical construction, durability, and adaptation to its line of work.” After the fair, orders spiked from restaurants and hotels throughout Illinois and neighboring states, and later sales were found in hospitals and colleges due to their strict sanitation requirements. A large-sized model of the Garis-Cochran dishwasher was designed for use by large institutional customers. The larger model could wash and dry more than 200 dishes in two minutes, freeing staff from dishwashing and saving businesses these labor costs.

THE GREAT DOMESTIC PROBLEM SOLVED!

The Only Machine Used at World's Fair!

6 in Wellington Catalogue. 2 in the New England Club Book.

HIGHEST AWARD AT WORLD'S FAIR, MEDAL AND DIPLOMA.

The Garis-Cochran DISH-WASHING MACHINE COMPANY.

ATTENTION!
Hotel Men, Stewards, Restaurant and Boarding House Keepers.
— receive your PROFITS and save your BY using a GARIS-COCHRAN DISH-WASHING MACHINE.
Come and investigate.
In practical operation at The Mass. Charitable Mechanics Ass'n's Fair, Huntington Ave., in the City in the basement, where orders will be received, and all quantities ordered, and the fullest opportunity to be investigated offered until Nov. 20, 1893.

EXAMINE THE MACHINE
Our machine has been in use for periods of three months in four years, since made in the largest and best kitchen in the West, and has given universal satisfaction.
Every Entertaining and Progressive Hotel Man should investigate this Machine.
It is simple and easy to run. A man can learn how to use it in an hour. Our No. 1, for hotels and large restaurants, requires 2 H. P.
No. 2, for clubs, small restaurants, and boarding houses, needing but 1 H. P., can be run by hand or 1/2 H. P.

Four of the machines used last week at a party of dishes. The plates were set by the ladies' guests on the table, which were in a few minutes returned to the kitchen, washed, dried, and set out as an order for the next morning.

NEW YORK OFFICE, CHICAGO, AND CLEVELAND.

New York and New England Territory for Sale.

AGENTS: GARIS-COCHRAN DISH-WASHING MACHINE CO., 1482 MASSACHUSETTS AVE., CAMBRIDGE.



About 1898, with all the success that the World's Fair created, Cochran was, at last, able to open her factory with her long-time machinist, George Butters, as manager. Now known as the Cochran's Crescent Washing Machine Company, sales of her dishwashers to businesses reached as far away as Alaska and Mexico. While she tried to lower the price per unit to make them affordable for households, the best she was able to do was approximately \$350 (more than \$12,000 in today's dollars). Thus, her customer base remained mostly hotels and restaurants.

"If I knew all I know today when I began to put the dishwasher on the market, I never would have had the courage to start. But then, I would have missed a very wonderful experience."

-JOSEPHINE COCHRAN

On Aug. 3, 1913, at age 74, she died at home in Chicago from a stroke or "nervous exhaustion."

- 1923, the Crescent Dishwashing Company she had founded and led received a trademark for their distinctive half-moon logo.
- 1926, the company was acquired by the Hobart Manufacturing Company, which produced dishwashers under the KitchenAid brand.
- 1986, KitchenAid was acquired by the Whirlpool Corporation.
- 2006, Josephine Garis Cochran was inducted into the National Inventors Hall of Fame.

It's hard to imagine a modern home kitchen without a dishwasher today, but it took more than 60 years for Cochran's dream to be realized; the dishwasher became a common household appliance in the 1960s. Today, some 85 percent of all U.S. homes have a dishwasher.



Collection of one: Dishwasher

On April 26, 2013, *Romfilatelia* issued a set of three Romanian postage stamps commemorating "2013 World Intellectual Property Day - Women and Inventions" (Mi. 6702-6704). Number 6703 honors Josephine Cochran for the invention of the Mechanical Dishwasher. Interestingly, there is no known connection between Romania and Cochran, which shows the far-reaching impact of her invention.



Mi. 6703, 3.30L, Josephine Cochran, 1839-1913, Mechanical Dishwasher, perf. 13½



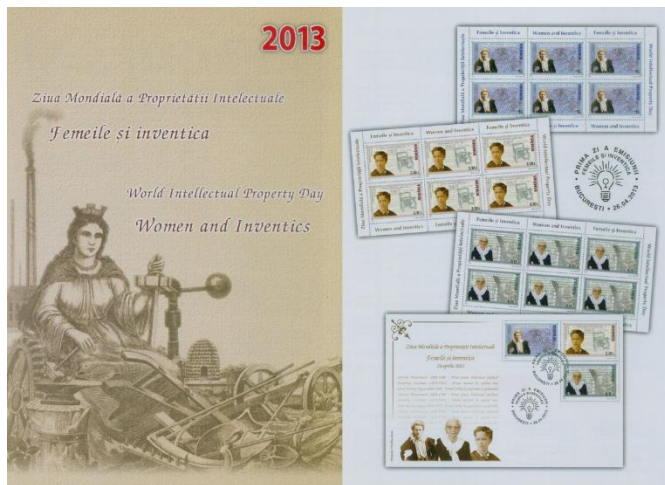
Mi. 6702, 1L, Stefania Maracineanu, 1882-1944, Artificial Rain, perf. 13½



Mi. 6703, 3.30L, Josephine Cochrane, 1839-1913, Mechanical Dishwasher, perf. 13½



Mi. 6704, 9.10L, Grace Murray Hopper, 1906-1992, Programming Language COBOL, perf. 13½



Mi. 6702-6704, First Day Cover Brochure



Mi. 6702-6704, First Day Cover

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