Sewing Machines
By Samantha Markowitz
Although the sewing machine was invented back in the 1700s, it still is extremely important in fashion today. Not only are sewing machines currently used in factories by clothing companies to produce garments, but also television shows like Project Runway exist in which viewers can appreciate how clothing is made. The sewing machine is truly a revolutionary invention, and one that was highlighted at many World's Fairs. In this guide, I will take you through the history of the machine; famous sewing machine companies and their exhibits at World's Fairs; complementary inventions; and finally, what sewing machines are like today.
In 1755, Charles Weisenthal, a German immigrant, patented a needle to use in mechanical sewing. Then in 1790, Thomas Saint patented the idea of the first “sewing machine”: a machine that can poke a hole in leather to allow a needle to pass through. In 1818, the sewing machine finally came to America as John Adams Doge and John Knowles created a device that could sew a short length of stitching on material.

In 1830, Barthelemy Thimonnier patented a wooden machine with a barbed needle originally designed for embroidery, but then used it for sewing. In 1844, Englishman John Fisher invented a machine designed for lace production, and Massachusetts farmer Elias Howe completed a prototype of a sewing machine. And finally, in 1851, Isaac Singer patented a machine with new features.
When an individual thinks of the sewing machine, he or she may think of its rich history and use in making clothing. However, there are many other “branches” that link back to the sewing machine, and I will focus on five: The World’s Fair Exhibitions, the Singer Company, Butterick Patterns, Mrs. Suplee’s Needle, and Sewing Today.
The sewing machine exhibitions were a highlight at many of the World's Fairs. I will focus on exhibitions at the 1876 Centennial Exhibition because it was the first World's Fair in the United States. Each sewing machine company had creative liberty to design its own exhibition.
At the Centennial Exhibition, there were a variety of sewing machine companies exhibited in Machinery Hall, such as Wheeler & Wilson, Willcox & Gibbs, Weed, Davis, and Howe. Each company created its own display and awards were given out for the best machines.

The Howe Pavilion, for example was 630 square feet, enclosed by a black walnut railing. There was a portrait of Elias Howe, and a variety of Howe machines were on display. The roof was held up by four pillars, with a figure of Mercury on top. Young women worked in the display, showing visitors how to operate the machines. Howe also exhibited a case of shoes in the Shoe and Leather Building to display stitching created by a Howe machine. On the other side of the lake stood a bronze statue of Elias Howe to remember him as the inventor of the sewing machine.
Wheeler & Wilson displayed their exhibits in the center of the American Department in Machinery Hall. The exhibit had three sides allowing visitors to walk through, and the final side had a screen showing their Connecticut manufacturing factory. The display showed both the company's family machines, as well as their manufacturing machines. At the center of the display were six machines in wood cabinets, along with samples of cloth and leather workings. For example, there was a sample of an infant's robe stitched with No. 400 cotton “as fine as a spider's web.”

Wheeler & Wilson won three awards at the exhibition:

1) Awarded to the “New Wheeler & Wilson Sewing Machine” for “A Lock-Stick Sewing Machine, unsurpassed in the fine workmanship of its parts, and possessing great originality, great adaptability to different classes of work both on Cloth and Leather, beauty of Stitch, ease and rapidity of motion, and completeness of display.”

2) Awarded to the “New Wheeler & Wilson Sewing Machine” for “Superior quality of work in Leather Stitching.”

3) Awarded for “A superb display of Needle-Work...exquisite in design and finish, from the lightest gauze to the heaviest leather.”
The Wheeler & Wilson machine was a practical machine that made a lock-stitch; it consisted of a double-pointed shuttle, a vibrating arm that controlled the needle, and a device that allowed seams of any angle or curve to be sewed. Some machines were foot-operated, while others were steam-operated. One English judge said, “Of all the machines we tested, the Wheeler & Wilson new machine was the most completely successful, failing in nothing that was given to it.”

The “Original Howe Sewing Machine” is claimed to be the first automatic machine to use two threads. The machine was constructed in 1845 (shown in the image on the right) and claimed to have sewn the “first seam ever made by machinery.” It was displayed in Howe’s Pavilion in Machinery Hall. At the Centennial, The Howe Company won an award for its “Shuttle Sewing Machines.”
Many sewing companies advertised their machines in Harper’s Weekly during 1876. The three advertisements shown are for Willcox & Gibbs, Howe, and Wilson. Given that there were so many brands of sewing machines at the time of the Centennial, each company had to determine a way to differentiate itself from competitors. For example, Howe focused on the family aspect of its machine, emphasizing the ease of use. Willcox & Gibbs highlighted the automatic and silent nature of the machine. And Wilson focused on “the best and cheapest” marketing technique.
Singer Company

There were many companies exhibited at the World’s Fairs, but the Singer Company is one that is still famous today, especially for its Family Sewing Machines. Not only does Singer have a rich history, but also the company sold machines globally and even had separate pavilions at the World’s Fairs.
It took Isaac Singer 11 days and $40 to complete his first sewing machine. Singer's machine had a straight eye-pointed needle and used a treadle to generate power similar to that of a spinning wheel. All other machines in those days used a hand crank instead.

In 1851, Singer formed the I.M. Singer & Company with Edward Clark. Within two years, Singer became the leading manufacturer and marketer of sewing machines in the United States. The first sewing machines were priced at $100 each, and in 1855, Singer began expanding overseas, making Singer the world's first international sewing machine company. In 1859, Singer received his first of three patents for lock-stitch vibrating shuttle machines. In 1870, the Red “S” girl Singer trademark debuted. In 1891, Singer created his first machine using an electric motor.

“Instead of the shuttle going around in a circle, I would have it move to and fro in a straight line. In place of the needle bar pushing a curved needle horizontally I would have a straight needle and make it work up and down.”
Not only did Singer exhibit his sewing machines at the World’s Fairs, but also he created his own pavilions to showcase them. Two fairs that he built pavilions for were at the 1876 Centennial Fair and the 1904 St. Louis Fair.

The pavilion at the Centennial Exhibit was a cottage-style building with many gables and a broad piazza on all sides. The top of the building had flags from many nations, and one said “The Singer Manufacturing Company.” The pavilion included a show room, reception room, parlor, and retiring rooms. The building cost Singer $20,000 to design and build. The exhibition had 61 sewing machines in operation and three wax female figures were in showcases to demonstrate varieties of sewing, pleating, ruffling and embroidering.

Singer gave out a machine as a prize at the Centennial. When guests walked into the Singer Pavilion, they would sign a register from which a winner’s name would be drawn.

Singer Pavilions

Souvenir book from St. Louis is shown to the right.

St. Louis 1904
Singer always prided itself as a global company. At the 1893 World's Columbian Exposition, Singer distributed a souvenir deck of cards to display the “Costumes of All Nations.” The back of the box holding the cards had the phrase “Salesrooms in Every City in the World.” Three cards are shown above, illustrating how a Singer machine can be used in any country. The back of each card had a description of the city, as well as information about how a Singer machine was used in that particular location.
Singer Universal Sewing Machine
Sewing machines were a revolutionary invention for making clothing in the home; however, it wasn’t until Butterick Patterns introduced graded patterns that made sewing intricate clothing easier for the everyday woman.
Butterick Patterns

For the first few years, the Buttericks specialized in male clothing. In 1866 they expanded to women’s clothing. In the late 1860s, the Garibaldi Suit became a popular fashion to mimic the soldier named Garibaldi. Butterick’s pattern for this suit helped spread the Butterick name across the United States.

With Butterick Patterns, not only did the act of sewing clothing become easier, but also fashion became globally widespread across all classes, as women were now able to replicate the latest styles.

Ebenezer and Ellen Augusta Pollard
Butterick created the first graded sewing pattern.

Ellen was sewing an outfit for her son, Howard, when she realized that although there were patterns available to use as guides, they all came in one size. A woman would have to manually increase or decrease the size of the pattern while she was sewing. Thus came the groundbreaking idea of graded patterns.

1863

The World’s First Name in Sewing Patterns

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In 1867, Butterick created its first magazine, “Ladies Quarterly of Broadway Fashions.” In 1868, Butterick also introduced a monthly bulletin called “Metropolitan.” The purpose of these publications were to show the newest fashion trends, as well as Butterick Patterns, and women could order the patterns through the mail. In 1873, Butterick also created “The Delineator” to advertise its patterns: the publication became extremely popular and Butterick turned it into a general magazine for women in the home. At the end of the century, it was known as the “Finest women's service and fashion magazine.” The magazine was a “high-quality magazine for intelligent, progressive women.”

A copy of “The Delineator” from 1901 is shown above. Articles included “Descriptions of Ladies' Figures,” “The Fashions of London,” and “Some Dainty Underwear.”
Butterick Exhibition

Butterick Patterns had an exhibit at the 1901 Pan American Exposition. The booth is shown in the left image.

The Butterick patterns were made of Manila paper. When a person folded the paper, it became 6 to 10 centimeters wide and 10 to 20 centimeters long. One side of the pattern had a “formula” with engravings to direct the sewer.

The Souvenir said that “These are cut on such a careful and scientific basis that any woman of average intelligence can reproduce for herself the garments represented by the patterns.”

The blue dress was “Dressy Street Toilette”—Jacket No. 4830. The pattern cost 20 cents and was offered in 7 sizes from 30-42 inches. The skirt was No. 4828, cost 25 cents and was offered in 9 sizes from 20-36 inches.
In 1948, Butterick bought new printing equipment, which allowed for the “printed pattern.” The “printed pattern” was a major advancement because now, there were bold dots, notches and lines instead of tiny holes that marked darts, matching points and foldlines. In 1950, the first full-color photograph was on the catalog cover.

In the 1950s, Butterick created a dress (Pattern 6015 shown on the right) that was known as the “Walk-away” dress because you could “Start it after breakfast...walk-away in it for luncheon!” That’s how easy it was to create. Demand for this pattern was so high that Butterick stopped manufacturing all other patterns since there was such a large back-order for this dress.

In 1961, Butterick licensed the name/trademark “Vogue Patterns” from Condé Nast Publications, Inc. and bought the pattern division. In 2001, The McCall Pattern Company acquired Butterick and Vogue Patterns, making them the “most advanced, highest quality patterns, catalogs and magazines to keep up with your changing needs.”
Not only were sewing machines an integral part of making sewing for women easier, but also Mrs. Suplee’s open-eyed needle was revolutionary in both hand-sewing and machine-sewing.
Mrs. Suplee’s Needle

In the Women’s Pavilion at the Centennial Exhibition, Mrs. Suplee from Suplee Needle Co., New York, showed “the Suplee Open-eyed, Easy Threading Machines for all sewing machines and hand sewing.” The needle was open-eyed, which meant that there was a side cut to easily slip thread into the eye. Mrs. Suplee had the idea to create this needle from her own experience with threading needles.

Mrs. Suplee was awarded a medal for her open-eyed needle, and the patent is shown in the image on the right.
Sewing Machines Today

When sewing machines were first invented, they had an impact both on hand sewing for women in the household, as well on commercial sewing. Today, sewing machines are still an integral part of the fashion industry. TV shows like Project Runway allow individuals who are not directly involved in the garment industry to still appreciate the importance of the sewing machine.
Sewing machines continue to play a prominent role in life today. Singer, for example, is still one of the major players in the sewing machine industry. Sewing machines have made tremendous strides since the 1700s, and Singer currently offers multiple types of machines. Singer has four categories of machines to choose from: electronic, basic, very basic, and embroidery & sewing. Singer also offers other types of machines, like sergers (trim and finish raw fabric edges), scholastic machines (for school and home use), and garment care.
Project Runway, an American reality TV show, is focused on a set of contestants who compete to create a fashion line. Each week, there is a challenge in which the contestants must produce a specific garment that meets certain criteria. The contestants are under time constraints during this task. Project Runway emphasizes the complete process of making garments, from selection of fabric to the final product.

Contestants are often shown using sewing machines to make their garments. Pictured on the left is the “Sewing Room.”

In Project Runway, the contestants use the Brother brand of machines. Brother has an entire line of Project Runway Limited Edition Machines. One example is the XR9500PRW Machine, which has 100 built-in stitches and a quilting table. On Amazon, the list price is $479, but it is currently on sale for $165. There is also a built-in sewing font for basic Monogramming.
Like many other Jewish families who immigrated from Eastern Europe, the sewing machine served as an important part of my family's history. From 1886 to 1914, over 2 million Jews came from the Russian Empire, Romania and Austria-Hungary. My maternal Great Grandmother Edith Farber (first from left) and my maternal Great Grandfather Isaac Lieberman (second from right), came to New York from Bialystok, Poland, in 1914. They settled in Brooklyn, New York, and Edith worked as a seamstress, traveling over 3 hours each day to Manhattan. Isaac worked as a “presser,” ironing men's shirts that the women sewed. The conditions were difficult; along with the commute, the shops (often called “sweatshops”) were poorly ventilated, hot, and unsanitary.

Like my maternal Great Grandparents, my paternal Great Grandparents (the Schmaefskys) immigrated from Eastern Europe and also worked in the garment industry in the Lower East Side. My Great Grandmother Dora Schmaefsky had a Singer sewing machine at home that she used to hem my family's clothing. My aunt currently has the sewing machine in her home. My Great Grandmother Dora's Singer sewing machine is shown on the right.
Who would have thought that the idea of a needle by a German immigrant 260 years ago would have sparked innovations ranging from mechanical sewing machines to graded patterns, generating an entire industry focused on garment making. Using the World’s Fairs as the forum to showcase developments in sewing machines, companies like Singer and Wheeler & Wilson shared their inventions with the world. As sewing became more commonplace in the home, inventions like Butterick patterns and Mrs. Suplee’s needle revolutionized home clothing making, resulting in upscale fashion styles to be accessible to all.

In the early 1900s in the United States, the garment industry flourished, providing an outlet for immigrants to use their tailoring and sewing skills. And, today more than ever, the popularity of television shows like Project Runway is proof that people are just as enamored with what the sewing machine can do, as they were at the 1876 Centennial World’s Fair.
General Sources

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