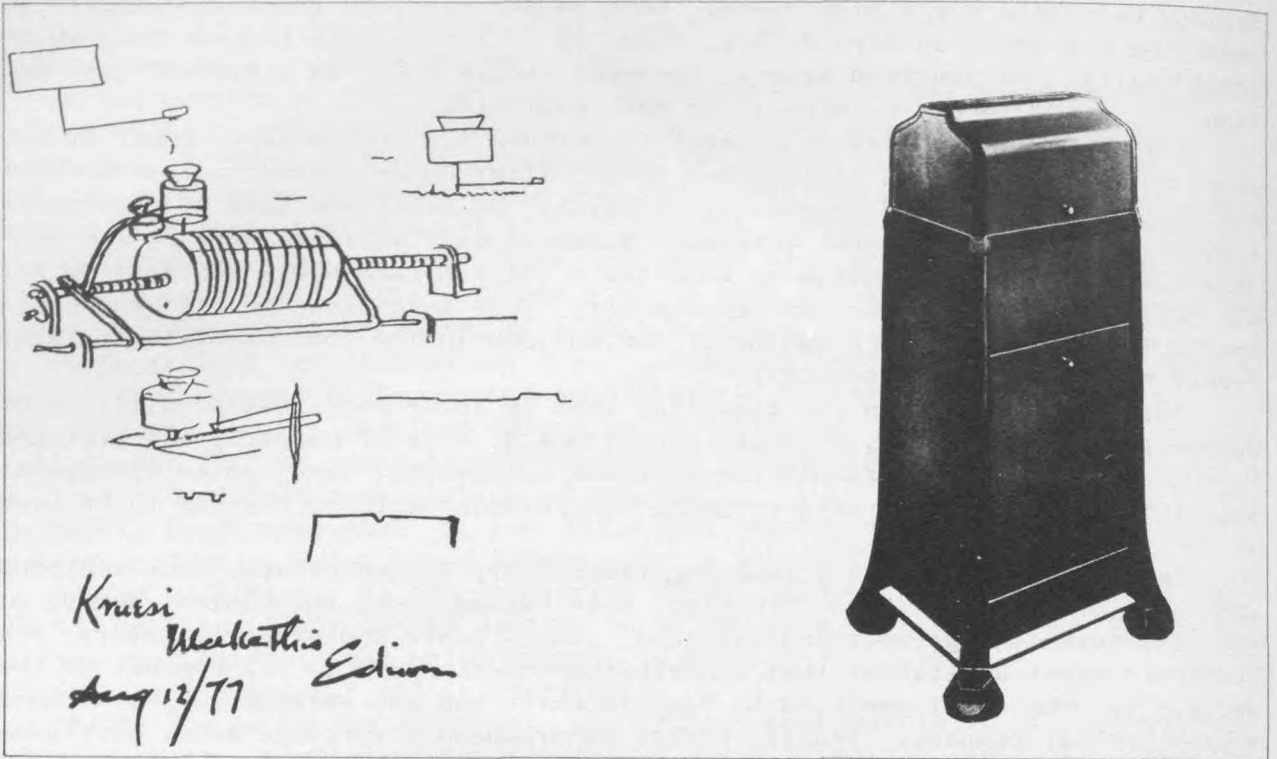


STORIES of New Jersey



The early drawing on the left, made by Edison himself, told his assistant how to make the first sound-reproducing machine. He intended it as a dictating machine. At the right is the streamlined product manufactured today.

overlooked. It is said that he even tried a hair from the red beard of J. U. Mackenzie, the Mt. Clemens station agent, whom he was then employing.

Two years passed, and \$40,000. Then on the evening of October 19, 1879, the inventor charred a piece of cotton thread, twisted it into a loop, and after many unsuccessful attempts managed to seal it in a glass bulb. He screwed it into a socket and turned on the current. The cotton filament glowed and then burned brightly. For forty hours it burned as Edison eagerly increased the current until it sputtered and went out. It was a laboratory success but not yet suitable for commercial manufacture. The experiments continued. Edison spent \$100,000 to send investigators all over the world looking for bamboo which he thought might work. It was with a bamboo fibre discovered in Japan that the first commercial electric bulbs were made.

The task of popularizing the use of electric light was not easy. The gas companies fought it fiercely; people were wary because they doubted its safety. William Vanderbilt had his New York mansion equipped for electric light, but Mrs. Vanderbilt refused to move into the new house until gas light was substituted.

Edison remained at Menlo Park after the death of his wife in 1884. Not until 1887, a year following his marriage to Mina Miller of Akron, Ohio, did he move to the West Orange plant where the company which now bears his name is situated.

He worked tirelessly improving the inventions already in use and developing new ideas. For the electric light alone and its related equipment he had 375 patents before he was satisfied that it had reached commercial and technical perfection. His lack of formal education was a great handicap. Scientists like Steinmetz, who respected his ability, shuddered at the enormous amount of