School Bulletin No. 21

STORIES of New Jersey

PREPARED FOR USE IN PUBLIC SCHOOLS BY THE

FEDERAL WRITERS' PROJECT of the WORKS PROGRESS ADMINISTRATION

1060 Broad Street, Newark, New Jersey

SCOTCH PLAINS

No. — PUBLIC LIBRARY

THE GROWTH OF RCA

The twentieth-century family accepts the victrola and the radio as part of the everyday equipment of the home, and yet only sixty years ago intelligent, wide awake men and women scoffed at the idea of permanently recording and reproducing the human voice, or any other sound.

In 1877 Edison patented the phonograph; and ten years later the Volta Laboratories, working under the direction of Alexander Graham Bell, developer of the telephone, announced another sound-producing machine, which they christened the graphaphone. These first machines were grotesque-looking contrivances. The records were cylindrical and the sound was amplified through a large megaphone which, following the overornamental style of decoration of the period, took on fearful and wonderful shapes as the market increased. Every parlor had a table in the corner holding a square box from which grew a large and utterly ugly lily. The sounds emitted from the throat of this giant flower were rasping and distorted, but people were grateful and enthusiastic.

Then another inventor entered the field of the reproduction of sound. He was Emile Berliner, a man who had taken part in the development of the telephone and had become interested with Bell in the phonograph. Berliner's invention differed from those of Edison and Bell in that the recording was done upon a disc. He called his instrument the gramaphone, and began marketing it in 1896 through an organization called the National Gramaphone Company. With this invention there began a contest between the disc and the cylinder types of machines.

One day in 1895 the owner of one of the early Berliner machines brought this instrument for repair to a young machinist in his shop back of a carriage factory on Front Street, in Camden. The machinist was Eldridge R. Johnson, who had won a reputation as a maker of working models for inventors.

Johnson studied the mechanism and saw several ways of improving it. His idea was to install a spring motor so that the machine would run smoothly and not distort the sound. The gramaphone he turned out was so superior to the original Berliner model that he received a contract to manufacture it for the National Gramaphone Company.

Johnson then turned to the improvement of the record itself and in 1898 produced one so much better than any of its predecessors that he attracted attention from the commercial interests. The record was of a popular song of the day sung by himself, I Guess I'll Have to Telegraph My Baby.