

# STORIES of New Jersey

PREPARED FOR USE IN PUBLIC SCHOOLS BY THE

NEW JERSEY WRITERS' PROJECT, WORK PROJECTS ADMINISTRATION

44 Chestnut Street, Newark, New Jersey

Sponsored by The New Jersey State Library and The New Jersey Guild Associates

## SETH BOYDEN--THE UNCOMMERCIAL INVENTOR



Seth Boyden

Seth Boyden, who gave America the methods of producing patent leather and malleable cast iron, is a strange figure in the great group of American inventors of the early 1800's who helped to stimulate the rise of the Nation's industrial life. No less than three times the inventor had within his grasp a large fortune. Each time he turned from making money out of one of his inventions to the investigation of some different mechanical problem, letting others make profits that should have been his.

He was born at Foxborough, Mass., November 17, 1788, the son of a "minute man" of the Revolution. He had an ordinary eighteenth century education, attending a small district school but two months a year. His scientific training came from his father, himself an inventor. Although Seth worked on his father's farm and sometimes at his grandfather's iron furnace, he showed an early aptitude for mechanics; at 15 he repaired watches. He revealed the bent of his mind in a book label, engraved on steel; it showed a shelf of books, a retort, jars of chemicals, a barometer, a thermometer and an electrical machine.

After building a high-power microscope he in-

vented an air rifle that could kill small animals. He devised an ingenious improvement on current gun locks and made a rifle according to his own design.

Boyden soon applied himself to devices of industrial and commercial value. He reduced the cost of wrought-iron nails, tacks, brads and files of different sizes by inventing machines to make them. By improving a machine to split leather, invented by his father, he made it commercially valuable. Splitting hides into two or more layers increased the quantity of leather available from each.

In 1815, the year after he married Abigail Sherman, he moved to Newark and opened a little harness shop in his home on Broad Street near Bridge Street. It is probable that Boyden came to this city because of its extensive commerce in leather and its products, particularly shoes. He brought with him his machine for splitting leather and soon had a flourishing business. Characteristically, he made an innovation in the new venture by developing his own method of silver-plating buckles and other articles for use on harnesses and carriages.

One day he heard someone read a carelessly written account of the French glazed leather produced in Europe and searched until he found a specimen in New