



Image: **Eagle Furnace, Steam-Engine, Machinery, & Stove Works**, designed by Elijah Forbes, printed by J. H. Hall, Albany, New York, c. 1845, Albany Institute of History & Art Purchase, 1980.8



Object: **Parlor Stove** John Morrison Green
Island Stove Works Troy, New York, 1844,
cast iron, Collection of the Albany Institute
of History & Art Purchase, 1977.18

Cast Iron Stoves



The Capital Region in 50 Objects

Cast Iron Stoves

Cast iron stoves fueled by coal helped people in the mid-to late nineteenth century to heat their homes and move their daily activities away from their fireplace hearths. Transportation by ship and rail, the availability of raw materials, and inventions by stove manufacturers combined to make Albany and Troy, New York, an ideal place for the development of the cast-iron stove industry. The industry relied on the natural resources found in the Hudson River Valley for their success: charcoal, iron ore, limestone, and fine molding sand.

Iron ore came mainly from Columbia and Dutchess Counties along the Hudson River and Clinton and Essex Counties in the Adirondacks. Charcoal was made in Albany and surrounding towns and village. Once the iron ore was heated with limestone, also known as flux, the impurities were separated from ore. The combination of heating charcoal, iron ore, and limestone produced molten iron that could be used for castings or sold for other industrial uses such as fences, train car wheels, and farm tools. At least one third of the design patents granted by the U.S. government between 1842 and 1852 were issued to manufacturers in Troy and Albany.

An iron worker would begin the process of making a stove by creating a box mold filled with sand. An impression of the design pattern would be pressed into the tightly packed sand and molten iron would be poured into the impression. When cooled, the shaped iron pieces would be removed from the mold and fit together. With much skill and experience ironworkers could make highly decorated stoves like this four-column parlor stove by K. Morrison Green Island Stove Works, located in Troy, New York.

Vocabulary

Cast – to give a shape to (a substance) by pouring in liquid or plastic, forming into a mold, and letting harden without pressure

Mold – a hollow form for giving a particular shape to something in a molten state

Natural resources – materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain

Patent – a government authority or license conferring a right or title for a set period, especially the sole right to exclude others from making, using, or selling an invention

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Name _____ Date _____

Directions

Use the depiction of the object, image, and corresponding text to answer the following questions.

1. Name two New York counties where you could find iron to make the stove:

a. _____ b. _____

2. Name two of the natural resources needed to make cast iron stoves:

3. How did cast iron stoves change people's daily lives? _____

4. What company made the stove and where were they located?

a. _____ b. _____

5. When was the advertisement printed? _____

6. Who printed the advertisement and where were they located? _____

7. Why do you think the company advertised called itself the "Eagle Furnace?"

8. What other objects were made with cast iron in the nineteenth century?

9. Name two ways the stoves made in Albany and Troy could be shipped to other parts of the country and the world:

a. _____

b. _____