

Welcome to Hagley's Powder Yard Trail!

The trail is designed to explain the process of how the DuPont Company made blasting powder and gunpowder. You will also discover the purpose of many buildings and sites throughout the powder yards.

The process of manufacturing explosive black powder can be broken down into three major phases: preparation, production, and packing. Throughout the trail you will see signs with the icons to the right. They will help identify which step in the process took place at each site. The signs will also describe the process in more detail.

The DuPont Company manufactured gunpowder and blasting powder here from 1802 until 1921 when the yards were shut down. By then the company was making a transition from producing explosives, for which a knowledge of chemistry was helpful, to researching and developing chemical products entirely. In 1957 this site was reopened as the Hagley Museum and Library.

Enjoy your walk through Hagley's industrial past!

Did you know?

- DuPont's workplace motto of "Safety First" originated in the need to keep the powder yards as safe as possible for its workers.
- All workers were checked at the gates for matches, alcohol, and metal in shoes, suspenders, and belts.
- In spite of rigorous safety precautions, there were 288 explosions in the Brandywine powder mills between 1802 and 1921, resulting in 228 deaths.
- Gunpowder was used to build canals, roads, tunnels, quarry rock, and to clear land.
- From the 1870s on, dynamite made gunpowder obsolete for most civil engineering work.

FLOWCHART OF THE POWDERMAKING PROCESS



PREPARATION

Purchasing of Saltpeter and Sulphur
Making Charcoal
Refining Ingredients
Measuring and Mixing Ingredients



PRODUCTION

Incorporating Ingredients in Roll Mills
Pressing Mixed Powder into Slabs
Breaking Up Slabs
and Sifting Powder Grains
Glazing Grains for a Smooth Finish
Drying Powder



PACKING

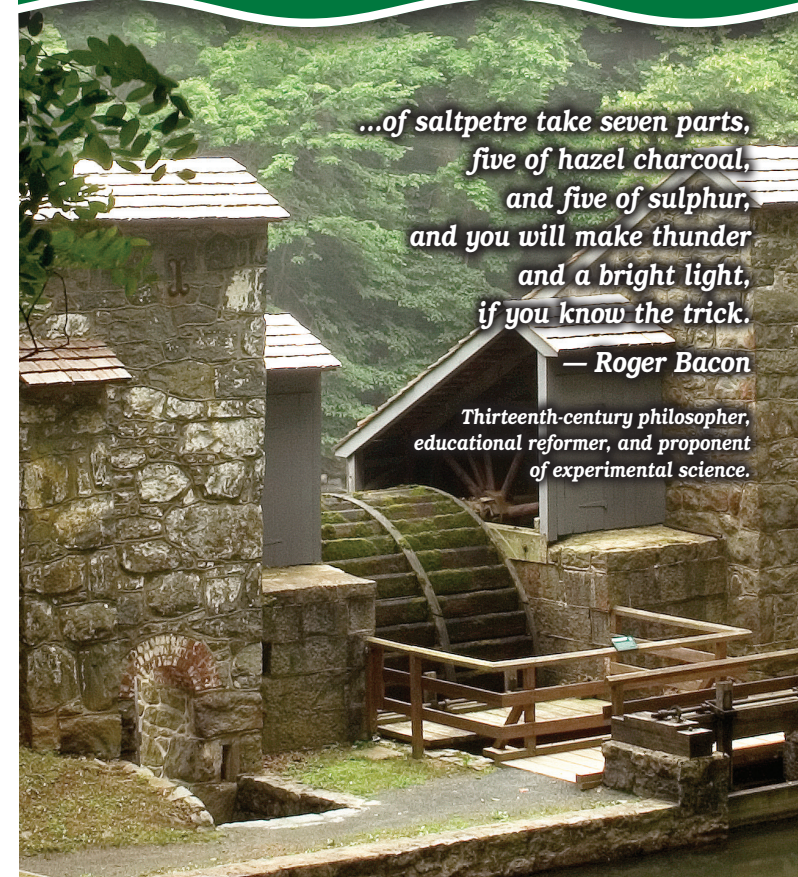
Pouring into Containers
Storing in a Magazine
Shipping to Customers



Powder Yard Trail

A SELF-GUIDED TOUR

HAGLEY MUSEUM AND LIBRARY
WWW.HAGLEY.ORG • (302) 658-2400
GPS: 200 HAGLEY CREEK ROAD, WILMINGTON, DE 19807



*...of saltpetre take seven parts,
five of hazel charcoal,
and five of sulphur,
and you will make thunder
and a bright light,
if you know the trick.*

— Roger Bacon

*Thirteenth-century philosopher,
educational reformer, and proponent
of experimental science.*

MAP KEY TEXT:

A: MILLWRIGHT SHOP

The Powder Yard Trail begins at this building with an exhibit about making black powder.

B: EAGLE ROLL MILL

Demonstrations are scheduled throughout the day.

C: DUST MILL

D: STONE QUARRY

E: INGREDIENTS STORE HOUSE/SULFUR STORAGE

F: PRESS HOUSE

G: DRYING TABLES

H: SWEEPINGS ROOM

I: GRAINING MILL

J: GLAZE MILL

K: COMPOSITION HOUSE

L: BIRKENHEAD MILLS

M: STEAM ENGINE HOUSE

N: WATSON'S GLAZE MILL RUINS

O: POWER PLANT

P: "BIG MARY" GLAZE MILL RUINS

HAGLEY POWDER YARD TRAIL

