

WASC 0702

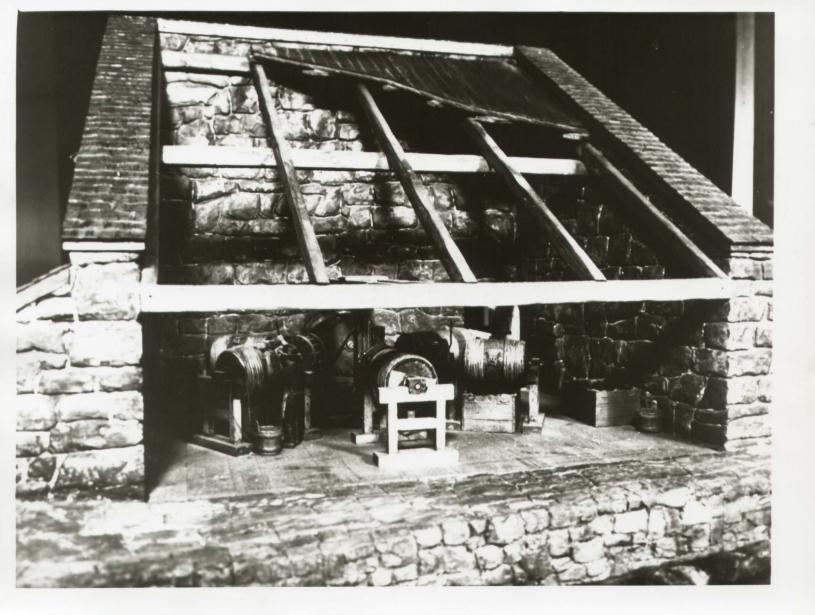
WAI 0134

Hagley Museum exhibits of DuPont Gunpowder Buildings. b/w photographs 1-6

- Gunpowder graining 1
- Mixture of ingredients by pounding of heavy pestles Process in the glazing mill (use of graphite) DuPont Co's Powder Mills (HN 207) 2
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- Refining saltpetre in a Gunpowder Factory 5
- Powder taken to the dryhouse 6







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Sketch by Pierre Gentieu (powderman) of the Du Pont Company's powder mills on Brandywine Creek, near Wilmington, Delaware in 1878.

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Negative No! HN 207.

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WASC 702/5

REFINING SALTPETRE in a gunpowder factory

Though saltpetre (potassium nitrate, KNO₂) was usually roughly refined near where it had first been dug from the earth, it still contained considerable earthy materials and unwanted salts that had to be removed before it would be pure enough for to use. Refining it was accomplished by putting a large quantity of rough saltpetre with a proportionate amount of water into a huge kettle skm mounted above a furnace. The mixture was heated to boiling point and held at that temperature for as long as ten or twelve hours. Having a lowers melting point than the foreign salts it contained, the saltpetre liquefied, while the other salts remained solid and fell to the bottom of the cauldron. The refiner then ladled them out. Dirt and fother foreign matter rose to the surface and were periodically skimmed off. The ladlings and skimmings were repeated until scum cased to

form and no more I salts came from the bottom of the kettle.

Shown in this photograph: A worker in the refinery (right) skims off impurities rising to the top of a large kettle of boiling saltpetre.

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