

# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

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### AMERICAN PRECISION MUSEUM DOCUMENTS WATERPOWER

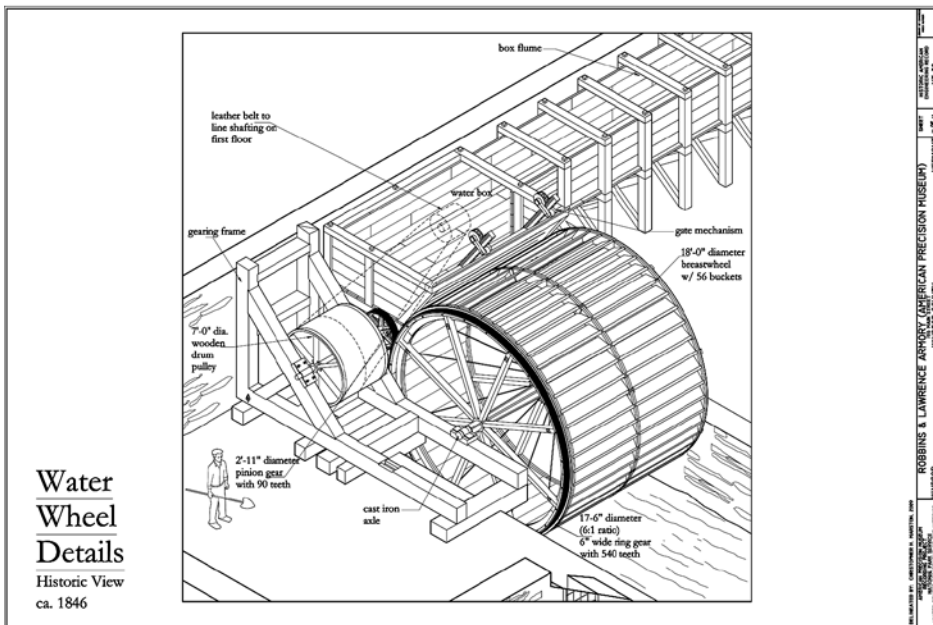
In 2007, with a grant from the SIA and funding from several generous donors and trustees, the American Precision Museum (APM) engaged the Historic American Engineering Record (HAER) to document the remains of the waterwheel pit and millwork at the Robbins & Lawrence Armory, home of the APM in Windsor, Vt. Christopher Marston [SIA], HAER architect, led the project, in collaboration with John Johnson [SIA], an industrial historian from Marshfield Vt.

The Robbins & Lawrence installation was typical of an 1840s waterwheel in northern New England, and the remains of the waterwheel pit and millwork are a case study in a waterpower system. Evidence from the study adds to the understanding of similar factories constructed at this time. The armory was constructed in 1846 as a private armory for the manufacture of firearms and machine tools to make those firearms, and it stayed in production as an

armory until 1856. During this period the American system of manufacture was employed here by skilled machinists with a variety of machine tools necessary for the manufacture of interchangeable parts.

On site fieldwork and additional research indicate that the armory was originally powered by a high, breast-type, wood and metal waterwheel 14-ft. wide and 18-ft. in diameter, that supplied mechanical power for the woodworking and metalworking machines used in the manufacture of government-contracted firearms. Power from the waterwheel was directed to a partially extant gearing frame set on granite blocks near the southeast edge of the extant wheelpit. Power from the gearing frame was directed to machinery on the first floor of the factory. While most of the conjectural drawings in the report focus on the millwork, other drawings illustrate major changes to the entire building showing its appearance in 1853, 1884, and today.

(continued on page 2)



Water Wheel Details  
Historic View  
ca. 1846

#### In This Issue:

- New IA Editor F. Quivik
- SIA Colorado Springs 2010
  - Photo Workshop
  - Student Scholarships
- General Tools Award—Call for Nominations
- SIA Officer Election—Slate of Candidates
- Fall Tour 2010—Vermont