

Grant Title: 082-17 Porter McLeod's Forgotten Empire: How a Hatfield Machine Shop Traversed the Globe

Grant #: 082-17

Type of Grant: Scholar in Residence

Amount Requested: \$3,500.00

Sponsoring Organization:

Hatfield Historical Society

39 Main St.

P.O. Box 168 - see past for diff payment address

Hatfield, MA 01038

Contact Information:

Kathie Gow

[REDACTED]

[REDACTED]

Application Form

Program Officer

AM

Grant Round

[Unanswered]

Comment: April 2017 Round (not available as an option!)

Type of History Grant*

Scholar in Residence

Project Title*

082-17 Porter McLeod's Forgotten Empire: How a Hatfield Machine Shop Traversed the Globe

Amount Requested*

\$3,500.00

Project Summary*

The Hatfield Historical Society is requesting \$3,500 for a Scholar in Residence grant for Prof. Robert Farrant, PhD and former machinist, to research our collection of 30 boxes of business records, plus some photos and artifacts, from our local machine shop, titled, "Inside the Porter & McLeod Machine Shop: Precision Manufacturing on Hatfield's Mill River." This project, to take place in the Hatfield Town Hall, will leverage the RIG completed in Fall 2016 (which cleaned, rehoused and inventoried the records) and the interest generated by the resultant media coverage. We will answer the following questions, and then present what we've learned through the scholar's report, a public program and a museum exhibit:

--How did the machine shop end up in Hatfield, vs. a more urban machining center like Springfield or Greenfield? How was the company able to continue doing business for nearly 90 years, both domestically and internationally? Did they fill a niche unfilled by other machine shops? How great was their reach?

--How did a machinist job in the small farming town of Hatfield compare with similar jobs in the urban machining centers nearby? And from where did they draw their employees?

--How did a job at the shop compare with a farming job? Was it a better job with better pay?

--What can we learn about the owners?

--What factors led to the company's closing in 1970? Did those factors mirror the decline of precision manufacturing in the CT River Valley in general?

1) Project Information

Disciplines [DR]*

History: Local

History: Massachusetts

Labor Studies

Grant Period Start Date*

05/15/2017

Grant Period End Date*

11/15/2017

How will the project be organized?*

Starting in May 2017, the scholar will travel to Hatfield, MA, approx. once a week through August 2017 to conduct his research. The project director will meet with the scholar at the start of each visit to review findings, discuss and update questions and directions, etc... The scholar will write and complete a paper that presents his findings, with annotated bibliography, in the fall of 2017 (prior to Nov. 15), with a presentation based on his research to take place the following spring. (The Hatfield Historical Society Board realized a fall program, suggested in our LOI, did not work with our existing schedule). As part of his deliverables, the scholar will also identify themes and narratives to be presented in a Porter & McLeod exhibit in the Hatfield Historical Museum. The tentative date for the scholar's spring presentation is Thursday, May 17, 2018, at the Society's Annual Meeting (our program schedule usually gets finalized in June). This presentation would be ideally placed to coincide with the opening of the exhibit in May 2018, giving us greater publicity options.

Describe the expected audience/participants/users for the products and any related program.

This exhibit and accompanying presentation will reach out to a new audience for us -- those interested in precision manufacturing and industrial heritage. Some may know of Porter & McLeod's legacy, but many do not, and with the breadth of the primary sources available in this collection as well as the background and expertise of our scholar (a former machinist himself), we have the opportunity to mine a hidden trove of knowledge. We will also reach out to those whose relatives worked for the Porter & McLeod Machine Shop over its nearly 90-year history, and other local repositories of industrial history, such as the Springfield Armory National Historic Site in Springfield, and the Museum of Our Industrial Heritage in Greenfield. For the online paper detailing our scholar's research findings (or subset of the paper), plus the spreadsheet of collection materials from our prior RIG, the audience will be other scholars and researchers interested in the history of precision manufacturing and industrial labor, as well as those with relatives who worked for the company but who cannot visit the museum or attend the presentation. We will also extend the reach of the scholar's report (and the RIG inventory) by publicizing it on the Commonwealth Historical Collaborative (Catablog).

Why are you taking on this project?*

The Hatfield Historical Society and its two museums (the Hatfield Historical Museum and the Mary Lou & Robert J. Cutter Hatfield Farm Museum) is dedicated to gathering, protecting, and preserving items and information related to the history of Hatfield, MA, making those items and information available to all people; and encouraging an interest in, knowledge of, and appreciation of history in general and the history of Hatfield in particular. Our activities include three spring

history programs, an annual Fall Festival, a November meeting at which we invite the community to share stories of Hatfield's past, and between one and three new exhibits each year in the Hatfield Historical Museum that help tell the diverse stories of Hatfield's past. This project will lead directly to a spring program and a major exhibit in the Hatfield Historical Museum, and will help meet our goal to expand our audience and build our capacity. In the coming year, as we begin plans for our move to a new location (the Town Hall), we also plan to create a financial and strategic plan for the next five to 10 years that will help ensure a solvent future for our organization and its collections.

Furthermore, with this grant, those 30 boxes of recently dirty uncataloged papers will be turned into a compelling narrative about a previously forgotten slice of Hatfield's history -- a story largely unknown outside the town and nearly forgotten within. Without this grant, we have neither the manpower nor the scholarly expertise to continue. And by doing it now, we also hope to reach the adult children of past Porter & McLeod workers (and perhaps a few workers themselves), both as providers of artifacts and stories, and as engaged attendees.

Describe your outreach and distribution plans.*

We will publicize the completion of the project in November 2017, and the public program and exhibit in May 2018 in local media ("Daily Hampshire Gazette," Mass Humanities and PVHN online calendars), as well as on the Hatfield Historical Society website and Facebook page. As a teaser for the spring events, we also plan to preview some elements of the findings at our annual Fall Festival (Sun., Oct. 1, 2017), at which our scholar plans to attend. As we have done in the past, we hope to get the Gazette to do a feature story on the project to promote the public program and opening of the exhibit in the Hatfield Historical Museum. By providing news outlets with contacts for our scholar, one or more former workers from the company or children of former workers (we hope to identify candidates in the months to come), and other precision manufacturing experts who can comment on the findings, we think they will be happy to oblige.

2) Nonprofit Sponsoring Organization Information

Organization's DUNS #*

██████████

Does your organization receive \$750,000 or more each year in federal funding?*

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3) Personnel

Project Director's First and Last Name*

Kathie Gow

Project Director's Position/Title*

Curator, Hatfield Historical Museum

Project Director's Address*

████████████████████

[Redacted]

Project Director's Email*

[Redacted]

Project Director's Daytime Phone Number(s)*

[Redacted]

Name & Email Address of the Person Submitting this Application

Project Treasurer's First and Last Name:*

Bryan Nicholas

Project Treasurer's Position/Title

Treasurer, Hatfield Historical Society

Project Treasurer's Address*

[Redacted]

Project Treasurer's Email*

[Redacted]

Project Treasurer's Daytime phone number*

[Redacted]

Project Scholar/Inventory Taker's First and Last Name*

Robert Forrant

Project Scholar/Inventory Taker's Position/Title*

Distinguished University Professor 2016-2019 and Professor of History at UMass Lowell

Project Scholar/Inventory Taker's's Address*

University of Massachusetts Lowell

Dept. of History

106 Dugan Hall, South Campus

Lowell, MA 01850

Project Scholar/Inventory Taker's Email*

[Redacted]

Project Scholar/Inventory Taker's Daytime Phone Number(s)*



4) Uploads

Events Listing (private and public)*

PM SIR event listing FINAL 4_10_17.doc

Project Scholar/Inventory Taker's CV/Resume*

Robert Farrant CV.docx

Budget*

PM SIR budget FINAL 4_10_17.doc

Additional Upload

Robert Farrant Scholar Statement 4_11_17.doc

Signatures Document*

Hatfield PM SIR contract sm 4_11_17.jpg

Application Files

Applicant File Uploads

- PM SIR event listing FINAL 4_10_17.doc
- Robert Farrant CV.docx
- PM SIR budget FINAL 4_10_17.doc
- Robert Farrant Scholar Statement 4_11_17.doc
- Hatfield PM SIR contract sm 4_11_17.jpg

EVENTS LISTING

Use this form for both public and private grant events. If funded, your public program(s) will be listed on our website. If publishing deadlines permit, your public program(s) will also be included in our monthly email blasts. Please complete ALL the areas below. If funded, please update Mass Humanities with any changes to your event(s) as soon as possible. You may duplicate the table as necessary.

If public events are finalized after the application is complete, you may submit your event online at masshumanities.org/events/submit-an-event/. Private events, date changes, or questions should be emailed to mwheaton@masshumanities.org.

Event/Session/Program Title	Program: Inside the Porter & McLeod Machine Shop: Precision Manufacturing in Hatfield's Mill River
Description	Come see how this modest shop in a small farming town attracted a highly skilled workforce, developed national and international markets for its machines and lasted for nearly 90 years.
Names of Facilitators/Scholars (if applicable)	Robert Farrant, PhD, presenter; Kathie Gow, facilitator
When (day, date, year, start time and end time)	Thursday, May 17, 2018, 7-8 pm
Where (include exact location, including name of venue, address, city, zip)	First Congregational Church of Hatfield, 41 Main St., Hatfield 01038
Contact Phone (include area code)	██████████
Contact Email	██████████
Web Address	hatfieldhistory.weebly.com
Cost (if applicable)	Free
Event Status:	<input type="checkbox"/> confirmed <input checked="" type="checkbox"/> public event <input checked="" type="checkbox"/> tentative (firm by 7/ 1 /2017) <input type="checkbox"/> private even

Event/Session/Program Title	Exhibit: Inside the Porter & McLeod Machine Shop: Precision Manufacturing in Hatfield's Mill River
Description	Come see how this modest shop in a small farming town attracted a highly skilled workforce, developed national and international markets for its machines and lasted for nearly 90 years.
Names of Facilitators/Scholars (if applicable)	Kathie Gow, curator
When (day, date, year, start time and end time)	Opening 5/27/2018 (Memorial Day Weekend, before and after annual parade, times TBD)
Where (include exact location, including name of venue, address, city, zip)	Hatfield Historical Museum, 2 nd floor, 39 Main St., Hatfield, MA 01038
Contact Phone (include area code)	██████████
Contact Email	██████████
Web Address	Hatfieldhistory.weebly.com
Cost (if applicable)	Free

Event Status:	<input checked="" type="checkbox"/> confirmed <input type="checkbox"/> tentative (firm by ____/____/____)	<input checked="" type="checkbox"/> public event <input type="checkbox"/> private event
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ROBERT FORRANT, Ph.D.
Distinguished University Professor of History
University of Massachusetts Lowell
Brief Professional Vitae

- Ph.D. History, University of Massachusetts Amherst, September 1994.
- B.A. 1970, M.A. 1972, History, Northeastern University.
- University of Massachusetts Lowell Distinguished University Professor 2016 – 2019.
- University of Massachusetts Lowell Martin Luther King Jr. Award, 2016.
- Massachusetts Endowment for the Humanities History Commendation, 2015.

SELECTED RESEARCH/SCHOLARSHIP

- 2014 *The Great Lawrence Textile Strike of 1912: New Scholarship on the Bread & Roses Strike*, Robert Forrant and Jurg Siegenthaler, Eds., Baywood Publishing.
- 2013 *Lawrence, Massachusetts and the 1912 Bread & Roses Strike*, with Susan Grabski, Arcadia Publishing, Images of America Series.
- 2011 *Ethnicity in Lowell: Ethnographic Overview and Assessment*, with Christoph Strobel, Northeast Region Ethnography Program National Park Service.
- 2011 *The Big Move: Immigrant Voices From a Mill City*, with Christoph Strobel, Loom Press.
- 2009 *Metal Fatigue: American Bosch and the Demise of Metalworking in the Connecticut River Valley*, Baywood Publishing.
- 2006 *Inside and Out: Universities and Education for Sustainable Development*, with Linda Silka, Eds., Baywood Publishing.
- 2002 *Globalization, Universities and Issues of Sustainable Human Development*, with Jean Pyle, Eds., Northampton, MA, Edward Elgar Publishing.
- 2001 *Approaches to Sustainable Regional Development: The Public University in the Regional Economy*, with Jean Pyle, William Lazonick and Charles Levenstein, Eds., University of Massachusetts Press.

Journal Articles (selected)

- 2016 “‘Into a New Canoe’: Thinking and Teaching Locally and Globally about Native Americans on the Confluence of the Merrimack and Concord Rivers,” with Christoph Strobel, *The New England Journal of History*, 72 (2), 62 – 75.
- 2015 “The Deindustrialization Dynamic: United States Industry and Global Competition,” *Scribner's Dictionary of American History: America in the World, 1776 to the Present* (forthcoming).
- 2015 “Empty Mills and Zombie Cities,” *Labor History*, 56 (1), 76 – 82.
- 2005 “Greater Springfield Massachusetts Deindustrialization: Staggering Job Loss, A Shrinking Revenue Base and Grinding Decline,” *New England Journal of Public Policy*, 20 (2), 67-88.
- 2004 “Work Systems, Corporate Strategy and Global Markets: Creative Shop Floors or a ‘Barge Mentality’?” with Suzanne Konzelmann and Frank Wilkinson, *Industrial Relations Journal*, 35 (3), 216-32.

SELECTED CURRENT AND RECENT INITIATIVES

- Panel Discussant and Session Chair, “Gauging the Past/Calibrating the Future: What Happened to Greenfield’s Tool Industry,” The Museum of Our Industrial Heritage, Greenfield, MA, November 5, 2016.
- Keynote Lecture, “The Lowell Immigration Story in Global Context,” Middlesex Community College Interdisciplinary Weekend, November 4, 2016.
- Panel Moderator, “Food Fight: Inside the Battle for Market Basket,” Film showing and discussion, organized by Labor Studies Interdisciplinary Minor, October 13, 2016.
- Panel Discussant, “Recent Memory: The Chair City Oral History Project”. Conversation on the affects of deindustrialization on greater Gardner, MA, its workers, and their communities, The Gardner Museum, September 22, 2016.
- Roundtable Discussion Moderator, “Determining the Future of Massachusetts Public History,” Massachusetts Endowment for the Humanities Eleventh Annual History Conference, June 13, 2016, Holy Cross College.
- Co-chair, Lawrence History Center Symposium, “Reclaiming Urban Renewal: Community Efforts and Impacts in Lawrence, Massachusetts and Other Industrial Cities,” May 7, 2016.
- White Fund Lecture, “Lawrence as an Immigrant City From Its Founding to the Present,” Feb, 25, 2016.
- Humanities Scholar, “Chair City Project: Job Loss and its Impacts in Gardner, MA,” Massachusetts Endowment for the Humanities funded, Tracie Pouliot, Chair City Art Center, July, 2015 – June 2016.
- Lecturer, American Studies Summer Institute. Nature and Nation Transformed: Rethinking the Role of the Environment in America’s Past and Present – “Reimagining Lowell and Lawrence: Urban Spaces and Sustainability,” July 2015.
- Coordinator, UMass Lowell Commemoration of the Passage of the 1965 Voting Rights Act, March – April 2015.
- Co-Principle Investigator, “Inventing America: Lowell and the Industrial Revolution” National Endowment for the Humanities Landmarks of American History and Culture Program, Tsongas Industrial History Center, Oct. 2015 – Dec. 2016.
- Lead Scholar, “Forge of Innovation: The Springfield Armory and the Genesis of American Industry,” National Endowment for the Humanities Landmarks of American History and Culture Program for the Collaborative for Educational Services, October 1, 2014 – December 31, 2015.

LOCAL HISTORY GRANT BUDGET

Category	Explanation	MH Funds Requested	Matching Amounts		Source of Matching Amounts	Line Totals
			Cash	In-kind		
A. Personnel 1. Scholars and Inventory Takers	Robert Farrant, 60 hrs x \$50/hr =	\$3,000	\$	\$500	RF: 10 hrs x \$50/hr, preparing for public program and giving the talk	\$3,500
2. Other Personnel	Kathie Gow, Proj. Dir., 20 hrs x \$20/hr for meeting each visit w/Scholar to discuss findings & goals, prepping materials, and reviewing Scholar's report.	\$400	\$	\$500 + \$188	KG: 25 hrs x \$20/hr, for edit process of scholar's report and exhibit narrative, plus curating exhibit. Bryan Nicholas, Treas., 8 hrs x \$23.56/hr for fin. recordkeeping and preparing tax forms.	\$1088
B. Travel (from MH only in exceptional cases)	RF: 16 trips from Lowell, MA to Hatfield, MA, to conduct research		\$	\$1,481	RF: (173 mi RT x 16 = 2,768 mi @ \$0.535/mi =	\$1481
C. Supplies		\$	\$	\$		\$
D. Postage		\$	\$	\$		\$
E. Rental (space & equipment)		\$	\$	\$		\$
F. Telephone		\$	\$	\$		\$
G. Publicity	Printing preview exhibit signage	\$100	\$	\$		\$100
H. Other (please specify)		\$	\$	\$		\$
TOTALS		\$3,500	\$	\$2,669		

TOTAL COST SHARE		\$2,669		
TOTAL PROJECT COST (MH funds + cash match + in-kind match)		\$6,169		

SCHOLAR IN RESIDENCE SCHOLAR STATEMENT

Scholar Statement submitted by:
Robert Farrant, PhD
Distinguished University Professor of History
University of Massachusetts Lowell

1. Research questions.

The research question is a straightforward one. How and why did Porter & McLeod start up in Hatfield, MA, and then as it grew to prominence why did it sink deep roots in agricultural Hatfield rather than relocate to the nearby precision metalworking powerhouse cities of Springfield, Greenfield, or Worcester? In addition I want to learn about how the firm attracted, trained, and held on to its skilled workforce. My instincts tell me that had its workers traveled to these larger metalworking cities they would have found more lucrative wages and benefits. What then was Hatfield's and the Mill River's allure?

2. Methodology.

My plan is to spend several days over the late spring and summer acquainting myself with the full contents of the company records that the Hatfield Historical Society has in its possession. I will search for information that reveals how the firm began, who the principals were, who designed its first lathes, and how workers made their way to Hatfield. As I establish the early history, the various company records, including annual payroll, and customer records will help me to understand how the firm grew. My hope is to recreate what the Hatfield firm's national and international reach was and produce a visual representation of this for an exhibit that will be created out of the research findings. A second visual will depict what the company's relationships were in western Massachusetts and New England. Who did they buy their materials and supplies from? Who bought machines from them? Did P & M lathes appear on the shop floors of far larger metalworking and machine tool firms like the Springfield Armory?

3. The significance of the research to be conducted.

Christopher Clark's *The Roots of Rural Capitalism: Western Massachusetts, 1780-1860*, (Cornell University Press, 1990) is one of a handful of monographs that consider how various precision industries took root in rural New England. However, the book stops short of coming to terms with firms like Porter & McLeod, which started later than the book's temporal boundaries. Research indicates that there were a good many small metalworking craft shops spread across the New England countryside. Backyard blacksmith shops, family businesses that produced nails, jack-of-all trade enterprises that repaired just about anything made of metal flourished, but only rarely did this activity result in the establishment of a firm that in its heyday sold its precision machinery around the world. How and why this happened is well worth investigation, especially in the context of our current preoccupation with considering the nature of start-up businesses.

4. The materials to be used and how they relate to the research problem.

The Hatfield Historical Society has a collection of 30 boxes of business records, plus photos and artifacts, from the Porter & McLeod Machine Shop. The Historical Society utilized a Mass Humanities Research Inventory Grant, which allowed them to inventory the records and create a detailed finding aid that I will put to great good use. I will look for information on Porter &

McLeod in the archives at the Springfield Museum of Industrial History, the Museum of Our Industrial Heritage in Greenfield, MA, and the American Precision Museum in Windsor, VT.

5. How the project reflects your research interests.

I spent several years working as a machinist at the American Bosch plant in Springfield, MA, before it abruptly closed in 1986. When I returned to graduate school at UMass Amherst to earn my PhD, my dissertation topic focused on the rise and fall of precision metalworking firms in the Connecticut River Valley. I worked in the archives of several libraries and historical societies up and down the valley from Springfield, MA, to Springfield, VT. In addition, I spent several months doing research in the archives of the American Antiquarian Society in Worcester. I sought to determine how and why so many precision metalworking firms were located in the valley, how they were able to attract, train, and retain skilled workers, how these firms succeeded for decades and then why in a very short period of time near the end of the 20th century the overwhelming majority of these companies closed their doors. This work led to a well-received book, *Metal Fatigue: American Bosch and the Demise of Metalworking in the Connecticut River Valley* (2009) and a series of articles, including: “The Deindustrialization Dynamic: United States Industry and Global Competition,” *Scribner’s Dictionary of American History: America in the World, 1776 to the Present* (2015); “Empty Mills and Zombie Cities,” *Labor History*, (2015); 2005 “Greater Springfield Massachusetts Deindustrialization: Staggering Job Loss, A Shrinking Revenue Base and Grinding Decline,” *New England Journal of Public Policy*, 2002; “Too Many Bends in the River: The Post-World War II Decline of the Connecticut River Valley Machine Tool Industry,” *Journal of Industrial History*, (2002); and, “Neither a sleepy village nor a coarse factory town: Skill in the Greater Springfield Massachusetts Industrial Economy 1800 - 1990,” *Journal of Industrial History*, (2001).

In doing this research, my archival work never turned up any material on the Porter & McLeod Machine Shop. Yet, the firm was successful and long-lived and existed within the hotbed of machine tool innovation that was the Connecticut River Valley. It remained relatively small in terms of workforce when compared with its larger machine tool builder neighbors. And yet, a cursory look at the materials at the Hatfield Historical Society indicates that it had a global reach in terms of market share. And, its machines were built to last as a quick check of machine tool websites revealed that Porter & McLeod lathes are still operating on shop floors the world over. How and why the shop succeeded in a rural environment is an intriguing research question as is the question of where the workforce came from. Materials at the Hatfield Historical Society, including a series of letters workers wrote to the firm seeking employment, will allow me to answer these questions and more as the Scholar in Residence at the Hatfield Historical Society.

6. Three books or articles published within the last 10 years that inform your research.

Anthony J. Connors, *Ingenious Machinists: Two Inventive Lives from the American Industrial Revolution*, State University of New York Press, 2014.

Gerald M. Carbone, *Brown & Sharpe and the Measure of American Industry: Making the Precision Machine Tools That Enabled Manufacturing, 1833-2001*, McFarland, 2017.

David R. Meyer, *Networked Machinists: High-Technology Industries in Antebellum America*, Johns Hopkins University Press, 2007.