

## February 2024

This newsletter is published by CIHC, an organization dedicated to preserving Canada's Industrial history.

About 1900, Brantford was Canada's third largest industrial producer of exports to the world. Its industrial history mirrors the evolution of industry across Canada.

Our Address is Canadian Industrial Heritage Centre, P.O. Box 23055, Brantford Ontario, Canada N3T 6K4

See our website:

[www.canadianindustrialheritage.com](http://www.canadianindustrialheritage.com)

Facebook:

<https://www.facebook.com/CanadianIndustrialhistory>

We are responsible for the TICCIH Canada website at [www.ticcihcanada.org](http://www.ticcihcanada.org)

Contact:

Please send submissions or inquiries to:  
[info@canadianindustrialheritage.com](mailto:info@canadianindustrialheritage.com)

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## Learning from Our Past Building a Strong Future

### President's Report

Dear Members and Friends of CIHC,

I hope you are all in good spirits and health as you read this newsletter. We have some thrilling updates to share with you. Firstly, we're delighted to announce the receipt of a grant from the Stedman Foundation. This generous contribution will significantly bolster our new endeavors, notably the upcoming virtual symposium and the digitization project of the Cockshutt Letterbooks. We recently had the opportunity to inspect these letterbooks at the Farringdon Independent Church, and we are enthusiastic about the potential paths to bring this project to fruition.

Our pop-up exhibit, supported by the Ontario Trillium Foundation Resilient Community Grant, is shaping up beautifully. We've assembled a dedicated project team for this endeavour. Directors Peter and Rob have graciously volunteered to craft the portable display cabinet, bringing their invaluable expertise to the table. We're also thrilled to welcome Lauren Holmes and Cassie Kok as project assistants, who will focus on content development and graphics. With Jazmin steering the project as manager, Lillia's creative vision as our graphic designer, and myself curating, we're confident in a successful outcome.

Our recent visit to the Niagara Falls Power Station proved to be an enriching team-building and educational experience. The "Memories of Brantford's Armenian" project is progressing well, with an update from Peter Muir featured in this edition of the newsletter.

We are also excited to invite you to our Virtual Symposium on March 16. The symposium, themed "The 3Rs of Industrial Heritage Renewal: Rehabilitation, Restoration, Regeneration," promises an enlightening day with esteemed speakers.

Lastly, our website continues to evolve with new features, including virtual exhibit on Cockshutt Moulded Aircraft, and the completion of our Eagle Place newspaper archive. We encourage you to explore these new additions.

Please mark your calendars for March 16 to join us at the Virtual Symposium. We look forward to sharing these moments of learning and celebration with you.

Christina Han, President

# NIAGARA FIELD TRIP NOV 14, 2023

There are a few photos of the exciting tour taken by our Directors to the Tunnel Museum at Niagara Falls Canada.


## THE CONSTRUCTION

### UNPRECEDENTED CHALLENGES


The plant sits on a flat parcel of land under which are many layers of solid bedrock. With only rudimentary dynamite, pickaxes, shovels, literal horsepower and lanterns to work with, engineers and work crews were faced with a number of unprecedented challenges in the plant's construction.

How could a massive wheelpit chamber be dug to a depth of 155 feet (47.25) through the rock? How could a long horizontal water discharge tunnel be excavated and built underground? How could the powerhouse itself be constructed? These were only some of the critical questions that needed to be addressed.


Excavation of the wheelpit chamber, the tailrace water discharge tunnel, the cofferdam and the forebay were part of the first phase of construction that began in 1901.



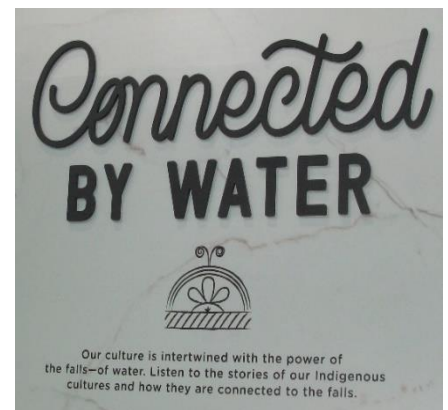
**COFFERDAM & FOREBAY**  
A temporary cofferdam was built in the Niagara River to create the forebay.



**WHEELPIT**  
Extends 12 storeys beneath the plant's main floor and houses the turbines, shafts, bearings and other equipment.



**TAILRACE TUNNEL**  
Takes the water discharged from the turbines and carries it back to the Niagara River.



The tunnel is 180 feet beneath the halls of the Niagara Parks Power Station. This remarkable 2,200-foot-long tunnel was excavated with only lanterns, rudimentary dynamite, pickaxes and shovels.

**GLAZED BRICK**  
LOCATION: INTERIOR OF BUILDING (WALLS)  
White glazed bricks were used inside the power station to reflect daylight and maximize lighting in the dim generator hall. The bricks were produced by the Don Valley Brick Works company in Toronto. At the time, the company was the only one in Canada that produced soft mud, dry press and stiff mud bricks simultaneously. The quality was considered high enough that the bricks won prizes at the 1893 Chicago World's Fair, the same fair that introduced Tesla and Westinghouse's alternating current concept to the world.

**DOLOSTONE** LOCATION: BUILDING EXTERIOR  
Dolostone is a variant of common limestone, but stronger and with fewer impurities in the stone itself. Dolostone stonework was carried right to the plant's ground level, even in the forebay, though it was not meant to be seen below the forebay's waterline.

**ROOFING TILE**  
LOCATION: ROOF  
The plant's roof is made of roofing tiles that can be removed to reveal the structure below. The tiles were made in the plant's own kilns, where they were fired at 1,800 degrees Fahrenheit.

**BRASS** LOCATION: MAIN FLOOR, GENERATOR  
The plant's main floor is made of brass. The plant's main floor is made of brass. The plant's main floor is made of brass.

**COPPER**  
LOCATION: ELECTRICAL WIRING, INTERIOR STAIRCASE, WINDOW SILLS, CONTROL ROOM, MEZZANINE DOORS  
Copper wiring carried the plant's electricity. It was also used as an aesthetic on much of the control panel to allow the operator to quickly read the lines like a map. From an aesthetic perspective, copper cladding was used on the exterior walls and soffits, the plant's interior staircase, window sills and control room instruments. The solid wood doors on the mezzanine level were dressed with copper to provide additional soundproofing.

**HOLLOW BRICK**  
LOCATION: CHIMNEY  
The plant's chimney is made of hollow bricks. The hollow bricks were used to reduce the weight of the chimney while maintaining its structural integrity.

**SOAPSTONE**  
LOCATION: CHIMNEY  
The plant's chimney is made of soapstone. The soapstone was used to reduce the weight of the chimney while maintaining its structural integrity.

**QUEENSTON LIMESTONE**  
LOCATION: CHIMNEY  
The plant's chimney is made of Queenston limestone. The Queenston limestone was used to reduce the weight of the chimney while maintaining its structural integrity.







After a guided tour of the Power Station with numerous displays, we descended in an elevator with windows which showed the amazing layers of construction under the building.

Then we walked down the actual tunnel to reach the new observation deck at the river's edge with an exciting view of the powerful waterfall close enough to cover us with the mist when the wind was in the right direction. After our tour we walked over to a restaurant at the Table Rock with an amazing view from our table overlooking the falls below us.

Further along the parkway is located a statue of Nicola Tesla, the inventor of alternating current which made the transmission of electric power over long distances possible. Many other important inventions made by Tesla are on display in the museum.

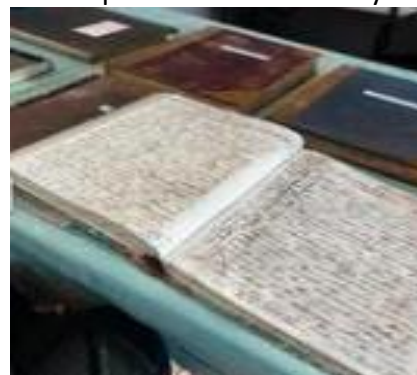
Another project is in the works at Niagara involving a Brantford company which will be the prime consultant and architects for a \$200 million transformation of the historic Toronto Power Generating Station into a five-star hotel overlooking Niagara Falls.

+VG Architects (The Ventin Group) was the design leader for the winning proposal submitted by Pearle Hospitality to Niagara Parks Commission for the restoration of the National Historic Site. Plans call for the restoration to include restaurants, multiple indoor and outdoor public viewing areas, a craft brewery, a wellness and social spa, theatre, museum and art gallery and event space.



## A NEW LONG-TERM PROJECT FOR CIHC

**THE IGNATIUS COCKSHUTT LETTERBOOKS:** The letter books are 19<sup>th</sup> century physical records kept by Ignatius Cockshutt of all his correspondence and business transactions. CIHC is working in partnership with Helen Kennedy of the Heritage Committee at Farrington Church Heritage Committee, to arrange the digitization of the six fragile Cockshutt Letterbooks preserved in their collection. We are investigating where other volumes are located. This is a long-term project involving special precautions requiring specialized equipment and conservation techniques. Any donations towards this project are welcome.





## **Me, You and the Armenian** Submitted by Director, Peter Muir

We have traveled through the rich legacies of immigrant communities...Jewish, Italian, Chinese, Ukrainian. Now the story of Brantford's Armenian community is being told. The "Memories" project takes a deep dive into a community which results in a 2-day event with a historical exhibit at the Brant Museum, music, food, lectures and an original play, "Me, You and The Armenian".

On March 23 at 1:00, we will be holding our Preview event which gives a taste of what we are working on. You can find out more by visiting [branttheatre.com](http://branttheatre.com).

The story of the Armenian community in Brantford is a vibrant and passionate story. The first recorded mention of Armenians is in 1889, Colonel Henry Cockshutt's visit to Constantinople, when 10 individuals were recruited and brought to Brantford.

Starting with Massacres in 1892 through to the Armenian Genocide of World War 1, Brantford became known as a safe place for a thriving community of Armenians attracted to its factories.

By 1908 there were 520 Armenians in Brantford. From a Titanic Survivor to a tragic Romeo and Juliet story, it is a tale of adventure and pride.

Although Brantford was a significant stop in the Armenian diaspora, like many other immigrant stories, members of the community moved on to other stops.

We are currently interviewing members of the community and searching for stories and artifacts. If you have anything you would like to contribute to the Armenian story, contact Peter Muir - [btheatre@rogers.com](mailto:btheatre@rogers.com).



## DID YOU KNOW? JAMES HILLIER ( 1915 -2007)

One of world's top scientists/inventors/problem solvers was a Brantford Boy?

- Graduate of BCI&VS; scholarship to University of Toronto in math and physics.
- Co-inventor of the resolving electron telescope which magnified bacteria and viruses, to 200,000+ and saved many lives in medicine.
- It was further developed to study DNA.
- Worked for RCA (Radio Corporation of America) for over 35 yrs. Retired as Executive Vice President.
- Held 41 patents for different devices and processes.
- Had James Hillier Elementary school in Brantford named after him.
- Many awards included: Order of Canada, U.S. National Inventors Hall of Fame, Canadian Science & Engineering Hall of Fame, honorary degree from Laurier, Brantford's *Walk of Fame*.
- In 1992, the Dr. James Hillier Foundation, composed of several local volunteer representatives, was established when Hillier donated \$500,000 and other donors built up the fund to be awarded in perpetuity. By 2018, more than \$1,000,000 had been awarded by the Foundation.
- Scholarships are awarded to Brant/Brantford high school student toward an undergraduate degree in science or technology, to be used for general academic fees for up to \$5000 per year up to 4 years \$20000.
- The Foundation has preserved many of Hillier's artifacts – important papers, plans, patents, etc. at PharmaChem, Inc. owned by Apotex Pharmaceuticals at 34 Spalding Drive, Brantford. It includes a 9-hour film, *Through the Looking-Glass*, a compilation of interviews with Hillier. The public is welcome to tour the exhibit by making an appointment by contacting the Foundation. Their website is <https://www.jameshillierfoundation.com/>.
- Brant Museum and Archives also has a collection, including about 40 photos, scans and diagrams of different aspects of the electron microscope and a real electron microscope!



## FREE Virtual Symposium

**Set Aside Saturday, March 16th 10am - 3pm (EST).**

<https://canadianindustrialheritage.com/virtual-symposium>



CANADIAN INDUSTRIAL  
HERITAGE CENTRE

### Virtual Symposium

The 3Rs of Industrial Heritage Renewal:  
*Rehabilitation, Restoration, Regeneration*



**FREE PUBLIC EVENT!**

on  
Saturday March 16th, 2024  
10 am - 3 pm (EST)

<https://canadianindustrialheritage.com/virtual-symposium>



CANADIAN INDUSTRIAL  
HERITAGE CENTRE

Saturday March 16th, 2024  
10 am - 3 pm (EST)

### Symposium Speakers Schedule

Each Speaker will be followed by a 10-15 min Q&A + Discussion period.

Welcome & Introduction.	10 - 10:05 am
Dr. Christopher DeSousa, Ph.D.	10:05 - 10:25 am
The Broom Factory: Jon Jeronimus.	10:35 - 10:55 am
Eliot Perrin, Ph.D. candidate Concordia University.	11:05 - 11:25 am
Oil Museum of Canada: Erin Dee-Richard, Curator.	11:35 - 11:55 am
Lunch & Chat.	12:05 - 1 pm
Keynote Tara Tran, Senior planner/project manager, City of Brantford.	1 - 1:30 pm
Wrap-Up.	1:45 - 2 pm

*Keep checking  
the CIHC website  
as more  
information gets  
posted!*



## SPEAKER PROFILES



**Celebrating the Past On Our Journey Forward:** Reflections on Best Practices in Integrating Heritage Open Spaces and /Sustainability in Brownfield Development.

**Christopher De Sousa**, Professor & Associate Director, School of Urban and Regional Planning, Faculty of Community Services, Toronto Metropolitan University.



**Kingston's Old Bailey Broom Factory:** Slated for demolition in 2024, one of the few historic industrial buildings is saved for use as offices and a café – at a price!

**Jon Jeronimus**, Architect, RAW Design, Toronto and Kingston



**From Nickel To Nature:** The Impact of Regressing Programs on Industrial History in Sudbury, Ontario

**Eliot Perrin** is a History PhD candidate at Concordia University. His research interests include deindustrialization, public history, heritage, commemoration. He is also the archives coordinator at Concordia's Centre



**Oil Museum of Canada:** The Little Museum on an Oil Field

**Erin Dee-Richard** is the Curator/Supervisor at the Oil Museum of Canada National Historic Site.



**City Of Brantford's Mohawk Lake District**

**Tara Tran**, Senior Planner/Project Manager, City of Brantford.

**[JOIN ZOOM LINK HERE](#)**

# ANNUAL MEETING OF CIHC IS BEING PLANNED FOR MAY

## EXECUTIVE AND DIRECTORS 2023



President Christina Han

Vice-Pres. Jean  
Farquharson

Secretary & Treasurer  
Ray Wright

Chairman John Kneale

### DIRECTORS

Bill Darfler

Tony Cockshutt

David Neumann

Lillia Dockree

Rob Adlam

Peter Muir

Be sure your membership is up-to-date so that you may vote in the election or re-election of Directors, by-law changes, and other motions. Memberships, due in January, are available at <https://canadianindustrialheritage.com>

Present by-laws permit CIHC to have up to 11 directors. The by-Law Committee is working with a Pro Bono group to assess any changes required by the Ontario Government relating to the new Non-Profit ... Act.

Paid-up members should receive an Annual Report package from the Secretary Treasurer Ray Wright by e-mail and later a link to the virtual Zoom meeting.

## KNOW YOUR DIRECTORS: PETER MUIR

We congratulate CIHC Director **Peter Muir** on the extensive newspaper article released in the *Brant Beacon* of February 10, 2024, about his very impressive career in theatre. He became an accomplished actor, stage manager, playwright and director, and worked with many well-known theatre people in a variety of theatres across Canada, garnering both a Genie Award and a Dora Mavor Moore Award. After teaching at George Brown College, he came to Brantford and was Editor of the Brant News and Artistic Director for Theatre Brantford, directing many shows at the Sanderson Centre. His strong belief is to bring culture to Brantford, and to dramatize Brantford's stories. His aim to bring different cultures together and reduce prejudice has led him to work with the Indigenous Community, to work on the Memories Project of Brantford's Immigrant experience, and to work with top professionals in Grandview Theatre to create a traveling play telling the stories of people along the Grand River. He says: "As an artist, this is where I am supposed to be." Thank you, Peter, for being who you are, and helping CIHC to tell Brantford's Industrial stories!

## THE ONTARIO TRILLIUM FOUNDATION PROJECT

The Ontario Trillium Foundation Resilient Community Grant Project is proceeding well with regular planning and work meetings. We are designing a portable pop-up display box which can travel and be opened up to display artifacts on various themes; as a way to help publicize collections, and increase awareness, interest and attendance of patrons after the lull created by COVID.



CIHC is collaborating with South Dumfries Museum, Paris Museum and Historical Society, Waterford Heritage and Agricultural Museum, and Brant Museum and Archives to create displays on three themes.



The group Committee met recently to brainstorm and design the box; which will be made flexible enough to be used to accommodate various artifacts.. With help from each museum the project team has received a list of possible artifacts to use, and will research and select what is appropriate for each display. Peter Muir has volunteered and begun to build the box with Rob Adlam assisting him.

Our Project Manager, working with the Research, Collection and Exhibition Committee, and a team of assistants have been hired to help design the pop-up display box and the exhibits. Dr. Christina Han, an experienced curator, has volunteered to curate the exhibits and will teach and guide the assistants through the process.

**The themes are Inventors, Industries and Marketing; Fibers and Fabrics; and Communication.**

**The opening gala Inventors, Industries and Marketing will be held at the Paris museum, June 22<sup>nd</sup> 2024.** The displays will be rotated to each museum. We are very excited about this collaboration project which will be shared with the public.



Advertisement photos (above) courtesy of the Paris Museum & Historical Society Collections.





CANADIAN INDUSTRIAL  
HERITAGE CENTRE

# CANADIAN INDUSTRIAL HERITAGE CENTRE

## Membership Form

### Benefits of Membership in the CIHC...

- Participation in the Annual General meeting, and the election of directors.
- Regular updates on our activities through the CIHC Newsletter
- 10% Discount on most Purchases
- Special invitation to all CIHC events

### Your Membership Helps us All...

- Expand and conserve the CIHC collection
- Advocate for the preservation of our extensive industrial heritage
- Promote awareness of the industrial and innovation heritage and its importance to our future and quality of life
- Liase with other national and regional heritage groups

**MEMBERSHIP STATUS** - **RENEWAL** ☐ **NEW** ☐ **DATE:** \_\_\_\_ / \_\_\_\_ /202\_\_

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, Prov.: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

**Membership Fees category:** Student \$10 ☐ Individual \$20 ☐ Family \$25 ☐

Family Member(s) at Same Address \_\_\_\_\_

I hereby consent to receive information by electronic-transmission from CIHC ☐

**Yes !** I would like to make a donation to the CIHC of \$ \_\_\_\_\_

Donations of \$20 or more above membership fees are tax deductible.

Charitable number #861470623RR0001

**Method of payment:** - **Cheque** ☐ **Cash** ☐ **OnLine** ☐

Please Make cheques payable to the Canadian Industrial Heritage Centre.

Our mailing address is - P.O. Box 23055, Brantford, ON N3T 6K4

Membership Fees are for the Calendar Year. Those joining after October 1st will be entitled to membership through to the end of the following calendar year.

visit - [www.canadianindustrialheritage.com/membership](http://www.canadianindustrialheritage.com/membership) - To Pay on-line

Are you interested in volunteering with us ? ☐

Areas of interest/comments/suggestions: \_\_\_\_\_

Information collected on this form is for CIHC membership records only.