

# Bytown Times

Volume 30, No. 2, March 28, 2010

ISSN 1712—2799

**NEXT MEETING**

**WHEN:**

Sunday, March 28, 2010

Meeting begins at 1:11 PM

Workshop begins at 11:00 AM

**WHERE:**

Qualicum & Graham Park  
Community Centre

25 Esquimault Ave., Ottawa

**MEETING AGENDA:**

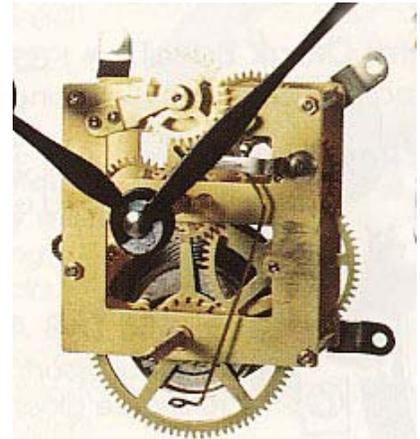
- To Be Determined
- Show and Tell

## TESTING THE INDIAN-MADE NAYAKS MOVEMENT

When the Indian made movements first became available as substitutes for American movements, I decided to purchase and test one for durability and dependability.

When I purchased the time only movement in 1993, I dismantled the movement to inspect all parts, take measurements of pivot diameters, mainsprings and determine the quality of workmanship as delivered from the factory.

Overall, the quality was considered satisfactory for testing. However, I



*continued on page 3...*

**INSIDE THIS ISSUE:**

Testing the Indian-made Nayaks Movement	1 & 3
March Workshop	1
Elemental Horology: Telling Time by Water	2 & 3
Update on Training Activities	2
January 2010 Meeting - Pictures	4 & 5
List of Local Supply Shops	5
Club Info & Contacts	6
Secretary's Corner	6
The President's Desk	6

## MARCH WORKSHOP: HOW TO DETERMINE THE CORRECT (BARREL) MAINSPRING LENGTH

At the next meeting, Dan Hudon will give a workshop entitled: 'How to determine the correct (barrel) mainspring length'. One of the objectives of the workshop is to encourage participants to consider mainspring dimensions when working on their clocks.

The workshop will begin at 11am and last until around 12:30pm.

Participants are asked to bring a barrel with the accompanying arbor and mainspring. A micrometer/calipers, calculator and notepad will be useful.

Dan will introduce two different formulas. Both are intended to calculate the maximum mainspring length for a given thickness of spring.

There will be a discussion on the consequences of springs that are too short or too long.

*Information provided by Dan Hudon*

## ELEMENTAL HOROLOGY: TELLING TIME BY WATER

Along with sundials, ancient peoples used water to fashion timepieces.

Dating as far back as 1500 B.C. (in Egypt), water clocks (or clepsydra—Greek for “to steal water”) were used to tell time. Water clocks were favoured over their counter-parts, sundials, because they overcame the one major downfall of the sundial: they could tell time at night as well as day.

There were many different forms of water clocks. One involved filling a large container with water, then placing a smaller metal bowl, with a small hole cut through the base, on top of the water in the larger container. The observer could tell a certain amount of time had passed when the small bowl finally filled with water and sank to the bottom of the larger container.

The most common form of ancient water clock used two containers of water, one set higher

than the other. The higher container had a small hole cut towards the base of the container. A continual, even amount of water would flow through the hole into the lower container. The container would have markings on the inside which, as the water passed, would indicate the “hours” that had passed.

Between 100 B.C. and 400 A.D., the Greeks and Romans began to “perfect” the water clock, attempting to make it more reliable. They designed feedback systems which would allow the clock to run perpetually. They designed ways to regulate the pressure, to allow for a more even flow of water.

In an attempt to make the water clocks more easy to read, the Greeks and Romans developed a way to include a dial with a hand. The lower container, being tall and narrow, contained a t-shaped float, where the rod stuck up and out of the container. At the top, the rod was notched

## UPDATE ON TRAINING ACTIVITIES

### NAWCC Field Suitcase Course F202: Lathe II Skills for Clock Repair

Building on what was learned in the F200 and F201 Suitcase Courses, students will expand their skills needed to make selected clock parts and tools using a cross-slide.

Prerequisites: F200 and F201 Field Suitcase Courses

When: May 21 through 24, 2010, inclusive

Where: Ottawa (exact location to be announced)

For more information, contact Grant Perry.

### NAWCC Field Suitcase Course F101: Intro to Basic Time & Strike - The American Kitchen Clock

This is a call for students for the NAWCC-F101 Introduction to Basic Time and Strike – The American Kitchen Clock. This is only the second time that this course has been offered in Canada.

This is an excellent opportunity for anyone interested in repairing and/or maintaining antique clocks. This four-day course, offered by the NAWCC, is the first course in an expanding series of clock repair offerings. This course is the required prerequisite to other NAWCC clock repair courses.

The course will be offered in Ottawa, May 21 through 24, 2010.

If you are interested in taking the course please contact Grant Perry as soon as possible, as he will be making a decision on the running of this course based on enrolments.

*Training info provided by Grant Perry, who can be reached by email at [paretime@rogers.com](mailto:paretime@rogers.com)*

## NAYAKS MOVEMENT, CONT'D

did make two modifications which I considered necessary. The first modification concerned the pallet angles. The escape wheel teeth struck the pallets almost flat on their faces and this in my opinion would cause resistance. I checked the pallets for hardness and altered the angle of the pallets so only the tips of the escape wheel teeth would hit the pallets. The second modification involved the hardening of the pallets which were too soft.

I re-assembled and tested the movement for 17 years before it stopped running. During the testing period the movement kept good time and ran as well

as any American clock. I took the movement apart to see what needed attention. To my surprise not much. First of all, there was no wear on the pallets. Only two bushing holes were slightly out of round and were bushed. The pivots were still in good condition and required only polishing. A general cleaning took care of the rest.

Conclusion: these movements are worthy of consideration should a replacement movement be required.

*Article provided by Dan Hudon*

## WATER CLOCKS, CONT'D

and fitted into a gear behind a clock dial. The gear was linked to the hand on the dial. As the water in the container raised, so did the rod, which thus turned the gear and caused the hand on the dial to move.

Water clocks have long since been abandoned as a main source of telling time, however they still exist in modern times, as novelty items and pieces of art.

One such example of a modern water clock is

the ChronArte Canne; a wall clock with a liquid display. The ChronArte has 12 clear, vertical tubes which stand lined up on a base. Each tube is labeled "1" through "12"; one for each hour of a 12-hour cycle. Each tube has 6 evenly-spaced markings which mark every 10 minutes of the hour. As time passes, each tube fills from the base-up, one after the other. When all 12 tubes are filled, all the tubes empty completely, and the cycle begins again. The entire clock is 121 cm high x 72 cm wide. To see a picture of the clock, or to find out more information, please visit the following website:

[www.chronarte.ch/Englisch/Canna/Canna\\_Clocks.htm](http://www.chronarte.ch/Englisch/Canna/Canna_Clocks.htm)

*Article provided by Erin Fox*

### HAVE YOUR SAY

**Are you bursting with grand ideas for the club?**

**Maybe you just want to be a bit more involved?**

**Exciting positions as**

**Club Officers are available.**

**We are currently looking to build an Awards Committee. Let us know if you're interested in participating, or even being the Committee Chair!**

### HOT TOPICS

**Have a great idea for a topic you'd like to see presented at a meeting? Let us know! We're looking for your ideas!**

**Want to do the talking? Let us know and we'll set it up!**

### May 30th - Trip to Museum

In celebration of the Canadian Clock Museum's 10th Anniversary, our Chapter will be visiting the museum in Deep River, ON, on May 30th, 2010.

# JANUARY 2010 MEETING - PICTURES

Our January 2010 meeting was jam-packed with avid buyers and sellers, keen on the horological finds in our latest Annual Auction.

Thanks to Past Chapter President Maynard Dokken for conducting the Auction. Thanks to all the members for participating, especially those whose donations and purchases helped us reach our goal for our projector fund!



# JANUARY 2010 MEETING - PICTURES



## TORONTO INVITATIONAL

The Annual Toronto Invitational Meeting is coming soon!

Here are the details:

When: May 2nd, 2010

Where: Travelodge Airport Hotel  
925 Dixon Road,  
Etobicoke, ON

Entry: \$10 (pre-registration)  
OR  
\$12 (at the door)

Mart: \$15 per table  
Limit of 3 tables/person  
NAWCC members only

## LIST OF LOCAL SUPPLY SHOPS

- Metal Supermarkets: 2900 Old Sheffield Rd., Unit 1, Ottawa, 613-747-7511, [www.metalsupermarkets.com](http://www.metalsupermarkets.com)  
[All metal, sheets, rod plates, in small amounts]
- Dowd Supply Co.: 36 Rosemount Ave., Ottawa, 613-236-9493, [www.dowdsupply.com](http://www.dowdsupply.com)  
[Jeweler's Tools, and Equipment (Grobet USA)]
- Lee Valley Tools: 900 Morrison Drive, Ottawa, 613-596-9202, [www.leevalley.com](http://www.leevalley.com)  
[Tools and round Brass Stock]
- Fastenal: 6 Bexley Place, Unit 102, Ottawa, 613-288-1470, [www.fastenal.com](http://www.fastenal.com)  
[Some Metal]
- Busy Bee Tools: 2251 Gladwin Cres., Ottawa, 613-526-4696, [www.busybeetools.com](http://www.busybeetools.com)
- Legere Industrial Supplies Ltd.: 1120 Morrison Drive, Ottawa, 613-829-8010, [www.legereindustrial.com](http://www.legereindustrial.com)  
[Machine mechanical supplies]
- Ottawa Fastener Supply Ltd.: 175 Robertson Road, Ottawa (Bells Corners), 613-828-4117, [www.ottawafastenersupply.com](http://www.ottawafastenersupply.com)  
[All metric and standard fasteners, Tools]
- Dynamic Hobbies: 21 Concourse Gate, Unit 6, Ottawa, 613-225-9634, [www.dynamichobbies.com](http://www.dynamichobbies.com)  
[small brass rods and small diameter piano wire]

## Club Information

This club acts as a meeting place for antique clock and watch enthusiasts. Members are interested in a wide array of topics: some collect, some do research, some do repairs.

Formal club meetings take place five times each year, on the fourth Sunday of every second month, with a break in the summer. Meetings are held in January, March, May, September, and November. Doors open at 1:00 PM.

Club members also enjoy two annual social events: a Wine and Cheese party each November, and a Picnic BBQ each July.

Courses on clock and watch repair are held throughout the year.

The Bytown Times is published five times each year.

Annual Dues for club membership is \$16. Club members should also have memberships to the National Association of Watch and Clock Collectors (NAWCC). NAWCC Dues are U.S. \$65.

## Club Officers & Contacts

**President & Librarian:** Wally Clemens  
Box 311, 4970 Opeongo Road, RR#3  
Woodlawn, ON, K0A 3M0  
(613) 832-3085

**Vice President:** TBD

**Auditor:** Georges Royer

**Membership Chair:** Veronica West

**Secretary &**

**Bytown Times Writer & Editor:** Erin Fox

**Treasurer &**

**Show and Display Coordinator:** Grant Perry

**Immediate Past President:** Maynard Dokken

**Program & Social Director:** Tim Bryans

**Education & Workshop Chairman:** Dan Hudon



## Secretary's Corner

I would like to thank Dan Hudon, Wally Clemens, Juan Antonio Cabieses, Ben Robers, and Grant Perry for their contributions to this issue.

As usual, I would like to welcome members to submit their own articles for the newsletter. Topics can be anything: a review of your collection with pictures, a summary of some research you've gathered, 'how-to' or instructional information, museums and other horological sites you've visited, etc. Articles and pictures can be emailed to me at:

**[erinfoxnawcc111@gmail.com](mailto:erinfoxnawcc111@gmail.com)**

Please visit our website:

**[www.ottawaclocksandwatches.ca](http://www.ottawaclocksandwatches.ca)**

## Notes from the President's Desk

Although its been said before, thank you all for contributing toward purchasing a projector. The investigation is ongoing to determine what make will deliver the biggest bang for our buck.

Great news: Georges Royer has offered to fill the vacancy of Vice President. I will be asking your approval at this upcoming meeting.

A good response was received by e-mail and a trip to help Allan Symons celebrate the Canadian Clock Museums 10th year will be held on Sunday May 30th. Our regular meeting will be held on Sunday May 16th, usual place and time.

Its been a very busy time and I apologize for not charring through on my promise to auction off the few donated clocks remaining from the Projector fundraiser. I hope to fulfil this promise between now and the May meeting.

We are still in winter so please bring dry footwear.

At the time of writing we do not have a main presenter so don't forget to bring your show and tell items.