

The NEMES

NEW ENGLAND MODEL ENGINEERING SOCIETY INC.

Gazette

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Club Business

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NEMES Apparel. We have NEMES denim button down shirts, t-shirts, sweatshirts, and aprons for sale. The aprons are \$20, the denim shirts \$35, sweatshirts \$25, and the t-shirts \$15. Contact Rich Baker if you would like to purchase 978-257-4101.

Dues. The 2016 dues are also due. Please bring your \$25 check to the March meeting or you can try out our credit card system. Or mail a check mail to Rich Baker at NEMES,

Next Meeting

Tuesday, March 1, 2016 7 PM

Charles River Museum of Industry & Innovation

154 Moody Street

Waltham, Massachusetts

Directions are [Here](#).

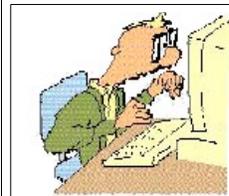
The speaker for the March meeting will be Gary Phillips, speaking on restoring the pipe organ in the Atlantic City Convention Hall.

Membership Info. New members welcome! Annual dues are \$25 (mail applications and/or dues checks, made payable to "NEMES", to our Treasurer Richard Baker) Annual dues are for the calendar year and are due by December 31st of the prior year (or with application).

Deadline for submitting articles is two weeks prior to the next meeting.

Table of Contents

| | |
|---------------------------------|---|
| Club Business..... | 1 |
| Editor's Desk..... | 1 |
| Searching for Speakers..... | 3 |
| From the Museum..... | 3 |
| Shop Talk..... | 3 |
| On Building My First Clock..... | 5 |
| From the Gazette Archives..... | 8 |
| Upcoming Events..... | 9 |



Editor's Desk

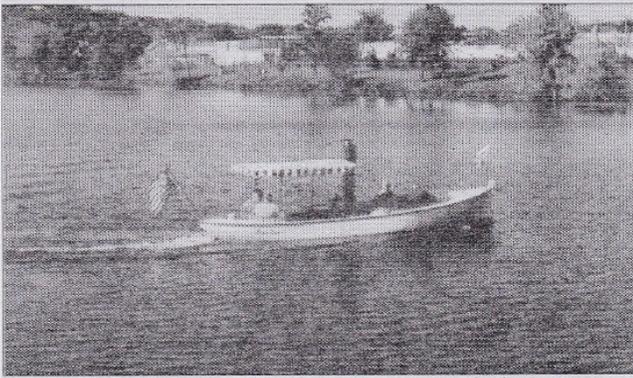
Dan Eyring

This month, we celebrate the 20th year of operation of NEMES with a look back at some of the early events and speakers.

On the next few pages, please join me for a short trip in the NEMES time machine.

Also this month, we feature articles from the steadfast Rollie Evans and Fred Jaggi of the Wireless and Steam Museum.

Finally, we feature the next episode in homemade horology from John Moran, Gadget Builder.



The Lisa Ann with Captain Rolli Evans steaming on the Charles River.

The First “Great New England Steam Expo” Is A GREAT Success.

by Lisa Pacitto

When Jim Gordon first approached CRMI Director Karen LeBlanc with the idea of a steam expo, it's doubtful either one knew the full extent of what they were about to undertake. After a year of planning and organizing, wading in waist-high water to install docks and praying for a sunny day the night before; then coordinating the arrival of 13 steam boats and numerous other exhibitors at 6:00 a.m. the next morning, the first “Great New England Steam Expo” had an auspicious birth, Sunday, October 2nd, 1994.

The Charles River Museum of Industry, the City of Waltham, the MDC and The Federal Savings Bank joined forces to create this first-ever event for the city and the premiere event of its kind in New England; bringing together steam boats, steam engines, model steam locomotives, steam cars and steam toys.

The MDC estimated approximately 3,000 people attended from Waltham and the surrounding communities to view the flotilla of steam launches and numerous steam powered items along The Charles River and Moody Street, as well as visit The Charles River Museum of Industry. With the cooperation of the weather and over 100 volunteers, the Expo was a memorable event for both participants and spectators. Steamboat Captains hailed from as far away as Canada, and many of the exhibitors came from out of state, travelling a long distance to participate. Dean “The Peanut Man” Stetson and his steam powered peanut cart came from Newport, New Hampshire.

Stetson, who's "nuts" about his job, didn't seem to mind making the trip, stating that events like this are like a living history lesson. "It exhibits a lot of the creativity and industry New Englanders are known for and it helps revive the past a little bit longer."

Those who attended not only got to see history being revived, they got to see it being made. It was the first time since the 1800s that this many steam powered boats were on the Charles River. According to The News Tribune, the crowds were entertained by the sights and sounds of steam engines churning and steam whistles tooting. For those who remember steam power it was a day of reminiscing and for those who didn't, it was a day of fascination and education. One spectator, who watched the steam boat parade with her 3-year-old granddaughter, said they were both having a lot of fun. "You don't realize how many things steam has been involved with and it's important to remember the past like this."

The Charles River Museum was honored to present the first Great New England Steam Expo and was pleased that so many enjoyed the event. The Museum would like to thank the City of Waltham, The Metropolitan District Commission, The Federal Savings Bank, the New England and Waushakum Live Steamers, exhibitors and volunteers who helped make the Expo a great success. We look forward to seeing you all again next year for "The 2nd Annual Great New England Steam Expo," September 30th, October 1st, 1995.

The First Gazette Editor

Stephen C. Lovely

From the May 1996 Gazette

For a group like the New England Model Engineering Society to flourish, members have to know what is going on, which means we need a newsletter. This leads to some questions. Should the name of the group be "The New England Model Engineering Society"? Should the newsletter be called "The NEMES Gazette"? What form should be the newsletter take?

I don't know if the group's name should be "New England Model Engineering Society" or something else, and "The NEMES Gazette" just seemed right when I started picturing in my mind what the newsletter should look like. Either or both can be changed based on whatever people want.

On what form the newsletter should take, I have some ideas, but if a newsletter is going to be successful it has to provide what the readers want, not what the editor wants, so PLEASE let me know what you think.

For now it'll be on 8.5 by 11 paper, both sides. How many sheets will depend on how much there is to print, and how much we can afford to print. I'm going to try to do it on a monthly schedule, but it depends on you to get me material to print. The newsletter is to communicate with the members, so we have to have something to say, which means you have to contribute or we won't have anything to say.

Here are some of the things I'd like to include:

- **Hints and Kinks**
- **Events**
- **Technical Articles**
- **Plans and Construction Articles**
- **Book Reviews**
- **Swaps and For Sales (We don't want to compete with the Want Advertiser, but let's see what develops.)**
- **Collaborations (Looking for a partner for that really big project that you don't quite feel up to tackling alone? Let us know about it, maybe one of the other members is wishing they had a partner for the same project.)**
- **Who's Doing What (Let us know what you're building and how it's coming along.)**

Most important, LET US KNOW WHAT YOU WANT

in the newsletter. We want to make the newsletter informative, useful, and fun.



Ronald Ginger, founder of the New England Model Engineering Society welcomed new and old members to the club's Thursday, October 3 meeting. NEMES meets on the first Thursday evening of every month at CRMI. For further information, call 893-5410.

Founder's Corner From the October 1996 Gazette

There has been a suggestion that we set a theme for each meeting, to bring some focus to our talks. Since drill sharpening was suggested, let's make that a theme for the October meeting. If any of you have gadgets for drill sharpening, bring them along. We will devote the second half of the meeting to drills and drill sharpening.

We will still have a general Show and Tell time, so please bring along something to show. I'd like to keep the emphasis on the Show part of that, so let's have more projects like Kay's submarine, or that great steam engine new member Art Corman brought along.

Keep in mind that just 2 days after our next meeting will be the Museums annual STEAM EXPO. I'm hoping to have a big exhibit of our members work. The museum hopes to have steam available, and maybe compressed air. You will have to bring your own tables, and maybe a folding chair. We will set up in the small park right at the end of the foot bridge. Let's make this a big show!

Speaking of shows, the Museum board is happy to have us run a show in February, so start thinking now about the FIRST annual show, February 15, 1997. This show will not be just steam, but any type of working device-engines, clocks, tools, etc.

I have a speaker lined up for the November meeting. Ray Hasbrouch will be coming from New York, with a few models.

Ray is a very prolific model maker, and has designed many engines for building without castings. It was one of

Ray's designs that was the first model engine I ever made. I'm sure you will all enjoy hearing Ray and seeing his models.

We do have a volunteer librarian, so start bringing in those favorite articles or plans to contribute to the club library.

See you Thursday, Oct 3 -- Ron Ginger

Henry's Cannons From the July 1996 Gazette (and 2016 MES)



I was quite surprised when right after Jay gave us a talk on what he was going through in researching the proper way to build a gun carriage for the non-firing version he was building, Henry Szostek got up with a finished cannon that he had made. It's a model of a British Naval Gun owned by a friend of his, Bill Saltonstall. The barrel modeled by Henry was captured from the British at the Battle of New Orleans in the War of 1812.

Mr. Saltonstall's ancestors used it aboard a family ship for a number of years after that. It's a particularly good barrel to model since one time when the ship was in a British port a British Marine noticed the crest on the

barrel and announced he'd be right back with reinforcements to reclaim it as Crown Property. While he was off to get the reinforcements there was a quick trip below to fetch the hammer and chisels and the crest was quickly removed. The Saltonstalls got to keep the gun, and Henry has an authentic model of a British Naval Gun without all the trouble involved in duplicating the Royal Crest that is normally found on such guns.

The carriage was built from plans he got a long time ago at Bliss marine. Since the guns had to line up with the gun ports in the ship, the carriage height and the wheel diameter were specified to fit the ship the gun was being built for.

In Massachusetts the fire chief is the person to see for permission to fire a cannon in a town. Henry educated many a fire chief back in the Bicentennial when he was part of a group that traveled with an old 3 1/2" bore Bronze tube that was 5 feet long and weighed 800 pounds. It fired a pound of powder at a time.

He uses a gun drill that he got cheap for drilling the bore, and suggests sandpaper on a broomstick to clean up the tooling marks. Don't use a pilot hole, the center of the drill acts as a limit on the feed and keeps things from grabbing. A gun drill is a single fluted tool, about 3/4 of a circle, brazed to the end of a tube with a flute rolled into it to match the drill.

The chips get blown out by the oil pumped up the tube and out the drill at 1000 psi. The hole is made in one pass. If you are going to ream the hole after drilling, fill it with grease first. The grease gets pushed out as the reamer goes in and carries the chips out with it. It's also easier to get a true hole down the center of the barrel if you spin the barrel and hold the drill stationary.

Gun barrels are cast solid, then the hole is bored. They solidify from the outside in, and then the impurities and voids that might be present when the last of the metal to solidify are removed when the bore is drilled. They used to do it with the barrel vertical so the chips would fall out.

DONT LET THE TRUNNIONS INTERFERE WITH THE BORE, it makes a weak point in the barrel. Henry has had barrels fail in the proof firing because of the trunnions. He now screws them into blind threaded holes using a hex on the end to screw them in tight, then cuts off the hex.

For getting the wooden cheeks of the carriage to line up properly he makes three soft jaws with the correct angles, clamps up the wood, and mills the top flat.

If firing a cannon, use black powder only. At about 35000 psi the burning of black powder is inhibited, and the burning slows so the pressure doesn't go up much further. Smokeless powder is just the opposite, as the pressure goes up it burns faster and the pressure spikes. So, **NO SMOKELESS POWDER**

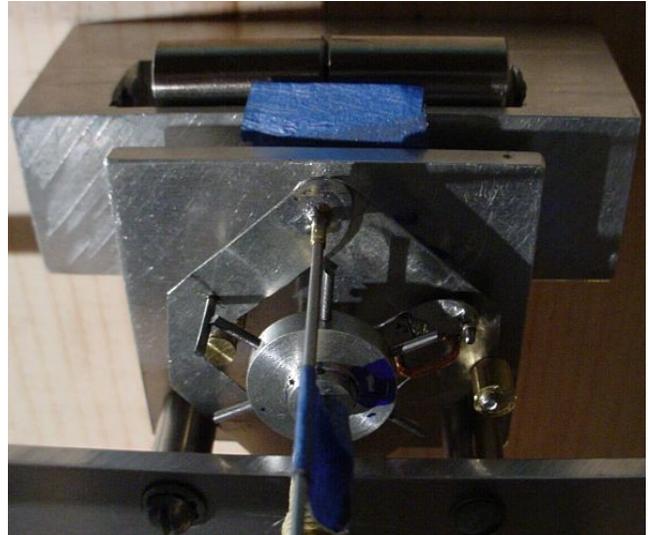
The biggest cannon models that Henry ever built was a

pair of them 30 inches long. He started to build them for fun, but then someone came by who wanted to buy them. He didn't want to sell them, so he quoted them at \$5000. He promptly had a \$1000 deposit, and all the fun was out of it, so they languished under the bench partially done for quite a while.

After a while it occurred to him that he had \$5000 under the bench, and called to see if they were still wanted. They were, even with the cost overrun that put them up to \$6000 for the pair. Henry finished them up, collected the money, and after considerable thought decided to do the sensible thing with the money. He spent six weeks touring the South Pacific.

The man who bought the two thirty inchers collects cannons. He also travels the world on business, looking for cannons everywhere he goes. He told Henry that his are the best. The conclusion is obvious, Henry makes the best muzzle loading cannons in the world.

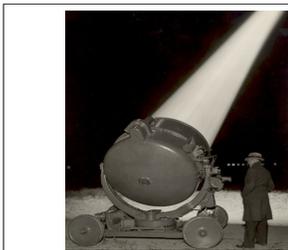
Escape Gear and Escapement



One of the reasons I chose the Arnfield escapement is the simplicity of the escape gear. My Test Escape Gear uses an aluminum collet to hold the wire teeth. There are six radial and six axial teeth (drilled as shown); after insertion, the radial teeth were ground to length and then the ends of the teeth were ground at an angle for a clean release from the stop. Grinding was done in the [Tinker fixture](#) to provide good control of the process.

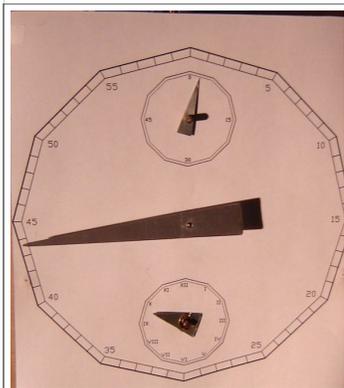


Test Escape Gear



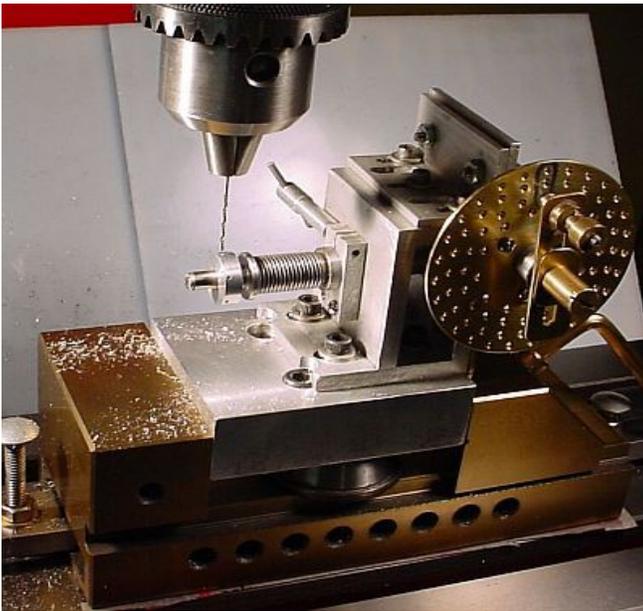
Searching for Speakers **Bob Timmerman**

April is the 20th anniversary of the first meeting of the newly formed NEMES club in 1996. Bob is hard at work lining up story tellers, from among the members who were at those first meetings, to describe what the club was like in the early days. Don't miss this meeting, you will hear great stuff about the early days of NEMES.



On Building My First Clock **John Moran / Gadget Builder**

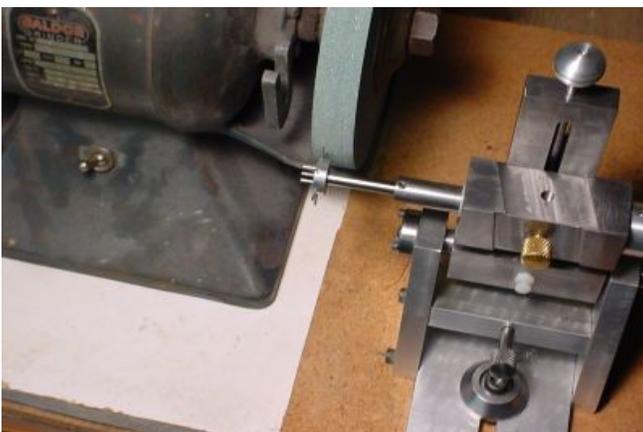
In this spot, I will post over a number of monthly issues John Moran's clock building article, which can be found at: <http://www.gadgetbuilder.com/Clock/Clock.html>



Drilling Radial Teeth



Drilling Axial Teeth



Grinding Teeth at an Angle

The test escapement arms are from scrap tin plate because it could be cut to shape with scissors and

solders well. The stop is piano wire ground flat on one side. Several items are adjustable either with a screwdriver or by unsoldering. It took some time to tweak things so it would work but it was surprisingly reliable considering the construction.

I tried to find information on the Arnfield design in Connecticut, libraries but haven't been successful to date; Yale has the Horological Journal but wants \$20 to copy the 3 page article... Articles concerning the Arnfield Escapement are included in the CD of "Horological Science Newsletter" but I haven't been successful in getting a copy of this either - clock info seems hard to come by for home shop machinists who are dabblers rather than dedicated clockmakers :-)

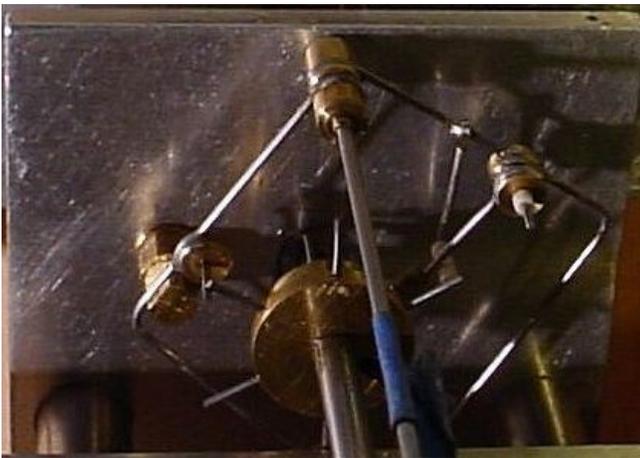
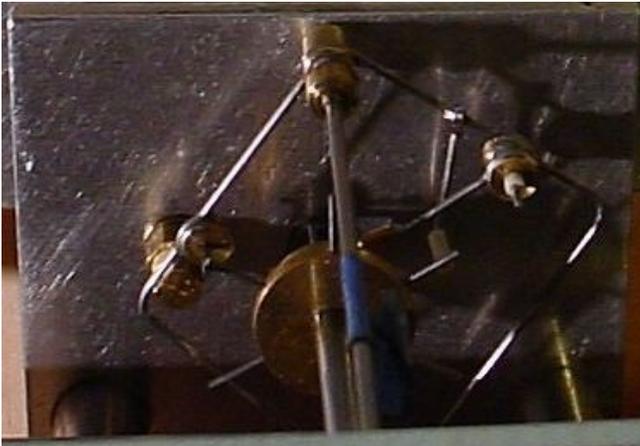
So, I made a drawing of the escapement essentials in IntelliCAD. Basically, a stick figure showing the lift arms and the escapement suspension point. A circle at the escapement suspension point with radius matching the distance where the lifting arm pivots is informative when coupled with circles with radius equal to the length of the lifting arm centered at the end of the escape teeth which lift the arm. This allows varying the sizes of various pieces and measuring the resulting lift angle without having to bend wires and then tweak things (stop for lifting arm, shape of gravity arm, etc). This was very helpful in improving my understanding of the Arnfield design.

I have developed some ad hoc methods for tweaking my version of Arnfield's escapement plus some observations which other experimenters might find helpful:

- The stop on the locking arm should hold the tooth so that the tooth is at 90 degrees to a line from the stop through the escapement arm suspension.
- Decreasing the distance from the escapement suspension point to the lifting arm pivot increases the lift angle. Adjust as needed so the gravity arm is just clear of the locking arm following the lift, necessary to ensure a positive lock.
- The minimum pendulum swing depends on the sum of (all angles referenced to pendulum angle):
 - The lift angle required to move the lock arm from the stop to unlocked
 - The extra lift angle needed to ensure the gravity arm is clear of the locking arm following lift
 - The lift angle required to release the lip (allowing the lifting arm to drop to its stop)
 - Extra pendulum swing beyond the lock and lip release points to ensure reliable operation

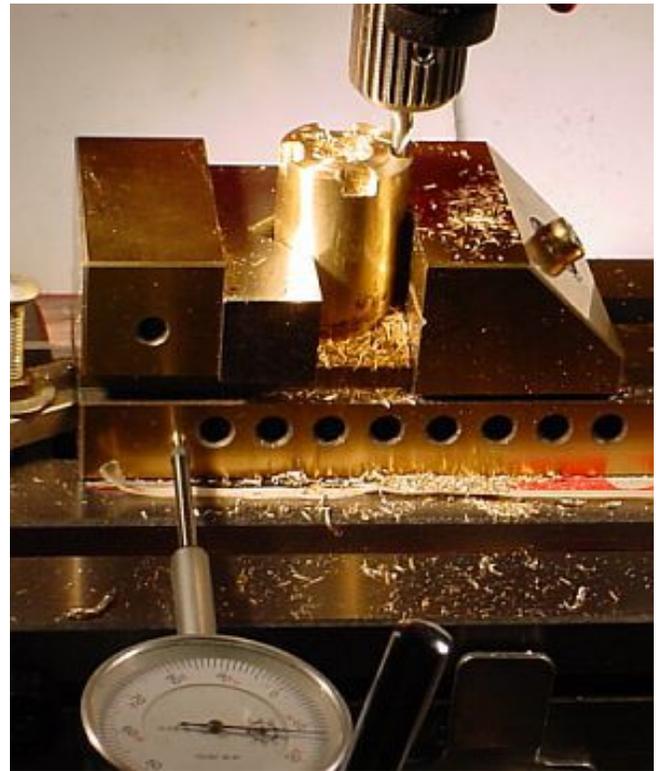
On gravity arm construction: the lifting arm should be on the same side of the gravity arm as the pin which drives the pendulum. This takes up any looseness in the bearing supporting the gravity arm -- putting the lifting arm on the other side causes the gravity arm to twist slightly during the cycle and requires extra lift to compensate.

The pictures of the escapement below show the relationships in the first two points.



Winding Arbor, Gravity Clutch and Ratchet

It seemed only fitting to use a gravity operated clutch (rather than a click) for winding in a clock with a gravity escapement. So, I cut pockets to hold "gravity pills" where the weight of these pills causes them to wedge between the outer and inner pieces of the clutch.



Pockets for "Gravity Pills"



Clutch Parts

When turned one way, friction moves the pills into the wider part of the slot, releasing the clutch to allow winding. The outer part of the clutch has a ratchet which engages a pawl to allow the maintaining spring (inside the front of the outer clutch piece) to keep pressure on the gears during winding; a ball bearing supports this piece on the winding shaft, ensuring that it remains concentric with the brass piece which holds the gravity pills. The winding shaft (not shown) passes through the hour hand shaft. The winding arbor is supported by ball bearings front and back.

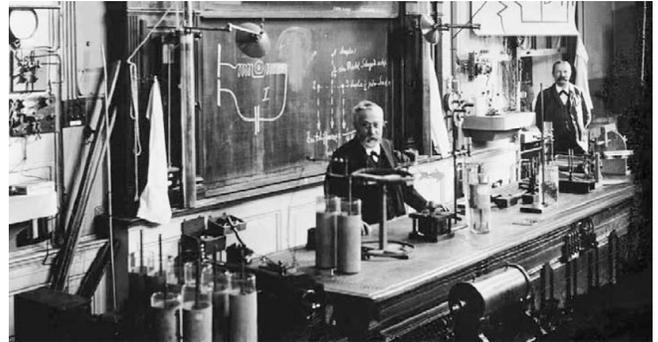


Gravity Operated Clutch

This gravity operated clutch works nicely. It is silent and nearly frictionless when released, yet locks immediately when direction is reversed. There are two pawls used with the external ratchet for safety and to minimize cw movement due to the maintaining spring during winding. The pawls are gravity actuated (of course). The maintaining spring is a nearly straight piece of 0.046 piano wire with a hook on the end to catch a pin of the gear; I may have over-done this - the clock will run for about 10 minutes on the maintaining spring. To work on the clock I remove the weight, apply CW pressure with the key and release the pawls.

Next month, we'll cover testing the clock.

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| | <p>From the Wireless and Steam Museum</p> <p>Fred Jaggi</p> |
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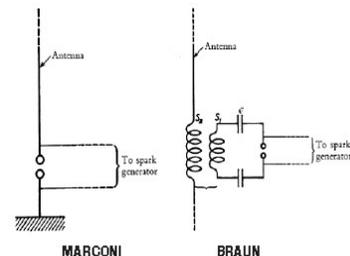
STRASBOURG UNIVERSITY PHYSICS INSTITUTE

The mind of a scientist

All wireless (radio, TV, cell phone, radar, etc.) is based on the transmission of electromagnetic waves first proposed by James Clark Maxwell in 1864 and demonstrated by Heinrich Hertz in 1887.

Among others, Marconi developed a wireless transmitter and receiving apparatus that could transmit a signal for about 30 km. He could transmit no farther until he incorporated the circuits invented by Professor Karl Ferdinand Braun, a physicist, 500 km to the north in Strasbourg, Alsace, then part of Germany.

Electromagnetic waves are produced when there is a change in flow of electric current. These are transmitted at the speed of light and their wavelength is inversely proportional to frequency. Therefore, practical wireless, which requires reasonably short antennas, needs very high frequency oscillating current. In 1895 -1897, Marconi used a spark circuit directly connected to his antenna to produce these currents. At high power the spark itself damped the oscillations.



Braun, who had already discovered the rectifying effect of crystals (think transistors), the cathode ray tube (think TV picture tubes), powdered iron inserts in induction coils (think ferrite core computer memories), studied vibrations, first in solids and liquids, then in electric circuits. In 1898, he was successful in developing circuits that could “tune” these circuits and by inductive coupling, allow the antenna circuit to resonate. Marconi used this concept in 1901 to increase the power of this transmission sufficiently to cross the Atlantic from Poldhu England to Newfoundland just 14years after the discovery of electromagnetic waves.

Marconi received the Nobel Prize in 1909. At the same time Braun received the prize for his work in developing the science of wireless telegraphy.

Braun was not only a brilliant scientist but also an exemplary teacher. Early in his career he taught physics to a school of women in Alsace Lorraine. Here he is in 1905 giving a public lecture on wireless telegraphy. The Kaiser attended the lecture. In those days leaders of countries actually attended scientific lectures from time to time. Braun’s 17 year old daughter transcribed his speech:

When a church bell is rung, we know the bell ringer makes it easy for himself: he draws on the pull rope, but always at the right intervals. He gives a little pull and then waits until the bell has passed through an entire oscillation.; then he give another pull at the right time. All his pulls add up until the sum of the individual pulls causes large movements of the heavy bell.

Now the spark – which has received the signal honor of havingt he whole thing named after it – is a thankless customer. On occasion I have compared it to Saturn, who ate his own sons.

We can’t increase its strength arbitrarily. We are led then to a simple conclusion: If we have already chosen a draft horse from the strongest existing breed, then to get more work done we shall simply have to use two horses instead of one. You don’t need a professor for that sort of advice. (Laughter)

But if I am to harness two horses, I must make sure they don’t pull in opposite directions, else I should be better off with one:and if I took four horses and one pulls forward, the second backward, the third to the right, and the fourth to the left, I shall have four horses to feed and still I shall be unable to budge fromt he spot. So the trick is to train the four horses to pull together....(The Kaiser laughs)

So the spark must be set off with a precision of one hundredth of one millionth of a second. Easy to say, but consider that one hundredth of one millionth of a second is to one second as a second is to – I figured this out beforehand, else I shouldn’t know it by heart (laughter) three years...I tried to make sure in everyway that the

sparks would set in at exactly the right moment, buti t could not be done; I came close to saying, ‘I can’t do anything with these sparks, they are even more stubborn than I am.’

(General amusement)

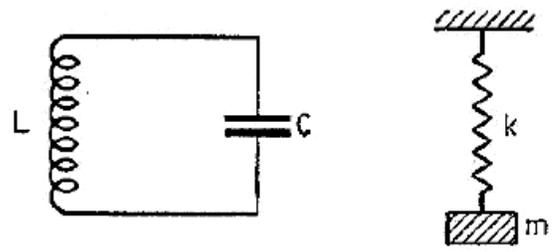
But I would not let go and went back to try just once more,and this time it worked....To begin with the circuits were so tightly coupled that when I drew energy from one circuit it was immediately replenished from the next. They acted like two ideal brothers – when one runs up debts, the other pays them...(His Majesty laughs and shakes his head as if to negate this)

But now the relation is transformed into that of a college student and his father. When one circuit runs up debts the other still pays them, but only after a certain phase delay.

(General amusement)

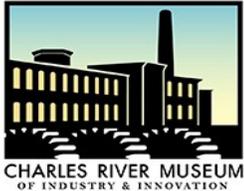
At this point Braun demonstrated his “energy circuit” in action. The printed text states, “Discharges a meter long and as thick as an arm were drawn from a coil.”

The next time you visit the museum, have a look at Bob’s weighted spring demonstration in the Massie building, whichs hows how a capacitor,represented by a spring, and a magnetic field, represented by a weight can be made to resonate with stored energy alternatively flowing from one to the other. Better yet, try this at home yourself.



Then go to the Wireless Building to review the display case showing a copy of Professor Braun’s Nobel Prize and several of his personal items,complements of Ruth Braun, his daughter in law, a friend of Nancy and Bob, who lived in Kingston.

~ Fred Jaggi



From the Museum Dan Eyring

Don't miss the exhibit of Todd Cahill's awesomely detailed, exquisite drawings of industrial architecture of the past. The show opened on March 10th (last night, as I write this) and it was a grand time for all lucky enough to attend.

Gone & Now

Perspectives in Drawing by Todd D. Cahill

Artist's Exhibition at the

CHARLES RIVER MUSEUM
OF INDUSTRY & INNOVATION

February 11th - May 8th

Public Opening and Artist Reception

Thursday, March 10th

6PM - 9PM



154 MOODY ST.
WALTHAM, MA
781-893-5410

WWW.CHARLESRIVERMUSEUM.ORG

A sculptor by training and inclination, Todd Cahill pushes beyond the childhood engineering of toy worlds and constructs through to the visual investigation of drawing. 'Gone & Now' explores the journey of his creative process from its genesis to today. Though devoid of human form, these drawings are very much about people; people he has known, friends that have left, and those that are no more. His metaphoric choice of subject

matter reveals a transcendental connection between what is gone and what is present now.

Beginning with Union Station in Worcester Massachusetts; a high school assignment initiates an excuse to explore an abandoned gateway to the industrialized age. Within this abandoned sea of apathy Todd discovers a positive channel for the emptiness of loss: drawing. Empowered with the feeling he could rewrite the course of history and visually restore the building the city had left in near ruin, he set to task on this epic drawing. In 2006 a renovated Union Station reopened, the marble of the towers now in fiberglass. But this Disneyfication does not solve the problems of the city.

In college, Todd intended to explore the two-dimensional, but, like many on their college journey, the choice of one path leads to another. A pause in drawing led to exploration of the manufacturing process and the use of drawings to envisage three-dimensional worlds.

After surveying the epic steam sites in England some fifteen years later, Todd became disconcerted with the inability to portray the monumental scale of the three-dimensional diminutively. Whitacre was born out of that 'Sturm and Drang' dissatisfaction and desire. It marks the return of pen to page. The multi-volume photographic survey of British steam engines by George Watkins served as source book and point of departure. Art becomes the home where old technologies retire, showing respect for the outdated and elegantly engineered.

In 2008 Paisley was started as a result of personal loss. Todd's opus is derived from a simple postcard image of the JP Coats thread mill, the third largest company in the entire world making something as minuscule as thread, and speaks to that polarity. It was thought that the production of silk thread required the dexterity of the human hand as if something so beautiful and intricate could never be produced by the impersonal power of a mountainous steam engine. In Paisley, you are drawn into a procession of impossible light, streaming in from both sides at once, ascending the ropes past the helical DNA spiral and into ethereal light.

The view of the Francis Cabot Lowell Mill boiler house—and now home to the Charles River Museum of Industry & Innovation—is just after the original trestle that carried the branch line of the Fitchburg Railroad to the coal gasification plant was unceremoniously dismantled to make room for a boardwalk. A modern day blight and barrier removed to ease the path for pedestrian movement. Just visible through the trees is the footbridge where friends now lost were first found. What gets removed, and what is left—or left with; when something is gone you are left with only now.

Waltham Watch Factory as seen from Mt. Feake Cemetery is a view Todd discovered in 2008 after

moving to Waltham. The vantage point is just above the site where D.H. Church is buried. Church was the master watchmaker who engineered many of the machines and processes at the Watch Factory, making possible the production of precision miniature parts that comprise a watch. This final resting spot for Church allows him to keep a supervisory eye on the factory that his engineering mastery made possible.

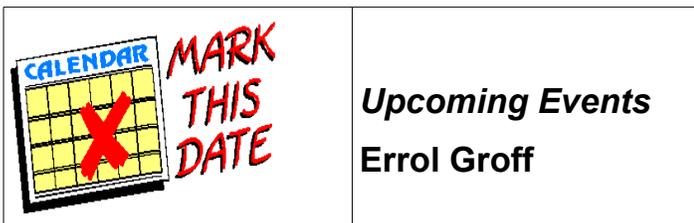
The one commissioned piece in this group was done for Fred Jaggi, the director of the Wireless and Steam Museum in East Greenwich Rhode Island. The drawing was commissioned for his eightieth birthday. Both the museum and Mr. Jaggi represent familiar and fleeting themes in Todd's life.

Todd Cahill depicts monuments that transition the era of artisan-craftsman to that of mass-production through the harnessing of the power of steam. Crumbling ruin becomes shrine to those who never had one. His portrayal of the abandoned is juxtaposed against his elaborate and bespoke settings. The void that accompanies personal loss is the same emptiness found in the structural giants of our past in this exhibition, Gone and Now.

email:belltowncarclub@gmail.com
www.belltownantiquecarclub.org

30 April Cape Cod Mini Maker Faire

10:00 AM to 4:00 PM @ Mashpee High School , 500 Old Barnstable Rd, Mashpee, MA. More information can be found at capecodmakerfaire.com



3 April Spring Training Model RR Show

Show flyer [HERE](#)

10 April New England O Scale Train Show

Show flyer [HERE](#)

9 April Robot Block Party in Providence RI

11 am - 4 pm at the Pizzitola Center, Brown University

235 Hope St. Box 1932 Providence, RI 02912

Contact mary.johnson@risf.net for information

April 24 42nd Annual Belltown Gas & Steam Engine Show & Flea Market

Fireman's Field on Route 16 by the Salmon River, East Hampton CT

Contact: Peter Christianson, PO Box 211, East Hampton, CT 06424 860-267-8394