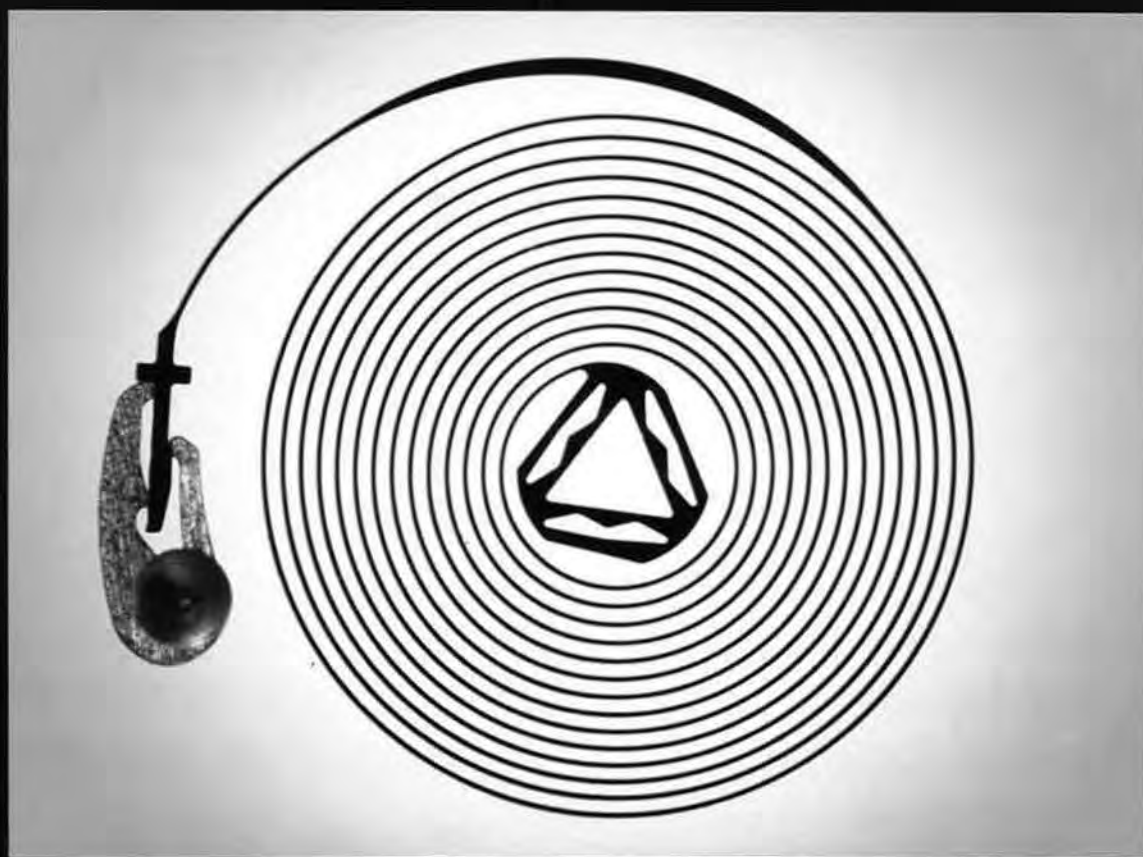


HOROLOGICALTM TIMES

June 2006

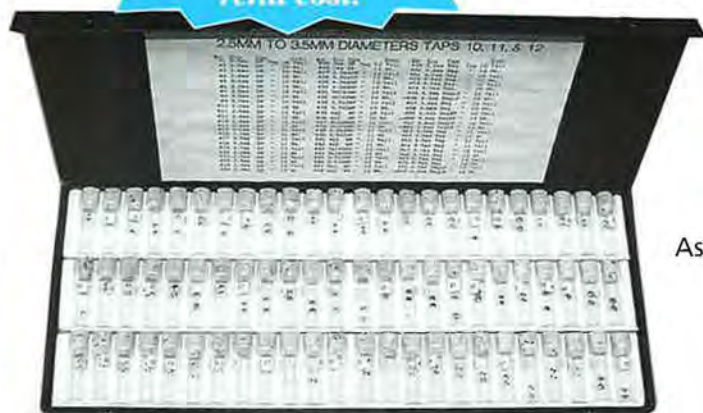


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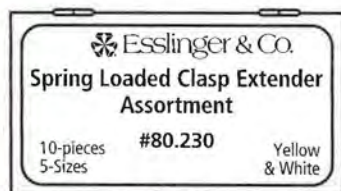
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HOROLOGICALTM TIMES

VOLUME 30, NUMBER 6, JUNE 2006

FEATURE ARTICLES

10

Patek Philippe Spiromax, By Ron DeCorte

24

The Story Behind the Watch, By Dale LaDue

COLUMNS

6

The Modern German Clock Movement, By Mark Butterworth

Part 63, Cuckoo Weights—A Weighty Matter

16

The Hermle Moon Dial, By Laurie Penman

DEPARTMENTS

President's Message, By Jim Door

Executive Director's Message, By James E. Lubic

Questions & Answers, By David A. Christianson

AWCI Material Search

From the Workshop, By Jack Kurdzionak

AWCI New Members

Bulletin Board

Industry News

Classified Advertising

Advertisers' Index

AWCI Employee Directory

EDUCATION

27

AWCI Evening Classes in Clock and Watch Repair

39

AWCI Academy of Watchmaking Classes

39

AWCI Certification Exam Schedule

41

AWCI Board of Examiners Needs Your Help

SPECIAL INTEREST

AWCI Directors' E-mail Address Directory

In Memory of Harold K. Calvert

Wisconsin Horological Society Convention

AWCI's Fiscal Year End

2006 AWCI Annual Convention & Educational Symposium

2006 Educational Symposium

AWCI-ELM Trust Welcomes You ALL Aboard!

COVER

*This month's cover features the
Patek Philippe Spiromax*



President's Message

Jim Door

There is a symbiotic relationship between service persons, material houses, manufacturers, and educational institutions. As John Donne put it: "No man is an Island." Each of these entities is needed for the continued health of the watch and clock industry. One segment cannot survive without the others. Sometimes we become so focused on our segment we forget about the welfare of the others.

As service persons we need the proper training, tools and parts to do our work. The AWCI and the schools around the country are supplying us with the training we need. For the tools and parts we look to the material houses and the manufacturers.

There are hundreds of different 'brands' sold in the U.S. alone, from low priced 'throw away' watches to solid mid-range timepieces to high grade pieces. I am constantly amazed how many times a customer will spend 50-60 dollars or more on a timepiece that didn't cost that much to begin with. For servicing these we rely heavily on the material houses for parts, as there is often no direct availability of parts from the manufacturers, if you can even find the manufacturer.

On mid-priced timepieces the supply houses are still an important part of the equation. Some of the major brands will sell parts directly. Though if one needs parts for several different brands at one time it is much more convenient to order from a material house. This saves on time spent contacting different companies and saves on postage costs.

While many manufacturers are concerned with the quality of servicing by independents, as we move into the higher priced categories we find the companies to be even more exacting. In order to service their brands they want to verify the quality of the skills, equipment and work space in which their product will be serviced. In order to achieve this some companies restrict the

(Continued on page 9.)



Executive Director's Message

James E. Lubic, CMW

June 2006 is the last month of AWCI's fiscal year 2005-06. The President, Executive Committee, Board of Directors, committees, AWCI staff, and a number of industry partners have all worked hard this past year to make AWCI the premier organization for Watchmakers and Clockmakers. I would like to congratulate and thank each individual (too many to list) for their time and dedication to AWCI. And thank you for your membership in AWCI.

It is also time to make those last minute plans to attend your organization's annual convention which will take place August 3rd through the 6th in Seattle, WA. You have been reading for the last few months in the *HT* about all the fantastic educational opportunities that await you in Seattle. This year's convention will truly be time well spent for those who attend.

As a professional in our trade you really owe it to yourself to attend. It is very hard to convey all the positives that come from attending these types of conventions. You will learn about the Affiliate Chapters and the role they play in AWCI's future success. Meet and talk with members who experience the same things as you on a daily basis. One of our Affiliate Chapters, the Chronometer Club, also meets just prior to our convention. They also provide fantastic opportunities to improve yourself.

You will have the opportunity to not only see your Board of Directors in action, but also participate in the meeting. Representatives from the Industry Advisory Board (IAB) will also meet and discuss the future of our trade.

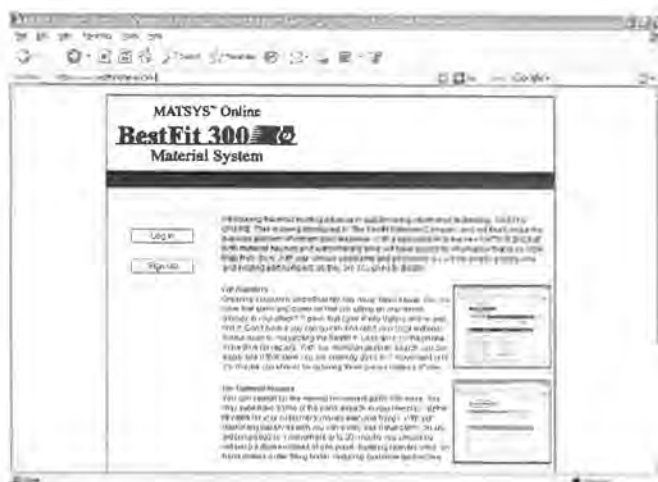
The AWCI-ELM Trust Fundraising Dinner on the *Spirit of Washington Dinner Train* will be extra special. Rolex USA is sponsoring this year's event for the third year in a row. How often do you have the opportunity to have dinner on a train, or even better yet, dinner on a train with 80 to 100 watchmakers and clockmakers and their spouses?

The educational programs on Saturday should be phenomenal. You have read about all of them and the topics in recent issues. The trade fair is sponsored by JIDA members and *HT* advertisers. Come and make some new business contacts during the trade fair and see the latest in tools and equipment.

Don't miss this chance to rub elbows with your peers. You will have a great time, learn so many new things, have so many new ideas of your own, and go home with a new sense of pride about your profession and yourself. I guarantee it!

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David Christianson,
CMW, CMEW, FAWI

Questions & Answers

Question

This is a Pierce chronograph that has parts missing. (See Figures 1 and 2.) Can you help me identify it? It has a B under the balance bridge. It is 13 ligne.



Figure 1

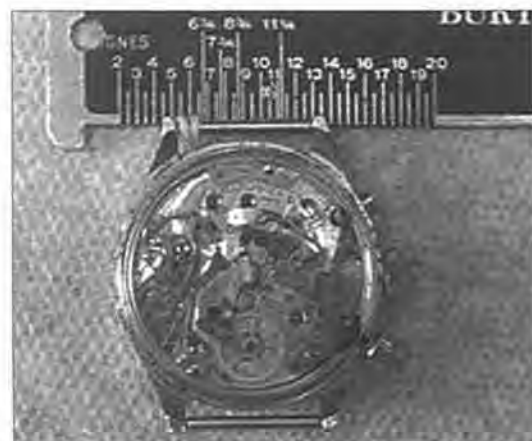


Figure 2



Figure 3

This is the watch marked DENT on the inside back cover. (See Figure 3.) It is 19 ligne, with the Brevet symbol and the numbers 4821-115 under the bridge. I need to know what parts are missing and where I might be able to find them if this is a Brevet?

*Dale H. Nummi
Superior, Wisconsin*

Answer

Your 13 ligne Pierce watch is known as a Pierce "four-in-one chronograph" with a subsidiary seconds, stopwatch, telemeter, tachometer and timeout feature. The watch is a Pierce caliber 130-134-134D and is illustrated in your Bestfit Material Catalogue #111, Part 1, page 290. Although the watch was made in the mid- to late-1940s some parts may still be available through your material supplier. At least it is worth a try. Pierce was founded in 1883 by Leon Levy in Bienne and was known as Leon Levy & Freres. By the 1920s it was known as Leon Levy & Freres, manufacturers of Pierce Watches. In the '40s and '50s they were known for their chronometers and were still

(Continued on page 31.)

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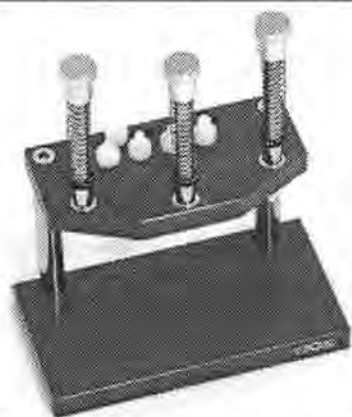
Head B (Ø 7mm): Valjoux 7750, 7770, Valgrange A07111, A07161, A07271

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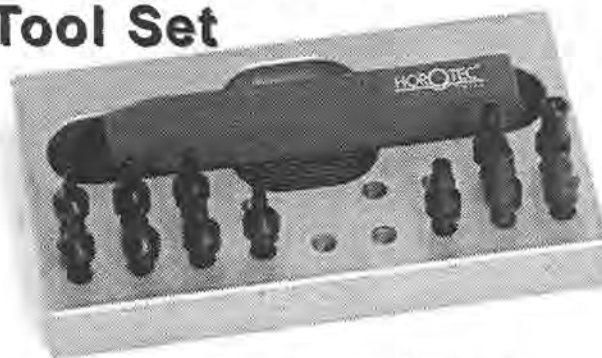
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Mark Butterworth

The Modern German Clock Movement

Cuckoo Weights—A Weighty Matter

Part 63

One would think that the subject of clock weights would be simple and straightforward. Usually that is correct, but there are always those exceptions to trip us up. A number of supply houses supply weights and the good news is that value of the weight is usually a part of the molded weight itself, except in the case of specialty designs. As a result the table provided will simply be in grams. Table 4 provides a conversion to pounds for the various values. (See page 8.)

Table 1 lists the weight requirements for the various Regula brand movements. This is the most common brand and is used in many different brands of finished clocks. It is made by the corporation SBS in Germany also called Thomas Burger, the name of the owner. Most of the movements will be stamped with the series number on the rear plate depending on whether it is a 1-day or 8-day and also the size of the plates. This number will be either 25, 34, 35, 70, 71, or 72.

The weights required for the 1-day unit varies from 275 g to 420 g. The value is determined by several factors: the length of the pendulum, whether it has a carousel or rotating platform on top, and the size of the plates or series number. Since the cuckoo pendulum is very light, the extra long 28 cm unit has a heavier requirement of 420 g. The movement that has a carousel has a requirement of 320 g. An alert individual would realize that although the time requirements might change because of the pendulum length and the weight driving the music box and carousel might be greater, the weight driving the strike mechanism should remain unchanged. This is true. There is a practical problem in that these clocks are being shipped worldwide and brought back home as souvenirs by folks who know nothing about clocks. The simplest thing for them is to have all weights the same. To do otherwise is to invite confusion and a non-working clock for folks getting the weights reversed; it also creates many technical

Table 1: Regula weight requirements

Series #	Type	Pendulum length (cm)*	Weight (g)
25	1 day 2 wt.	Less than 28 cm	275
25	1 day 2 wt.	28 cm or more	420
25	1 day 3 wt.	All	320
34	8 day 2 wt.	All	1260
34ASO	8 day 2 wt.	All	1500
34	8 day 3 wt.	All	1500
35	1 day 2 wt.	All	275
70	1 day 3 wt.	All	320
71	1 day 3 wt.	All	320
72	8 day 3 wt.	All	1750

* Measured from suspension post to center of leaf.



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6/06

Table 2: Hubert Herr weight requirements

Series #	Type	Pendulum length (cm)	Weight (g)
All	1 day	All	320
All	8 day	All	1500

Table 3: Pendulum length conversions.**Note 1" = 2.54cm**

Cm	Inches
19.5	7 3/4
23.5	9 1/4
28.5	11
40	15 3/4
60	23 5/8

Table 4: Weight conversions.**Note: 1 lb = 454 g. 1 oz = 28.4 g**

Metric (g)	English (Lb)
275	0.60
320	0.70
420	0.88
1260	2.80
1500	3.40
1750	3.86

and the 1500 g for all three-weight units. The exception is the automatic shutoff two-weight unit labeled "ASO". This requires extra power to drive the shutoff mechanism and it uses the 1500 g the same as the three weight. There are a number of

repair persons, myself included, who feel that the 8-day unit was traditionally underpowered and that the 1500 g weight should be used for all models. However, the factory specifications are what is provided.

The newer Regula movements will have the pendulum length stamped on the rear plate of the movement if it is NOT 19.5 cm. Pendulum lengths are measured from the suspension post to the center of the leaf or location of the metal bracket used as the pendulum slide. If that is unknown, the slide will usually leave a smooth mark on the stick. If all else fails, choose the center of the stick and find the closest figure. (See Table 3 for pendulum length conversions.)

Regula makes a large plate unit for larger clock cases. It is not so common, but it has a simple scheme. All 1-day units have a 320 g weight and all 8-day units have a 1750 g weight.

The Hubert Herr models follow a very simple scheme. All 1-day units use 320 g. and all 8-day units use 1500 g. (Please see Table 2.)

It is hoped that this helps the reader see at a glance what weights are required for the clock in the event they are missing, suspected incorrect in the first place, or simply mixed up in the shop.

Sources

Anton Schneider Cuckoo Clocks/Carl Baessler
Black Forest Imports, Inc.
Butterworth Clocks, Inc.

Final Tip

Mark both the weight and pendulum with the job number or customer's name with a repair tag. It will reduce confusion and save a lot of time later. It also saves embarrassment from the customer telling the repairperson that the weights and/or pendulum he got back are not the same as those brought in with the clock.

Final thought: "Don't tell your problems to people; 80% don't care and the other 20% are glad YOU have them." —
Lou Holtz

assistance inquiries. The clocks from the Black Forest region are exported to over 80 countries around the world. Many of the inhabitants do not speak any of the several languages that come in the instruction box so the package needs to be very user friendly. Having identical weights also lessens the chance of getting the wrong weights in the box at the factory. As a result, all of the weights have the value of the heaviest one needed. Does this cause a part to wear faster? Yes, but the train that needs the heaviest weight will wear anyway, so having the other trains wear faster than normal makes no difference. Ultimately the unit will need to be restored or replaced if only one train wears the fastest. Shouldn't the strike train play faster with a heavier weight? Yes, but it is not very different as the fly will do some regulation of that problem.

With the Regula 8-day unit the same scheme applies except that there are only two different weights used instead of three. The 1260 g is used for two-weight units

President's Message

(Continued from page 2.)

availability of parts to those who can prove they meet their standards. The AWCI has been working with companies to help our members meet these standards.

Unfortunately this has a negative impact on the supply houses that have traditionally carried these repair parts. Perhaps there is a way for material houses to still handle the parts while not compromising on the standards the factories desire. Will this scenario ever happen? Is it feasible? I don't know but it is worth consideration.

What I do know is that the more we work together, the more we talk, the closer we get to equitable solutions. The AWCI annual convention is one place where we get to know each other better—the repairpersons, the factories and the material houses. The humorist Will Rogers had his own world peace plan. He said if everybody shook each other's hand wars would cease. First we would be so busy shaking hands we wouldn't have time to fight and how can you hate someone you shook hands with? Let's meet at the annual convention, shake each other's hands and listen to each other.



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Ron DeCorte, CMW

Patek Philippe Spiromax

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It was about one year ago that Patek Philippe introduced their new caliber with a high tech silicon escape wheel. The idea behind the new escape wheel was to eliminate the need for oiling the pallet stones, a long-standing scourge of the lever escapement. This year Patek has attacked another area of the watch escapement with yet another development from their Advanced Research department. The hairspring, or “spiral” in French, has presented its own set of challenges from the beginning.

So what is a hairspring and why is it so important? Let’s examine the beast in some detail. In a mechanical watch the number of ticks per second, per hour, and per day are dictated by the hairspring and the balance wheel. The length, width, thickness, and strength of the hairspring, when attached to the balance wheel, form an instrument-of-time in much the same manner, as a fine violin is an instrument-of-music.

Early hairsprings were made from carbon steel, highly susceptible to magnetism, oxidation (rust), and temperature. Over time hairspring materials have evolved to eliminate most of these problems, but not entirely. A spring that is totally non-magnetic, will not oxidize, not effected by temperature, and isochronous, has been a long time dream of watchmakers. Has the Patek Advanced Research team solved all the problems? Time will tell.

An early verge hairspring was usually a simple affair, flat with only a few coils. As time progressed the number of coils



Figure 1

increased when combined with the larger amplitude anchor escapement. Ten-plus coils were now the standard for fine timekeeping watches, but magnetism, oxidation, temperature, and isochronism remained problematic.

A. L. Breguet developed one clever solution to the isochronism problem more than 200 years ago. The outer coil was brought up and above the flat portion of the spring. This simple modification allowed the spring to breathe with less distortion and improved isochronism. One drawback to the “Breguet” hairspring was the increased amount of space it occupied within the watch, about 3 times more.

Metallurgical advances in the late 1800s and early 1900s brought about new hairspring materials that were almost impervious to

oxidation, magnetism, and had very little temperature variation. It was these advances that spawned the mono-metallic balance wheel that we see exclusively in modern watches compared to the split bi-metallic balances of yesteryear.

Skipping ahead in time we now have nanotechnology, or simply put, the ability to build components molecule by molecule in an extremely precise manner. Teaming with other like-minded companies and technical universities Patek Philippe started its Advanced Research department several years ago in search of new horological improvements.

Before we go any further I suppose some are asking, "What is happening to the fine art of watchmaking?" Well I can't answer that question for you. But before you make any conclusions I think we should keep in mind all the earlier developments that have advanced horology.

Technology takes time (excuse the pun). In 2005 we saw a new silicon escape wheel from the Patek Philippe Advanced Research team, and in 2006 they are introducing their new Spiromax hairspring.

And what exactly is the Spiromax? Well for one it is the first non-metallic hairspring intended for production. It is true that glass, and other non-metallic materials, have been used (experimentations) over the last couple centuries. But none of these experiments ever evolved into standing horological revolutions.

In the past all hairsprings required a lot of time to construct, manipulate (form), and adjust for optimum performance (timekeeping). A collet was used to attach

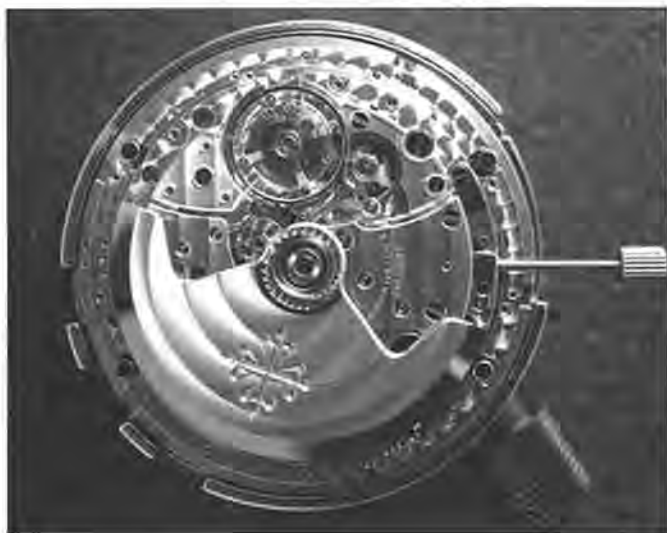


Figure 2



Figure 3

the spring to the balance staff; a stud was attached at the outer end to the balance cock, and the length and over-coil demanded countless hours of people-power for final adjustment.

Figure 2 shows a Patek caliber fitted with the Spiromax. Patek has not assigned a reference number to this new caliber as of this writing. Note: the balance cock and pallet bridge are fabricated of rock crystal in order to facilitate viewing; this feature will not be used in the final production of watches. As this particular movement is a very early prototype, please excuse any minor imperfections in the Cote-de-Geneve.

The material used for the hairspring is silicon-based, but different from the silicon escape wheel introduced in 2005. The exact composition of the spring material is undisclosed at this time. There is no metal contained in its manufacture. Hence it is totally non-magnetic. According to Patek, they tested a number of mechanical watches that used a conventional modern hairspring (anti-magnetic) and found that 1/3 of them stopped functioning when exposed to high levels of magnetism while not one Spiromax watch failed. We live in a world full of magnetism and as a watchmaker I can attest to the influences it has on mechanical watches, especially the hairspring.

Another apparent advantage of the Spiromax is its mass, 2.4 g/cubic-cm as compared to 8.0 g/cubic-cm for a conventional modern spring, a reduction of 70%. The advantage of mass reduction is simple; the hairspring is far less influenced by gravity and shocks.

A Spiromax spring is formed as one piece with the exception of the stud-clip, Figure 3, far left. Uniformity



Figure 4

of the spring is exceptional from the collet (center) to the outer end. You will notice a thicker part near the end of the outer coil. This is Patek's patented terminal curve that helps control the breathing of the spring (isochronism) and would be impossible with a conventional flat spring.

Due to the fact that the spring cannot be lengthened or shortened, as with a conventional spring, the manufacturing process must be extremely accurate (Figure 4).

The technology that makes the Spiromax possible is deep reactive ion etching (DRIE). "Deep" being the key word since until recently it would have been impossible to create a super precision mask given the extreme thinness of each coil as compared to the height. In basic terms this technology is the same used to manufacture computer chips; a mask representing the physical shape of the desired object is created on a wafer and then etched, and finally the mask is dissolved leaving the object behind. I suppose you could call the mask a mold since it dictates the physical shape of what is being fabricated.

Now that we have a basic idea of the fabrication technology let's have a close look at what may be the most important aspect of the Spiromax, isochronism.

The ability of the spring to expand and contract in a uniform manner, as it is being wound and unwound by the balance wheel is critical to the timekeeping. In the following photographs we will see the difference between a conventional spring and a Spiromax.

Figure 5 shows a conventional spring and Figure 6 shows a Spiromax. In these figures both springs are at rest, or I guess we should say not under compression or expansion. Notice the uniformity (spacing) of the coils for both springs.

Figures 7 and 8 show both springs under contraction. Notice the extreme disparity of coil spacing in the conventional spring, Figure 7 at arrow, while the Spiromax



Figure 5



Figure 6

(Figure 8) remains uniform. Obviously the conventional spring is exerting a great deal of lateral pressure on the balance, which is not conducive to accurate timekeeping.

Figures 9 and 10 show both springs at maximum expansion, and again we can notice the conventional spring (Figure 9) has disparity of coil spacing (although not as extreme as earlier) while the Spiromax (Figure 10) remains uniform.

OK, call me a cynic, but I asked Patek for a personal opportunity to see and photograph the Spiromax in action. They graciously agreed and Figures 11 and 12 show what I observed.

In Figure 11 the Spiromax is under maximum compression, and in Figure 12 the Spiromax is under maximum expansion, verifying excellent uniformity through the entire cycle of rotation.



Figure 7

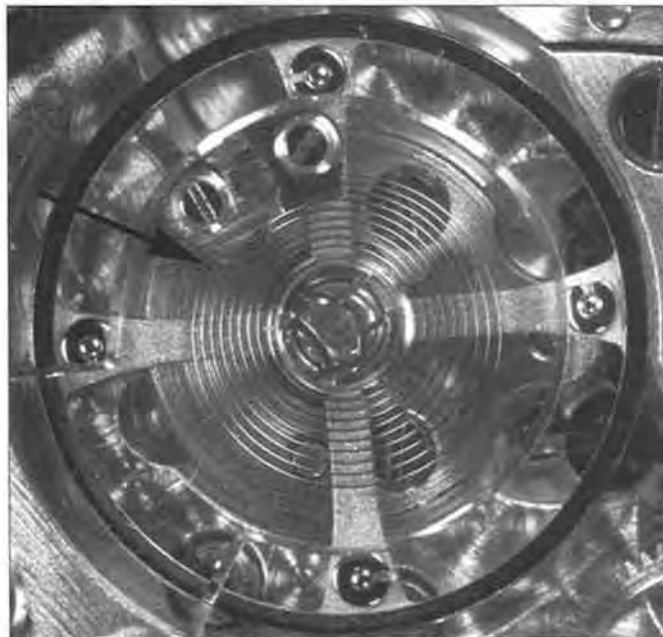


Figure 9

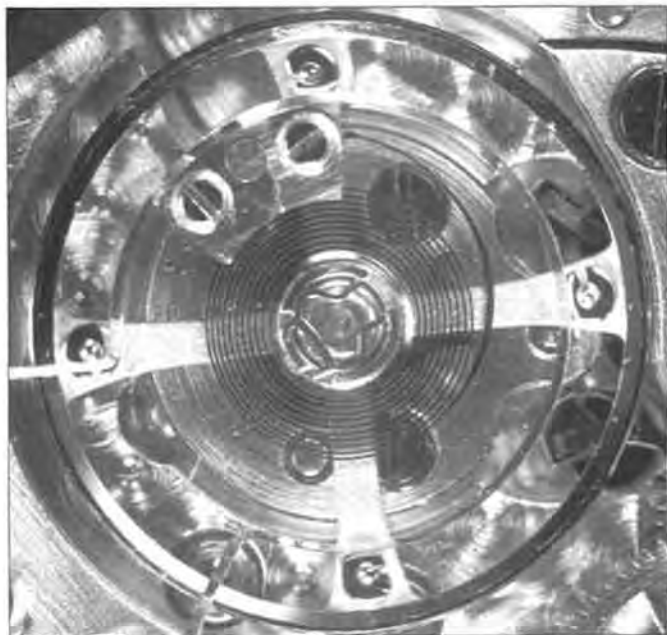


Figure 8

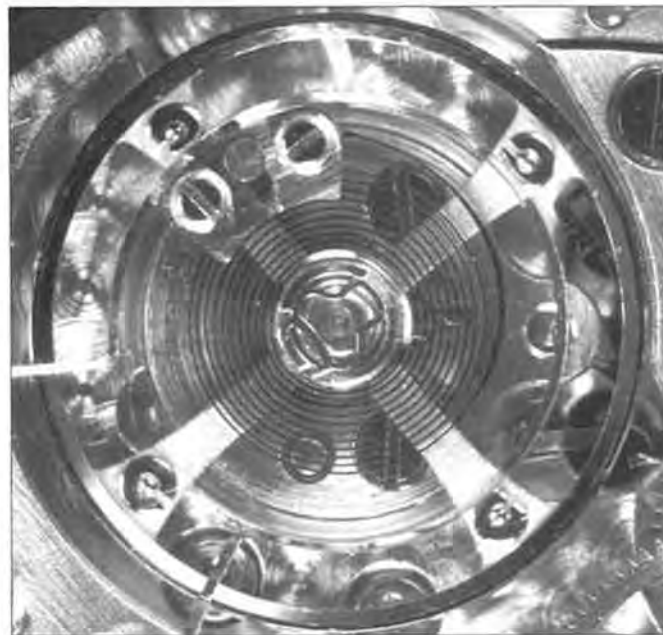


Figure 10



Figure 11



Figure 12

Figure 13 is taken from Patek's patent application.

In conclusion, I'm very impressed with the Spiromax. It's refreshing to see technological exploration for the advancement of horology, and Patek Philippe should be applauded for their efforts.

And what advantage(s) should we expect from the Spiromax? As a watchmaker I think the isochronal integrity of the Spiromax will be its greatest advantage

by establishing what should be a new level of performance for mechanical watches. While its non-magnetic properties and reduced mass should not be ignored either, since they will also be added attributes.

The most logical question I can pose at this time is, "What's next?"

This article is reprinted courtesy of Ron DeCorte and TimeZone.com. ☺

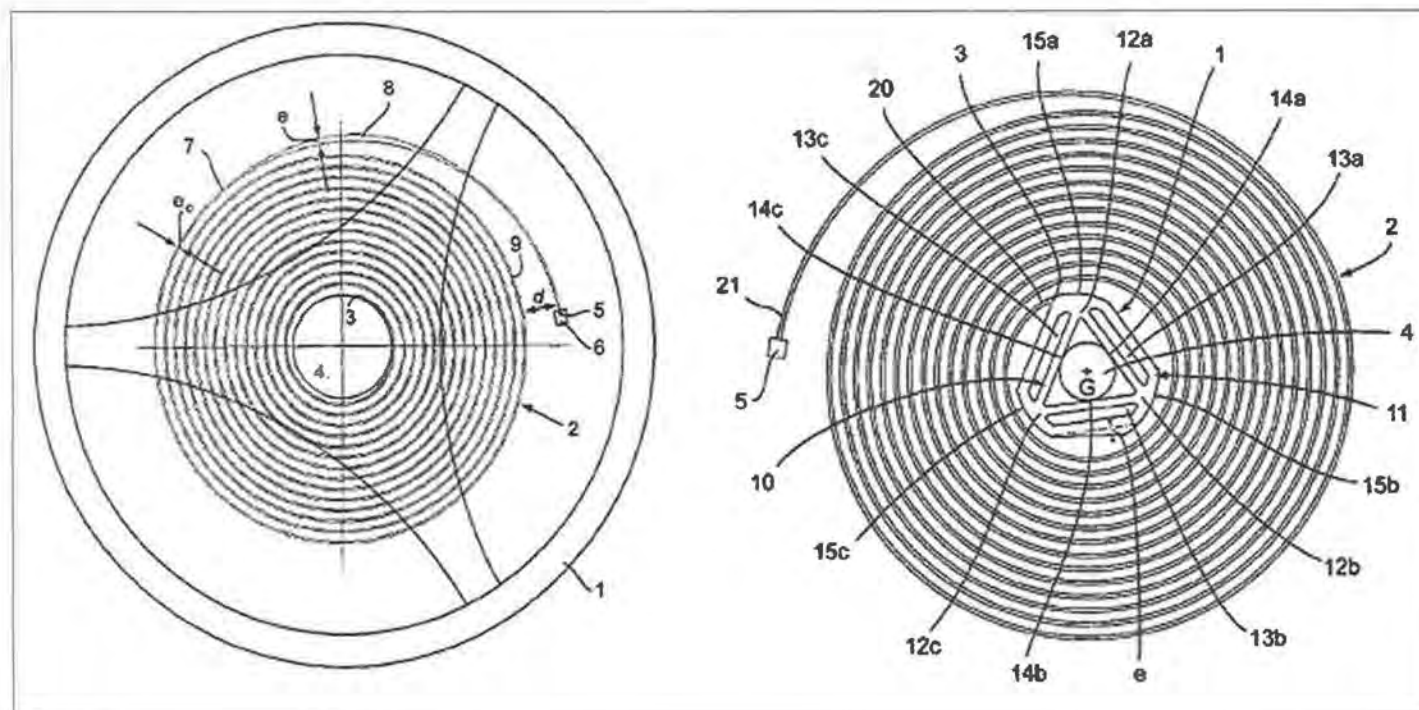


Figure 13

AWCI Material Search

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1H1 Hamilton 505 balance complete, #50555

If you can supply any of these items please contact: AWCI Material Search, American Watchmakers-Clockmakers Institute, 701 Enterprise Drive, Harrison, OH 45030-1696. Toll Free: 1-866-367-2924, ext. 305; Phone: (513) 367-9800, Fax: (513) 367-1414 or E-mail: mhuff@awci.com

The American Watchmakers-Clockmakers Institute maintains this unique member service to assist professionals in replacing hard-to-find parts for vintage timepieces. There is a fee of \$10.00 for each search.

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Laurie Penman

The Hermle Moon Dial

Recently Hermle redesigned their moon dial (Figure 1) to make it more foolproof and resistant to damage by owners of their clocks. The result is excellent and has eliminated the major problems that repairers find in movements with moon dials. Figure 2 is a partial detail of the back of the dial plate. Wheel A has a single pin pressed into it, which moves the moon dial one tooth as it rotates twice a day. (There are two holes, but only the blacked hole has a pin in it.) The moon dial is seen behind wheel A and for reasons of page space is only shown in part.

There is no jumper spring, the pin enters the tooth space cleanly, sliding down the angled side, entering the slot at the root of the tooth space and then sliding up the other

angled side to leave the dial accurately indexed by one tooth space. The whole action is carried on the dial plate and, apart from the engagement of the lower wheel with the motion work of the movement, there is no possibility of not obtaining proper engagement between the wheels of the transfer train and the clock movement.

It is possible, if the customer moves the dial by hand, for the teeth of the dial to be placed in a position that will jam on the indexing pin of wheel A (Figure 3). However, it has to be exactly in the right place to do this. The tops of the teeth are sharp, and usually will slide to one side or the other of the indexing pin. If the pin does jam, the clock will stop of course.

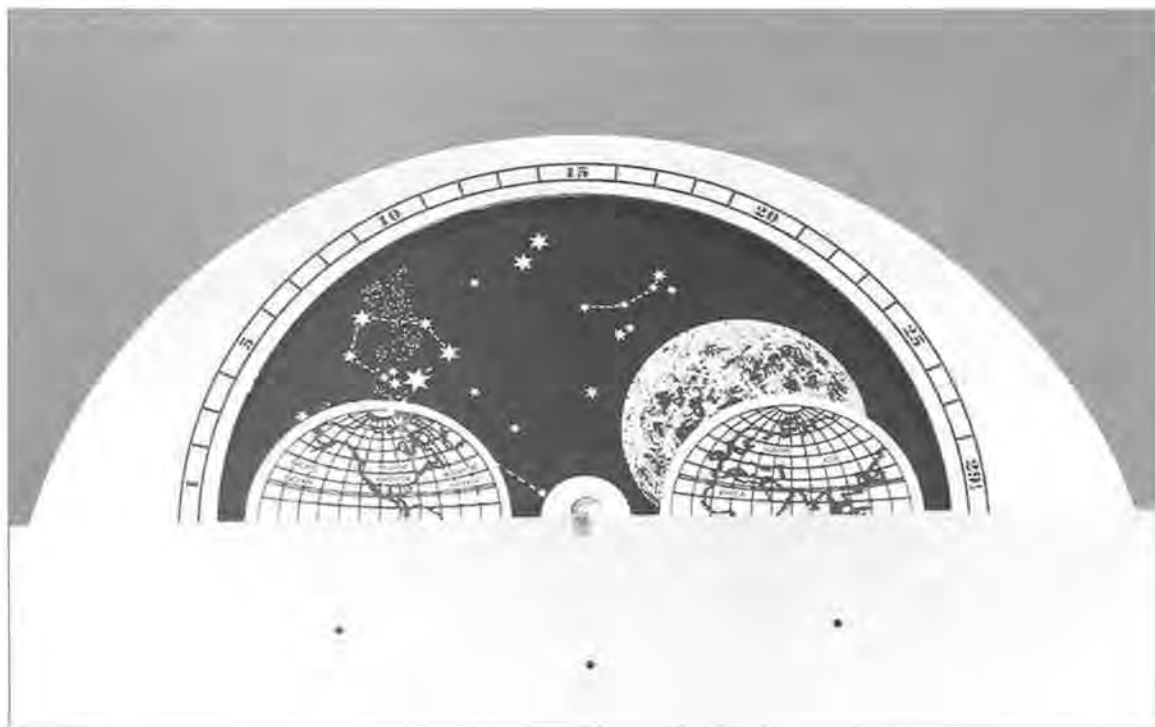


Figure 1

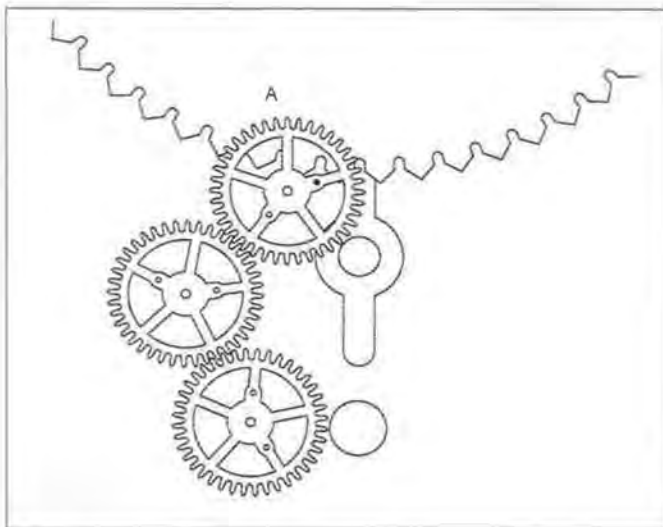


Figure 2

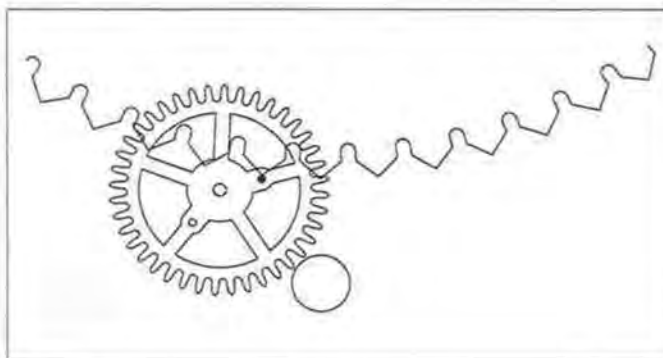


Figure 3

To release the dial from the pin, simply move the minute hand back by about one minute marking to take the pressure off and touch the moon dial with a fingertip. This will move it slightly so that the pin is no longer in exactly the wrong place and the dial will index correctly.

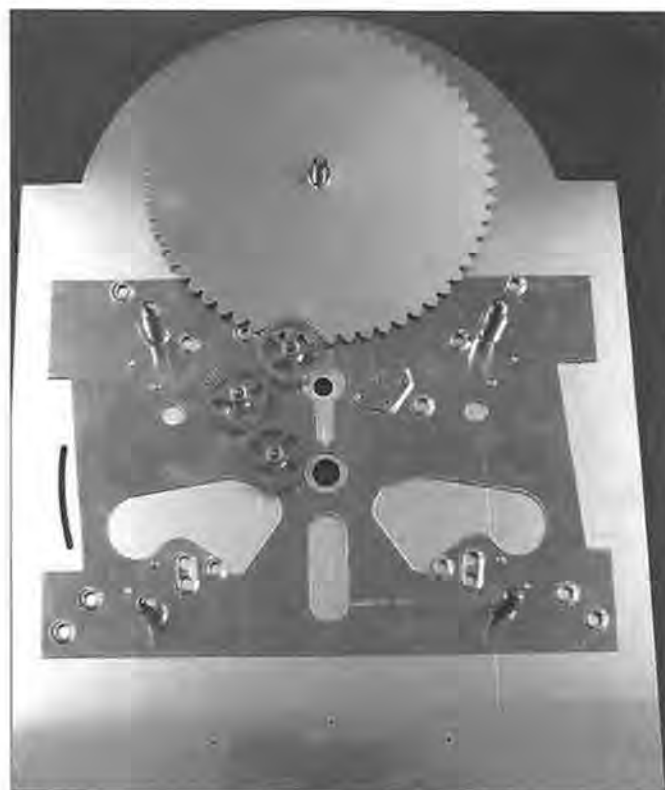


Figure 4

The design (Figure 4) is very nice and neatly carried out, there is no reason at all for either posts or the indexing pin to become bent, other than mishandling by the customer. As explained above, even that depends upon the dial teeth to be placed in precisely the wrong position and jamming the pin.



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In Memory of Harold K. Calvert

Harold K. Calvert of Indianapolis, Indiana passed away Wednesday, March 8, 2006 at the age of 91. He was born in Franklin, Indiana and was a Naval Reservist. Harold retired from the State of Indiana where he served as the Executive Secretary of the State Board of Watch Repair Examiners and Executive Secretary of the Radio and Television Repair Board. He served as the 7th President of the American Watchmakers Institute (AWI), Executive Secretary for the Horological Institute of America and President of the Watchmaker Association of Indiana.

Harold received a Distinguished Hoosier Award by Governor Edgar D. Whitcomb and was awarded the Sagamore-of-the-Wabash in 1980 by Governor Otis R. Bowen.

Preceded in death by his wife, Mary Jane (Kreisher) Calvert, Harold is survived by his son Harold Calvert, Jr. (Louella) and daughter Norma Wehe (Ron); granddaughters: Leslie Clarke, Alison Lanier, Angela Pettit and Melissa Craig, and six great-grandchildren.

By Laurence A. Blanchard

Written here are some memories I have of Harold Calvert. Harold was a dear friend to me and one of the finest persons I have known, inside and outside of the horology profession.

My earliest contact with Harold came in Indiana, in 1954, when, as Executive Secretary of the State Board of Examiners in Watch Repairing, Harold signed my apprenticeship certificate. Indiana enacted licensing legislation in 1939. I believe Harold was the second person to serve as Executive Secretary and assumed those duties about 1946. He was the Executive Secretary until about 1985, when the licensing law was allowed to expire.



Our first meeting was in 1958, when I took the exam to become a licensed watchmaker in the state of Indiana.

Our paths crossed occasionally over the next few years, and as our acquaintance grew, so grew my respect and admiration for Harold. He had an excellent knowledge of the law, coupled with a sensible and fair approach to overseeing administration of the rules and bylaws. His level of professionalism and his manner might well have taken him to advanced levels of government service or industry endeavor, but he loved our craft and all in it with whom he came into contact, in Indiana and elsewhere.

Harold possessed an excellent knowledge of our craft as a practicing bench watchmaker. A seeker of new skills and knowledge, he was always ready to share skills, knowledge and fellowship with others.

I believe it was this desire for knowledge and willingness to share it that led him to make contacts with Bulova Watch Co. during the early days of Accutron. This led to Harold being one of the first outside of Bulova to be trained at Bulova in New York, to service Accutron.

Bulova provided him with training movements and spare parts, and Accutron bench seminars became a reality in Indiana. I recall going to a Sunday seminar in Indianapolis where 48 watchmakers were in attendance and Harold was the only instructor. None of the rest of us had any knowledge of servicing Accutrons—48 students, quite a challenge. Harold did a fine job and the rest of us came away with much improved knowledge and skills. Harold's interest in Accutron, and later in Quartz-based timepieces, led him to conduct and arrange many more such "hands-on" bench courses in later years.

Harold was the recipient of many awards, inside and outside of the horology profession. Among them: Kentucky Colonel from the Governor of Kentucky 1967; Distinguished Hoosier Award from Indiana Governor Dr. Otis Bowen 1970; Watchmakers Association of Indiana Award of Merit 1975; Sagamore-of-the-Wabash, Governor Bowen 1980; Hoosier Horologist Award 1987; Northern Indiana Watchmakers Guild Lifetime Membership Award 1987.

At the charter convention of AWI held in June 1960 in Chicago, Harold was a participant and a

charter member. Affiliate chapters came into being during Harold's tenure as President of AWI. He was a life member of AWI and the recipient of a service award from the AWI Board, signed by board members including Henry Fried.

Harold was also Executive Secretary of the State Board of Examiners, Television & Radio. He served on the Better Business Bureau's National Panel of Consumer Arbitrators. Harold served as Secretary of the Horological Institute of America from 1959 - 1960.

Harold was instrumental in bringing a number of prominent speakers in horology to the Watchmakers Association of Indiana (later known as the Horological Association of Indiana). Among the speakers were Jean Pierre Savary and Henry Fried.

Some personal memories I will cherish as long as I have memory. At my shop in Broadview, Illinois, Harold would sometimes visit for a few days and work with two other watchmakers and myself. When we all got busy, time would pass when the only sounds were of screwdrivers and tweezers being dropped gently on benches and occasional sound from chairs rolling. Harold would sometimes say, upon completing repairs on a watch, "another soul made happy." Through Harold and others in our profession, love of our craft, love of the timepieces we service and those who cherish and rely upon them, is carried from generation to generation. Many thanks to you Harold. You will be missed but the memories will be cherished always. "Another soul made happy" is one of those memories.



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Jack Kurdzionak, CW

From the Workshop

You Are Invited

Do you have a solution to a watch or clock repair problem that you want to share with our membership? Do you have a question about a repair problem you would like to ask? I invite you to participate in this column with your suggestions, questions, and comments. It is easy. Just e-mail me at AWCi <magazine@awci.com> or write using the old standby known as the postal service. You can even fax me at 513-367-1414.

I will do my best to help you help the membership. By sharing your questions and suggestions, all of our members can benefit from our combined knowledge and experience. The ideas, tools, techniques and products presented in this column suggested by the author and contributing members are not endorsed by any manufacturer, supplier, advertiser or AWCi itself.

Watches and Computers

My 3-year-old laptop computer just suffered a fatal major malfunction. During its 3-year, four-month lifetime it was attacked by numerous virus infections, failed to work at critical moments, and had to be cajoled and pampered to get it to cooperate with me. Instead of being a faithful servant like my automatic wristwatch, it behaved like a spoiled child. I was always wary about how it would behave, especially in a public situation when I needed it to give a PowerPoint presentation. Depending upon its mood, it could just refuse to obey my commands while at other times it would operate flawlessly. It displayed its last and final tantrum just when I needed it to produce some records at a critical meeting.

On the other hand, my trusty old wristwatch works day and night without missing a beat. All it asks of me is that I wear it daily and provide some TLC every few years. It even warns me that it is ready for care by gradually slowing down. It has never just outright refused to work. It even forgives me if I spill some beverage on its display or drop it on the floor. My computer would never allow that. During my computer's brief lifetime, it cost about \$1.25 per day to own, and I had to supply it with software, at an additional cost to give it working instructions. Can you imagine if the watches we sold required an additional software purchase just to make them keep time? I took the laptop back to the store from which I purchased it. I complained bitterly that I just bought it recently (3 years ago) and it no longer works. The person handling my problem looked at me quizzically while he decided whether it was best to humor me or merely call security to have me removed from the store. He said that a \$1200 machine was not that expensive and was obsolete just after it was purchased. He explained computer life expectancy is very short, regardless of what the sales person said when it was purchased. "Could I see the sales person who sold it to me?" I asked. "Sorry, that person left 2½ years ago and has been replaced at least six times," was the response. All that could be done was to sell me a new laptop with the latest features that will probably be obsolete after the first time it is used.

It would be great for those of us who sell watches and clocks if our customers were as understanding about product life as computer customers seem to be. We watchmakers still have to deal with customers who

bought a watch 3 years ago and complain bitterly that the power cell died too quickly and demand that a new one be installed at no charge or they complain that the watch scratched more than it should have and no longer looks new. Another customer may bluntly state that his automatic watch was very expensive (\$350) and he thought it would last a lifetime. "Maybe," he asks, "You should just exchange the watch for a new one as it never worked quite right since it was new? It lost time, about 2 minutes every month, and I received a watch for buying a magazine subscription that keeps better time and never stops."

On days when my computer stops working and watch customers complain, I sit down and wonder if I should have chosen a career in computers instead of watchmaking. But then remember, no one I have ever met enjoys owning or repairing computers. Besides, I would have to join a new organization, the ACI (American Computer Institute).

Jack Kurdzionak

Hands Off

For some reason, unknown to us watchmakers, watch manufacturers install the chronograph second recorder hand (the long sweep second hand) and small recorder hands so tightly that they usually cannot be removed without damaging some or all of them. Regardless of which hand remover one uses and how much caution is exercised, the hands pull away from the tubes to which they are attached. If they do not pull away, the center of the hand deforms from the force required to pull it off the arbor. Service centers for many Swiss brands now include a complete set of hands in their chronograph repair charges.

Watchmakers in the field are advised to make certain that replacement hands are available to them for the chronograph brands they accept for service and to include the charges for new hands in their repair estimates. Chronograph hands can be costly; \$50-\$100 per set of replacement hands seems to be the usual range of cost to the watchmaker for a set of hands. Even

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though genuine replacement hands are not inexpensive, the sub-dial and second recorder hands often do not fit well. They require careful broaching to make them fit properly so that the hour hand clears all of the sub dial hands safely and the second recording hand safely clears the minute hand and crystal.

When fitting chronograph hands there is no need to drive them on with an arbor press. Hands need to be secure enough to flyback without loosening on their respective arbors, but they do not need to be so tight that the next time they are removed, they come off in pieces. Most new hands are painted or highly polished so they need care and protection while being installed to prevent damage to their finish. Steel or brass hand pushers can easily damage delicate hand surfaces. Plastic tipped hand pushers are now available from material suppliers. Gone are the days of pressing a hand on with the edge or back of a pair of tweezers. The new hands are far too delicate for that type of rough HAND-LING.

Jack Kurdzionak

A True(Ing) Story

Experienced watchmakers are adept at centering hairsprings so that the collet is exactly concentric with the balance staff. This skill, acquired by years of practice, is necessary for those who wish to adjust a mechanical watch precisely. A properly centered collet and hairspring eliminates side pressure on the balance staff, one of several requirements for precision position adjustments. Alan Burtoft, BHI member and instructor, shared his method of centering the collet with a group of BHI students during a recent seminar in England. It is so simple and effective that it makes one wonder, "Why didn't I think of that?"

Some textbooks suggest removing the hairspring from the balance and fitting the hairspring, with collet and



Centering the hairspring and collet without the upper jewel in place.

stud, to the balance cock itself. Then the hairspring can be adjusted to have the collet concentric with the upper jewel hole in the balance cock. This method works, but it is time consuming and risky to remove and replace the collet from the balance each time the hairspring is adjusted.

Alan recommends installing the balance assembly into the movement without the upper shock resistant jewel in place. The lower jewel assembly must be installed. That being done, the watchmaker can observe the position of the upper staff pivot in the empty upper shock resistant frame. If the upper pivot is centered in the frame, nothing further is required to center the collet. If it is not centered, the hairspring can be adjusted properly to move the pivot until it is exactly in the center of the frame. Once the pivot is centered, the upper jewel setting can be installed. The photo of the upper balance staff pivot shows it in the center of the jewel frame. This simple technique works. Give it a try. Of course, a level bench top is a must for this operation.

Jack Kurdzionak



PARTS MESSAGE BOARD

The American Watchmakers-Clockmakers Institute **Parts Message Board** is available on line at www.awci.com Click on the Parts Forum in the Top Links box. Guests are free to browse our topics and posts but only validated AWCI members will be able to actively post messages and communicate with one another via private messaging.

The purpose of this board is to aid our members in finding watch parts, clock parts and tools. This board is not open to generic advertising posts; therefore, web addresses and e-mail addresses should not be included in public messages.

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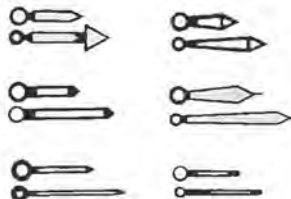


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The Story Behind the Watch

Dale LaDue, CMW

Not only am I a certified master watchmaker but I also enjoy speedskating. However, as watchmaker/clockmaker professionals you know there is always potential work wherever we go.

The Rochester speedskating team is one of, if not the largest team in the United States. Our team has four national short track champions; one in the juvenile men class, one in the master men 30-39 age group, one in the master ladies 30-39 age group and one in the master men 60-69 age group. We work hard, have a lot of fun and are coached by the nation's best.

After one of our workouts a team member mentioned he could not get a spring bar for his Casio® watch. He tried the mall stores and kiosks to no avail. I told him I could take care of that and asked him to bring the watch to the next workout. Craig, the National Champion in the 60-69 age group, overheard my conversation and mentioned he had a watch he wanted to give me for parts because it had gone through the washer and dryer and was in pieces.

The next workout I brought a small assortment of spring bars, replaced the band on the Casio, and Craig handed his watch in a plastic bag to me. It was a basket case but it was a nicely engraved 14kt gold hunting case. I told him I couldn't just take it and tried to offer him something but he wouldn't hear of it and turned away.

As I evaluated the watch at my bench I found the case cover hinge broken, the crystal missing and the case was not distorted in any way. As for the movement, all of the plate screws, as well as the balance bridge screw, were loose. The pallet jewels and the roller jewel were missing. The balance pivots were both sheared off. The gear train pivots were out of their jewel bearings and in good shape.

From the photo of the dial you can imagine the beating the watch had taken, particularly in the dryer. When any of my customers tell me they accidentally ran their

watch through the washing machine I instinctively ask: "Did it go through the dryer also?" I've found that vintage dress wristwatches survived quite well. After a good cleaning and rinse, a good drying should be in order! Pocket watches take a beating but at least escape the ravages of rust.



Craig is a good friend and inspiration to me as well as the other teammates. We competed in the 2004 National Championships and he missed the Championship by a few points. Shortly after the Nationals his daughter notified the team that he had suffered a serious heart attack and was recovering in the hospital after surgery. His heart specialist told him that he wouldn't and shouldn't skate and train as he had been. Craig found a cardiologist who was a long distance runner and would work with and guide him to regain his abilities. Craig cautiously but diligently worked with

the team through the summer workouts, the skating season workouts and competitions. He won the National Championship in his age group in 2005. Quite an accomplishment!

As a token of my friendship and inspiration I repaired his watch. The case hinge was easily repaired. I replaced the crystal with glass, as the original was. Searching through my supply of parts I was able to find a pallet fork and arbor as well as a duplicate dial. After replacing the roller jewel, the balance staff and poising the balance wheel the movement was overhauled, timed, cased and ready to be presented to Craig.

I was unable to skate at the next workout but I was able to stop at the ice rink after the team workout. I tried to give the watch to Craig but he refused to take it. I was puzzled by his reaction. He went on to say he didn't deserve it because he ruined it and that I should keep it. I mentioned again that it was a solid 14kt case and is an heirloom that should be kept and handed down in the family. At this point Craig's grandson, who

skated with the junior skaters, overheard us, saw the watch and his eyes lit up, looked at his grandfather and questioned, "You mean this could be mine someday?" At that point Craig could not refuse and took the watch. I said goodbye to everyone and said I would see them at the next workout and left.

Two days later I received a letter from Craig explaining just how much this watch means to him! With Craig's permission I am able to share his letter with you. At the next workout other team members who did not know about the watch repair came up to me and asked, "What happened?" or "What I had done?" because after I left, he became emotional and couldn't explain except to say, "I can't believe he did this, I can't believe I have the watch back."

To know the sentiments attached to a watch that I brought back to life for someone touches me deeply and I thank Craig for sharing his feelings with us. Craig told me he tried several other sources to repair his watch and was convinced it could not be repaired.

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Here is Craig's letter:

Dale and Louise,

Thank you so much. I'll try to explain how much this means to me.

For many, many years I always wanted a very good pocket watch. They were expensive and I would always back away from getting one as there were other things Shirley and I needed more. She desired things and would do the same thing. We would always tell each other to get what we wanted but still would not.

Shortly after Shirley died, I came across this watch at a jewelry shop. I did not buy it that day. Days later I had this feeling that Shirley was saying, "Buy it, you deserve it." I did and it felt so good to have it. I put a picture of Shirley in it and carried it always. When you finally have something you always wanted, you soon take it for granted and get a little careless. I broke the lens once and had it replaced. But the final straw was when I put it through the washer and dryer. Oh boy! I really destroyed it and, to me, it was gone.

You know, life is like my watch experience. Shirley was what I always dreamed of having: a loving wife. I really did not know what it all meant before I met her. As we went through our lives together, I may have taken her for granted. Not the same way as the watch. But, more just not noticing the little things she did that showed her love for me.

It will be four years this February since she has gone. There is not a moment that I do not think of her. I think of all the things I took for granted. The moments she would simply take my hand, or smile at me from across the room, or her ease of doing the housework.

Well, Valentine's Day is coming and I do not enjoy that day anymore. Shirley gave me a card four days before she died. She wrote, "I love you" on it. She had the most beautiful handwriting and yet on this card it looked labored. She was failing and it showed on that card. She died four days after and Valentine's Day reminds me of how much love I once had.

I have prayed every day, since she died, for the Lord to bring us together once again. He did it once, but I do not know how he could give me that once again. It seems impossible. I have a lot of faith in the Lord but it sometimes slips a little when I think of how impossible it seems.

Well Dale, this brings me back to the watch. The Lord works in mysterious ways. That watch (to me) was in an impossible state of ever returning to me. It means more to me than it ever did before. I have Shirley's picture in it once again. Thank you for strengthening my faith. Shirley and I will be together again. Nothing is impossible. Keep skating.

Craig



In Remembrance

AWCI has been notified of the passing of the following members:

ILLINOIS

Kabumoto, Jack — Chicago, IL

INDIANA

Calvert, Harold K. — Noblesville, IN

IOWA

Chang, Augusto W. — Cedar Falls, IA

MISSOURI

Jones, John T. — Neosho, MO

PENNSYLVANIA

Jakim, Joseph — Pittsburgh, PA

VIRGINIA

Willis, John C. — Hardyville, VA

INTERNATIONAL

Slydel, Ramon — East Sussex, United Kingdom

AWCI EVENING CLASSES IN CLOCK AND WATCH REPAIR

American Watchmakers-Clockmakers Institute is offering weekly evening classes (10 consecutive Wednesdays) in clock and watch repair. These will be basic instructional classes, loosely structured to adapt to the needs of the students. Watch and clock classes will run simultaneously on Wednesday evenings from 6:00 PM to 9:00 PM at the training facilities at AWCI in Harrison, Ohio.

- Instructors: Laurie Penman, Clock Repair
Tom Schomaker, CMW, Watch Repair
- Schedule: Summer Session - June 28, 2006 - August 30, 2006
Fall Session - September 20, 2006 - November 22, 2006
Winter Session - January 10, 2007 - March 14, 2007
- Location: AWCI Training Facility
701 Enterprise Drive, Harrison, OH 45030
- Cost: \$400 per 10-week session
Registrants must be AWCI members (\$83 yearly membership)
Tool and material costs are extra

For more information or to register for a class, contact Nancy Wellmann, Education Coordinator
1-866-367-2924, ext. 303 or e-mail: nwellmann@awci.com



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Glenn D. Gardner,
WHS Affiliate Chapter
Representative

Wisconsin Horological Society Convention

The 71st annual convention of the Wisconsin Horological Society was held in Reedsburg, Wisconsin on May 5, 6 and 7. We had 35-40 watch and clockmakers in attendance. This included students from St. Paul Community College and some watchmakers from the Illinois area. Our programs started around 5:00 on Friday night with Dan Fenwick from the Swatch Group. Dan gave us a program on the T-touch Tissot watches; how to set them and all the functions the tactile watch has. We were taught the problems and precautions when uncasing and casing the movement. This seminar lasted until around 9:00 and then we adjourned to the hospitality room.

The morning started early, around 9:00 AM, with Manuel Yazijian, watchmaking instructor at AWCI. Manuel's program was on being a professional in your work and also what to expect when taking the AWCI 21st century CW certification. Manuel said

working on watches should be like being a cat burglar, enter and repair the watch without leaving a trace that you were in there. I thought that was an interesting way of putting it. Everybody came away from the seminar understanding what is required in taking the exam.

After lunch, Ray Flood gave a presentation showing us some of the tools he has made over the years to make things easier for clock repair in his shop. The favorite was a timer he made in which the pendulum broke the invisible beam from an electric eye. This was hooked up to an electronic counter in which you used the numbers of the train to find out how fast or slow it was running.

Next, Dan Fenwick explained the principles and the repair of the Omega coaxial escapement. I remember when George Daniels talked about and showed us a drawing of this watch at the AWCI 25th anniversary. Dan explained how friction is almost non-existent in the escapement. You carefully oil the coaxial wheel only because momentum that it receives causes a problem. Is this the future of the escapement?

The annual banquet featured the presentation of the WHS appreciation award which was given to Tamara Houk for her dedication and contributions to WHS and the industry as a whole.

Sunday at 8:30 AM, we had our annual meeting and decided to have the 7750 bench course next year on Saturday with Tamara giving the course. We will be returning to Reedsburg next year.



Dan Fenwick demonstrating the T-touch Tissot.



Seminar attendees



Seminar attendees

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Glenn Gardner presents Manuel Yazijian with a certificate of appreciation.



Board of Directors (left to right): Ed Kohn, Allan Smiles, Tamara Houk, Jeff Debbink, Noah Riley, Glenn Gardner, Mike Gerber, and Joe Smith.



Dan Fenwick receives a certificate of appreciation from Glenn Gardner.



Manuel Yazijian making a specialized collet removing tool.



Ed Kohn presenting Tamara Houk with an appreciation award.

Our last program had Manuel Yazijian show us some bench tips and specialized tools which he has made over the years. He uses a brass pick many times instead of the plastic style. All of his tools take into consideration the need for doing the repair without anybody knowing you have been into that watch.

In all, the convention was a great success and we thank our speakers Dan Fenwick-Swatch Group, Manuel Yazijian-AWCI, and Ray Flood, a friend of WHS from Minneapolis. ☺

Questions & Answers

(Continued from page 4.)

manufacturing watches, though not necessarily chronometers, up into the 1970s under the Pierce SA name.

Your Dent watch is a 19 ligne chronograph. The Swiss cross with the 4821.115 tells us this is a patent number. Dr. Matt Clark, an AWCI member, graciously researched this patent and found that it referred to a chronograph/speedometer (chronographes-compteurs) mechanism issued to Georges Nicolet of La Chaux-de-fonds on June 18, 1892. Georges Nicolet took control of Stauffer, Son & Co. in 1874. From at least 1892 (the time of the Nicolet patent) the company's name was changed to Nicolet Fils & Cie. The company apparently sold their movements to other makers and distributors such as "Dent," as well as selling them themselves under the "Stauffer Peerless" and "Atlas Watch Co." names. Your watch probably dates near the turn of the 20th century.

Finding parts, however, will be a real challenge. They won't be available through material houses. You'll probably need to do searches for Nicolet patent chronograph watches and movements on the Internet. ☺

AWCI's Fiscal Year End

AWCI's fiscal year end is June 30, 2006. Those parties who have provided goods and services to AWCI up to and including June 30, 2006 must submit those claims or invoices to AWCI no later than July 15, 2006. This includes chapter and individual expense reimbursement claims. Claims or invoices received after that date will be subject to additional review by our accounting firm. They are also subject to not being paid by AWCI. Thank you in advance for your consideration and attention to this matter.



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Watch & Clock Review is published 10 times per year and is the industry's most-used publication—the only one in North America devoted to watches and clocks. Get the one convenient source of industry news features including eight annual directory issues.

2006 AWCI Annual Convention & Educational Symposium

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If you think Seattle is only for adults you are so wrong! There are so many attractions for families in Seattle. A City Pass will get you in to five great attractions including the Woodland Park Zoo, the Seattle Aquarium, the Pacific Science Center, the Museum of Flight and a Seattle Harbor tour. Woodland Park Zoo is award winning with ninety-two acres of beautiful wildlife habitat full of everything from gorillas to anacondas or wonderful attractions such as the Willawong Station where kids can purchase bird seed and have the birds eating literally right out of their hands. The Pacific Science Center is on the grounds with the Space Needle and has incredible hands-on activities for kids from 1 to 101 including exhibits such as a tropical butterfly house, the science playground, robots, computers, a saltwater tide pool, an insect village with giant robotic insects, laser shows and an IMAX theater. The Seattle Aquarium is one of the most fascinating I have been to mostly because of the astonishing underwater dome. This is a 400,000 gallon tank that visitors walk right through. It brings you up close and personal to sharks, the Giant Pacific Octopus, and so much more and every day at 1:15 you can watch divers feed the fish. If you still wonder if bringing the kids is a good idea you could try the Wild Waves Enchanted Village which is a Six Flags Theme Park located just south of Seattle or you might enjoy a ferry ride to Victoria, British Columbia where you can visit the museum of miniatures, the wax museum or Butchart Gardens. Now if that is not enough to convince you then maybe the Experience Music Project, the Ye Olde Curiosity Shoppe, a Seattle Mariners baseball game, Tillicum Village.... Ok, well you get the idea, so see you there and bring the whole family!



Merrienne Door



AWCI 46th Annual Meeting Agenda

Thursday, August 3, 2006

9:00 AM - 4:00 PM	Chronometer Club Chronograph Course
3:00 - 6:00 PM	Registration
5:00 - 6:00 PM	Chronometer Club Business Meeting
6:30 - 7:30 PM	New Member & Welcome Reception
7:30 - 8:30 PM	Affiliate Chapter Welcome Reception
8:30 - 10:00 PM	Affiliate Chapter Orientation

Friday, August 4, 2006

7:00 AM	Registration
7:00 AM	Continental Breakfast
8:00 AM - Noon	Affiliate Chapter Meeting Antoine Simonin - Keynote Speaker
9:00 - 10:00 AM	J.M. Dodson Perpetuation Fund Meeting
10:00 AM - Noon	Industry Advisory Board (IAB) Meeting
Noon - 1:30 PM	Lunch on your own
1:00 - 5:00 PM	AWCI Board of Directors Meeting
5:30 PM	Bus departs for the ELM-Trust Dinner/Fundraiser
6:00 - 10:00 PM	ELM-Trust Dinner/Fundraiser on the <i>Spirit of Washington</i> Dinner Train
10:00 PM	Bus returns to the Marriott

Saturday, August 5, 2006

7:00 AM	Registration
7:00 AM	Continental Breakfast
8:00 - 9:30 AM	Educational Presentations
Brien K. Dews	Electric Clocks and the Telechron Company

Saturday, August 5, 2006 (continued)

Antoine Simonin	Watchmakers of Switzerland Technology & Education Program (WOSTEP)
Bob Macomber	Bushing Wooden Clock Movements
9:45 - 11:15 AM	Educational Presentations
Ed Ueberall	Railroad Pocket Watches
Manuel Yazijian	The Professional Watchmaker; Behaviors, Practices and Certification
Vince Schrader & Jerry Faier	Jointly present on Certification (watch and clock)
10:00 AM	ELM Trust Meeting Atrium 5
10:00 AM - 3:00 PM	Trade Fair Plaza Mall
11:30 AM - 1:30 PM	Vendors Luncheon Buffet
1:30 - 3:00 PM	Educational Presentations
Brien K. Dews	Electric Clocks and the Telechron Company
Antoine Simonin	Watchmakers of Switzerland Technology & Education Program (WOSTEP)
Bob Macomber	Bushing Wooden Clock Movements
3:15 - 4:45 PM	Educational Presentations
Ed Ueberall	Railroad Pocket Watches
Manuel Yazijian	The Professional Watchmaker; Behaviors, Practices and Certification
Vince Schrader & Jerry Faier	Jointly present on Certification (watch and clock)
6:00 - 7:00 PM	President's Reception
7:00 - 9:00 PM	Dinner & Awards Program

Sunday, August 6, 2006

8:00 - 9:00 AM	Breakfast Buffet
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AWCI Board Meeting

Hospitality Room open to all - Evenings throughout the event

AWCI's 46th Annual Meeting — August 3-6, 2006

AWCI Registration Deadline: July 15, 2006

Registration also available on line: www.awci.com

(Please type or print all information requested)

Name: _____ AWCI Member No.: _____

Company/Affiliate Chapter: _____

City: _____ State/Province: _____ Zip/Postal Code: _____

Phone: _____ Fax: _____

E-mail: _____

Spouse's Name: _____ Guest's Name: _____

Child #1: _____ Age: _____

Child #2: _____ Age: _____

Child #3: _____ Age: _____

Registration Fees

Received by July 1, 2006

After July 1, 2006

Weekend Package*

AWCI Member _____ @ \$250.00 _____ @ \$300.00

Nonmember _____ @ \$300.00 _____ @ \$350.00

Spouse/Guest _____ @ \$150.00 _____ @ \$200.00

Children (under 12) _____ @ \$ 50.00 _____ @ \$100.00

Saturday Package**

AWCI Member _____ @ \$200.00 _____ @ \$250.00

Nonmember _____ @ \$250.00 _____ @ \$300.00

Spouse/Guest _____ @ \$ 75.00 _____ @ \$100.00

Education Package***

AWCI Member _____ @ \$150.00 _____ @ \$200.00

Nonmember _____ @ \$200.00 _____ @ \$250.00

ELM Trust Dinner - Friday Night _____ @ \$ 65.00 per person

(Not included in weekend package)

Total _____

Should we be aware of any personal health issues you have? _____

Do you prefer vegetarian meals? _____

***Weekend Package Includes:** Thursday: Welcome Receptions and Affiliate Chapter Orientation; Friday: Continental Breakfast, Affiliate Chapter and Board Meetings; Saturday: Continental Breakfast, Technical Presentations, Luncheon, Dinner/Awards Program, and Auction; Sunday: Breakfast Buffet

****Saturday Package Includes:** Saturday: Continental Breakfast, Technical Presentations, Luncheon and Dinner/Awards Program, and Auction

*****Education Package Includes:** Saturday: Continental Breakfast, Technical Presentations & Luncheon

Note: Program changes will be announced as they occur.

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AWCI's 46th Annual Meeting
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2006 Educational Symposium

The Saturday Educational Symposium, August 5th from 8:00 AM until 4:45 PM features:

Mr. Antoine Simonin, who is coming from Switzerland where he was the Director of WOSTEP (Watchmakers of Switzerland Training and Educational Program) from 1976 until 2003. He is now consultant to Rolex Geneva as an adviser and coaches teachers in watchmaking schools in the USA and Japan. At the same time, he is busy as a member of the committee of the Musee International d'Horlogerie in La Chaux-de-Fonds and the Horological Museum of Le Locle, Honorary President and on the Board of Chronometrophilia, the watch and clock collectors association of Switzerland. Mr. Simonin is a:



- Well-known expert in the Swiss Watch Industry
- Teacher in watchmaking
- Specialist in old and new horological books
- Expert on old timekeepers and horological books

You won't want to miss this opportunity to learn from an expert, and, speaking of experts, we have several others who are specialists in their field. Check the Annual Meeting Agenda and make your reservations now at the **Marriott Seattle Sea-Tac Airport Hotel**

Phone: Reservations (800)228-9290 or (206) 241-2000; Guest Fax (206)248-0789; www.seattlemarriottseatac.com

Hotel Cut-Off Date: Monday, July 3, 2006 - to receive the \$105 rate and be included in the AWCI block of rooms. Don't forget to mention you are with AWCI.

Meeting registration on-line at www.awci.com



Bob Macomber, CMC
Bushing Wooden Clock Movements



Vince Schrader, CMW
Vince & Jerry jointly present on AWCI Certification



Jerry Faier, CMC



Ed Ueberall
Railroad Pocket Watches



Manuel Yazijian, CMW
The Professional Watchmaker: Behaviors, Practices and Certification



Brien K. Dews, CC
Electric Clocks and the Telechron Company

AWCI-ELM Trust Welcomes You ALL Aboard!



The AWCI Educational, Library and Museum Charitable Trust (ELM Trust) will host a Friday night to remember. Leaving the Sea-Tac Marriott hotel on Friday, August 4th at 5:30 PM, participants will be whisked away in a Grey Line premium charter coach for a six-mile trip to Renton, Washington. Once there, you will board the *Spirit of Washington Dinner Train* (www.spiritofwashingtondinnertrain.com). This event is sponsored by Rolex.

You are going to see Lake Washington, a fresh water lake connected to Puget Sound, Mercer Island, Wilburton Trestle with a final destination being Columbia Winery. During this scenic ride you will be served a choice of prime rib, pork osso buco, breast of chicken, cherry smoke roasted salmon, vegetarian or children's meals.



No winery tour is complete without some wine tasting and you will be able to sample and purchase vineyard designed Cabernets, Merlots, and other of classic European varietal wines of the highest quality. The winery occupies a magnificent Victorian



style building in the countryside. It features a tasting room, gift shop and a banquet room. Swatch will be sponsoring transportation during the convention.



AWCI's 46TH ANNUAL MEETING

AUGUST 3-6, 2006

VENDOR REGISTRATION

DOOR PRIZE – ELM TRUST DONATION

The American Watchmakers-Clockmakers Institute would like to invite your participation in the AWCI 46th Annual Meeting & Convention at the Sea-Tac Marriott Airport Hotel in Seattle, Washington. Exhibitors may reserve a table for \$225 for Saturday, August 5, 2006 from 10:00 AM to 3:00 PM This will also entitle two people to have lunch and dinner with the convention attendees. Deadline for vendor registration is July 1st, 2006.

Company Name _____

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- ☐ Please reserve _____ table(s) for us to exhibit during the AWCI 46th Annual Meeting.
The following people will be attending:

Name _____ Title _____

Name _____ Title _____

Name _____ Title _____

- ☐ A door prize will be sent to AWCI for the drawings held during the Trade Fair and at the close of the convention. This entitles our company to be listed as a convention sponsor.

The generous financial support of persons interested in preserving the past and building the future of horology augments the AWCI-ELM Charitable Trust. Your donation will contribute to the education of the next generation of watchmakers and clockmakers or to maintaining the historical record of the craft.

Please accept this donation of \$ _____ to the AWCI-ELM Charitable Trust

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Wolfsberg, Barry—Florence, AZ*

California

McWilliams, Kenneth—Northridge, CA

Connecticut

DeVito, Ralph—New Haven, CT
Loitz, Gerhard—Greenwich, CT*

Delaware

Fullerton, Robert M.—New Castle, DE

Florida

Ivins, Louis G.—Port Saint Lucie, FL*

Illinois

Krawczyk, Krysztof—Arlington Heights, IL*
Nordin, Larry—Skokie, IL
Weir, Bruce—Effingham, IL

Indiana

Duffie, Rick—Indianapolis, IN

Massachusetts

Carey, Christopher M.—West Newton, MA*

Michigan

Kizy, Jalk—Troy, MI
Lauderman, Ryan—Troy, MI

Minnesota

Gjervold, Debbie—Eden Prairie, MN

Montana

Hancock, Jerry D.—Bozeman, MT

Nevada

Tayag, Ernesto F.—Las Vegas, NV*
Vara, James—Las Vegas, NV

New Hampshire

Malapan, James—Pelham, NH

New Jersey

Amaral, Fernando—Kearny, NJ
Hoover, Scott—Haddonfield, NJ
Soper, Blane—Princeton, NJ

New Mexico

Eckre, John—Santa Fe, NM

New York

Alvarez, Wilfredo—West Hempstead, NY*

Ohio

Dougherty, Larry—Columbus, OH
Gibs, Donald—Loveland, OH

Oklahoma

James, Ron—Oklahoma City, OK

Pennsylvania

Ambruso, Anthony—Lansdowne, PA
Golfetto, Paul H.—Gilbertsville, PA*

Texas

Daykin, Graham E.—San Antonio, TX*
Rodriguez, Arturo S.—Laredo, TX*
Williams, Michael D.—Round Rock, TX

Virginia

Nantz, Benjamin—Mc Lean, VA

Washington

Walker, Ben—Bellevue, WA

Wisconsin

Henrikson, David—Appleton, WI
Malmquist, David—Washburn, WI*
Sponsor: Timothy Frank Bale—Ironwood, MI

***AWCI welcomes back these individuals who have chosen to reinstate their membership.**

YOUR EDUCATION DIDN'T END ON THE LAST DAY OF SCHOOL!

It continued when you joined AWCI.

For many professional watchmakers and clockmakers, AWCI is the after-school training offering courses that allow members to keep abreast of the latest information and trends.

Through these educational offerings, AWCI fills the gap in technical education.

ANOTHER BENEFIT OF AWCI MEMBERSHIP!

AWCI ACADEMY WATCHMAKING CLASSES

Manuel Yazijian, CMW Instructor

AWCI is offering a series of watchmaking classes throughout 2006. The series will consist of ten 5-day sessions covering a variety of subject matter. Each 5-day block will cost \$475.00. For additional information, contact Education Coordinator, Nancy Wellmann nwellmann@awci.com or call (866) 367-2924, ext. 303.

June 5 – 9	Introduction to the Watchmaker's Lathe
June 19 – 23	Servicing Modern Automatic Watches, Timing & Adjustment
July 17 – 21	Servicing Modern Automatic Watches, Timing & Adjustment
September 11 – 15	Vintage Chronographs (Bernhard Stoeber, Instructor)
October 23 – 27	Basic Watch Repair, Adjusting and Timing
November 6 – 10	Introduction to Basic Quartz Watch Repair & Quartz Chronograph Repair

(No courses offered in August and December)

AWCI CERTIFICATION EXAM SCHEDULE

Certified Watchmaker & Certified Master Watchmaker

June 19-22, 2006	North Seattle Community College	Seattle, WA
July 24-27, 2006	Saint Paul College	Saint Paul, MN
August 21-24, 2006	AWCI Training Facility	Harrison, OH
September 18-21, 2006	AWCI Training Facility	Harrison, OH
October 2-5, 2006	Oklahoma State University	Okmulgee, OK

**To register for an exam or for more information contact
Education Coordinator, Nancy Wellmann at nwellmann@awci.com
or call toll free 1-866-FOR-AWCI (367-2924)**

BULLETIN BOARD

NEW REQUESTS

Federal Glass Crystal Catalog
Michael Doyle, Sacramento, CA, is looking for a catalog for Federal Glass Crystals.

File Rest

John Schwartz, Sarasota, FL, would like to purchase a file rest.

ITEMS STILL NEEDED

Sir Francis Drake Falling Ball Clock
Gordon Beach, Yuma, AZ, is looking for technical/parts information for a Sir Francis Drake Falling Ball Clock, 1981, made in England.

Levin's Pivot Polisher & Straightener

George Davis, Richland, WA, is looking for a copy of the parts list and user manual for Levin's pivot polisher and straightener Cat. #P500.

Do you have information regarding this month's requests? Do you need information about one of this month's responses? If so, send your information or requests to:

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AWCI Board of Examiners Needs Your Help

The AWCI Board of Examiners need certain clock movements and materials for use with the new Certified Clockmaker exams. If you have an American, 8-day T/S mantel or wall movement such as the ones with wire type strike levers that is complete without solder work, broken wheels/pinions or mainsprings and with its strap pallets, you can donate these to the ELM Trust and receive a tax deduction and help with AWCI's clock certification material supply all at once!

A few examples of what we are looking for include: Seth Thomas #89 styles, Waterbury T/S, Sessions T/S, Gilbert T/S, Ansonia T/S (but NOT with a visible escapement), or an Ingraham T/S with the wire type strike action levers. We are also in need of complete 400-day clocks, but without dome and key, such as Kundo, Schatz, Haller (but NOT with the plastic anchor), and etc., especially those with adjustable (Villiamy style) pallets that **still have** their suspension guards, all suspension spring parts, no bushings, the original pendulum, a usable mainspring and all on a base (it's fine even if the base has cracks and tarnish), we need those as well!

Please help AWCI and dig through your stock of these older items and see if a tax deduction might not be better than the dust they now collect.

Contact Jim Lubic for more information: Toll Free (866) 367-2924, ext. 310 or e-mail: jlubic@awci.com

Industry News

AWCI Unveils New Certification Designations

Over the past few years we have witnessed an unprecedented growth in sales of mechanical watches and other fine timepieces. This growth has resulted in an ever-increasing demand for qualified technicians and well-trained watchmakers. The Swiss watch industry has responded by opening new and supporting existing watchmaking programs and currently there are five American institutions that teach the prestigious WOSTEP curriculum.

Many upscale retailers, also driven by this increasing demand for proper service and maintenance of high-end watches, are rethinking their approach to watch service. These retailers are willing to invest in re-establishing in-store watch repair departments, only to realize a shortage of formally trained professionals. The much more serious problem, however, is that thousands of untrained and often self-taught people are attempting repairs – on valuable and complicated pieces, only to inadvertently cause serious damage in the process. While the watches can ultimately be restored, repairing the resulting damage to the good names and reputations of jewelers and watch companies can prove to be far more difficult and expensive.

Recently, the senior service directors of leading watch companies, as well as independent jewelers, professional AWCI certified watchmakers, chain stores, jewelry supply houses, and even a watch battery company – all joined forces with AWCI with the goal of finding a way to address this shortage of trained professionals. After several meetings over the past year and following a 3-day marathon meeting in Ohio, a solution has emerged.

The result: a concept for two new job categories with great potential for the watch companies and the retailers in today's market:

- The Watch Specialist
- The Watch Technician

The goal of the Watch Specialist is to grow and support the sale and service of watches. The specialist will be the most knowledgeable watch sales person in the store, with expertise ranging from knowledge of history and materials, to operating complex devices. They will also be responsible for keeping up with warranty policies and for directing watch repair and maintenance programs. However, this person will not open a watch – or even adjust a bracelet. That is where the line was drawn.

The Watch Technician, on the other hand, will know which watches “not” to open, and will be perfectly comfortable performing a variety of tasks ranging from battery replacements and bracelet adjustments, to watch movement and

crystal replacement – while of course, maintaining water resistance. However, they will not be trained to disassemble movements, or how to reproduce hand-made obsolete components; such jobs will remain within the domain of the Certified Watchmaker or Certified Master Watchmaker.

It is envisioned that the training and testing for the “Watch Specialist” position will take place at regional trade shows, through the mail, and over the Internet. Training for the “Watch Technician” will encompass much more hands-on technical expertise and will require special programs at qualified colleges or other institutions around the country, and at AWCI. This training will be more formal and structured, yet may be broken into multiple segments to help the retailer make the most of the limited amount of time required to pursue proper certification.

It is hoped that some portion of Watch Technicians will wish to further their education and income producing potential, and evolve toward becoming Certified Watchmakers. Just how much money do *fresh out of school* – AWCI certified watchmakers earn? Of course that depends upon the location and competition for jobs, but \$40,000 to \$50K is not unheard of, and that is for starters. And what will be the income potential of these two new job categories? Of course, time will tell. However, the well-trained sales professional often ranks among the highest paid people in the store, and the Watch Specialist training could prove to be a critical first step. The Watch Technician job category would be perfect for the more mechanically inclined individuals who share a passion for watches and complicated devices. They will not start at the earnings level of a Certified Watchmaker, but one thing is for sure; they are destined to rank among the greatest profit generating employees in any store!

Training programs and certification requirements are currently under development and AWCI has retained a well-established consulting firm, Castle Worldwide, to work with the content experts from the various areas and organizations involved in the watch and jewelry industry. It is planned that these two new job categories and their respective certification programs will be introduced for the first time to the watch and jewelry industry at the 2007 JCK Show in Las Vegas, at AWCI's “Watchmaker of the Future” booth.

For more information on assisting the AWCI Industry Advisory Board, or the AWCI Panel of Watch Retailing and Service Experts, please forward your comments via e-mail to jlubic@awci.com attention Mr. Jim Lubic, Executive Director of AWCI (www.awci.com).

Submitted by Henry Kessler, Sy Kessler Sales, Inc./Renata U.S., on behalf of AWCI.

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WatchTime Names Joe Thompson Editor-In-Chief

Wolfgang Blum, publishing director of *WatchTime* magazine, has announced that Joe Thompson became the magazine's editor-in-chief, effective March 22, 2006. He replaces Matthew Morse, who has resigned to pursue other opportunities. Thompson has been the magazine's senior writer since December 2000. As editor-in-chief, he will oversee all of the magazine's editorial operations while continuing to write articles.

Thompson has written about watches and the global watch market for 29 years and is considered one of the industry's most knowledgeable observers. In addition to his watch knowledge, he brings valuable experience in editorial management, having served for 18 years as editor-in-chief of two magazines in the watch and jewelry field.

A frequent visitor to watch production centers in Europe and Asia, Thompson has interviewed and is well known to virtually all of the industry's key players. He is best known for his in-depth, analytical articles on watches and the watch world and his independent views as expressed in editorials and columns.

"We were very glad to get Joe on board shortly after we launched *WatchTime* in the U.S. market," said Blum. "Our readers love his *Fortune*-style articles covering all facets of the watch business from an always fresh perspective. His excellent work as writer and journalist, along with his conceptual input, played a big role in the overall success of the magazine."

In a related move, Frank Sellien, president and CEO of Ebner Verlag GmbH, *WatchTime*'s parent company, headquartered in Ulm, Germany, announced that Wolfgang Blum has assumed the additional duties of editorial director. Until now that position has been based at German headquarters. Blum is *WatchTime*'s founding publisher.

Blum praised Matthew Morse's contribution to *WatchTime*'s success in the U.S. market. "Matthew was the first editor of *WatchTime*," he said, "and we appreciate his work in creating an editorial package that appeals to American watch collectors and enthusiasts. We thank him for his contributions and wish him all the best in the future."

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1 Wynfield Drive • Lititz, PA 17543

(717) 625-3787

info@lititzwatchtechnicum.org

North Seattle Community College

Watch Technology Institute

9600 College Way North • Seattle, WA 98103

(206) 526-0169

WTI@sccd.ctc.edu

Saint Paul College Watchmaking Program

235 Marshall Avenue • Saint Paul, MN 55102

(651) 846-1408

www.saintpaul.edu

Oklahoma State University Okmulgee

Watchmaking and Microtechnology

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Advertisers' Index

Borel & Co., Jules	5
(816) 421-6110	
Butterworth Clocks, Inc.	17
(800) 258-5418	
Cas-Ker Co.	inside back cover
(513) 674-7700	
Chronos/WCR	31
(303) 296-1600	
<i>Clocks</i>	43
011 01 31 228 6638	
Esslinger & Co.	inside front cover
(651) 452-7180	
Ferrell & Company	25
(213) 627-6031	
Frei, Otto	23
(510) 832-0355	
Livesay's, Inc.	7
(813) 229-2715	
Maxell Corp.	back cover
(201) 794-5900	
McCaw Co., William S.	3
(419) 243-3720	
Smith Supply House	9
(213) 622-1687	
Twin City Supply	21
(952) 545-2725	
Vibrograf U.S.A. Corp.	15
(516) 437-8700	
Zantech	19
(800) 441-7569	

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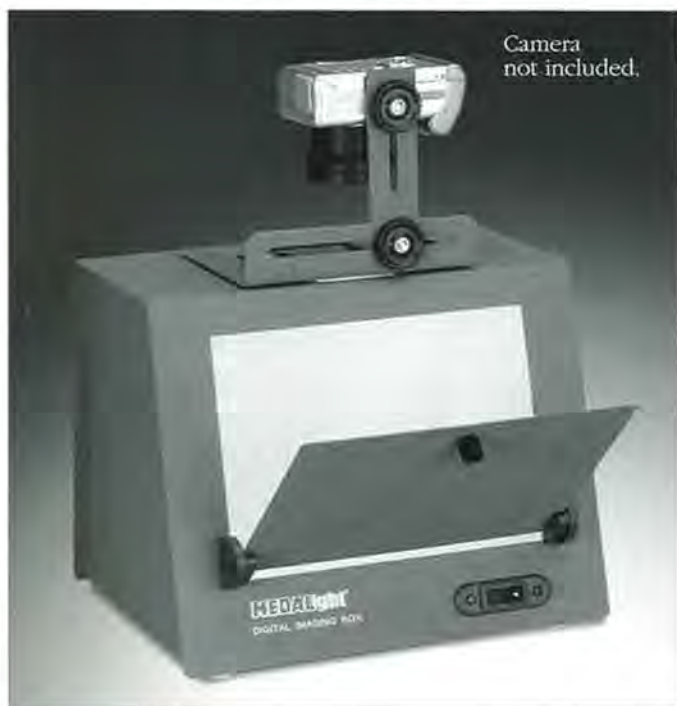
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Above images were created with MEDALight Small Light Box.



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