Volume XXXVI, Issue #4

December 2010

The Journal of the Electrical Horology Society

Chapter #78 National Association of Watch and Clock Collectors



- Attention Members: Dues are due! A membership form can be found on the last page of the Journal.
- "We are always looking for information suitable for the Journal and greatly appreciate the loan of original material."

Inside this issue:

Membership Renewal

Form

President's Message	1
SWCC Points of Interest	2
SWCC Schedule of Parts	3
Jefferson Electric Clock Company	19
Electric Horology Links	23
Mart	24

25

President's Message

Fellow Horologists:

The feedback concerning the changes in the layout of The Journal of the Electrical Horological Society has been very positive. Thanks to those who responded to the request for comments and kudos to our Secretary / Treasurer, Tony Bolek.

MEMBERSHIP DUES PAYMENT

It is time for the renewal of dues for membership in the Electrical Horological Society. We are able to keep dues at the past year's rates of \$10.00 for U.S. members and \$15.00 for all others. The dues just cover our printing and mailing costs. Please send your dues to Tony Bolek as soon as possible as this will save additional printing and mailing costs asking for dues payment. A form for dues payment and for Chapter records is attached as the last page of the Journal. If you look at the mailing label on the envelope containing your copy of the Journal, the date printed in the upper right hand corner indicates your last dues payment (at least according to Chapter #78 records). If there is an error, please let Tony know.

THIS ISSSUE

This issue of the Journal contains a reprint of a Parts Listing for the Self-Winding Clock Company covering the Type F and Type K movements. This information will help identify each of the parts in this relatively common movement. Keep in mind that your movement may have been in the hands of several repair people and, thus, your movement may differ slightly. However, this listing represents what the factory designed into the movement. Also, there are other Parts Listings available which differ slightly from this particular version of the listing. This Parts Listing is from the library of Tony Bolek. We are always looking for information suitable for the Journal and greatly appreciate the loan of original material. Thanks Tony.

Also included in the Journal is a reprint of a small advertising flyer illustrating a series of "Jefferson Electric Clocks." Unfortunately, the flyer is not dated. However, I checked two clocks that are shown in the flyer and both clocks are stamped "1959" in ink. The flyer is interesting in that it includes the retail prices for the clocks shown. I was surprised to learn that the "Suspense" is the most expensive clock as I have always felt that it was the least mysterious of the various mystery clocks. Also, you can see the higher initial cost of the new cordless technology represented by the "Integer" and "Intermezzo" models.

The battery movements in the "Integer" and the "Intermezzo" are electrically wound, balance wheel movements very similar to the movements used in automobile clocks of the period. As the clock runs, a set of contacts eventually close. This causes a solenoid to wind a very small mainspring. The "Self Regulating" feature mentioned in the flyer refers to a system that regulates the balance wheel whenever the time is manually set. This system was also used in most automotive clocks of the 1950's. The battery mentioned in the flyer is approximately the same size as a AA battery. I was not able to find a technical description of the "mercury cell" shown in the flyer but the clock runs well on two AA alkaline batteries. This flyer is from my library.

Best wishes for the Holiday Season and a happy and healthy New Year to all. Enjoy this issue of The Journal of the Electrical Horological Society.

Bill Ellison, FNAWCC President

SWCC Points of Interest

SELF WINDING CLOCK CO

The Self Winding Clock Company began in 1886 and stayed in business until about 1970. The company was based on patents held by Chester Pond. In 1932 SWCC experienced financial problems and the Western Union Company purchased an interest in the company. This

is when the Time Distribution System was initiated and it is also the time when the Type F and Type K movements were introduced.

A customer of the Time Distribution System purchased the case and essentially leased the movement. Periodically, the SWCC replaced the movement with a cleaned and serviced movement. When the replacement movement was installed, the Serial Number Plate was also replaced so your movement Serial Number should match the number shown on the Serial Number Plate. Each day, at 11:50 AM, Eastern Standard Time, Western Union cleared their telegraph lines. At exactly at 12:00 noon, a signal was distributed based on a time signal from the U. S. Naval Observatory.

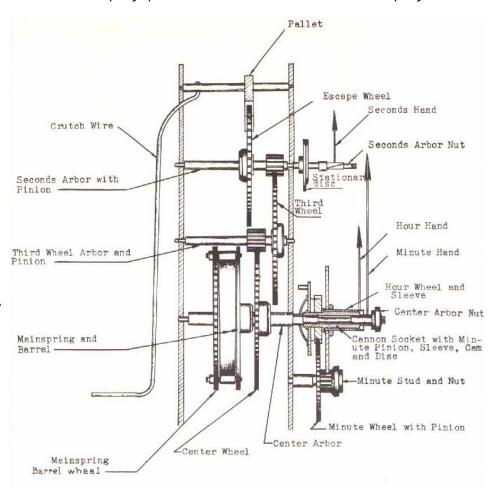


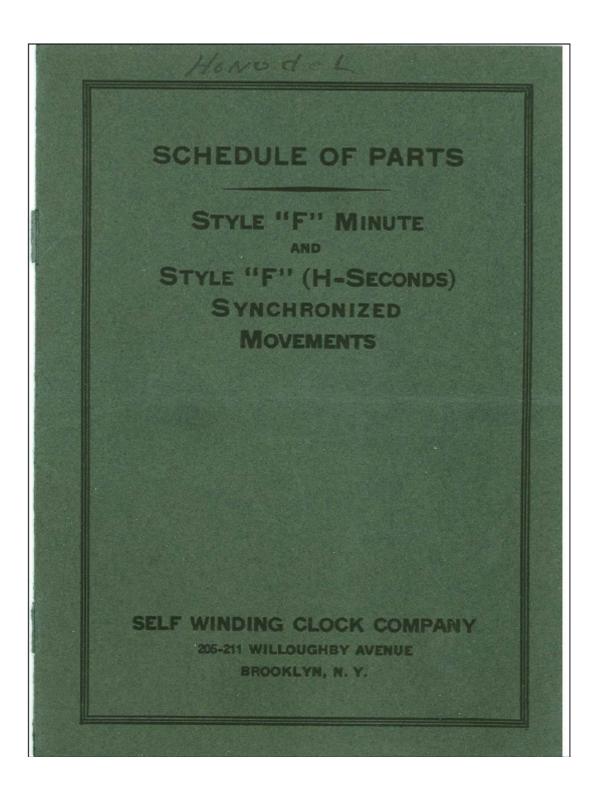
Figure 1: Style F Movement Sub Assembly

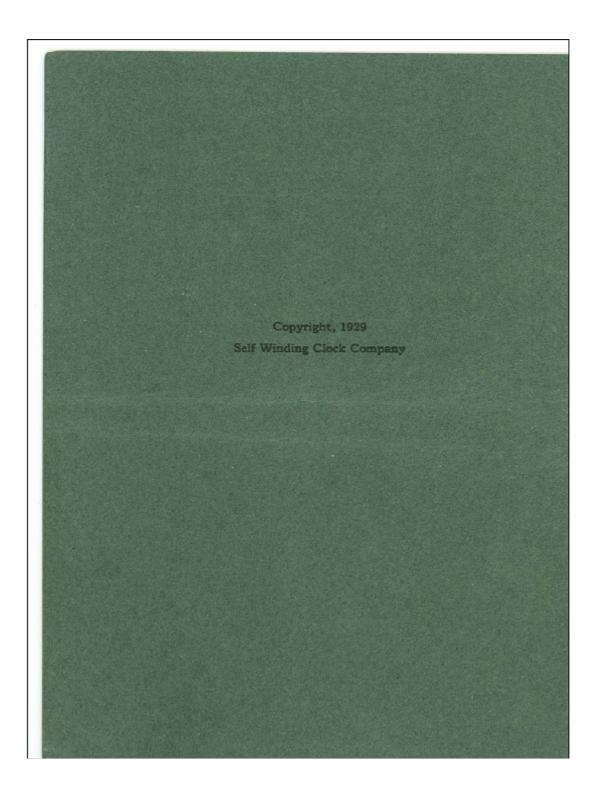
SWCC was head quartered at: 10&12 Dey Street
New York, New York

They purchased movements from several companies although Seth Thomas seemed to be the primary supplier. SWCC did have some manufacturing facilities and did repair movements.

Western Union eventually decided that the 10 minutes of "down time" on their lines was too expensive to dedicate to the time signal and essentially abandoned the SWCC Time Distribution System. Clocks were allowed to remain in place and for a relatively short period of time, movements were repaired if problems developed. However, this service was also soon abandoned.

SWCC Schedule of Parts





THIS booklet is for the guidance of Clock Repair Men employed in the Time Service Department of the Western Union Telegraph Company.

The schedule and illustrations include all parts for:

Style "F" minute synchronized movements, and

Style "F" (H-seconds) synchronized movements.

When ordering, each part should be designated by the number shown in schedule and wherever possible give serial number of movement, or movements, for which parts are ordered.

This will insure prompt and accurate filling of orders by the Self Winding Clock Company and result in a saving of time and correspondence.

Note.—See Pages 11 and 12 for Type "K" synchronizing parts with large magnets, furnished with rental clocks only, shipped on and after February 1, 1929.

Form 82 5M-4-29

SELF WINDING CLOCK COMPANY

Note. Wherever possible give serial number of movement, or movements, for which parts are ordered.

740399

- F 1. Suspension Spring, .003" for all clocks except Master clocks with 60 beat mercurial pendulums which have .005".
- F 2. Pin for Suspension Spring Stud.
- F 3. Bracket with Studs.
- F 4. Escape Wheel, Arbor and Pinion—specify whether 60, 80, 120 or 140 beat and whether Minute or Seconds.
- F 5. Center Arbor, with center wheel mounted (for center arbor and hub only—specify Part F-5-D).
- F 6. Third Wheel complete, with Arbor and Pinion specify whether 60, 80, 120 or 140 beat.
- F 7. Winding Lever—new style—with Pawl, Spiral Spring and Stud.
- F 8. Backstop, or Retaining Pawl, with Spiral Spring and Support.
- F 9. 3/6" No. 2-56 R-H Blued Machine Screw for F-8.
- F 10. Ratchet Wheel complete with Arbor and Pinion.
- F 11. Pallet, Arbor and Crutch Wire—specify whether 60, 80 or 120 beat (140 beat same as 120 beat).
- F 12. Pallet Buttons (2 required).

SELF WINDING CLOCK COMPANY

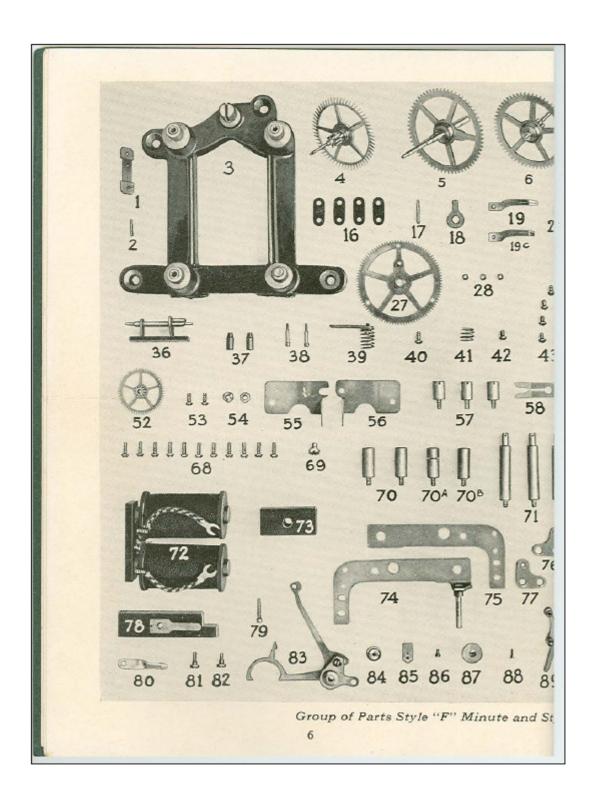
- F 13. %6" No. 5-40 R-H Blued Machine Screws for F-12 (2 required).
- F 14. Contact Sector Piece with Bushing and Pin.
- F 15. Top Center Winding Contact Stud and Support.
- F 16. Flat Fibre Insulators (4 required); one for F-15, one for F-30, one for F-76 and one for F-77.
- F 17. Center Arbor Pin for engaging winding sector.
- F 18. Knock-a-way Piece.
- F 19. Top Center Winding Contact, with Platinum.
- F 20. Seconds Arbor Nut.
- F 21. Bottom Center Winding Contact, with Platinum.
- F 22. 1/8" No. 2-56 R-H Blued Machine Screws (4 required); one for F-19, one for F-21, one for F-46 and one for F-47.
- F 23. Mainspring—.008" thick, 1/2" wide.
- F 24. Mainspring Hub, with Slot and Pin.
- F 25. Pin for Center Arbor to engage Mainspring Hub.
- F 26. Mainspring Barrel, with Studs.
- F 27. Mainspring Barrel Wheel, with Hub and Pin.
- F 28. No. 2-56 Brass Barrel Nuts for F-27 (3 required).
- F 29-L. Motor Magnets (4.5 Ohms) complete with Yoke—including Shunt—See Part F-34.

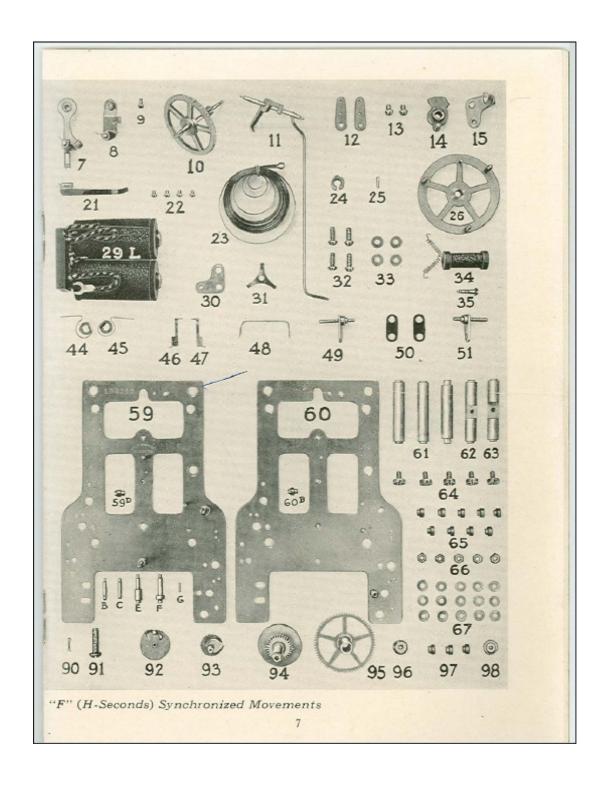
SELF WINDING CLOCK COMPANY

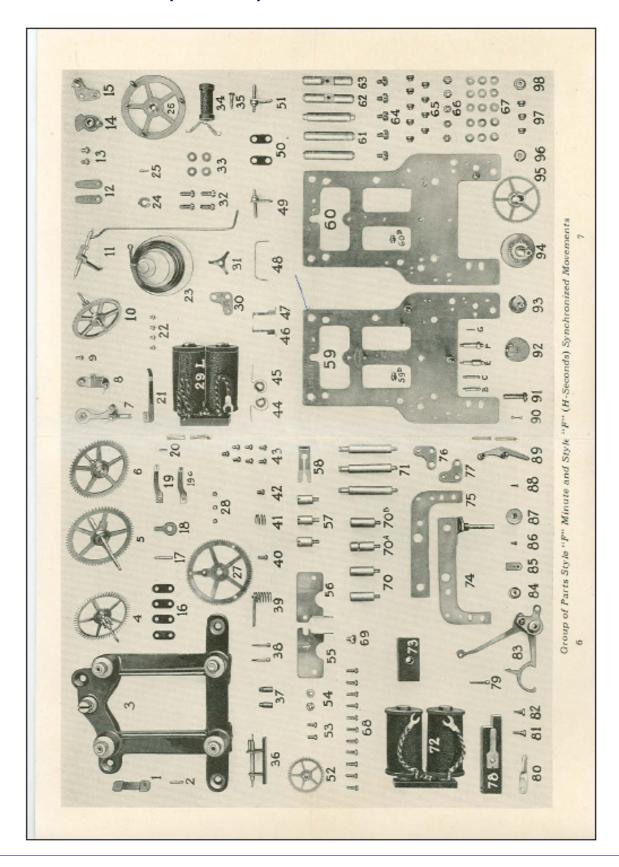
- F 30. Motor Magnet Binding Plate.
- F 31. Minute Hand Friction Spring.
- F 32. 3/8" No. 6-32 R-H Blued Machine Screws (4 required) for fastening winding magnets to front and back plates.
- F 33. No. 6-32 Brass Washers for F-32 (4 required).
- F 34. Shunt (65 Ohms).
- F 35. ½" No. 4 R-H Blued Wood Screw for fastening Shunt.
- F 36. Motor Armature complete.
- F 37. Hard Rubber Armature Screw Bushings (2 required).
- F 38. Motor Armature Bushing Screws (2 required).
- F 39. Top Banking Spring and Support.
- F 40. 1/4" No. 4-40 R-H Blued Machine Screw for fastening F-39 to Pillar.
- F 41. Bottom Banking Spring.
- F 42. 3/6" No. 4-40 R-H Blued Machine Screw for fastening F-41 to Pillar.
- F 43. 3/6" No. 4-40 R-H Blued Machine Screws (7 required); one for F-15, one for F-30, one for F-55, two for F-56, one for F-76 and one for F-77.
- F 44. Front Spiral Motor Contact, with Platinum.

SELF WINDING CLOCK COMPANY

- F 45. Back Spiral Motor Contact, with Platinum.
- F 46. Front Plate Motor Contact, with Platinum Pin.
- F 47. Back Plate Motor Contact, with Platinum Pin.
- F 48. Spiral Motor Contact Connecting Band.
- F 49. Front Spiral Motor Contact Stud with Support.
- F 50. No. 4 Fibre Insulator Punching—large hole—(2 required); one for F-49 and one for F-51.
- F 51. Back Spiral Motor Contact Stud, with Support.
- F 52. Minute Wheel, with Pinion.
- F 53. 1/4" No. 4-40 R-H Brass Machine Screws—(2 required); one for F-49 and one for F-51.
- F 54. Large Brass Hexagon Nuts for Spiral Motor Contacts (2 required); one for F-49 and one for F-51.
- F 55. Front Dust Cap Punching.
- F 56. Back Dust Cap Punching.
- F 57. Pillars for Dust Cap Punchings (3 required); one for F-55 and two for F-56.
- F 58. Bracket Clamps.
- F 59. Front Plate with Studs B C D E F & G.
- F 60. Back Plate with Bushing 60 B.
- F 61. Movement Plate Pillars, plain (3 required).







SELF WINDING CLOCK COMPANY

- F 61-A. Movement Plate Pillar—long tenon (not illustrated); 1 required on synchronized movement only.
- F 62. Top Banking Spring Pillar.
- F 63. Bottom Banking Spring Pillar.
- F 64. Plate Pillar Screws (5 required); two for front and three for back.
- F 65. Hard Rubber Bushing No. 2 with thin shoulder (9 required); one for F-15, two for F-30, one for F-49, one for F-51, two for F-76 and two for F-77.
- F 66. No. 4-40 Small Brass Nuts (5 required); one for F-15, two for F-49 and two for F-51.
- F 67. Small Brass Washers (15 required); two for F-15, two for F-30, one for F-41, one for F-49, one for F-51, four for F-73, two for F-76 and two for F-77.
- F 68. 5/16" No. 4-40 R-H Blued Machine Screws (11 required); one for F-15, two for F-30, four for F-73, two for F-76 and two for F-77.
- F 69. Plate Shoulder Screw for fastening Synchronizing Bracket to Back Plate.
- F 70. Plain Dial Pillars (2 required).
- F 70-A. Slotted Dial Pillar (1 required).

SELF WINDING CLOCK COMPANY

- F 70-B. Shoulder Dial Pillar (1 required).
- F 71. Bracket Pillar Screws (3 required).
- F 72. Synchronizing Magnets (12 Ohms) complete with Yoke.
- Note.—See Page 12 for Type "K"—large Synchronizing Magnets furnished with rental clocks only, shipped on and after February 1, 1929.
- F 73. Cast Iron Synchronizing Magnet Support.
- F 74. Back Synchronizing Frame with Stud.
- F 75. Front Synchronizing Frame.
- F 76. No. 3 Front Binding Plate for Synchronizing Frame.
- F 77. No. 2 Back Binding Plate for Synchronizing Frame.
- F 78. Synchronizing Armature with Throwback Spring.
- F 79. Synchronizing Armature Set Screw.
- F 80. Synchronizing Armature Connecting Piece.
- F 81. Synchronizing Armature Connecting Piece Screw—long.
- F 82. Synchronizing Lever Connecting Piece Screw short.
- F 83. Minute Synchronizing Lever complete.
- F 84. Synchronizing Lever Stud Nut.

SELF WINDING CLOCK COMPANY

- F 85. Seconds Synchronizing Lever "V" Piece, used for Seconds Synchronizer only.
- F 86. 1/10 x 1/64 Filister Head Screw for fastening "V" piece to Synchronizing Lever.
- F 87. Seconds Synchronizing Lever Roller (used for Seconds Synchronizer only).
- F 88. Synchronizing Lever Roller Screw.
- F 89. Synchronizing Latch.
- F 90. Cotter Pin for Synchronizing Latch Stud.
- F 91. 5/8" No. 10-32 R-H Blued Machine Screw for fastening Synchronizing Magnets to Yoke Support.
- F 92. Stationary Disc complete for Style "H" Synchro-
- F 93. Square Sleeve Seconds Socket complete for Style "H" Synchronizer.
- F 93-E. Round Sleeve Seconds Socket (not illustrated) complete for Style "H" Synchronizer.
- F 94. Cannon Socket complete.
- F 95. Hour Wheel complete.
- F 96. Center Arbor Nut.
- F 97. Hard Rubber Bushing No. 1 with thick shoulder (3 required); one for F-15, one for F-49 and one for F-51.
- F 98. Minute Wheel Stud Nut.
 - · See illustrations on pages 6 and 7

SELF WINDING CLOCK COMPANY TYPE "K" SYNCHRONIZING PARTS WITH LARGE MAGNETS FURNISHED WITH RENTAL CLOCKS ONLY, SHIPPED ON AND AFTER FEBRUARY 1, 1929 See illustrations and schedule on page 12 11

SELF WINDING CLOCK COMPANY

TYPE "K"

SYNCHRONIZING PARTS

WITH LARGE MAGNETS FURNISHED WITH RENTAL

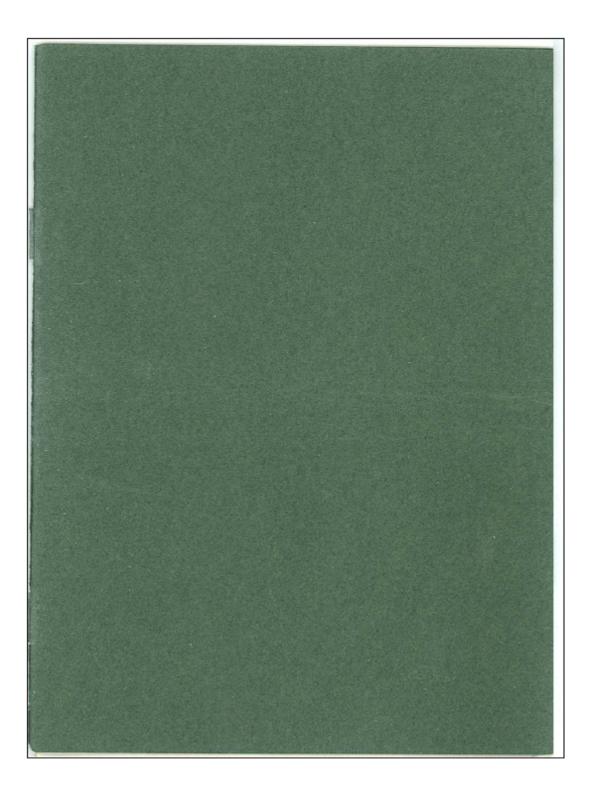
CLOCKS ONLY, SHIPPED ON AND AFTER

FEBRUARY 1, 1929



F 116 F 117

- F 114. Synchronizing Magnet Assembly.
- F 116. Minute Synchronizing Lever Assembly.
- F 117. Seconds Synchronizing Lever Assembly.



Jefferson Electric Clocks

JEFFERSON ELECTRIC COMPANY

The Jefferson Electric Company started in business in 1915. They produced several electrical items such as transformers, automotive ignition coils, fuses, lamp ballasts, etc. In 1931 they moved their manufacturing facilities from Chicago to Bellwood, Illinois and built a very large, modern plant. The original Jefferson Mystery Clocks seem to be the result of the company President's wife finding an "appealing" clock in a shop window during a visit to the Netherlands.

The design of the original Dutch clock was simplified and the various Jefferson Mystery Clocks were placed in production.

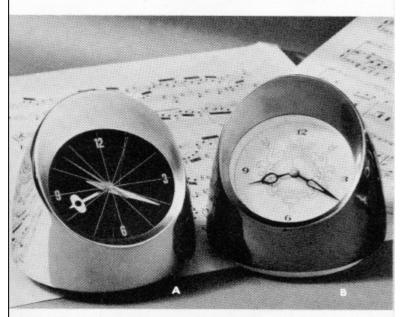
The clocks shown in the flyer were introduced in the late 1950's and early 1960's. The "Integer" and the "Intermezzo" models (the 110 VAC corded desk clocks) featured a patented system that wound any excess electrical cord in the base of the clock thereby tidying your desk top.



Jefferson Electric Clocks (continued)

CONVENTIONAL ELECTRIC

Famous Jefferson 110 volt AC, 60 cycle synchronous motor for guaranteed accuracy. Take-up reel in base conceals unused cord. Size: 5-5/32" x 4-23/32"; net wt.: 3 lbs.



The "500"

(A) Sparkling heavy chrome plate keynotes this handsome chronometer. Striking contrast is provided by its jet-black instrument dial—accented by gold numerals, hands and a red second hand.

\$10 05

Lady Marion

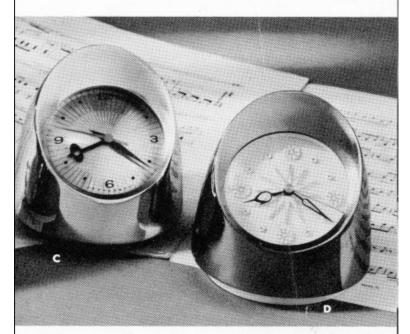
(B) Gold and white—for delicacy and taste...24 kt. gold plated housing... white hand crafted dial with matching base—all combine to create the very best effects of quality and refinement.

\$22.95

Jefferson Electric Clocks (continued)

CORDLESS ELECTRIC

A reliable cordless clock engineered and warranted by a quality manufacturer. Self regulating. Standard mercury cell power. Size: 5-5/32" x 4-23/32"; net wt.: 3 lbs.



Integer

(C) Unique design and unusual operation—with its own built-in power source. Gold prismatic face encased in polished chromium creates a design in keeping with its advanced concept.

\$29.95

Intermezzo

(D) Completely independent of outlets or cords... place anywhere to achieve maximum effectiveness. An exquisite cameo dial of gleaming gold on winter white—nestles in luxurious 24 kt. gold plate.

\$29.95

Jefferson Electric Clocks (continued)



Electric Horology Links

Calling all Members:

If you have a link to an interesting internet site you think other members may enjoy visiting, let us know and we build a list in the Journal. Of course it should be about electric clocks or watches. Sites with information about repair and restoration tips and techniques are also encouraged.



Here are a few links to get things started. We can categorize the list as it grows.

- 1) http://revereclocks.com/index.php?p=1_9_History-of-Revere-GE-Clocks
- 2) http://clockhistory.com/telechron/warrenclockco/
- 3) http://www.ahsoc.demon.co.uk/ehg/electricalindex.html
- 4) http://www.roger-russell.com/jeffers/jefhour.htm
- 5) http://electric-clocks.com/
- 6) http://www.abbeyclock.com/western.html
- 7) http://www.telegraph-office.com/pages/time.html
- 8)

Mart Ads



All Mart Ads are FREE:

- Send copy to the attention of the Editor: Tony Bolek 55500 Cleveland Shelby Township, MI 48316
- Limit 3 Lines

Hard to Find Parts

BULLE Suspension assemblies, fabric type, just like originals. TIFFANY Single Contact suspensions springs (.004"). Clock Trade Enterprises (CTE), Box 264, St. Clair Shores, MI 48080; (313) 882-9380

TIFFANY Double Contact Suspension Springs: Use a Hamilton Ladies Watch Mainspring, Specifications: HAMILTON 6/0 #2521, 1.4mmx 0.12mm x 11 $\frac{1}{4}$ ". Available from: Bill Schroeder @ &3.00 each + postage. 6033 N. Sheridan Rd., #31H, Chicago, IL 60660; (773) 275-2563. Also available from most watch parts suppliers.

For Sale

Telechron B rotors rebuilt using Telechron factory tooling, parts and paperwork. Most commonly used rotors are in stock for a quick turnaround. Also repair service offered for Telechron, GE, Revere and Hershede electric clocks. All Good Time Clock Service, 119-B Courtland St., Rockford, MI 49341; (866) 914-8463

Glass dome for the large Bulle clock. We also have glass domes for the Tiffany Never Wind, Barr, Poole, and Kundo clocks. If I don't have it in stock, I'll try to get it. Ben Bowen, PO Box 4718 Dowling Park, FL 32064; (386) 658-1167; E-mail me at www.glassdomes.com.

CD containing over 100 electric clock systems, such as ATO, Brillie, Bulle, Campiche, Eureka, Garnier, Gent, Hipp, Holden, Magneta, Poole, Scott, Shortt, Synchronome, Tiffany, Vaucanson, Wagner, Warren & many more. Price \$30, includes shipping. J. E. Bosschieter; E-mail me at BosscoClocks@Zonnet.nl.

"A Guide to Electrical Horology" by Martin Swetsky, FNAWCC. A step by step book on the repair and servicing of Tiffany Never Wind, Poole & Barr, Bulle, Eureka, Synchronome, Self Winding, American Clock Co. (Chicago), Standard Electric, ATO, Sempire, NoKey, Brille, Pulsynetic, etc. Cost \$42.00 Post Paid. Contact Michell Swetsky, 10 Chelsea Way, Fairport, NY 11450; E-mail me at www.swetskyNY.net/agteh or MSwetsky@Rochester.rr.com.

Electronic "master clock" for old slave dials: \$50. "Governor" makes Eureka clocks keep quartz-accurate time with no change to the clock: \$95. Voltage regulators: \$35 to \$55. Bryan Mumford, 3933 Antone Road, Santa Barbara, CA 93110; (805) 687-5116; E-Mail www.bmumford.com.

BANGOR Electric Clock Parts, New Factory original parts ... too many to list separately. Call or e-mail with your needs. Elmer Crum; (727) 868-0181; E-mail at electrichorology@juno.com.

Tower & Street Clocks - Electric Time Company, manufacturers new tower and street clocks. Exact replacement movements for Telechron large clocks. Electric Time Company, Inc., 97 West Street, Medfield, MA, USA (508)-359-4396/800-531-2562 FAX 508/359-4482 - http://www.electrictime.com - sales@electrictime.com

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THE ELECTRICAL HOROLOGY SOCIETY

CHAPTER #78

NATIONAL ASSOCIATION OF WATCH AND CLOCK COLLECTORS

MEMBERSHIP FORM

Please Print All Information	. Membership dues:	_	ous 48 States ers, 1 year for		•	r \$20
NAME			N	NAWCC# _		_
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COUNTRY						
E-MAIL	TE	_EPHONE		_		
I wish to join or renew my n please find a check in the	•		•	r #78 of th	e NAWCC. Enclose	ed
SIGNED			[DATE		
Please make checks payab	le to: The Electrical Horolo	gy Society Ch	apter #78			
Comments/Suggestions/In	formation that I am willing	to loan for fu	ture publication	on:		
Return to: TONY BOL 55500 CL	EK SECRETARY-TREASURI	ER				

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