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The Journal of the Electrical Horology Society

Chapter #78 National Association of Watch and Clock Collectors

The Side Bar:

- In this issue, we bring you Part II, the conclusion of the Tiffany Neverwind Repair, Instruction, and Information Chart for Style 1100 Clocks.
- This Issue's Collector's Corner features a Self Winding Clock from Leonard Brenner
- Members: "We are always looking for information suitable for the Journal and greatly appreciate the loan of original material."

Inside this issue:

President's Message

Fellow Horologists:

Best wishes for a prosperous and healthy New Year. Speaking of the New Year, it is time for resolutions and our Editor, Tony Bolek, and I have both resolved to get future Journals out on time. Sorry for this issue's delay.

This issue of the Journal of the Electrical Horological Society features repair and selling information about the Tiffany Never-Wind Clocks. The original information for this reproduction was provided by Rodney King and we thank him for his generosity. Tiffany Never-Wind clocks were produced in relatively large numbers and the clocks are usually available in our Marts. Generally, these clocks run well but they do require careful setup. It is not mentioned in the Tiffany literature but a drop of contact cleaner on the "interrupter" (identified on page 10) is a help to the good running of these clocks.

In setting-up Tiffany clocks, the distance between the top mounting of the pendulum wire and the "oscillator contact pin" is critical and the gauges shown on page 12 are helpful in achieving the proper distance. Generally, a 0.0038 inch thick Horolovar 400 -day clock suspension spring will work well in the single contact clocks. However, Tiffany was not too careful in the manufacture of their pendulums and sometimes it is necessary to experiment in order to get the clocks to rate properly.

The "Sales Helps" beginning on page 18 makes for interesting reading, particularly the Fifth Sales Help which recommends that the sales person never should describe a Tiffany clock as an electric clock. This shows the publics' feelings about electric battery powered clocks. Of course, except at certain times, the members of Chapter #78 would have a very different opinion about battery powered clocks.

Beginning op page 20, our Editor, Tony Bolek is introducing a new feature for the Journal entitled "The Collector's Corner." As long as it pertains to electric horology, The Collector's Corner can cover just about anything. The first offering describes clocks manufactured by the American Self-Winding Clock Company of Chicago. Len Brenner was looking for information on this company. Unfortunately Len died before we could publish his request in the Journal. Consequently, if you have any information about the American Self-Winding Clock Company of Chicago, please let me know. If you have any questions, information you would like to share, or requests suitable for the Collector's Corner, please let Tony know. Thank you for your help.

Enjoy the Journal, the winter months, and remember, spring is just around the corner.

Bill Ellison, FNAWCC President

Tiffany Never-Wind Style 1100 - Part II

REPAIR DIRECTIONS.

No. 1100 Style Movement.

IMPORTANT—The less you take this clock apart, the less likely to get out of adjustment and the less you have to put together and adjust. Most of the parts are fixed, properly adjusted and rarely have to be touched or re-adjusted. We tell you how to do it when necessary, but strongly urge your reading these directions through at least once before beginning any repair work on a Tiffany Never-Wind Clock. This is the simplest clock movement in the world, one that the watchmaker or clock repairer can readily understand and whenever repairs are necessary, due to accident or abuse, they are easily and quickly made and highly profitable. We invite you to write us on any points we can be of service to you, for watchmakers who have made a study of our simple movement, are today the Tiffany Clock's most enthusiastic friends.

Sec. 1. **OIL**—No oil of any kind should be used anywhere on the No. 1100 Tiffany Never-Wind Clock movement and if you find any oil has been used by anyone, such oil should be cleaned off. This clock is constructed to function perfectly without oil and oil is a non-conductor of electric current and spoils contacts. Not having any oil on it, the Tiffany Never-Wind Clock, through the accumulation of dust with the oil, will not get gummed up and will run for years with little or no cleaning. The use of oil in assembling is positively forbidden in our factory.

Sec. 2. The latest model Tiffany Never-Wind Clock is so constructed that the greater part of its very simple mechanism is protected by the Back-Plate, on which the movement is mounted, and the Back-Cover placed over the movement.

Sec. 3. Even in case of accident, about all that can happen is—to bend or break the Pendulum Wire, or bend the Suspension Bracket which supports the Pendulum.

Sec. 4. **TO REMOVE THE BACK COVER**—unscrew the screws (one on each side of the Back Cover) which fasten the Back Cover to the Back Plate, and then pulling the Back Cover out slightly at the bottom, lift it over the Suspension Bracket. This exposes the working mechanism of the clock.

Tiffany Never-Wind Style 1100 - Part II (continued)

THE PENDULUM (In General)

Sec. 5. If the Pendulum Wire has a bend or kink, by putting on the Pendulum Weight and rubbing the side of an ordinary, round lead pencil against the flat side of wire that bulges, it will generally straighten out the wire and make it as good as new.

Sec. 6. If the Pendulum Wire has a sharp kink in it or is broken, then it needs a new wire and we can either send you a Pendulum Wire (only 25 cents), or if you will return to us the top and bottom attachments to the wire, the Regulating Screw and Nut complete with the Oscillator Nut and Contact Pin, we can then send you the complete Pendulum Wire assembly, properly spaced and adjusted so that it is the work of but a few minutes for you to insert the new wire (our charge for this service, including the new wire being but 50 cents). In any event let us know whether the pendulum is of the "hook on" (new) or "slot" (old) style (see diagrams 3, 4 and 5 on pages 9 and 11).

Sec. 7. Once in a while a customer may knock the Suspension Bracket to one side—see that Suspension Bracket is at right angle to the Back Plate on which the movement is mounted, so that the Pendulum Wire hangs straight down through the center of hole in the Oscillator Guide. The Oscillator Contact Pin should swing (revolve) so as first to make contact just above the center of the small platinum wire which is on the face of the Contact Plate and then, as the Armature pulls up and trips the Interrupter, this Oscillator Contact Pin on the Pendulum Wire will rest in the top of little notch just below, until the reverse motion of the Pendulum Weight swings the Oscillator Contact Pin free and allows the Contact Plate to drop into proper position to receive the next contact of the Oscillator Contact Pin.

Sec. 8. If the Oscillator Contact Pin does not point directly at a line drawn vertically through the center of the clock movement, take a small pair of pliers and grip the Pendulum Wire just below the top and twist the **Pendulum Wire** so as to bring the Oscillator Contact Pin back into position. This you can often do without removing the Back Cover. The Oscillator Contact Pin should not bend down or up but point at a right angle from the Pendulum Wire and you should see that the Suspension Bracket has not been bent down or up so as to raise or lower the Oscillator Contact Pin and prevent its making contact at the proper point on the Contact Plate. If the Suspension Bracket has been so

Tiffany Never-Wind Style 1100 - Part II (continued)

bent, you can bend it back in place with a pair of pliers, being sure that the two screws hold the Suspension Bracket tight in place.

Sec. 9. It is just possible that once in a while you may find that some one has pulled the Pendulum Wire partly down in the Top Suspension Clamp so that it brings the Oscillator Contact Pin too low. To correct this, in the case of the New Pendulum Wire Assembly (Diagram 3, page 9) loosen **slightly** the three little watch screws (Suspension Clamp Screws and Safety Screw) and push Pendulum Wire up to Top Suspension Pin and hold Pendulum Wire in place and tighten three screws; and in case of Old Pendulum Wire Assembly (diagram 5, page 11) loosen the Suspension Clamp Nut and push Pendulum Wire up as far as it will go, holding Pendulum Wire in that position and tighten the Suspension Clamp Nut.

Sec. 10. If the Pendulum Wire makes clock run too fast and you can't slow it down within the regulation limits on the Regulating Screw, then rub the flat sides of the Pendulum Wire **very lightly** with fine Emery paper—taking off or thinning the Pendulum Wire but a very little at a time. If the Pendulum Wire makes a clock run too slow, then clip off the wire a trifle at **the bottom**, never more than ⅛".

Sec. 11. **DOUBLE CONTACT**—When a clock makes a double click or contact instead of a single, it is probably due to the fact that the Suspension Bracket has been bent down or up. You can test and correct this (see Sec. 7, page 7). Sometimes the Armature Arm needs adjusting to proper position (see diagram 6, page 12). It may be simply that the clock tips forward or backward and that setting the clock level will stop the double clicking.

Tiffany Never-Wind Style 1100 - Part II (continued)

THE PENDULUM (Now Used).

Sec. 12. **TO REMOVE NEW PENDULUM WIRE WITH ATTACHMENTS FROM CLOCK** (Diagram 3, Page 9)—first remove the Back Cover, then loosen Safety Screw, which is the upper one of three small watch screws in Top Suspension Clamp, and disconnect the Safety Wire under head of this screw, then remove Top Suspension Pin which runs through Suspension Bracket and Top Suspension Clamp and then carefully take the Pendulum Wire through slot in back of Oscillator Guide.

DIAGRAM 3
NEW PENDULUM WIRE ASSEMBLY

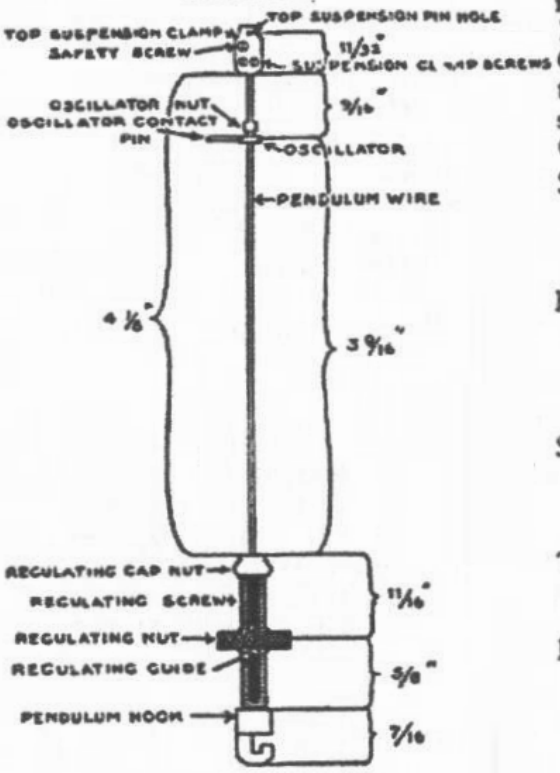
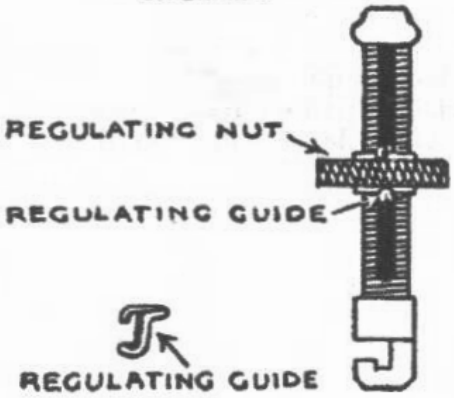


DIAGRAM 4



Sec. 13. **TO ASSEMBLE NEW PENDULUM WIRE YOURSELF** (See Diagram 3, page 9):

First—Put Regulating Nut on Regulating Screw from the top, with the "S-F" marked on Regulating Nut facing upward.

Second—Put Regulating Guide in place in Regulating Nut (see enlarged drawing—diagram 4, page 9).

Third—Put Regulating Cap Nut on top of Regulating Screw.

Fourth—Put Pendulum Wire in from the top, through the Regulating Cap Nut, the Regulating Guide and through the small hole in the bottom of the Regulating Screw.

Fifth—Insert Pendulum Wire in slotted end of Bottom Suspension Clamp (this Suspension Clamp being contained in the bottom of Regulating Screw) as far as the slot goes and then put the Bottom Suspension Clamp back into the hole in bottom of Regulating Screw and then screw the Pendulum Hook on tight.

(over)

Tiffany Never-Wind Style 1100 - Part II (continued)

Sixth—Have Oscillator Nut loose and push upper end of Pendulum Wire through to proper distance (as per diagram 3, page 9) and tighten Oscillator Nut.

Seventh—Loosen slightly the three little watch screws (Suspension Clamp Screws and Safety Screw) and push Pendulum Wire up to Top Suspension Pin and hold Pendulum Wire in place and tighten three screws.

NOTE—REGULATING GUIDE—In the latest model No. 1100 Style movement, the Regulating Guide is a small piece of Bronze wire bent to shape, which is located in the Regulating Nut, which travels up and down on the Pendulum Wire in the groove in Regulating Screw, as the Regulating Nut is turned up and down (see diagram 4, page 9).

Sec. 14. **TO INSERT NEW PENDULUM WIRE AND ATTACHMENTS ALREADY ASSEMBLED**—Pass the Pendulum Wire, at a point on the wire just below Oscillator Contact Pin, through the slot in back of Oscillator Guide, turn the Pendulum Wire around so that the Oscillator Contact Pin points toward the center of Back Plate and just to the left of the Interrupter Contact. Then put in slot of Suspension Bracket and put in Top Suspension Pin. In case of New Pendulum Wire Assembly, the Battery Safety Wire is fastened under the upper (Safety) Screw (diagram 3, page 9) and in case of Old Pendulum Wire Assembly the Battery Safety Wire is fastened under the Safety Screw diagram 5, page 11).

THE PENDULUM (Formerly Used)

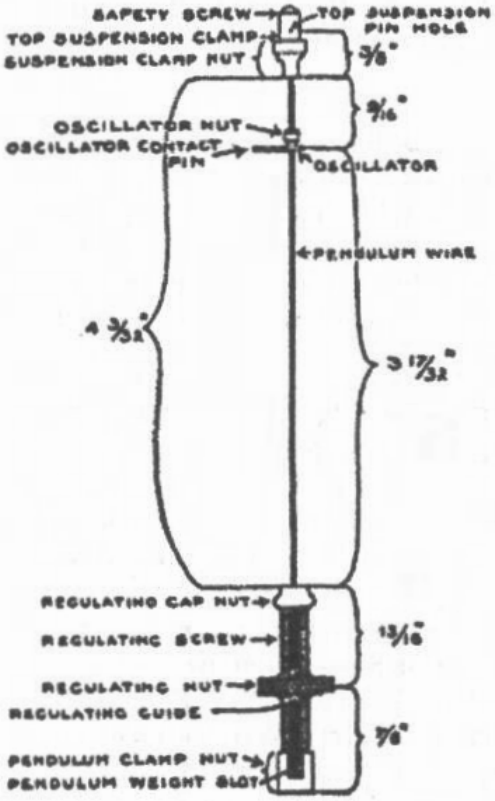
Sec. 15. **TO REMOVE OLD PENDULUM WIRE WITH ATTACHMENTS FROM CLOCK** (diagram 5, page 11)—first remove the Back Cover, then loosen Safety Screw on top of Suspension Bracket and disconnect the Safety Wire just under it, then remove Top Suspension Pin which runs through the Suspension Bracket and Top Suspension Clamp and then carefully take the Pendulum Wire through slot in back of Oscillator Guide.

Revere Electric Clocks Service Manual - Part II (continued)

Sec. 16. TO ASSEMBLE OLD PENDULUM WIRE YOURSELF (see diagram 5, page 11).

DIAGRAM 5

OLD PENDULUM WIRE ASSEMBLY



First—Put Regulating Nut on Regulating Screw from the top, with the "S-F" marked on Regulating Nut, facing upward.

Second—Put Regulating Guide in place in Regulating Nut (see enlarged drawing—diagram 4, page 9).

Third—Put Regulating Cap Nut on top of Regulating Screw.

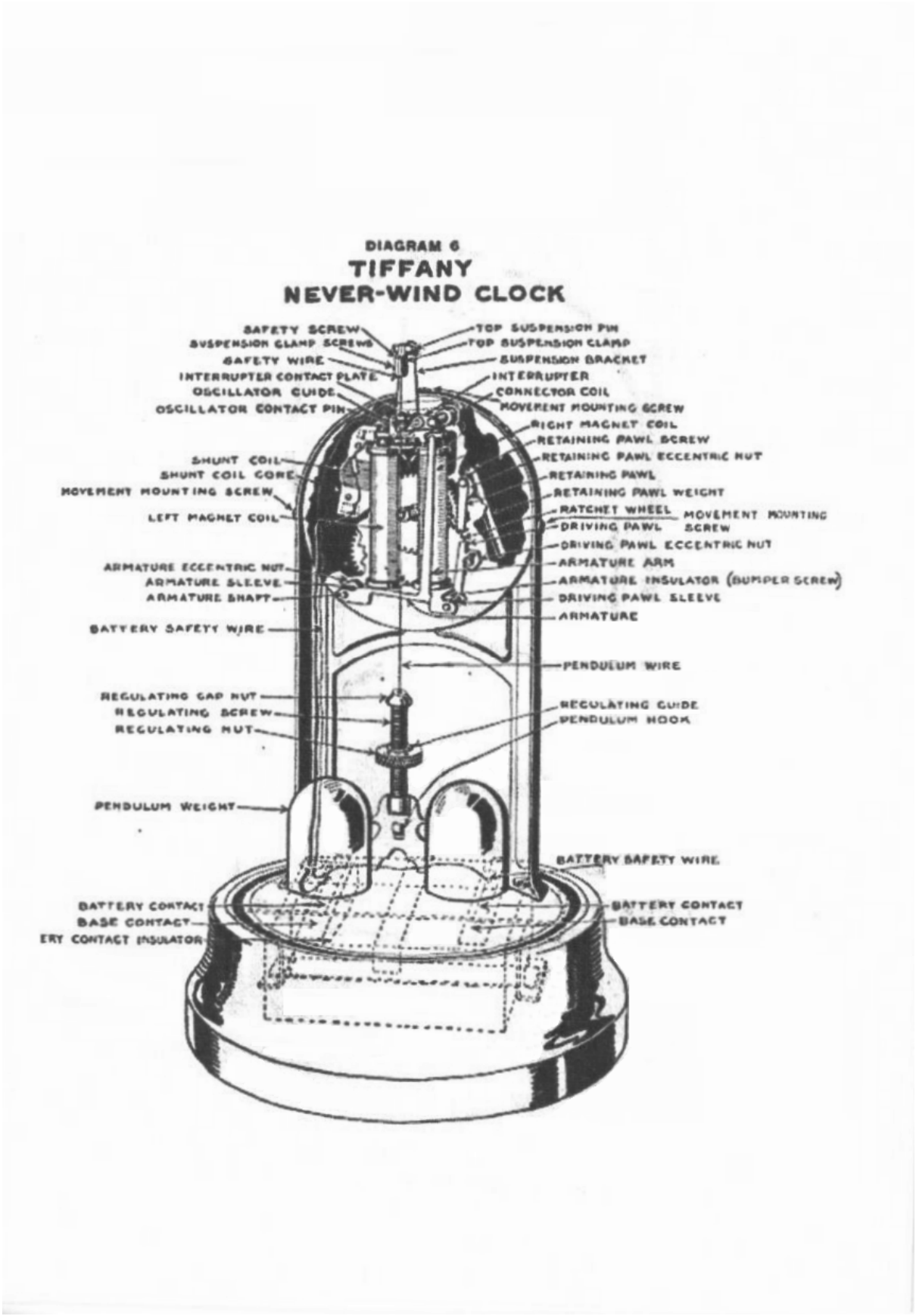
Fourth—Put Pendulum Wire in from the top, through the Regulating Cap Nut, the Regulating Guide and through the small hole in the bottom of the Regulating Screw.

Fifth—Insert Pendulum Wire in slotted end of Bottom Suspension Clamp (this Suspension Clamp being contained in the bottotm of Regulating Screw), as far as the slot goes and then push the Bottom Suspension Clamp back into the hole in bottom of Regulating Screw and then screw the Pendulum Clamp Nut tight.

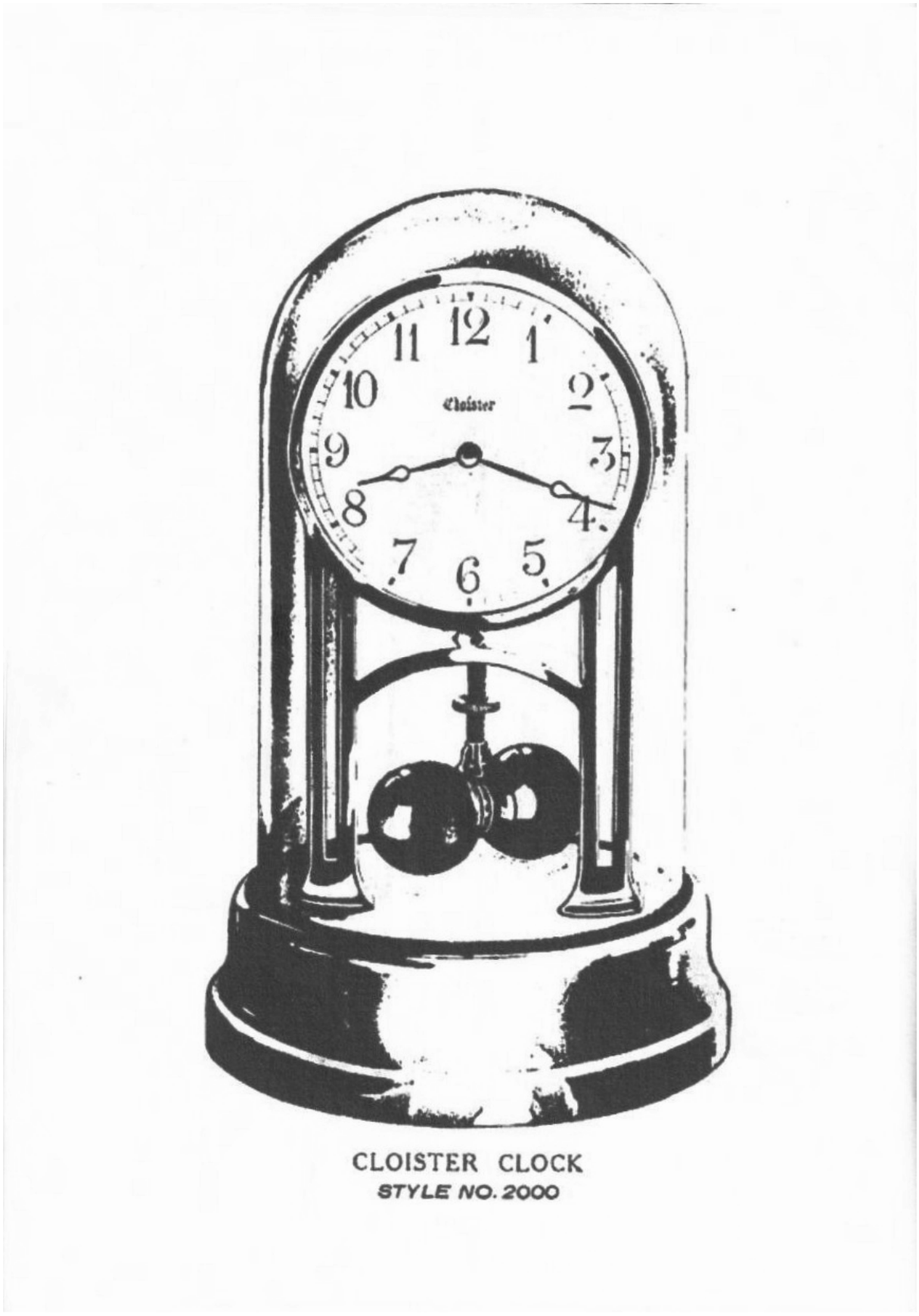
Sixth—Have Oscillator Nut loose and push upper end of wire through to proper distance (as per diagram 5, page 11) and tighten Oscillator Nut.

Seventh—Loosen slightly the Suspension Clamp Nut and push Pendulum Wire up as far as it will go, holding Pendulum Wire in that position and tighten the Suspension Clamp Nut.

Tiffany Never-Wind Style 1100 - Part II (continued)

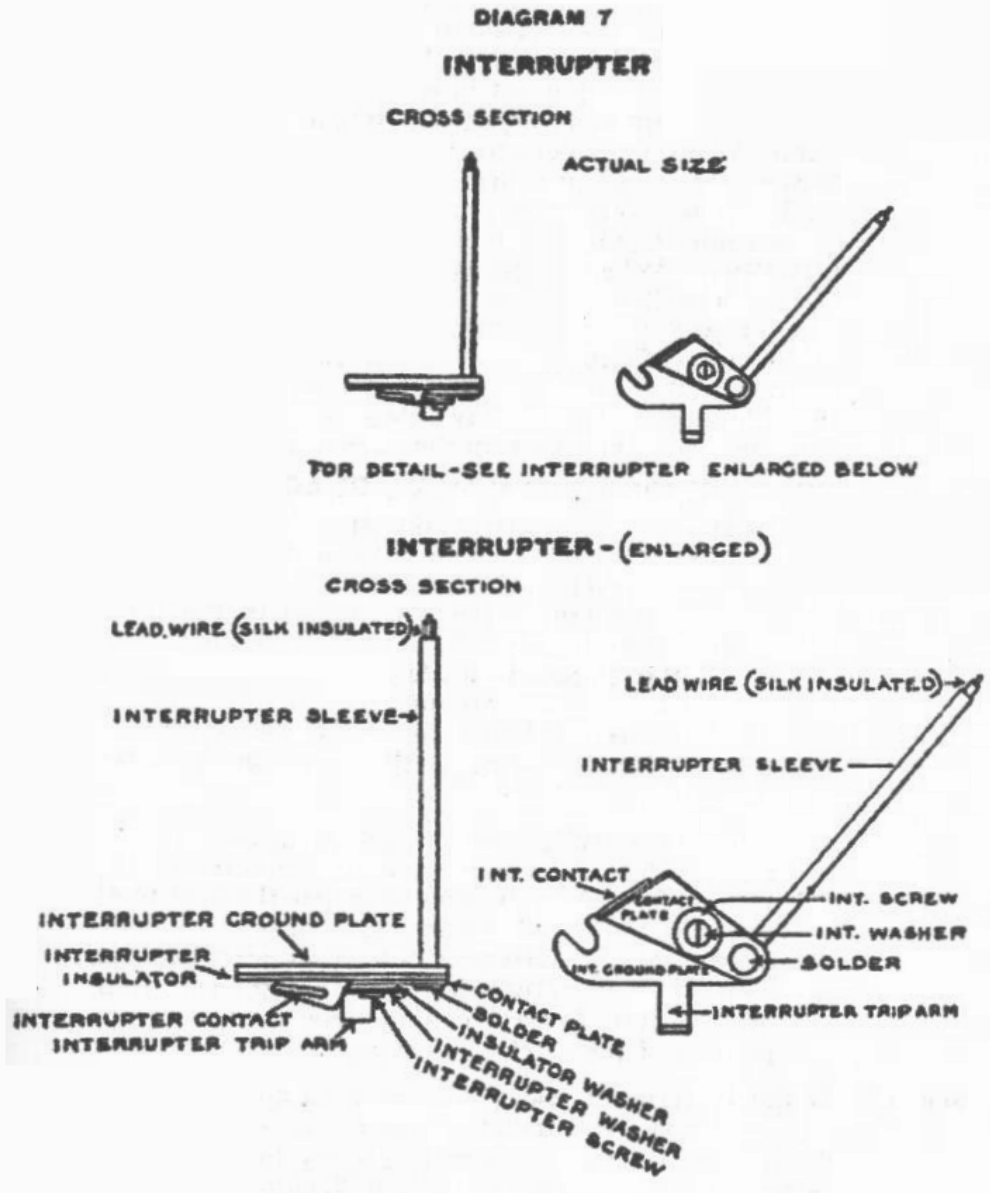


Tiffany Never-Wind Style 1100 - Part II (continued)



CLOISTER CLOCK
STYLE NO. 2000

Tiffany Never-Wind Style 1100 - Part II (continued)



Tiffany Never-Wind Style 1100 - Part II (continued)

SUSPENSION BRACKET

Sec. 17. The Suspension Bracket is used to suspend the Pendulum Wire and its proper position is covered under chapter on Pendulum Wire (pages 7-11 inclusive).

INTERRUPTER

Sec. 18. The Interrupter, which is made up of several parts, one of which is the Contact Plate, is one of the vital parts of the clock mechanism and a knowledge of its purpose and function is important in connection with the complete Pendulum and Suspension Bracket. As the Pendulum Weight revolves to the right (looking from the back of the clock), it brings the Oscillator Contact Pin on Pendulum Wire in contact with the Platinum wire (Interrupter Contact) which is on the face of the Contact Plate. When all adjustments are as they should be, this Oscillator Contact Pin first makes contact at a point just above the middle of the Platinum wire (Interrupter Contact). The electric circuit is thus closed and the electric current flows instantly into the two Magnet Coils. The two Magnet Coils then become magnetic and pull up the Armature.

TWO ACTIONS THEN TAKE PLACE:

First—The Armature trips the Interrupter, causing the Oscillator Contact Pin to slide down the Interrupter Contact until the Oscillator Contact Pin rests in the top of the little notch in the Interrupter Ground Plate. This being done instantaneously, the circuit is made and broken instantly, for the Interrupter Ground Plate is out of circuit and no current is being used while the Interrupter Contact Pin is resting in the notch on the Interrupter Ground Plate.

Second—The Driving Pawl, which is fastened to the right end of Armature, is moved upward by the action of the Armature and engages the next tooth above in the Ratchet (driving) Wheel and immediately, as the current is cut off as described just above, the Armature drops, the weight and dropping of the Armature propelling the gears and pinions of the clock movement.

Sec. 19. If the Interrupter sticks, that is, does not drop down so as to rest on Oscillator Guide Bracket when the Oscillator Contact Pin is swung away from it by the reverse motion of the Pendulum Weight, it may be that it has been jammed. Insert a knife blade and wedge slightly between Interrupter and the bearing and work the Interrupter up and down a few times. If that does not fix it, then the Connector Coil, which

Tiffany Never-Wind Style 1100 - Part II (continued)

is located between the dial and the back plate and which connects the shaft of the Interrupter with the upper end of Spark Coil, should be unsoldered and the Interrupter pulled out of the bearing and cleaned, as also the inside of the bearing itself. No oil should be used, just wiping with a soft cloth.

Sec. 20. **TO REMOVE INTERRUPTER WITH ATTACHED SLEEVE FROM BEARING FOR PURPOSE OF CLEANING**—After removing Back Plate, unsolder that end of Connector Coil between Back Plate and Dial which is soldered to Interrupter Lead Wire, then remove fibre washer, then friction washer and then loosen large hexagon nut enough so that Interrupter Bearing will drop out of place sufficiently to allow you to pull Interrupter and Interrupter Sleeve out of Interrupter Bearing, which will then enable you to clean inside of bearing and outside of sleeve with soft cloth, as Oil must not be used.

Sec. 21. **SPARKING AT CONTACTS**—If a clock shows a "spark" at contact point on Interrupter Contact as contact is made, it may be due to the need of re-soldering the soldering lugs on both ends of Shunt Coil. To do this re-soldering, it must be done with a heated soldering iron, but no acid should be used, but rosin dissolved in alcohol or in turpentine. If this does not stop the "sparking" then a new Shunt Coil is needed.

Sec. 22. **TO REMOVE SHUNT COIL**—Unsolder the two wires, one at either end and remove the two screws which are nearest the coil of wire.

THE ARMATURE

Sec. 23. The Armature consists of several parts and is located at the bottom of the two spool Magnet Coils. It is supported at left end on Armature Shaft, the shaft itself being embedded in the Armature Eccentric Nut and the turning of the Armature Eccentric Nut adjusts the proper spacing of the Armature below the two Magnet Coils. The right end of Armature is supported by the Driving Pawl which rests on a celluloid bushing covering the Driving Pawl Stop Pin which is embedded in the Driving Pawl Eccentric Nut. The Driving Pawl Eccentric Nut is for the purpose of adjusting the Driving Pawl.

Sec. 24. On our older No. 1100 style movements, a piece of thin silk should be in place (shellaced on) on the top of Armature so as to come between the upper side of Armature and the soft iron bottom of the magnet cores,

Tiffany Never-Wind Style 1100 - Part II (continued)

the purpose of this insulating silk being to prevent the Armature freezing (sticking) to the Magnet Coils as the freezing prevents the Armature from dropping freely as it should; in our later model of No. 1100 style movement there is or should be this piece of silk on the top of the Armature under the Left Magnet Coil and under the Right Magnet Coil there is a rubber disc called the Armature Insulator, which serves the same purpose as the insulating silk and also deadens the sound.

Sec. 25. **THE ARMATURE SHAFT** is a steel pin driven into the Armature Eccentric Nut to support the Armature.

THE ARMATURE ECCENTRIC NUT is used for adjusting the space between the Armature and the two Magnet Coils.

THE ARMATURE SLEEVE is a small brass tube at left end of Armature used as a "stop collar" and is forced on the Armature Shaft; this must fit tight to the Armature Shaft.

TO REMOVE THE ARMATURE pull it straight off the Armature Shaft to which it is fastened only by friction of the Armature Sleeve.

DRIVING AND RETAINING PAWLS

Sec. 26. **THE DRIVING PAWL** is attached to the right end of the Armature and at every upward movement of the Armature, engages one tooth of the Ratchet Wheel and as the Armature drops, pulls the Ratchet Wheel down one tooth. It is the dropping of the Armature which propels the clock train.

THE DRIVING PAWL ECCENTRIC NUT is for the purpose of adjusting the Driving Pawl to the Ratchet (driving) wheel.

THE RETAINING PAWL is placed on Back Plate just above the Driving Pawl and the pressure of the Retaining Pawl Counter Weight keeps the Retaining Pawl in position between the teeth of the Ratchet Wheel and its purpose is to prevent the Ratchet Wheel from turning backward (upward) as the Driving Pawl reaches up and pulls the Ratchet Wheel down one tooth at each contact. Generally there are two full teeth in the Ratchet Wheel between the teeth in which the Driving Pawl and Retaining Pawl rest—but occasionally there may be three.

Tiffany Never-Wind Style 1100 - Part II (continued)

Sec. 27. **RETAINING PAWL COUNTER WEIGHT** lies between the Back Plate and Dial and is adjusted to Retaining Pawl Shaft by a small set screw, in such position that the right hand lug on Back Plate acts as a "stop" for it and this stop prevents the weight from falling on the wrong side of center when clock is tipped upside down as it often is in transit.

IN GENERAL

Sec. 28. See that Magnet Coils are not loose, if necessary tightening nut or screw which holds each Magnet Coil at the top. If Magnet Coils are loose or bent over against center shaft of clock this will cause a short-circuit and run down the battery very quickly.

Sec. 29. **TO REMOVE BACK PLATE AND DIAL**—First, unscrew small knurled nut in center of dial and wedge off clock hands. Second, remove three screws, one at top of Pedestal and one at either side of Pedestal and lift out Back Plate. The dial is held in Pedestal merely by friction.

Sec. 30. Examine the little pin on Center Shaft of the clock between the two Magnet Coils and see if the pin touches either of the two Magnet Coils as the shaft revolves. If it does, the pin should be filed off slightly —for its touching the Magnet Coils would cause a short circuit and run down the battery.

Sec. 31. Examine the clock hands and see that they do not interfere in revolving.

Sec. 32. **IN RETURNING A CLOCK TO US FOR REPAIRS** do not send the glass globe, which might get broken in transit. Wrap the Pendulum Weight separately and put inside of base of clock where the battery ordinarily is and put battery underneath base in packing box where it will not damage the clock. Use sufficiently large wooden box so that no pressure will come against head or top of clock and mark outside of box for identification.

Sec. 33. When clocks are unpacked, see that head or top of clock is not struck against some object and that each pendulum weight is used only on clock it is packed with and that you follow the other directions in order.

THE BATTERY

Sec. 34. **TO PUT IN BATTERY**—See directions sent with each clock. We decline any responsibility unless our simple "setting up" directions are followed exactly as given.

Tiffany Never-Wind Style 1100 - Part II (continued)

Sec. 35. **BATTERY RENEWALS**—As our earlier clocks used a larger (No. 5) battery, please specify "small three cell battery" when ordering for our No. 1100 style clocks.

Sec. 36. **BATTERY GUARANTEE**—We guarantee our standard size battery to run the style No. 1100 clock a year, the average battery life being 15 months. While we use a standard size battery, obtainable for renewals almost anywhere, as both you and we are interested in your customers having good battery service, we recommend and guarantee batteries furnished by us.

Sec. 37. **A CLOCK IS SOMETIMES STOPPED** accidentally or by some one without the owner's knowledge and the battery blamed, where very often it will run the clock for months if the clock is simply started again.

Sec. 38. **A FRESH BATTERY SHOULD TEST** about eight amperes, sometimes showing slightly less when first received in cold weather, till warmed up. A high amperage battery has not necessarily a long life and The Tiffany Never-Wind Clock requires long life rather than high amperage, in fact often will run two or three months on a battery showing no amperage on the ordinary ammeter tester. If you have not an ammeter tester, by changing the battery from a clock that does go to one that does not—you can determine whether the fault lies with the battery and if the battery shows any signs of dampness or leakage or if the battery is dead, it should be removed from the clock at once and a new battery substituted. The three battery cells should not be removed from the inner cardboard box container when inserted in the clock. When laying a battery down (except in clock) do not allow its brass contacts to come in contact with any metal, as that would short-circuit and run down the battery immediately.

Sec. 39. **BATTERY TESTER (Ammeter)**—A good Ammeter is made by the American Ever Ready Company of New York City, which can be bought for about $1.50 at almost any hardware or electrical store, where they will show you how to use it. When making test of battery, hold the cord contact and right leg of Ammeter on battery contacts only for a second or two, as otherwise you will be running down the battery, and if the battery does not register with the contacts applied one way, reverse the points, as different makes of Ammeters register differently.

Tiffany Never-Wind Style 1100 - Part II (continued)

REGULATING

Sec. 40. **THE TIFFANY NEVER-WIND CLOCK** is the only clock in the world that does not require the pendulum to opgrate the clock-train. In the old-time clock the pendulum and clock train are so linked together that friction on the one or other makes its impression on the time-keeping quality. Whereas in The Tiffany Never-Wind Clock, these two functions are distinctly independent of each other, thereby insuring more accurate time keeping.

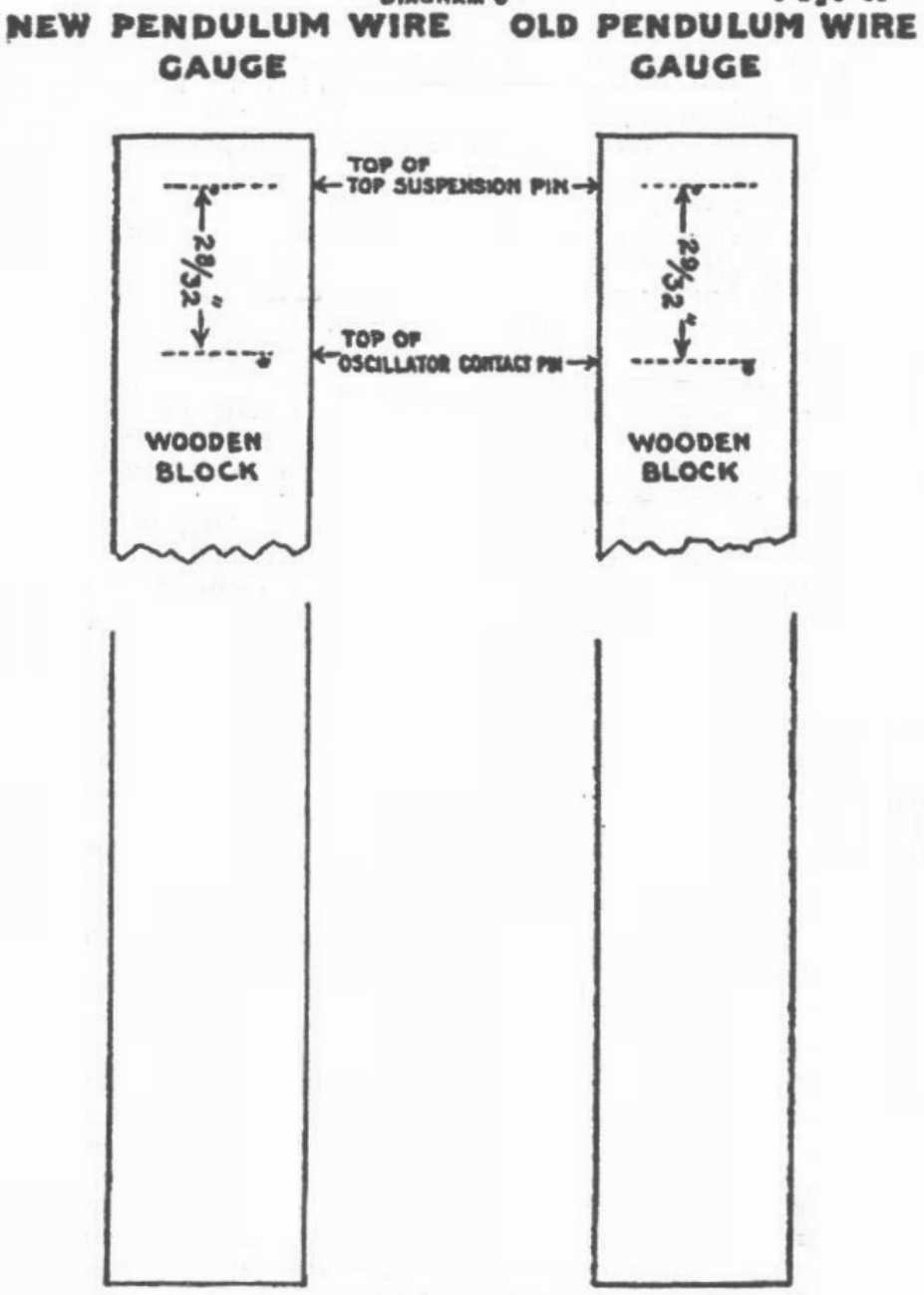
Sec. 41. You know there is no such thing as a perfect time-piece—ours approaches nearer than any other mantel clock; yet because it never needs winding, does not imply that its hands may not require moving forward or backward once in a while and occasionally the Regulating Nut be touched. It will run within a minute a week or better—its good time-keeping being simply up to the owner.

Sec. 42. The Tiffany Never-Wind Clocks are regulated at our factory at level. Should further regulation be necessary, turn slightly knurled Regulating Nut, between and just above the Pendulum Weight (see indicating letters "S-F" on top of knurled nut). Turn to the right to make clock go faster and to the left to go slower. All clocks require slight re-regulating after being placed in position, and a quarter turn of the Regulating Nut makes a difference of about two minutes a day. These clocks, properly regulated, make contact every twelve seconds or five times a minute. A clock tipping forward will run fast and back slow, tipping to the left fast and to the right slow, hence the importance that it should stand level. Your customers should be shown how to set the hands and how to regulate. This will save you the trouble and loss of time calling at their homes and make the clocks "stay sold."

Sec. 43. **IT IS WELL TO REMEMBER THAT THE NEARER LEVEL THE CLOCK STANDS THE BETTER THE TIME AND THE LESS RE-REGULATING NECESSARY.** It stands to reason, on account of the often severe and sudden changes in temperature, that a clock in the jeweler's window will not run as accurately as in the store, nor will a clock that is being moved about in demonstrating, so that you may need to set the hands forward or back occasionally in the case of the clocks you are showing in the window or demonstrating with on the show-case. The clock should not be moved about with the heavy Pendulum Weight on and each Pendulum Weight should be used only on clock it is packed with. Mixing the pendulum weights causes much unnecessary re-regulation.

Tiffany Never-Wind Style 1100 - Part II (continued)

DIAGRAM 8 *Page 21*



Actual Size of Gauge to Assemble Pendulum Wires.

To assemble these two gauges take a simple, smooth block of wood and use two headless pins the same size diameter as the Top Suspension Pin, these pins to occupy the periods as shown in each gauge.

Tiffany Never-Wind Style 1100 - Part II (continued)

SALES HELPS

Important—Read Very Carefully

There is a right and a wrong way to sell the Tiffany Never-Wind Clock. Permit us to point out **the right way**—so that your sales may be large and ever-increasing, your customers pleased and satisfied and, your profits clean because you have no "come-backs."

The one who has trouble with this clock or does not make good sales, is the one who **does not** follow the directions sent with each clock, nor take the few minutes necessary to read carefully what we send him.

First.—When clocks are unpacked, see that head or top of clock is not struck against some object **and that each pendulum weight is used only on clock it is packed with** and that you follow the other directions in order.

Second.—You can make good sales only by having on hand at least three of these clocks—for you should have one in window **displayed with window card,** one for a demonstrator in your store and at least a third ready for immediate delivery to your customer.

Third.—From the experience of our jewelry customers, we know that this clock, **properly leveled,** running, **on time** and **with display card** in the window, not only sells many clocks, but is a splendid window attraction and draws many a new customer into the store. It is not the custom generally to have clocks displayed in the window or show cases on time—but you see this being a new clock to the public, they will invariably look to see if the time is right and if within a minute or two with their watches, be favorably impressed and themselves begin to advertise the clock by talking about it. This may seem a little matter to you, but we beg to assure you that with your kindly interest in and attention to this "on time" request of ours, your sales will grow rapidly and the whole store be benefitted thereby. You see, the public is first attracted by the clock's novelty, the window card stating that it requires no winding excites curiosity and, if the clock is on time, is impressed with its time-keeping and they then come into the store to ask questions, which is what you want. Once in the store, you have a chance to sell him or her not only the clock but other things, and this clock works wonders as a window attraction and should be kept there.

Fourth.—It stands to reason on account of the often severe and sudden changes in temperature, that a clock in the window will not run as accurately as in the store, nor will a clock that is being moved about in demonstrating so that you may need to set the hands forward or back occasionally in the case of the clocks you are showing in the window or demonstrating with on the show case.

Tiffany Never-Wind Style 1100 - Part II (continued)

Fifth.—Always sell, advertise and refer to this clock as the Tiffany **Never-Wind Clock**—never as an **electric clock.** You see, the word **electric** often frightens your customers before they understand how simple the clock is, might imply the necessity of wiring or of getting a shock and thus prevent a sale.

Sixth.—A question commonly asked of you—is it a perfect time-piece—should be answered truthfully, that there is no such thing in the world, and that **your customers** may need to set the hands and touch the regulator once in awhile, especially when the clock is first set up, but show them how easy it is to do this by simply lifting the globe and without moving the clock. Tell them not to regulate this clock by an alarm clock, which itself is often not correct, for this clock is capable of fine regulation and timekeeping, and can be so regulated by the owner instead of bothering you to go to his or her home.

Seventh.—The Western Union Clocks are set **every hour** and often vary several minutes **in an hour**; the Government clock in Washington, D. C., is kept in a special room where the temperature, dryness, air pressure, etc., are always the same and still that clock is corrected **every day**; the Big Ben Clock in the tower at Westminster, London, England, is corrected **every half hour** electrically from Greenwich. Tell your customers these facts, it will pay you, and they will then see why not even the Tiffany Never-Wind Clock can be left entirely to itself and always be on time.

Eighth.—The Novelty and Attractiveness of the Tiffany Never-Wind Clock is such that this clock becomes, quite naturally, an object of interest and inspection by friends and family of the purchaser. While this is most excellent from a re-sale standpoint, you can readily understand that if this clock is frequently moved, the pendulum weight taken off and perhaps even the battery taken out to show a friend how the clock operates, that this would be likely to disarrange the clock, as it would any other clock in the world, and prevent its giving satisfactory time service. Consequently your customer should be informed of the above when sale is made. Properly treated, it is a fine time-keeper.

Ninth.—The battery which furnishes the motive power for this clock, is a standard dry cell, obtainable at any hardware or electrical store—but as we guarantee our batteries to run the clock a year, it is advisable to secure the batteries from us, but only for the reason of the above said guarantee, which batteries purchased in the open market do not carry.

Tenth.—A lot of the trouble and expense that all jewelers have with all makes of clocks is their own fault by allowing their customer to buy any clock expecting too much and not realizing that a clock is not a hammer but a piece of mechanism that requires decent treatment and **some attention from its owner.** The Tiffany Never-Wind Clocks are not new, not an experiment, but are running successfully in thousands of homes to the delight and satisfaction of their owners.

TIFFANY NEVER-WIND CLOCK CORPORATION,
BUFFALO, NEW YORK.

Collector's Corner

THE AMERICAN SELF-WINDING CLOCK CO.
CHICAGO, USA

The American Self-Winding Clock Company advertised two models (l-E & 1-0) in a trade magazine named "THE KEYSTONE" on October 1, 1911, see Figure 1. Besides claiming that these clocks would run forever, they were both stated to have an anchor escapement. I recently acquired a model 1-D but with a balance wheel movement, Figures 2 & 3. The advertised 1-D would seem to have a balance wheel too as shown by the Fast-Slow adjustment under the dial number 12, see figure 1. My clock, figure 2, has a bezel and glass not shown in the advertisement. Just under the center arbor is the name "AMERICAN SELF- WINDING". In small print below the number 6 are the words "AMERICAN SELF-WINDING CLOCK CO., U.S.A." Figure 3 shows a weight on the movement which moves down by gravity running the clock. Eventually, movement of the weight closes a switch which causes a solenoid to be energized to kick the weight back up where it again starts down powering the clock. The clock is made to run on two 1.5 volt dry cells (apparently type no. 6), one on each side of the movement. Except for the advertisement and my clock, I can find very little documentation of this electric clock company. Obviously the gravity driven electric movement and Chicago location would lead one to wonder if and how it was related to the American Clock Co.

Leonard Brenner

Figure 1

Collector's Corner (continued)

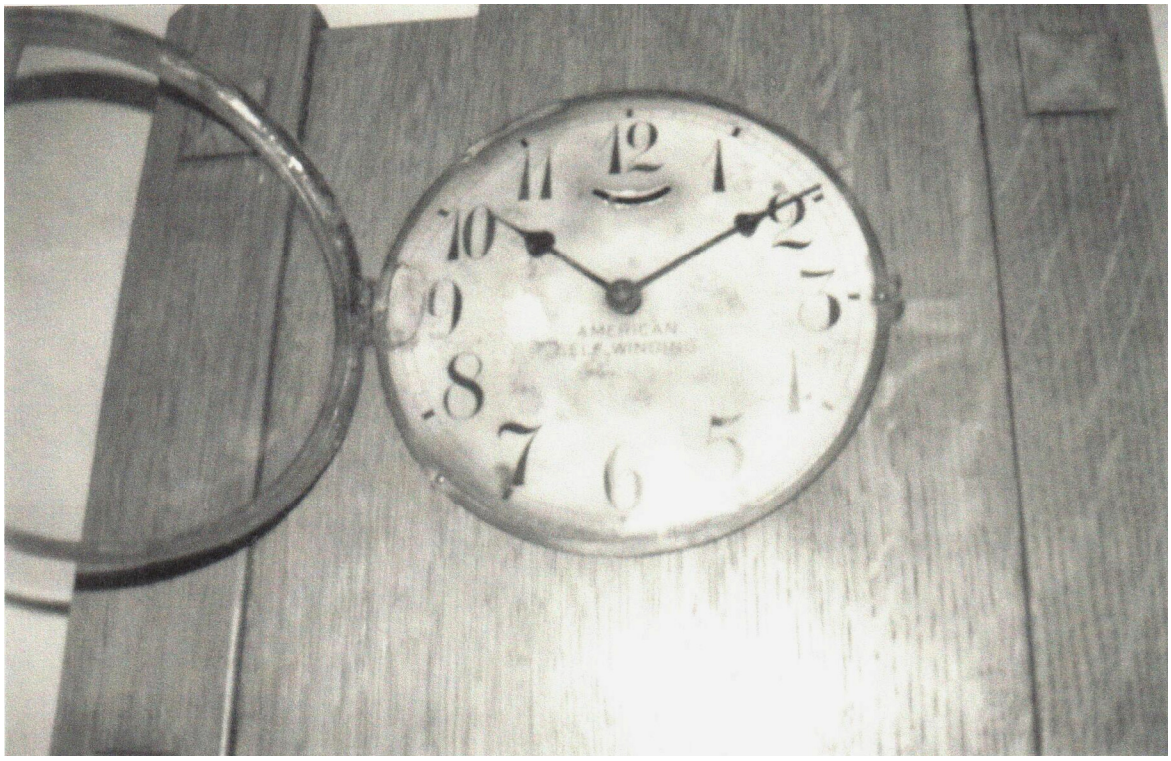


Figure 2 (DIAL)

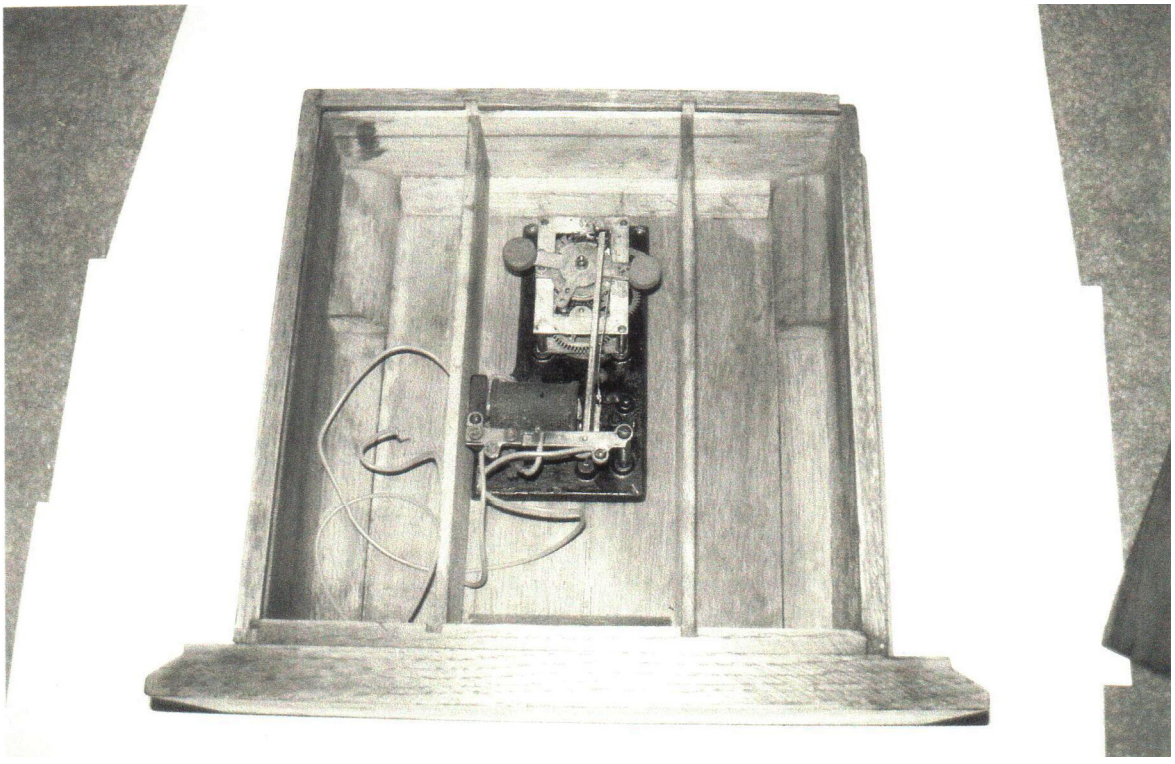
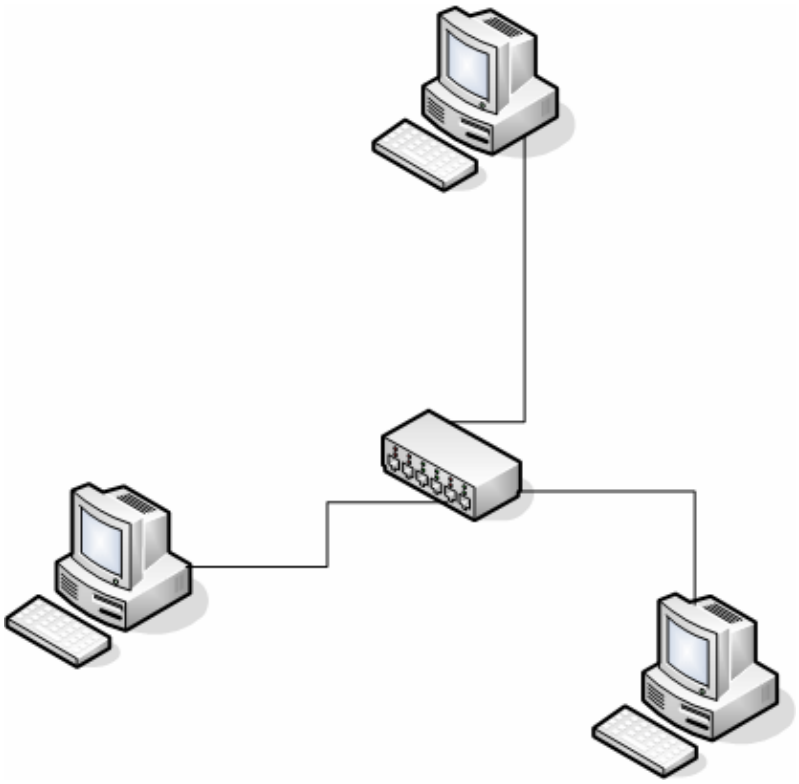


Figure 3 (MOVEMENT)

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.

Some useful links:

General Information Links

1) http://electric-clocks.com/
2) http://www.nawcc.org/museum/nwcm/galleries/precision/precision.htm
3) http://www.antiqueclockspriceguide.com/default.php
4) http://www.electricclockarchive.org/ClockGallery.aspx?aid=1

Telechron / Revere / GE Clock Links

1) http://revereclocks.com/index.php?p=1_9_History-of-Revere-GE-Clocks
2) http://clockhistory.com/telechron/warrenclockco/
3) http://www.clockguy.com/SiteRelated/SiteReferencePages/WarrenTelechronHistory.html

Electric Horology Links

Antiquarian Horological Society—Electrical Horology Group

1) http://www.ahsoc.demon.co.uk/ehg/electricalindex.html

Self Winding Clock

1) http://www.abbeyclock.com/western.html

2) http://www.telegraph-office.com/pages/time.html

Sangamo

1) http://www.sangamoclocks.com

MasterCrafters

1) http://www.roger-russell.com/mastrpg/mastrpg.htm

2) http://www.roger-russell.com/mastrpg/mastr2.htm

Jefferson Golden Hour

1) http://www.roger-russell.com/jeffers/jefhour.htm

Eureka Links

1) http://orlovac.eu/satovi/eureka.pdf

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

Wanted

100 Beat movement for American Clock Co. — Self Winding — Also, pendulum bob, stick, dial and hands for same. Contact Dennis Roberts (630) 761-9286

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; E-mail at cteparts_1@juno.com.

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 BoscoClocks@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

I have set up a facility to rewind the coils for Kundo and Jungens moving magnet pendulums. If anyone is interested in this, contact me John R. (Jack) Seeley, FNAWCC, at jackclok@bellsouth.net. Suggestions welcome, since I have not decided on a price.

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