

A. GENERAL DESCRIPTION

1. Movement
2. Winding
3. Hourly winding control
4. Winding Circuit
5. Synchronization

Ex Libris
H. Weiland

B. INSTALLATION

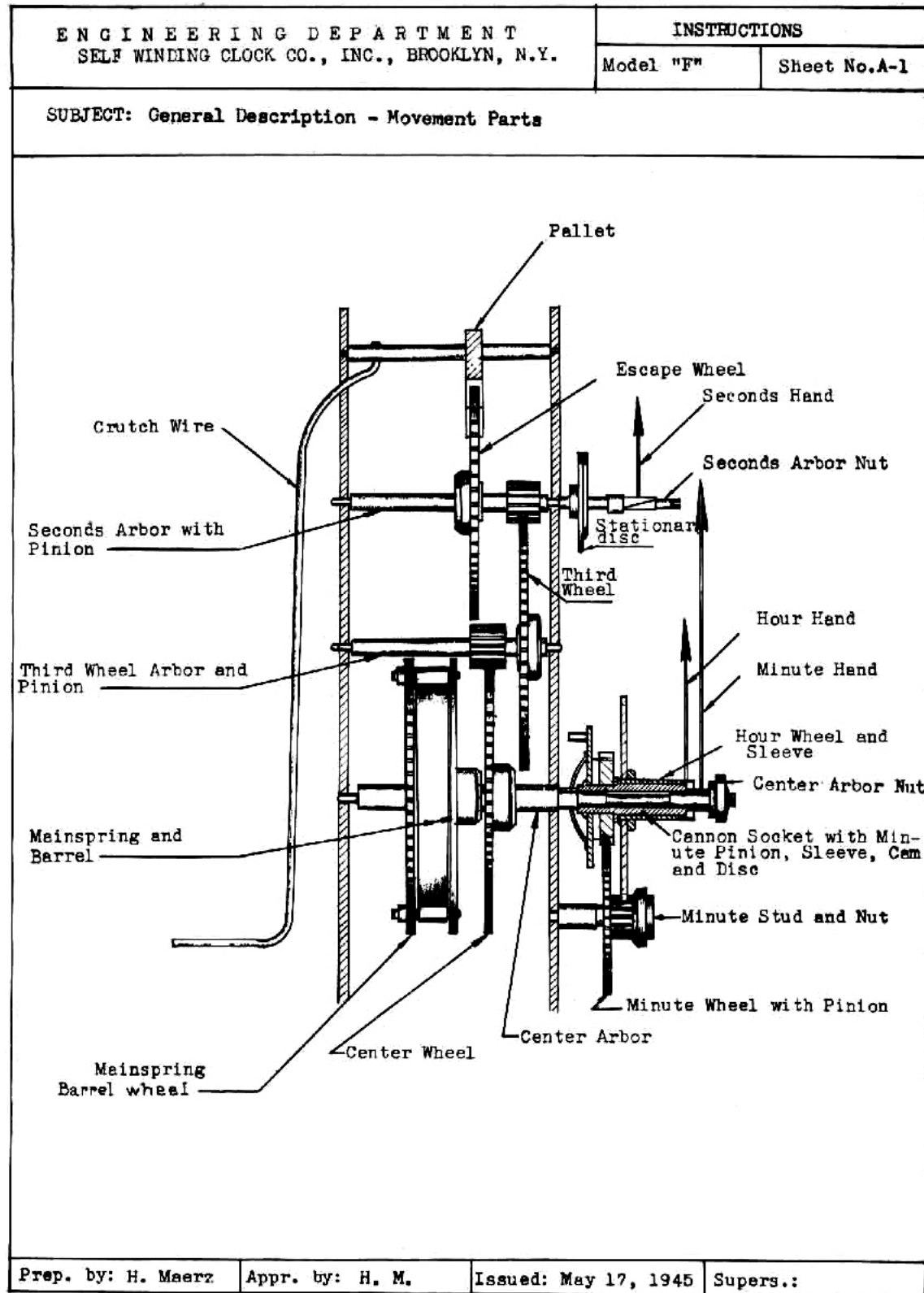
1. Unpacking (Pg. 4)
2. Suspending, Wiring & Starting
3. Maintenance of sweep seconds movement

C. ADJUSTMENTS

1. Hourly winding circuit closer
2. Adjustment of Motor Magnet and Armature
3. Adjustment of Motor Contacts
4. Adjustment of Synchronizing Levers
5. Adjustment of friction on Seconds Hand Arbor
6. Adjustment of Heavy Duty Minute Contact Fingers

D. MAINTENANCE

1. Cleaning and Oiling
2. Exchanging Movements, Packing for Return Shipment
3. Directions for setting up turns on mainspring



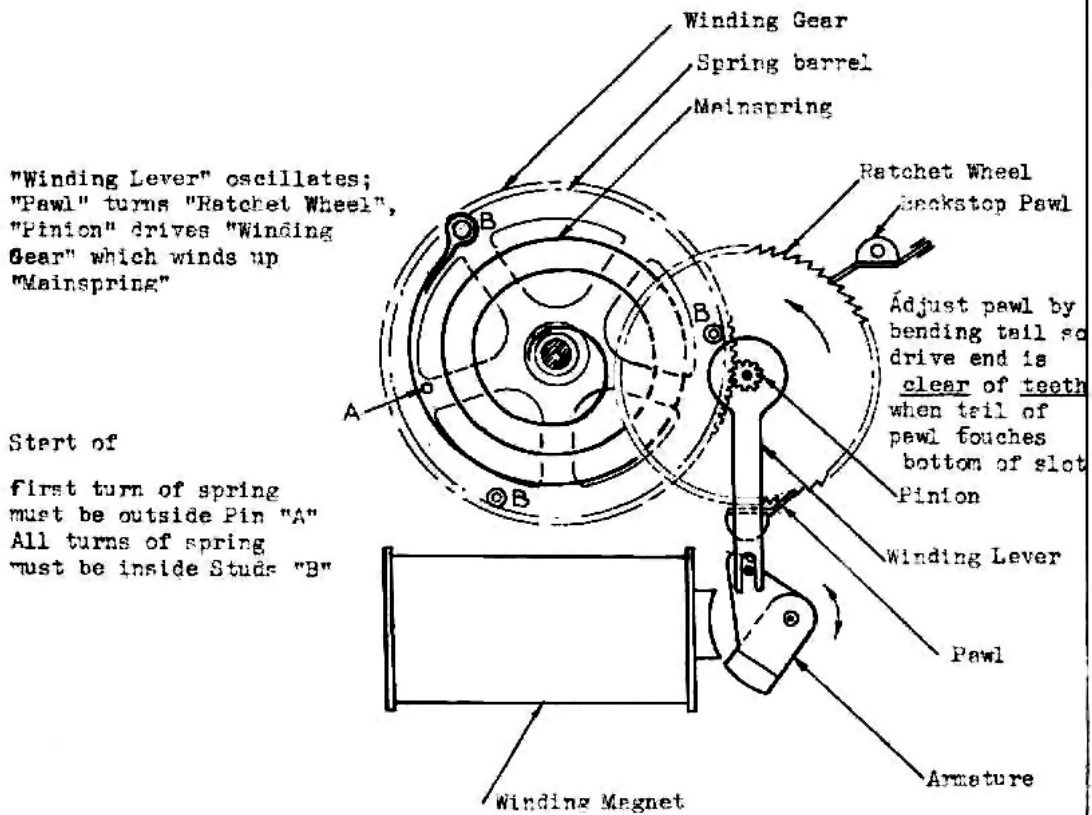
ENGINEERING DEPARTMENT
SELF WINDING CLOCK COMPANY, INC., BROOKLYN, N.Y.

INSTRUCTIONS

Model "F" Sheet No. A-2

SUBJECT: General Description - Winding

Whenever "Winding Magnet" circuit is closed, "Armature" vibrates same way as the hammer of an ordinary electric bell.



Prep. by: H. Meers

Appr. by: H. M.

Issued: May 17, 1945 Supers.:

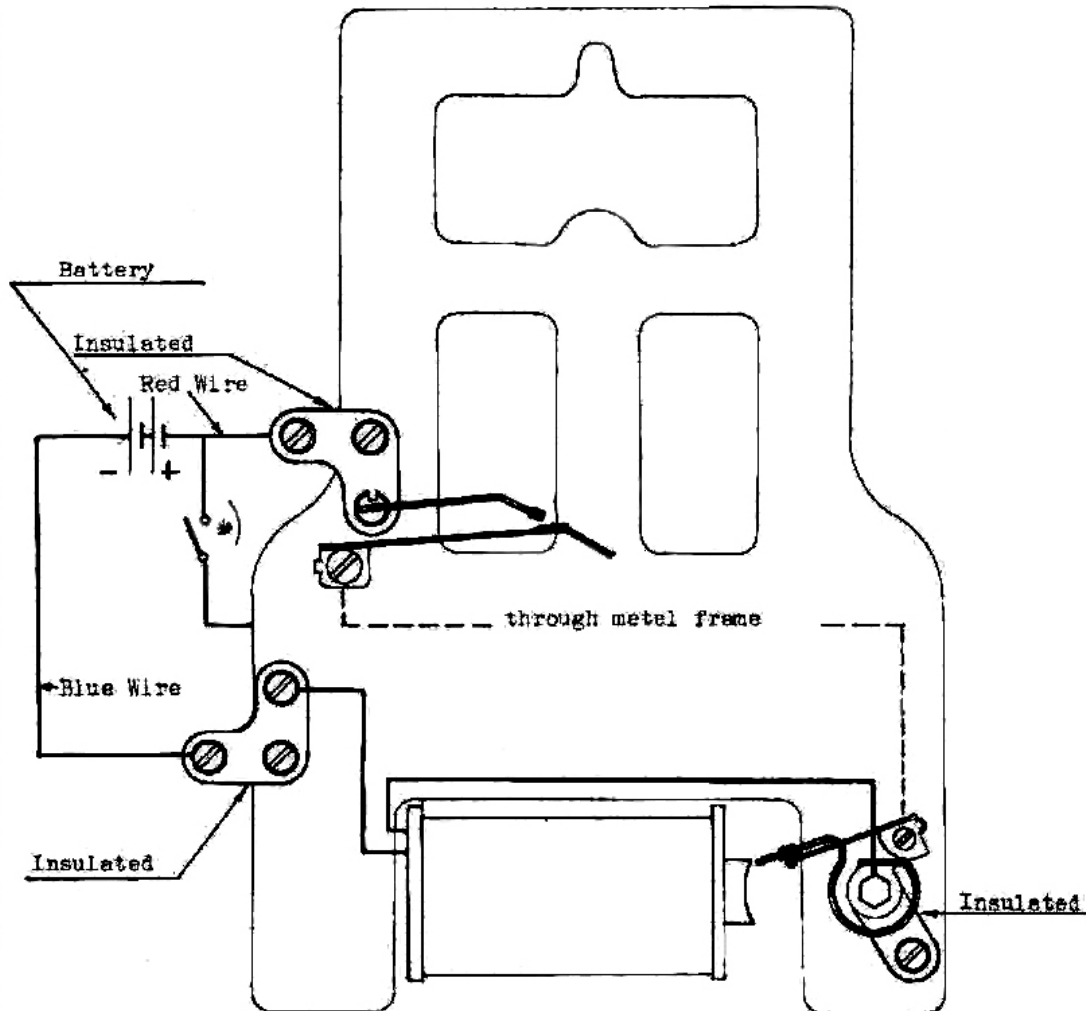
ENGINEERING DEPARTMENT
Self Winding Clock Co., Inc., Brooklyn, N.Y.

INSTRUCTIONS

MODEL "F"

Sheet No. A-4

SUBJECT: General Description - Winding Circuit



*) Key for starting winding motor by hand.

Prep. by: H. Meerz

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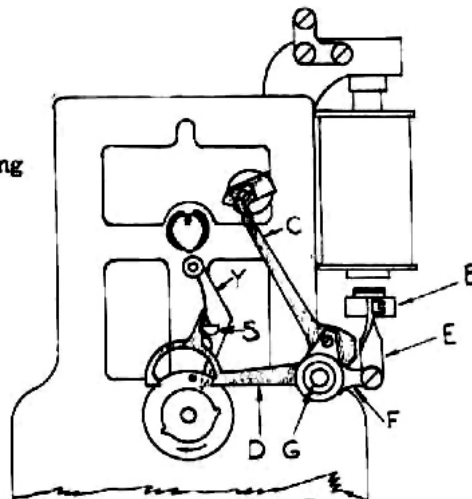
Supers.:

SUBJECT: General Description - Synchronization

"Synchronizing" Magnet De-energized

Connecting piece (E) connects
Armature (B) with Lever Arm (F)
which is placed on Stud (G)

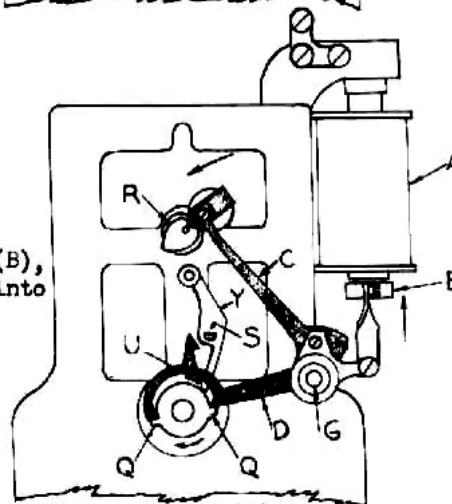
Minute Synchronizing Arm (D) is
locked on Pin (S) of Sync. Latch (Y)
at all times except during synchronizing
periods.



"SYNCHRONIZING"

"Synchronizing" Magnet Energized

Cannon Socket Pin (U) has moved
Sync. Latch Pin (S) thereby unlocking
Arm (D). Magnet (A) pulls up Armature (B),
which in turn pulls Levers (C) and (D) into
synchronizing position.



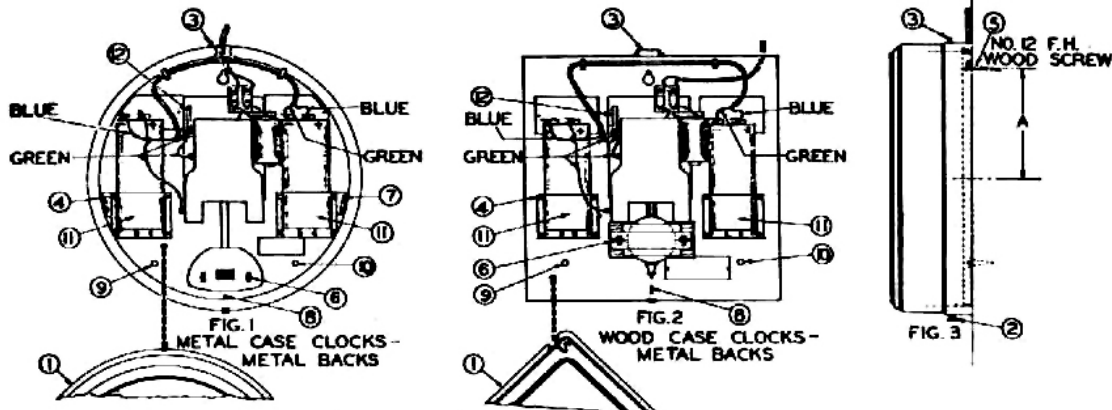
Lever (D) synchronizes Minute Hand, pressing on "Zers" (Q).

Lever (C) synchronizes Second Hand, turning "Heart-Shaped Cam" (R) to zero
position.

INSTRUCTIONS FOR INSTALLING SELF WINDING CLOCKS

Styles 25, 37, 42 and 43 — 11" and 15" dials — metal cases and metal backs

Styles 27, 28 and 35 — 10" and 12" dials — wood cases and metal backs.



These clocks should be mounted on rigid vertical walls. To install, proceed as follows:

1. Remove case front from metal back. Front (1) can be removed by loosening knurled screw (2) at bottom and lifting case off of pin or lip (3) at top. Remove straight out to prevent bending dial.
2. Screws for mounting clock on wall will be found fastened to left hand battery shelf at (4). Insert the large mounting screw (5) in wall with head pointing up. Locate screw directly above point where dial center is desired. Distance between dial center and mounting screw (Dimension A Fig. 3) can be ascertained from table below.

STYLE OF CLOCK	DISTANCE DIAL CENTER TO CENTER OF MOUNTING SCREW
Nos. 25, 37, 42, 43 — 11" dial.....	6"
" 25, 37 — 15" dial.....	8-5/16"
" 27, 28, 35 — 10" dial.....	5-5/8"
" 27 — 12" dial.....	5-5/8"
" 28, 35 — 12" dial.....	5-7/8"

3. Hang metal back on mounting screw and unfasten screws or wood block (6) holding pendulum. (Where pendulum is held by screws only, save blocking screws and wing nuts in loops (7) as directed) (Where wood blocks are used, set aside for future return shipment)
4. Plumb metal back on wall by shifting slightly until tip of pendulum rod lines up with index mark (8) on back. Be sure pendulum swings freely.
5. Insert two side steady screws in holes (9 & 10). Do not use nails for this fastening. If necessary to remove case for drilling holes for steady screws, reblock pendulum to avoid buckling suspension spring.
6. When case is firmly fastened to wall, insert two dry cells in metal holders (11). Connect wiring harness and pull time service wires through hole or groove at top of back for connection to Fahnestock connectors.
7. Wind clock movement by pressing key (12) at left hand side of movement plate for about ten seconds.
8. Start pendulum and set hands on time.
9. Reinstall case front. Top of case should catch on pin or lip at top of metal back. When case front is secure at top, push in lower part and turn up knurled screw at bottom, finger tight.

CAUTION: Be sure case front is securely fastened to back so that it cannot fall off and result in injury or damage. Chain with hook is provided on each back to hold case front when removed for repair. Hook to battery holders (11) when not in use.

IMPORTANT: Before leaving premises, instruct subscriber how to remove case front and how to make Daylight Saving Time changes. Caution him never to turn hands backward and to make sure front is always refastened to metal back.

SELF WINDING CLOCK COMPANY, INC.
NEW YORK



POSITION OF THIS STUD—
GOVERNS RELATIVE ALIGN-
MENT OF MINUTE AND
SECOND HANDS.
DO NOT CHANGE FACTORY
ADJUSTMENT

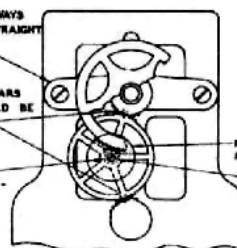


FIG. 2
DIAL TRAIN GEARING - SHOWING
CORRECT RELATION OF TEETH

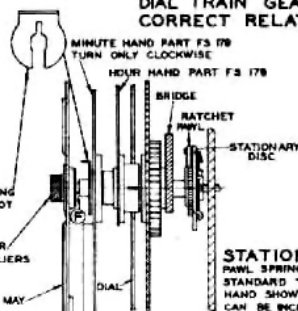


FIG. 3
SIDE VIEW OF HAND
HARBOR AND RATCHET
ASSEMBLY

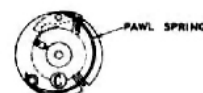


FIG. 3A
STATIONARY DISC REAR VIEW

STATIONARY DISC REAR VIEW
PAWL SPRING IS PERMANENTLY ADJUSTED TO
STANDARD TENSION AT FACTORY. IF SECOND
HAND SHOWS TENDENCY TO SLIP, TENSION OF SPRING
CAN BE INCREASED BY PRESSING ON SPRING AT C USE
TWEEZERS.

FS 145 IDLER WHEEL RETAINING WASHER
 FS 146 " " " " SCREW
 FS 172 MINUTE HAND " CLIP
 FS 174 FRONT SECONDS ARBOR NUT
 FS 180 SWEEP SECONDS HAND ASSEMBLY
 OTHER MOV'T PARTS EXCEPT SWEEP
 SECONDS PARTS AS LISTED ON W.U.T. CO.
 STENCIL 1853 B

(PART FS 180) SWEEP SECONDS HAND MAY BE TURNED IN EITHER DIRECTION.

NOTE SPECIAL SHAPED HOLE IN SOCKET. SECONDS HAND CAN FIT ONLY ONE WAY. TO REMOVE, INSERT CLOCK SCREW-DRIVER AT POINT (F) AND TURN SLIGHTLY.

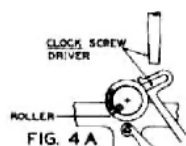


FIG. 4A

IF FORK STICKS WHEN CLOCK IS SYN-
CHRONIZED INCREASE CLEARANCE BE-
TWEEN FORK AND ROLLER BY INSERT-
ING CLOCK SCREW-DRIVER AT POINT
INDICATED BY ARROW AND TURNING
SLIGHTLY.

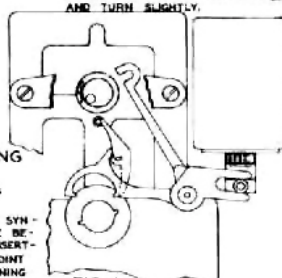


FIG. 4

FIG. 4
TYPE B SYNCHRONIZING
LEVER IN NORMAL
POSITION (PRESENT SWEEP SECONDS
CLOCKED)

LATCH RELEASED READY FOR SYNCHRONIZING

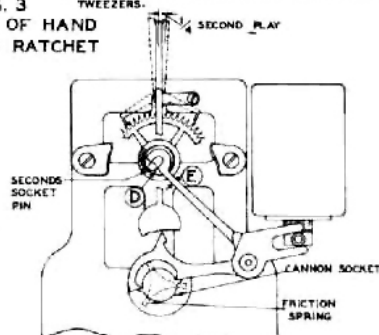


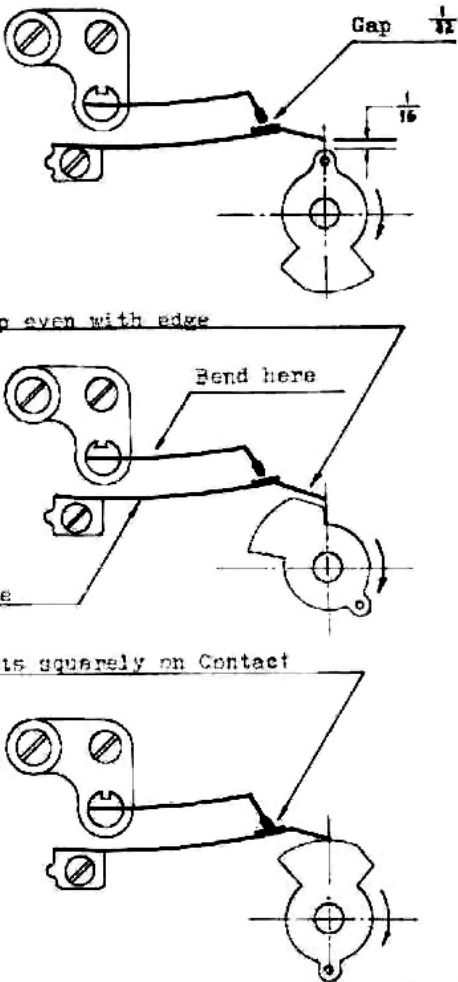
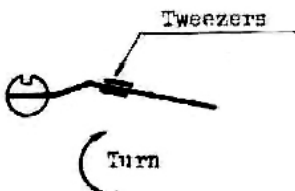
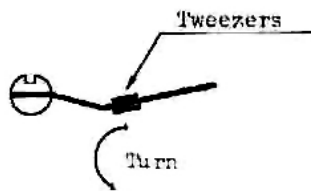
FIG. 5

FIG. 3
TYPE B SYNCHRONIZING LEVER
IN SYNCHRONIZED POSITION

(PRESENT SWEEP SECONDS CLOCKS)

NOTE NECESSARY CLEARANCE BETWEEN SECONDS SOCKET PIN AND SYNCHRONIZING FORK AT D WITH SYNCHRONIZING LEVER HELD CLOSED, SECOND HAND SHOULD HAVE 1/4 SECOND PLAY; IF HAND HAS NO PLAY, PLACE PLIERS AT POINT E AND ADJUST FORK SLIGHTLY UPWARD, UNTIL 1/4 SECOND PLAY IS OBSERVED.

SELF WINDING CLOCK COMPANY, INC.
NEW YORK

ENGINEERING DEPARTMENT SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.	INSTRUCTIONS	
	Model "F"	Sheet No. C1
SUEJECT: Adjustment of Hourly Winding Circuit Closer		
<div data-bbox="349 506 479 537"> OPEN </div> <div data-bbox="349 863 544 894"> CLOSING </div> <div data-bbox="349 1209 527 1241"> CLOSED </div>	 <p>Gap $\frac{1}{16}$</p> <p>Fingertip even with edge</p> <p>Bend here</p> <p>Bend here</p> <p>Edge rests squarely on Contact</p>	
BEND SPRING AS SHOWN. (Exaggerated)		
<div data-bbox="391 1493 683 1682">  </div> <div data-bbox="943 1493 1252 1682">  </div>		
Prep. by: H. Maerz	Appr. by: H. M.	Issued: May 14, 1945 Supers.:

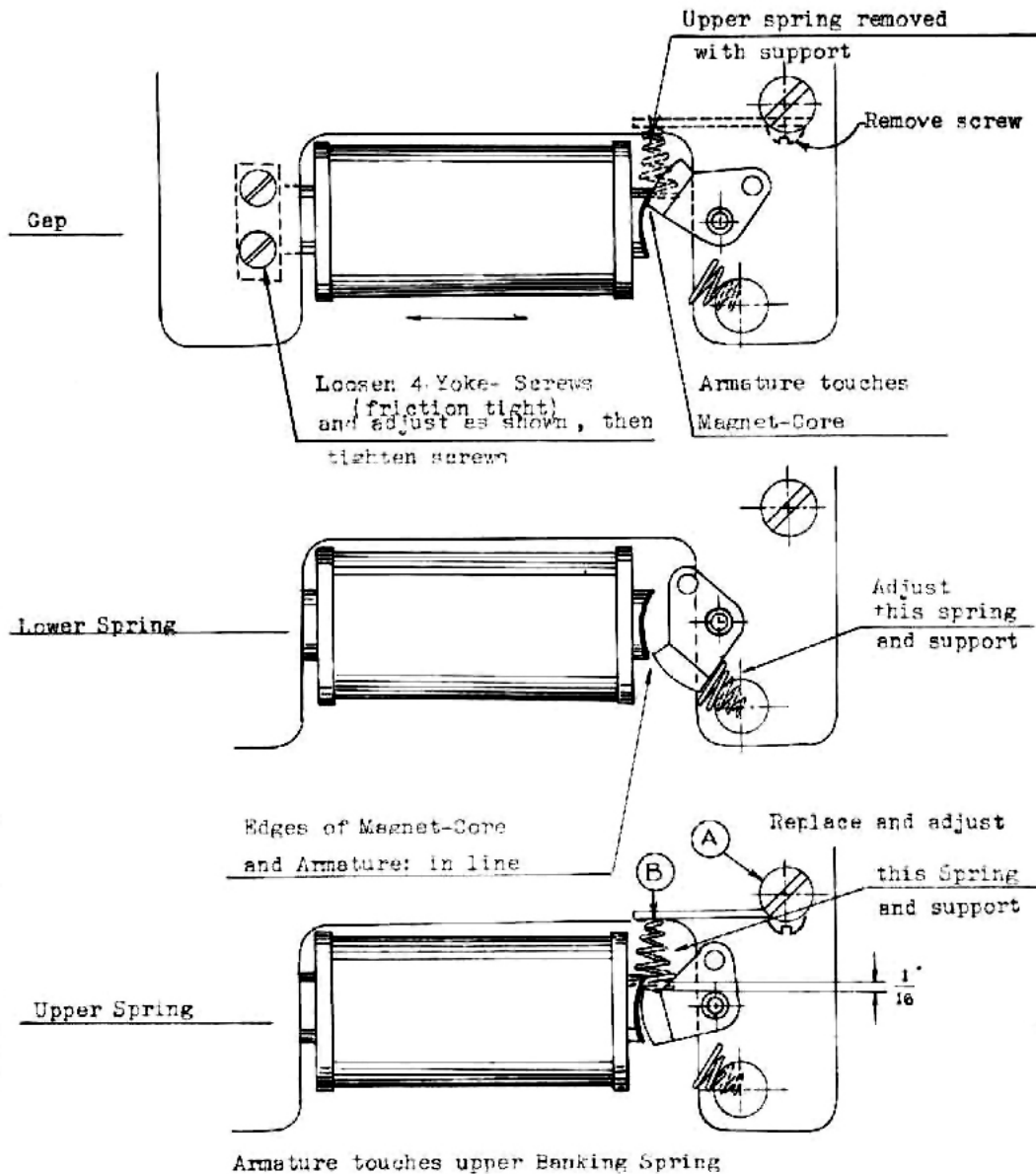
ENGINEERING DEPARTMENT
SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.

INSTRUCTIONS

Model "F"

Sheet No. C2

SUBJECT: Adjustment of Motor Magnet and Armature



NOTE: To adjust upper spring, loosen screws "A" (friction tight), front and rear plates and set support up or down. Tighten screws "A" front and rear. Loosen screw "B" and turn spring so end of same is flat against armature. To adjust lower spring, remove same and compress with pliers if too long.

Prep. by: H. Maerz Appr. by: H. M. Issued: May 14, 1945 Supers.:

If too short, grip last turn with pliers and pull out.

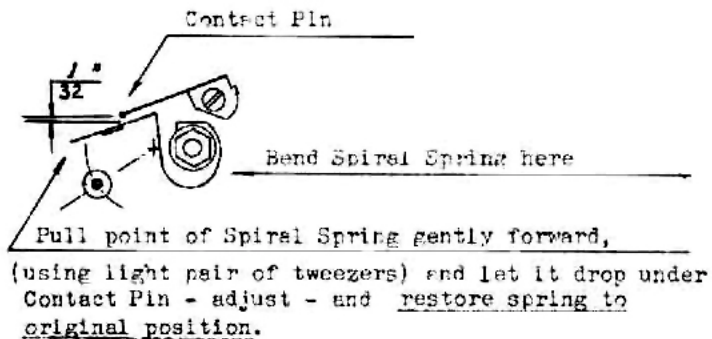
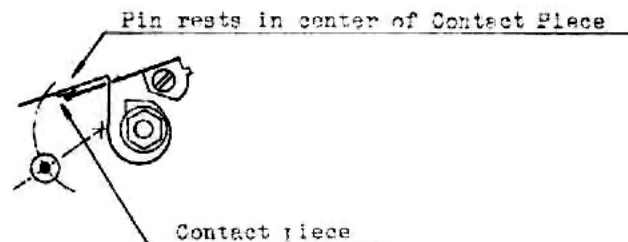
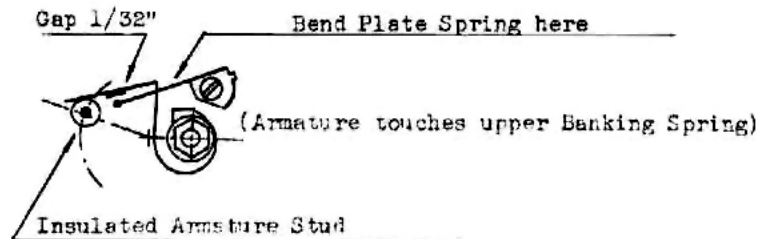
ENGINEERING DEPARTMENT
SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.

INSTRUCTIONS

Model "F"

Sheet No. C3

SUBJECT: Adjustment of Motor Contacts

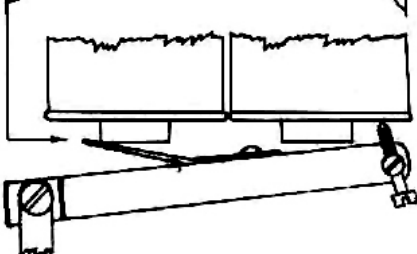
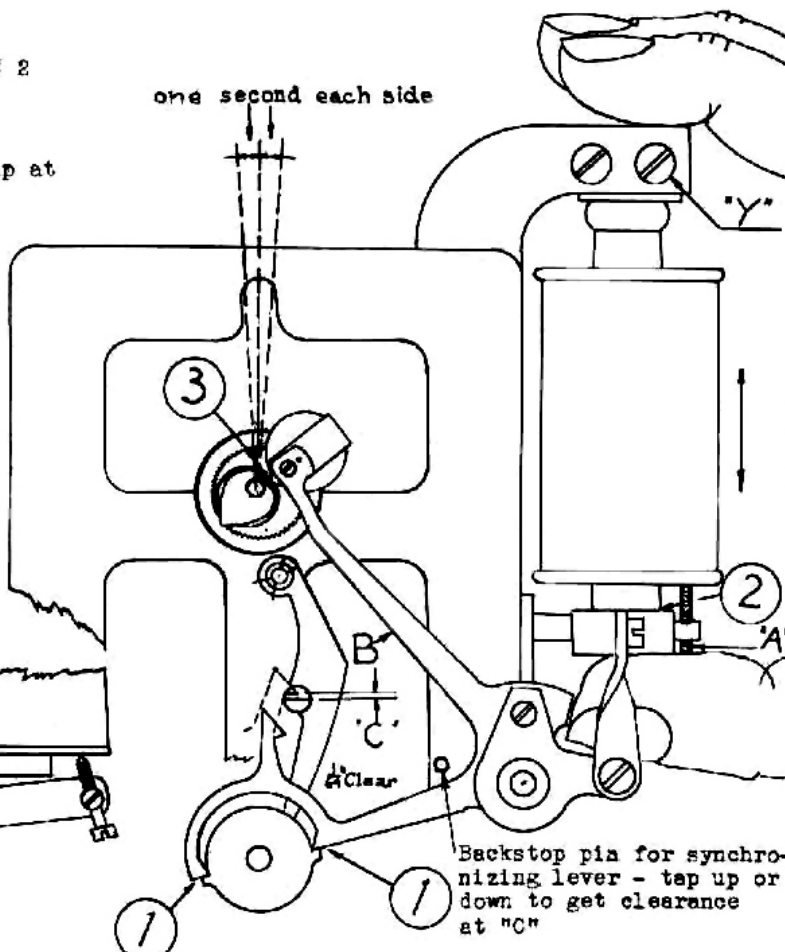


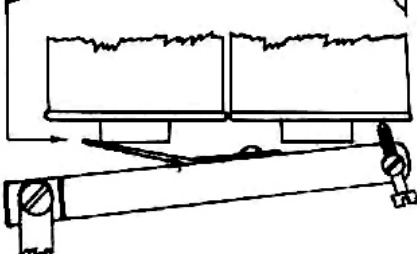
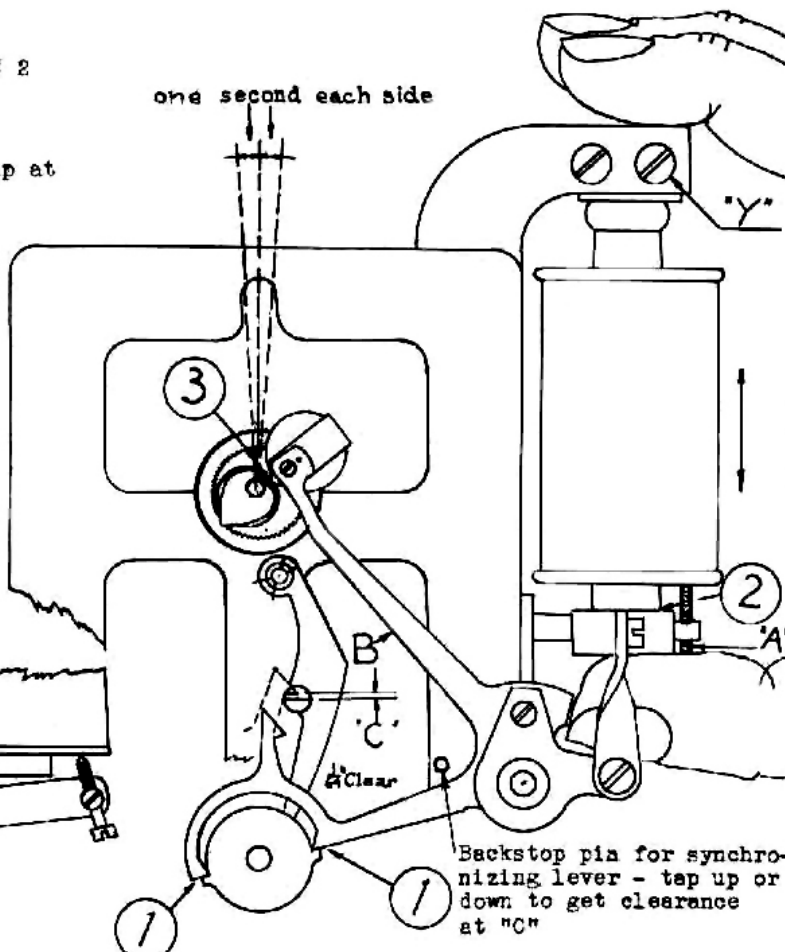
Check Springs on both sides of Contact over full width
and for appr. simultaneous "Break" and "Make".

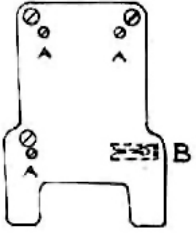
Prep. By: H. Maerz

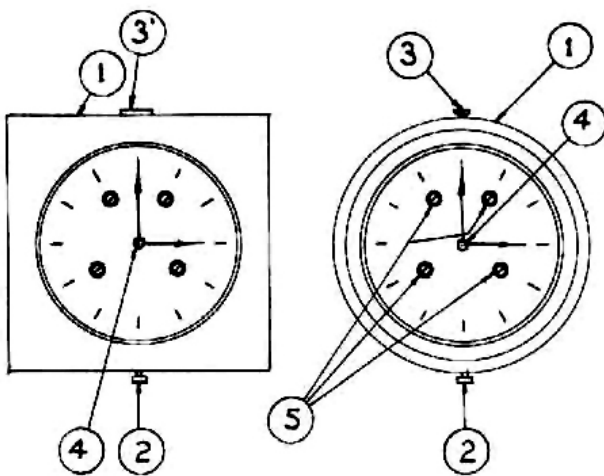
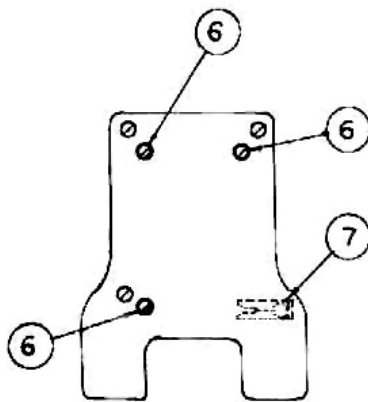
Appr. By: H. M.

Issued: May 14, 1945

ENGINEERING DEPARTMENT		INSTRUCTIONS	
SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.		Model "F"	Sheet No. Ch
SUBJECT: Adjustment of Synchronizing Levers etc.			
<p><u>Press firmly as shown</u></p> <p><u>Check:</u></p> <ol style="list-style-type: none"> 1. No play at 1 and 2 Front Magnet 2. Appr. 9/1000" gap at Rear Magnet 3. \pm "2 Seconds" play at 3 <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 20px;"> <div style="width: 30%;"> <p>Adjust Throw-Back Spring (when Armature is down) so it just touches corner of core</p>  <p><u>If adjustment required:</u></p> </div> <div style="width: 60%; text-align: center;">  <p>one second each side</p> <p>Backstop pin for synchronizing lever - tap up or down to get clearance at "C"</p> </div> </div> <ol style="list-style-type: none"> 1. Loosen 4 Yoke Screws "Y" and Screw "A"; adjust Magnet; tighten 4 Screws "Y" 2. Tighten Screw "A" until gap 9/1000" (Appr. 3 layers of newspaper) under Rear Magnet. 3. Bend Synchronizing lever at "B" for play at 3. 			
Prep. by: H. Maer	Appr. by: H. M.	Issued: May 17, 1948	Supers:

ENGINEERING DEPARTMENT		INSTRUCTIONS	
SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.		Model "F"	Sheet No. Ch
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Prep. by: H. Maer	Appr. by: H. M.	Issued: May 17, 1948	Supers:

ENGINEERING DEPARTMENT SELF WINDING CLOCK COMPANY, INC., Brooklyn, N.Y.		INSTRUCTIONS	
		MODEL "F"	Sheet No.D-1
SUBJECT: Maintenance - Cleaning and Oiling			
<p>1. <u>REMOVE</u>: Movement from case</p> <p>a. Hands Unscrew knurled nut Pry off minute hand with screw driver Remove hour hand by grasping at center with fingers and, while pulling, turn back and forth.</p> <p>Movement with sweep seconds hand: Remove small knurled nut. Insert small screw driver between clip and hand socket and pry a little at a time, turning hand to a new position at each pry. Remove clip and proceed to remove minute and hour hands as above.</p> <p>b. Dial Remove four dial screws</p> <p>c. Wires Remove winding battery leads, synchronizing circuit and any wires to contacts</p> <p>d. Movement Unscrew three bracket screws "A" Remove bracket clamp "B"</p> <p>e. Dial Train Unscrew two knurled nuts</p> <p>f. Heart-Shaped Seconds Socket Remove contact assembly, if any Remove small, headless screw (end of arbor)</p> <p>g. Synchronizing Levers Remove knurled nut on stud</p> <p>2. BRUSH: All bearings and pivot holes. Use Pyrene or similar non-combustible cleaning fluid on stiff marking brush (spin wheels while cleaning to drive out dirt). Allow to saturate for two or three minutes.</p> <p>3. WIPE: Plates and arbors (Use cheese cloth on flat wood piece)</p> <p>4. OIL: All bearings and pivots (Use fine wire or heavy needle) Use on drop on all pivots Trace of oil on center arbor nut and pallets Vaseline on winding lever and pin on motor armature</p> <p>5. CHECK: All contacts. Must be dry and clean. Smooth out all grooves with fine emery cloth.</p> <p>6. REPLACE: All parts previously removed</p>			
			
Prep. by: H. Meerz		Appr. by: H. M.	Issued: May 17, 1945 Supers.:

ENGINEERING DEPARTMENT		INSTRUCTIONS	
SELF WINDING CLOCK CO., INC., BROOKLYN, N.Y.		Model "F"	Sheet No. D2
SUBJECT: Maintenance - Exchanging Movements, etc.			
<p>1. <u>To remove Case Front (1)</u></p> <p>Loosen nut (2); lift case off pin (3) on lip (3'); tilt out front bottom and move straight out to prevent bending dial.</p>			
<p>2. <u>To remove Hands</u></p> <p>Unscrew knurled Nut (4) and pry off Hands with screwdriver. Sweep Seconds Hand: Insert small screw driver between clip and hand socket and pry a little at a time, turning hand to a new position at each pry.</p>	<p>3. <u>To remove Dial</u></p> <p>Unscrew four screws (5)</p>		
<p>4. <u>To remove Movement</u></p> <p>First remove all wires Unscrew three screws (6) and pull clamp (7) out to the right</p>			
<p>5. <u>Metal Property Tag</u></p> <p>Tag must be removed with movement and returned with it</p>			
Prep. by: H. Maerz	Appr. by: H. M.	Issued: May, 1945	Supers.:

ENGINEERING DEPARTMENT SELF WINDING CLOCK COMPANY, INC., BROOKLYN, N.Y.		INSTRUCTIONS	
		Model "F"	Sheet No. D3

SUBJECT: Directions for Setting Up Turns on Mainspring

1. Remove Front Plate of Movement and take out Center Arbor Assembly
2. Grasp both gears firmly with left hand and slide off "Sector" and Knockaway Piece as shown.
3. Grasp Gear (2) with right hand and let Spring unwind SLOWLY by loosening grip on Gear (1) slightly.
4. Grasp Gear (1) and turn Gear (2) counter-clockwise (facing Gear (2)) until longer end of Arbor Pin is in line with Gear Stud. Now make desired number of turns plus 1/4 turn. Insert "Knockaway Piece" and "Sector Piece" as shown.
5. Reinstall Center Arbor Assembly.
6. If new spring is installed, proceed as in paragraphs 1, 2 and 3. Then knock out arbor pin and unscrew 3 nuts to remove barrel wheel "2". Install new spring with start of first turn outside of pin "A". All turns to be inside studs "B" and "C". Be sure slot at end of spring engages pin on spring hub. Replace gear and tighten 3 nuts. Hold arbor so pin hole is vertical (spring completely unwound). Insert arbor pin from top if gear stud is to right of arbor or insert pin from bottom if gear stud is to left of arbor. Tap pin in place with long end clearing gear stud 1/32". Proceed as in Paragraph 4.

Prep. by: H. Maers	Appr. by: H. M.	Issued : May 17, 1945 Supers...
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- INSTRUCTIONS -

FOR INSTALLATION AND MAINTENANCE OF SELF-WINDING SYNCHRONIZED
CLOCKS

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*

Clock Stopped

When clocks are found stopped it is of the utmost importance to locate the cause of the trouble. To do this, test as follows:

First: Set pendulum swinging to see if hands move; if not, see if dial is warped so as to touch hands.

Second: Turn hands to see if they bind in any way.

Third: If hands are free and yet do not move when pendulum swings, wind the clock by contact key.

Fourth: If clock winds slowly in this way, the battery is weak and the clock is run down.

Fifth: If clock winds rapidly, it shows that the trouble is caused by the center winding contact or motor brushes being out of adjustment.

Sixth: Take off hands and dial and examine all the parts closely.

Seventh: Touch contact key in case a number of times to see if the motor starts from every point.

Eighth: Take off front pallet arbor button, hold the escape wheel and raise pallet, then let the clock run down slowly until it makes on the center contact. This will show whether that part is right.

Ninth: If the fault is found and cannot be easily and surely corrected, take the movement out and make a thorough job of it.

Cleaning and Oiling

At stated times - say once in eighteen months or two years - all clocks should be thoroughly cleaned and oiled, and at the same time inspected to be sure they are in good order.

Never let the clock run down backwards as the arm A will be carried back against the brush B and bend it out of adjustment.

To clean the movement take it from the case, take out the anchor and allow it to run down gently so as not to break the pins, then remove the motor. Take off front plate and separate all the parts. Wash the plates and all parts in good quality of benzine, letting them dry before assembling. The motor must not be taken apart, but may be washed in benzine using a small brush freely about the bearings, commutator and brushes. Put oil in all the pivot holes, but not so much that it will run. The motor bearings and the pallets of the anchor should also be oiled.

Inspect carefully to see that the center winding contact is right, and the motor without dead points. Dust out the case and put the movement in place. Before putting on the dial try the winding to be sure that is right, also see that the disc on cannon socket is in the right position to open the latch at the hour, and after the dial and hands are on move the minute hand forward past the hour and then backward gently until it is stopped by the latch. This will prove that the hand is on the square correctly.

Remounting Clock Hands

To determine if the minute hand is on the proper square of the cannon socket, slightly turn minute hand forward until it passes the even hour approximately $1\frac{1}{2}$ to 2 minutes, when a slight sound should be noted, which is an indication that the latch has dropped off the latch pin on the cannon socket disc and locks the synchronizing lever until 2 minutes before the even hour. In this position the hand is placed correctly. If however, this sound occurs on any other quarter hour, carefully remove center nut by holding on to minute hand, then remove minute hand being sure not to change the position of the cannon socket. Replace the minute hand on the cannon socket. In this position the hand will point to the even hour. Be sure that the minute hand is pressed down slightly below face of the cannon socket and replace center arbor nut. Next see that the hour hand is pushed down slightly below the top of the hour wheel sleeve. When moving hour hand back and forth, there should be at least $1/64$ " clearance between back of minute hand socket and top of hour wheel sleeve. Test hands to see that neither hour nor minute hand touches the dial and that the hour hand does not touch the back of the minute hand.

Dials Warped

Dials, being made of zinc, warp if exposed to great heat. If they cannot be straightened a new one must be put in.

Hands Bent

When the hands are put on they must be carefully inspected, especially the hour. See that it is perfectly free and does not catch on the minute or second hands as it passes them.

Regulating

60 Beat Pendulum with 10 lb. Brass Bob and Wood Rod

One turn of regulating nut changes rate 40 seconds in 24 hours either fast or slow. If clock is equipped with front regulating bracket, one turn of regulating rod changes rate 20 seconds in 24 hours either fast or slow.

60 Beat - 15 lb. Mercurial Compensated Pendulum

One turn of regulating nut changes rate 30 seconds in 24 hours either fast or slow. Two divisions of indexed nut changes rate 1 second in 24 hours either fast or slow. If equipped with front regulating bracket one turn of regulating rod changes rate 15 seconds in 24 hours either fast or slow.

80 Beat Pendulum with 2 lb. Brass Bob and Wood Rod

One turn of regulating nut changes rate 55 seconds in 24 hours either fast or slow.

120 Beat Pendulum with 2 lb. Brass Bob and Wood Rod

One turn of regulating nut changes rate 1 minute and 50 seconds in 24 hours either fast or slow. If equipped with front or top regulating bracket, one turn of regulating rod changes rate 1 minute and 10 seconds in 24 hours either fast or slow.

140 Beat Pendulum with 2 lb. Brass Bob and Wood Rod

One turn of regulating nut changes rate 2 minutes and 20 seconds in 24 hours either fast or slow. If equipped with front or top regulating bracket, one turn of regulating rod will change rate 2 minutes in 24 hours either fast or slow.

140 Beat Pendulum with Small 10 oz. Nickel Finished Bob and Wood Rod

One turn of regulating nut changes rate 2 minutes in 24 hours either fast or slow. If equipped with front or top regulating bracket, one turn of regulating rod will change rate 2 minutes and 10 seconds in 24 hours either fast or slow.

Fast: If clock gains time turn regulating nut to the left.

Slow: If clock loses time turn regulating nut to the right.

Any subdivision of a complete turn of the regulating nut will affect the rate in proportion to the above schedule.

Circuits

The clock circuits should be clearly defined on a map or by streets from point to point, so that inspectors and linemen may be thoroughly familiar with each circuit, and know all danger points where line troubles may occur.

There should be a bell in the office, connected in the synchronizing line as an audible signal showing when the line is in working order.

Exchanging Movements

It is of utmost importance that numbers on metal property tags in clock cases should correspond with numbers of clock movements.

When movements are exchanged, the metal property tag must be removed with the movement and returned with same. When a new movement is installed, there must be a new property tag bearing same number as new movement. Managers and Inspectors should immediately report such changes to their immediate superior so that records can be properly corrected.

When exchanging movements do not remove old bracket from clock case as this movement will also fit the old style bracket. Fasten style "F" movements to old style brackets with three screws only, and omit the brass clamp such as is used on the new style bracket for "F" movements.

When ordering material for these movements, always mention style "F", specify beat of movement, size of dial and order by number as indicated in booklet entitled: "Schedule of Parts Style 'F' Minute and Style 'F' (H-Seconds) Synchronized Movements".

Directions for Packing Clocks for Shipment

Never put the battery inside of the clock, but wrap it up in paper and excelsior, and pack it in the box at the head of the clock. Block down the pendulum ball as when received.

Never leave the pendulum in the clock loose. If the blocks are lost, then take the pendulum out of the clock, wrap it in abundance of paper and slip it in beside the case.

Put a little straw or excelsior in the bottom of packing case before putting the clock in, then crowd in wads of paper and excelsior at the four corners.

Remove broken glass, if any, and put loose ornaments and keys inside the packing case.

Place strips at top and bottom of the door, to hold the clock in packing case, nailing through the sides of the packing case into the ends of the strips. Place thick pads of paper and excelsior under the strips, at the edge of the clock; press strips down while nailing in, so the door cannot open.

* * * *

FOR INSTALLATION AND MAINTENANCE OF SWEEP SECONDS CLOCKS

REMOVE PENDULUM BLOCKING SCREWS AND STORE IN CASE FOR USE WHEN RETURNING CLOCK.
BEFORE FASTENING TO WALL PLUMB CASE WITH PENDULUM AT RST. PLUMB SO THAT RAISED CENTER LINE ON PENDULUM IS DIRECTLY IN LINE WITH MARK ON BACK OF CASE. NOTE THAT CLOCK BEATS EVENLY. ALWAYS FASTEN PENDULUM TO BACK OF CASE BEFORE REMOVING CASE FROM WALL.

(PART FS 172) MINUTE HAND RETAINING CLIP INSERT WITH FINGERS DO NOT FORCE OR USE TOOL.

(PART FS 174) FRONT SECONDS ARBOR NUT MUST BE TIGHT USE CLOCK PLIERS DO NOT FORCE.

(PART FS 180) SWEEP SECONDS HAND MAY BE TURNED IN EITHER DIRECTION.

POSITION OF THIS STUD—
GOVERNS RELATIVE ALIGN-
MENT OF MINUTE AND
SECOND HANDS.
DO NOT CHANGE FACTORY
ADJUSTMENT

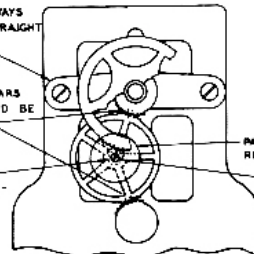


FIG. 3

PAWL SPRING

FIG. 4A

CLOCK SCREW DRIVER

ROLLER


AND TURN SLIGHTLY.

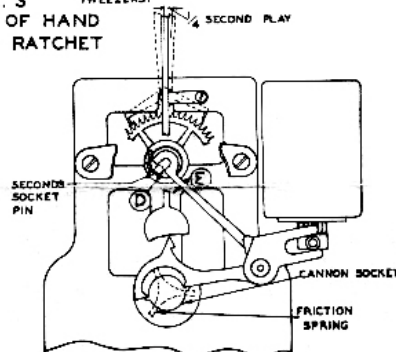
TYPE A SYNCHRONIZING LEVER FORK

(EARLY MODEL SWEEP SECONDS CLOCKS)

IF CLOCK STICKS WHEN CLOCK IS SYNCHRONIZED INCREASE CLEARANCE BETWEEN FORK AND ROLLER BY INSERTING CLOCK SCREW DRIVER AT POINT INDICATED BY ARROW AND TURNING

FIG. 4

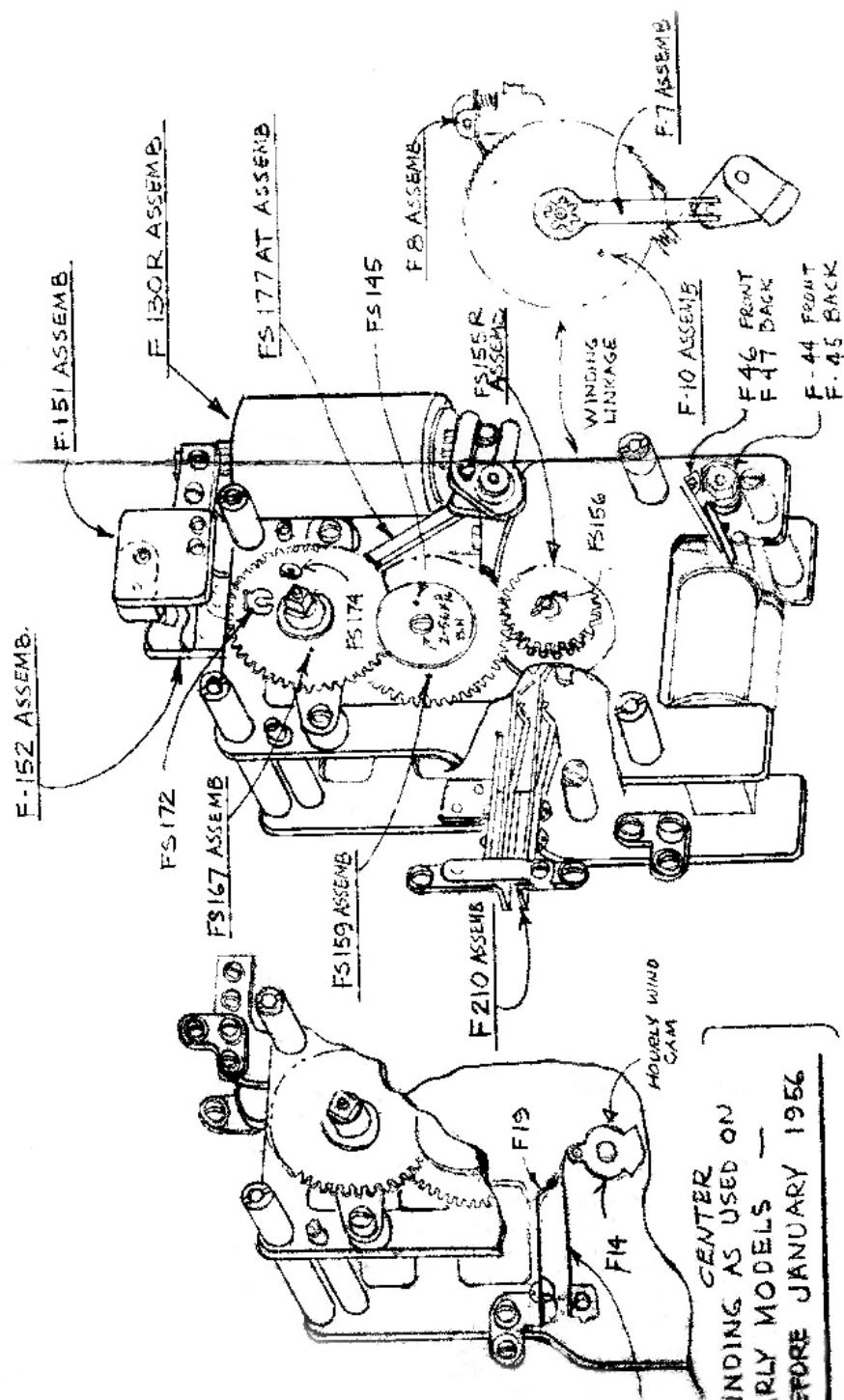
TURNING  FIG. 4
TYPE B SYNCHRONIZING
LEVER IN NORMAL
POSITION (PRESENT SWEEP SECONDS
CLOCK)
LATCH RELEASED READY FOR SYNCHRONIZING.



(PRESENT SWEEP SECONDS CLOCKS)

NOTE NECESSARY CLEARANCE BETWEEN SECONDS
SOCKET PIN AND SYNCHRONIZING FORK AT (D) WITH
SYNCHRONIZING LEVER HELD CLOSED, SECOND HAND
SHOULD HAVE $\frac{1}{4}$ SECOND PLAY 2. IF HAND HAS NO
PLAY, PLACE PLIERS AT POINT (E) AND ADJUST FORK
SLIGHTLY UPWARD, UNTIL $\frac{1}{4}$ SECOND PLAY IS OBSERVED.

FORM 126-B-500-1-40 (SUPERCEDES FORM 126)



NOTE:
 STANDARD 'F' MOVEMENT PARTS ARE
 SUPPLEMENTED BY THIS GROUP OF
 MAINTENANCE SPARE PARTS (VIBRATOR WIND)
 IN ORDERING REPLACEMENT PARTS
 GIVE SERIAL NUMBER OF MOVEMENT
 FOR WHICH PARTS ARE ORDERED

