

# REPAIR MANUAL

No. 216

*Price 25c*

# SHEAFFER'S

PENS • PENCILS • DESK SETS • SKRIP  
SKRIP-GRIP                      PARA-LASTIK

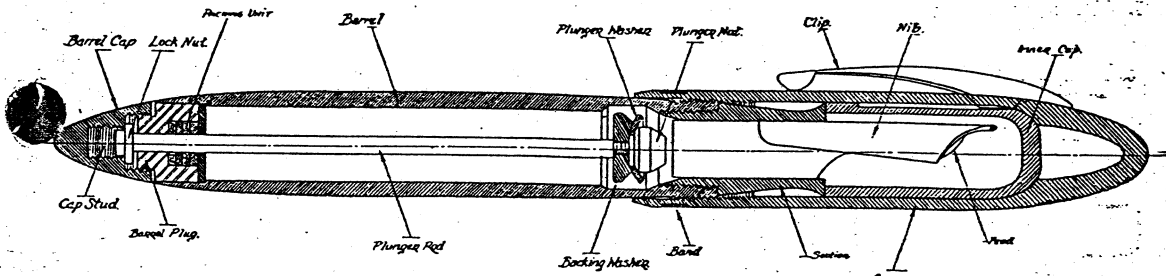
**W. A. Sheaffer Pen Co., Fort Madison, Iowa**

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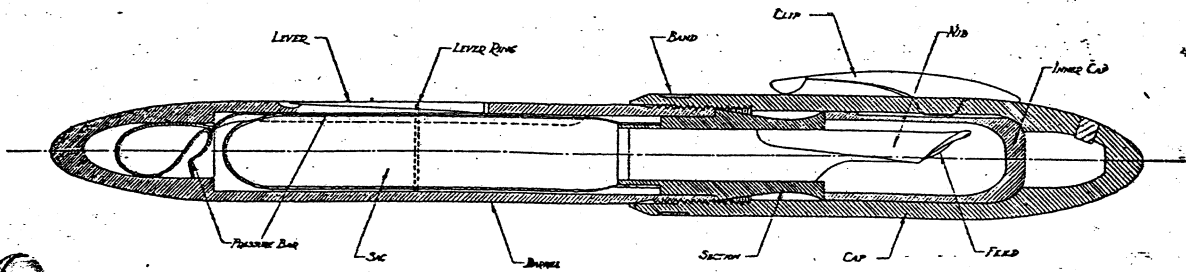
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# PEN AND PENCIL PARTS

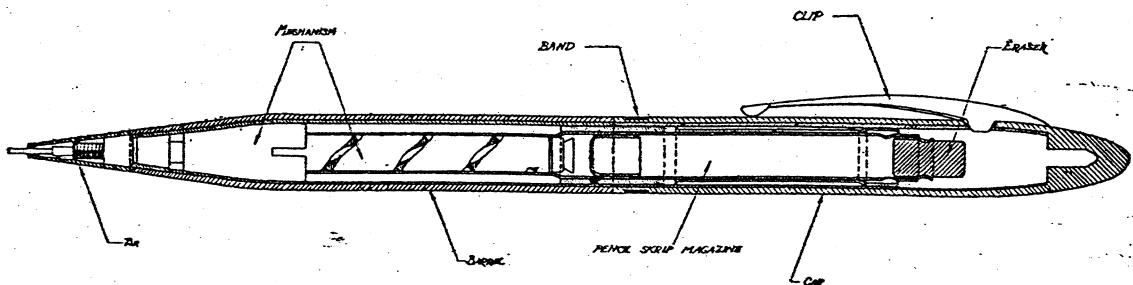
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SHEAFFER VACUUM-FIL PEN

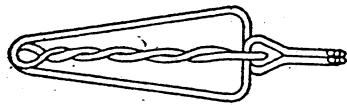


SHEAFFER'S LEVER-TYPE PEN



SHEAFFER'S PROPEL-REPEL-EXPEL PENCIL

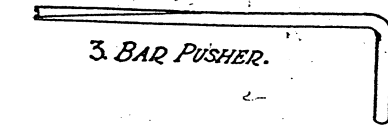
# TOOLS FOR ADJUSTING AND REPLACING BAR, LEVER AND SAC IN LEVER TYPE PENS.



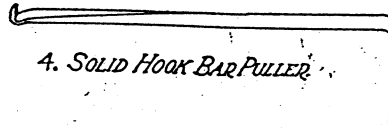
1. SAC SPREADER



2. SHELLAC



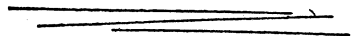
3. BAR PUSHER.



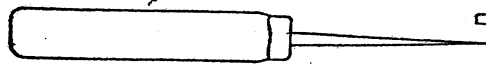
4. SOLID HOOK BAR PULLER



7. Wax (2)



9. LEVER WIRE



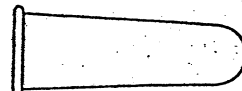
11. PIN PUSHER



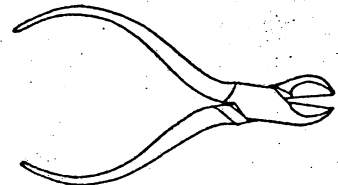
12. FILE



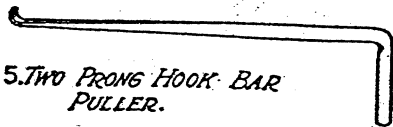
13. SAC CLAMP FOR TWIST-SAC PEN.



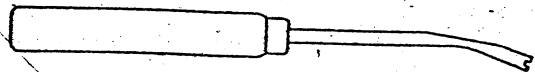
8. HEAVY RUBBER FINGER.



10. DIAGONAL CUTTING PLIERS.

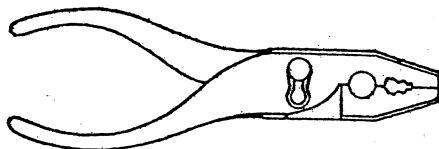


5. TWO PRONG HOOK BAR PULLER.

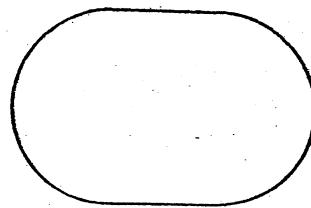


6. LEVER ASSEMBLY TOOL.

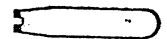
# TOOLS FOR ADJUSTMENT OF PLUNGER IN PLUNGER TYPE PENS.



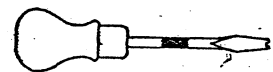
1. SECTION & PLUG PLIERS.



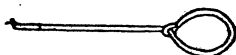
2. PIECE OF RUBBER.



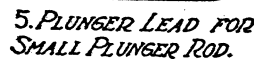
3. LOCK-NUT WRENCH.



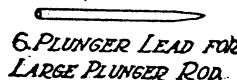
4. SLOTTED SCREW DRIVER.



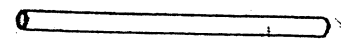
9. SEAL WASHER HOOK.



5. PLUNGER LEAD FOR SMALL PLUNGER ROD.



6. PLUNGER LEAD FOR LARGE PLUNGER ROD.



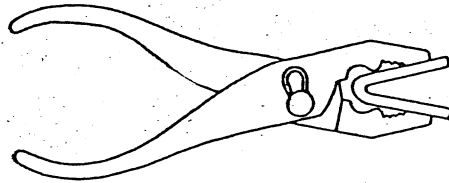
8. PLUNGER ASSEMBLY TOOL.



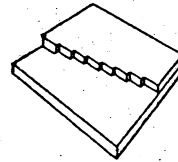
7. PLUNGER REMOVING TOOL.

# TOOLS FOR POINT AND FEED ADJUSTMENT

BAR,



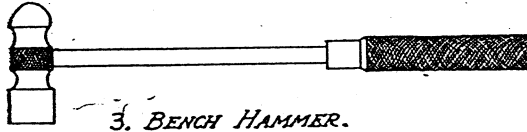
1. POINT PUSHING PLIERS.



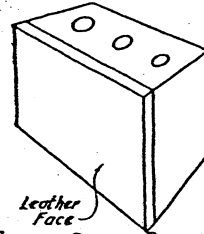
2. POINT PUSHING GAUGE.



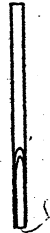
6. MAGNIFYING GLASS.



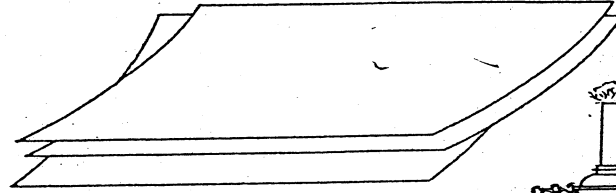
3. BENCH HAMMER.



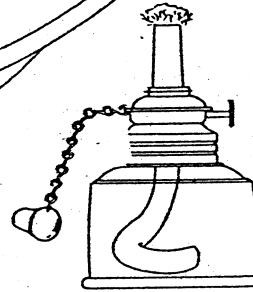
4. BENCH BLOCK.  
Leather Face



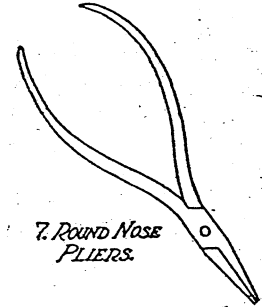
5. FEED PUNCH



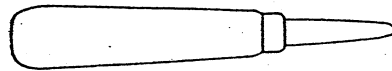
10. SMOOTHING PAPER.



9. ALCOHOL LAMP.

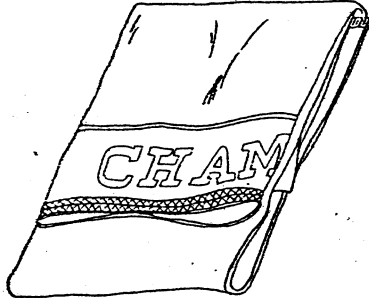


7. ROUND NOSE PLIERS.

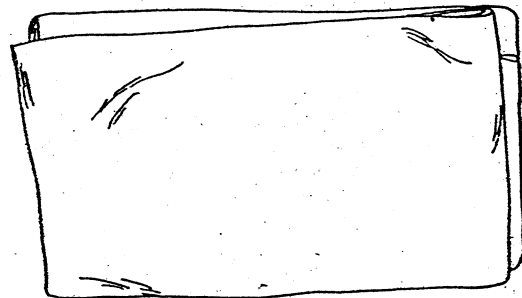


8. BURNISHER.

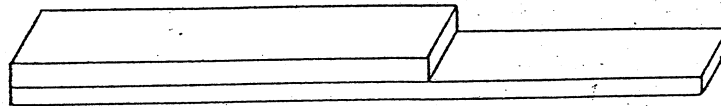
# TOOLS FOR CLEANING AND POLISHING.



4. POLISHING CLOTH.



3. CLEANING CLOTH.



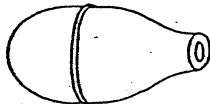
5. POLISHING STICK.



1. SPIRAL BRUSH.



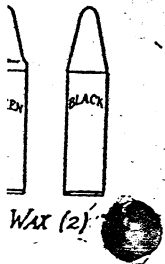
2. TWEEZERS.



7. RUBBER CLEANING BULB.



6. ROUGE.



PLIERS.



WRENCH.



DRIVER.



2.

## TO FILL A LEVER-TYPE PEN

The routine for filling a fountain pen is important and too often essential details are overlooked.

1. Press all air from the sac by raising the lever.
2. Place the entire point and part of the section under the surface of the writing fluid so air will be prevented from entering the sac.
3. Close the lever. Let the point remain under the fluid from seven to ten seconds (long counts) to give the sac time to draw in the fluid. Improper filling causes many pens to be criticised for not holding enough fluid.
4. Hold the pen with the point down so the excess fluid will run to the tip, then wipe it with an absorbent cloth.

Important: Wipe all fluid from the point before placing the cap over it.

Complaints of pens leaking often arise because the writing fluid is not wiped from the section and threads before the cap is screwed on. Then, when the cap is removed and writing fluid is found on the threads and section and in the cap, it is assumed that the pen leaks.

## TO FILL A PLUNGER-TYPE PEN

1. Unscrew the barrel-cap and pull out the plunger as far as possible.
2. Place the entire point and part of the section into the writing fluid.
3. Push the plunger in slowly and use care that part of the section remains under the surface of the writing fluid.
4. Wipe the excess fluid from the point, the same as outlined in paragraph 4 above.

## WASHING AND CLEANING

1. Pens which are not clogged may be washed by alternately filling them with clean, cool water and emptying, using the filling device.

Never use hot water for heat tends to soften the feed and section and cause the point to become loose.

2. If no water can be taken in by the filling device it will be necessary to dismantle the pen so the feed channel can be cleaned.

## SERVICING CLOGGED PENS

Caused usually by being filled with dirty or poor quality ink.

### TO PREVENT CLOGGING:

1. Use the best grade of writing fluid.

Our recommendation to all fountain pen users is that they use SKRIP to the exclusion of all other writing fluids. SKRIP was produced by Sheaffer in self defense after realizing that ink would not give satisfaction for any length of time if used in a fountain pen. Most inks have an acid reaction while SKRIP does not. The ingredients in SKRIP will not injure any part of the pen. There is no sediment to clog the feed. It will not dry on the nib, and it always flows freely and dries evenly and quickly on the paper.

2. A pen should be cleaned frequently—fill and empty several times with cold water.
3. NEVER MIX WRITING FLUIDS—Neither in pens nor in bottles. No two writing fluids are chemically alike and if mixed will neutralize each other. Sometimes such mixtures will form a thin, light colored, watery fluid while others will form a thick gummy residue inside the pen which will clog the feed and stop the flow of writing fluid.

## DISMANTLING A LEVER TYPE PEN

1. Empty the pen of writing fluid.
2. Remove the section from the barrel.

Twist or work the section out of the barrel. Use a rubber strip if necessary to provide a grip and protect the fingers.

On pens with transparent sections first break the shellac seal as described on page 22.

3. Remove the sac from the section.

Catch the end of the sac with the thumb nail and with the end of thumb roll the sac off the section.

If the sac is not torn when removed from the section and the rubber is good--test by stretching--it can be re-used if washed and dried.

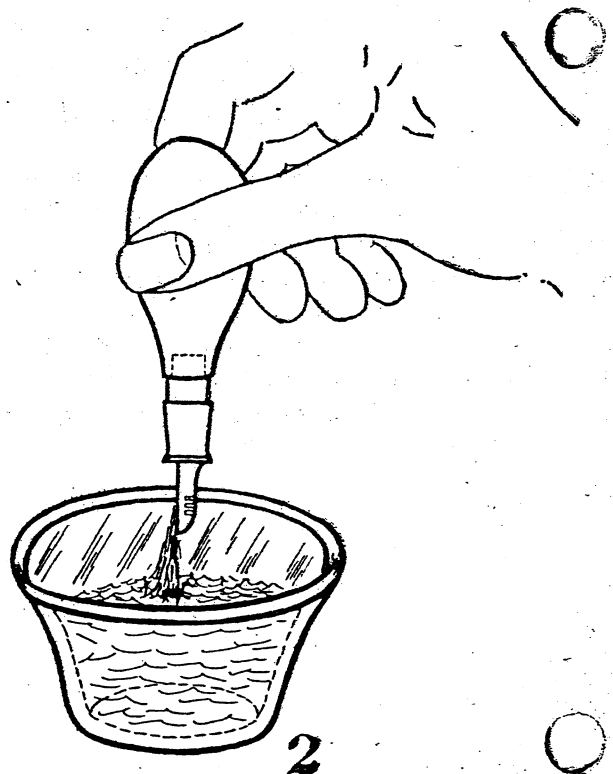
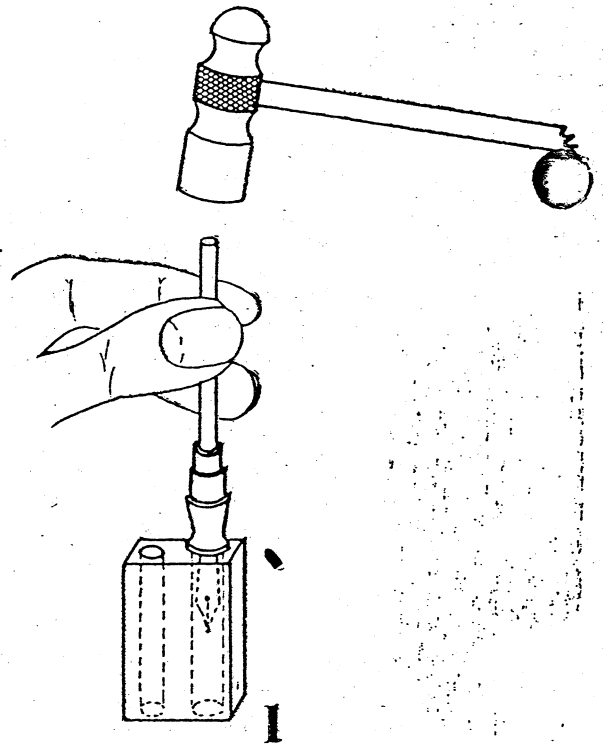
4. Drive the feed and point out of the section. (Illustration No.1)
5. Wash point, section and feed.

- (a) "Open-channel" feed:

Make certain that all sediment is removed from feed channel. Use a brush such as a tooth brush if necessary. Occasionally one may have to run the tip of a knife blade thru each of the three grooves in the bottom of the channel to remove the hard sediment.

- (b) "Tip-fill" feed:

Place the rubber cleaning bulb either on the end of the feed or the end of the section assembled with the feed and draw in and expel the cleaning fluid thru the feed. (Illustration No. 2)

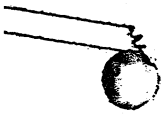





## ADJUSTMENT OF LEVER-TYPE FILLING MECHANISM

## LEVER ASSEMBLY

(A) To assemble the lever which is held in place by a ring inside the barrel:

- 
- 
- (1) Place a wire lever ring thru the hole in the lever, then place the large end of the lever in the end of the lever assembly tool. The end of the wires should point back toward the tool handle. (Illustration No. 8)

- (2) With this tool, thread the lever thru the slot in the barrel from the inside. When the end of the lever extends thru the slot, grasp it with thumb and finger and remove the tool.

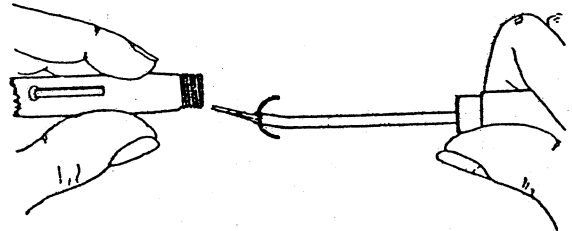
- (3) Spring the lever ring into position in the groove inside the barrel by moving the lever toward the groove. A hook shaped tool, such as the bar puller, may be used to force the ring into the groove should it fail at first to snap into place.

(B) To assemble the lever which is held in place by a wire run thru the barrel walls:

This style lever is assembled in the barrel after the bar has been put in place.

- (1) Lay the lever, finished side up, on the bar in the barrel slot.
- (2) Thread a piece of lever wire thru the barrel drillings and the lever.

The pressure of the bar against the lever should hold the lever firmly in place but the lever should not push the bar away from the inside barrel wall.



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- (a) To test for play: Hold the barrel with the lever down. Pull down the lever about 1/16 of an inch (3mm.) then release. If the lever snaps back into place and the bar does not hang away from the inside wall of the barrel the lever adjustment is correct.

- (b) If the lever has play, that is, hangs down, remove the lever and increase the width of the slot in the thick end.

- (c) If the lever presses the bar too far away from the barrel, decrease the width of the slot.

- (3) Pull the wire out slightly and cut it off close to the barrel with the side-cutting pliers. The wire should be cut short enough so neither end extends out of the barrel when it is pushed back into place.

- (4) Fill in holes with wax the same color as the barrel.

## ADJUSTMENT OF THE LEVER-TYPE FILLING MECHANISM

### ADJUSTMENT OF THE BAR AND LEVER:

The bar and lever are in proper adjustment when the lever, in a raised position, is stopped by the bar at a right angle with the barrel.

Should the bar stop the lever before it is at a right angle, the bar should be pushed farther into the barrel.

If the lever goes beyond a right angle the bar has been pushed too far and should be pulled back until the lever is again at right angles.

Should the lever turn over, straighten the bar in the barrel so the lever will strike the stop.

The lever must be closed when making adjustments on the bar.

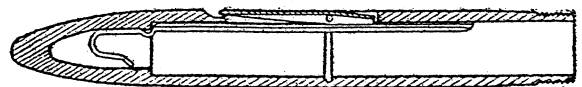
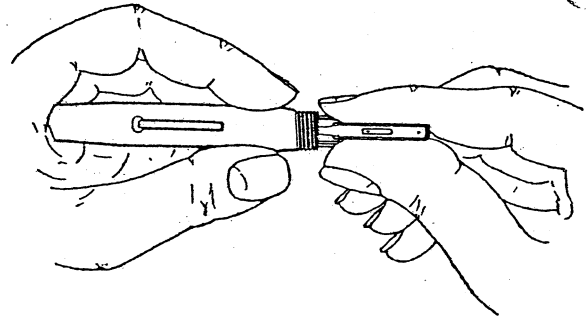
### BAR ASSEMBLY

1. The two piece bar with collar is used in all flat end barrels and Streamlined Balance barrels with solid ends.

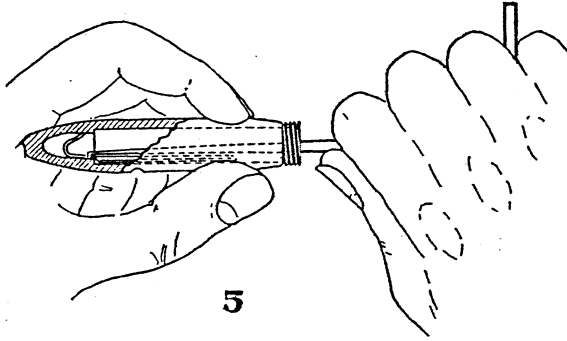
To remove this bar use the bar puller with the solid hook.

To Assemble—Grasp collar as illustrated (No. 3) and start it into barrel with bar in line with lever slot. Use bar pusher to push bar into place. Test for correct position as outlined above.

2. The embossed, one piece bar with single hook (Illustration No. 4) is used in regular and small size, Balance barrels with hollow ends.



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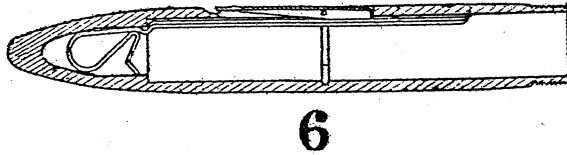


To remove this bar use the two pronged hook as illustrated. (Illustration No. 5)

To place this bar in a barrel, first place it on the bar pusher, hold it down with the fore-finger and push into position.

Test as outlined above.

3. The embossed, one piece bar with double reverse hook (Illustration No. 6) is used in the large size, Balance barrels with hollow ends.

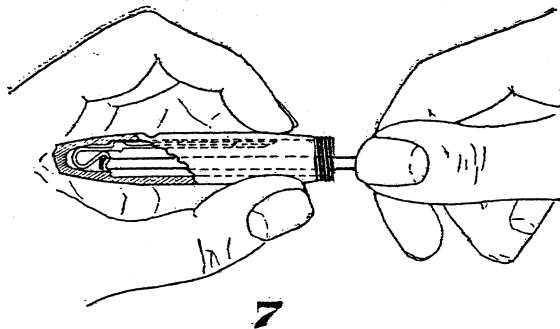


To remove this style use the two pronged hook as illustrated. (Illustration No. 7)

Place this bar in a barrel, using the same method as on the bar above except it is necessary to push on the reverse hook to set the bar in place.

Test same as the above bars.

**IMPORTANT:**—Any style bar must be straight when assembled and must lie close against the inside barrel wall. It must not press on the sac for such pressure will cause a pen to flow unevenly.

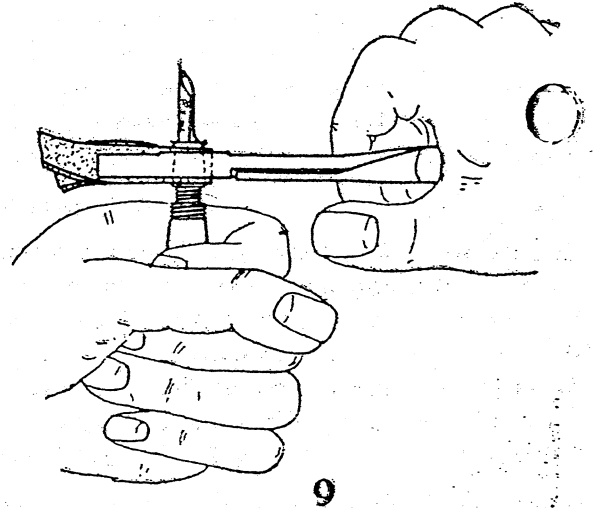


## DISMANTLING THE VACUUM-FIL PLUNGER TYPE PEN

- (1) Empty writing fluid and rinse pen by filling with cold water.
- (2) To Remove Section:
 

Wrap two thicknesses of rubber inner-tube around section, grip with section removing pliers and turn to LEFT. (Illustration No. 9)
- (3) To Remove Plunger:

- (a) Unscrew barrel cap and pull out plunger. Loosen lock-nut with wrench and remove barrel cap. (Illustration No. 10)  
Use the slotted screw driver for WASP Vacuum-Fil pens. (Illustration No. 11)
- (b) Push plunger back into barrel and with plunger removing tool push thru packing washers.

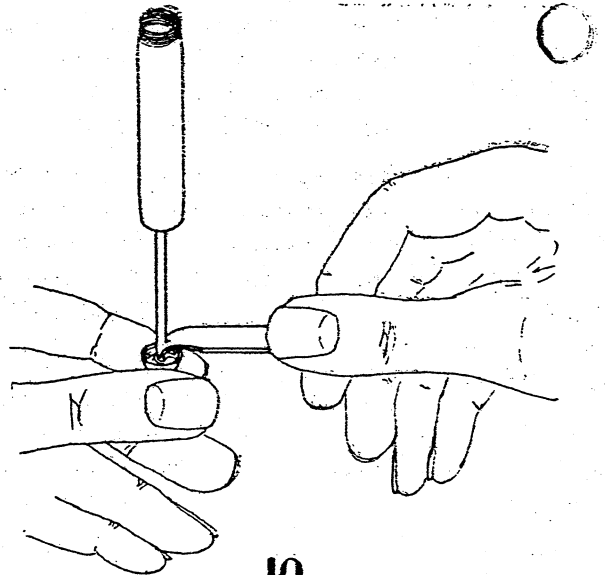


### ASSEMBLING THE WASP VACUUM-FIL PLUNGER TYPE PEN

- (1) To Replace Plunger:
  - (a) Place plunger assembly lead on threads of plunger rod and push into barrel from section end. (Illustration Nos. 12 & 13)
  - (b) Screw lock-nut on plunger rod. Then screw on barrel cap. Tighten lock-nut against barrel cap with wrench. (Illustration No. 10)

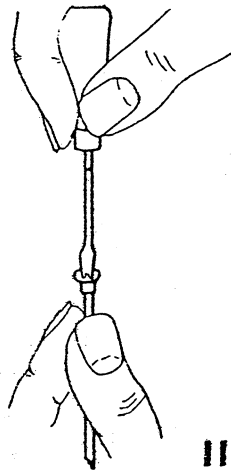
On WASP Vacuum-Fil screw large brass button on plunger rod first, then screw on the small lock-nut and tighten. (Illustration No. 11)

- (2) To Replace Section:
  - (a) Scrape the threads of the section across a bar of soap so as to fill the threads with the soap.



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IR



11

- (b) Start section into barrel and tighten, using pliers and piece of rubber. (Illustration No. 9) The shoulder of the section must be drawn up firmly against the barrel but not enough to bulge the barrel threads and cause the cap to bind.

#### THE BARREL- PLUG

**IMPORTANT:**—Do not attempt to remove the barrel-plug unless fluid leaks out between the threads of the plug and the barrel. When the plug is moved the barrel-cap fit is thrown off for it is seldom that the barrel-plug can be replaced in its original position.

If a leak occurs it is probably caused by a faulty seal-washer.

#### (1) To Remove the Barrel-Plug:

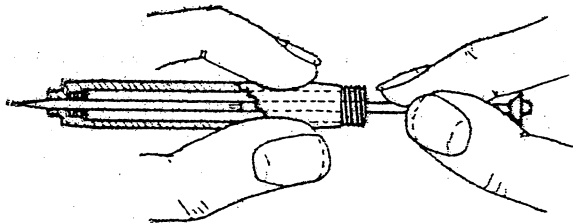
- (a) Fit the special pliers with the threaded jaws carefully onto the barrel-plug. With a firm grip on the pliers, turn to the **RIGHT** for this is a **LEFT-HAND** thread.

- (b) Lift out and replace seal-washer with the small wire hook.

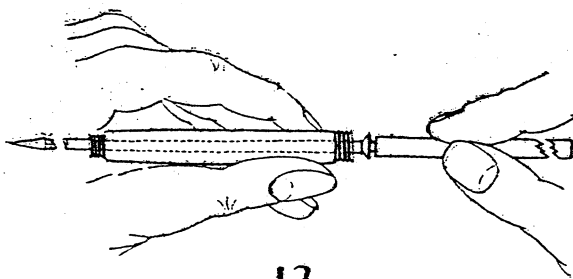
#### (2) To Replace the Barrel-Plug:

- (a) See that the seal-washer fits smoothly on its seat.

- (b) With the plug-pliers screw the barrel-plug firmly into place.



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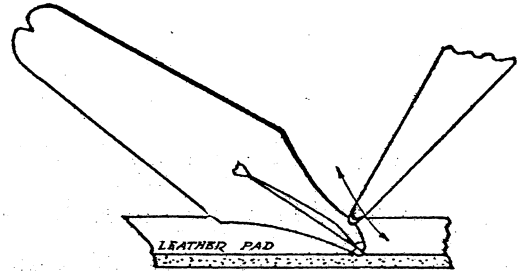


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**NOTE:**—The above procedure can be followed on all models of Plunger Type pens except those of small diameter and those having entire barrel made of the same transparent material. The barrel-plugs in these cannot be removed. If faulty, drill out and cement in a new packing unit.

## STRAIGHTENING THE GOLD POINT

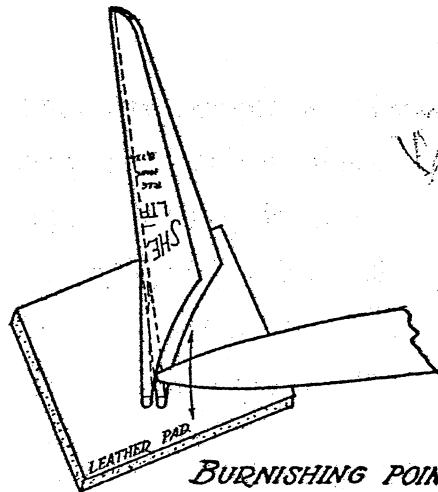
Points which are bent in at the tip can be adjusted by burnishing the outside edge of the gold point where the bend occurs while the iridium tip is resting on a leather pad. (Illustration No. 14)



*BURNISHING POINT WHICH IS CLOSED AT TIP.*

**14**

Points that are forked at the tip are treated as above except that the uppermost side is pushed away with the tip of the burnisher while burnishing the inside of the lower point. (Illustration No. 15)



*BURNISHING POINT WHICH IS FORKED AT THE CENTER OF SLIT.*

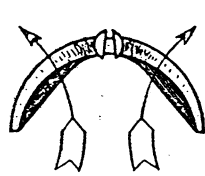
**15**

Points must be spaced the same width on the face as on the back. (Illustrations No. 16, 17 and 18)

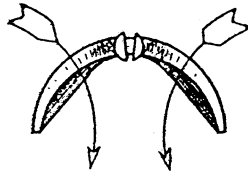


*POINT CORRECTLY SPACED.*

**16**

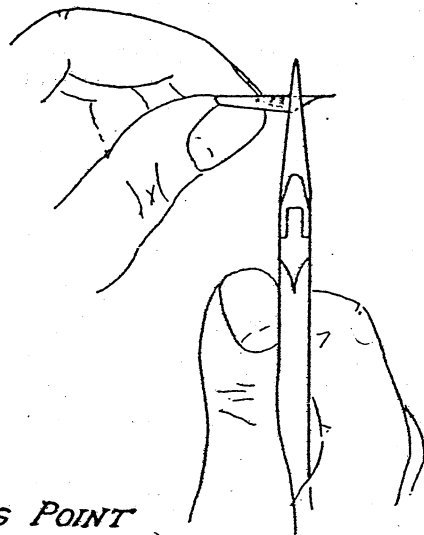


*INCORRECT.*  
POINT IS OPEN ON THE  
FACE. 17



*INCORRECT.*  
POINT IS OPEN ON THE  
BACK. 18

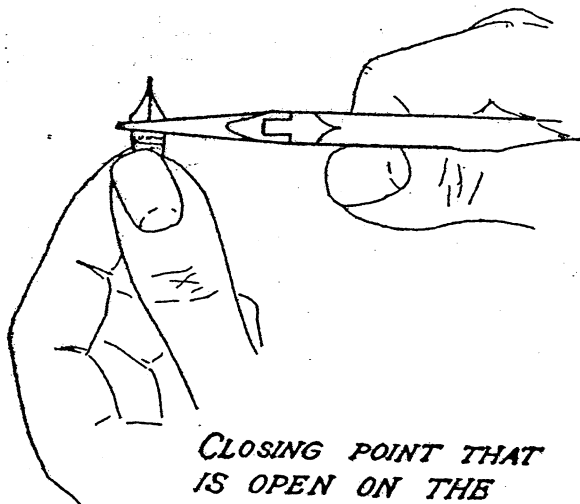
CLOSED



*CLOSING POINT  
THAT IS OPEN ON THE FACE.*  
19

Points that are spaced wider on the face can be adjusted by springing the shoulders of the point together slightly. (Illustration No. 19)

WHICH  
TER



*CLOSING POINT THAT  
IS OPEN ON THE  
BACK.*

Points that are open wider on the back than on the face are adjusted by pressing the point lightly across the heart with the pliers. (Illustration No. 20)

## SPACING THE POINT

The flow of the pen is regulated by the width of the spacing which varies according to the fineness of the point.

A needle point makes a very fine line and requires little spacing while a coarse point makes a heavy line and requires a wider space.

The points should always be far enough apart so a space of light can be seen the entire length of the slit.

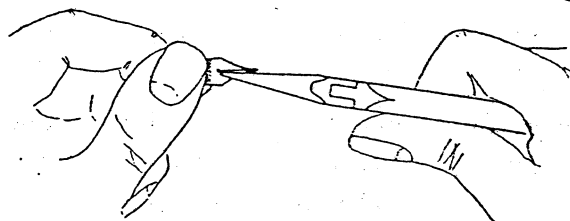
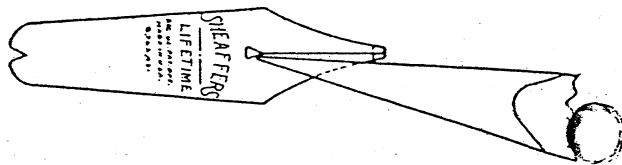
Points which do not have enough space are adjusted by raising first one side, then the other, away from the feed or writing surface.

Grasp the point with the smooth jaw pliers and lift or spring up alternate sides. Do not make an abrupt bend in the point. (Illustration No. 21)

When the point is spaced too much, reverse the process and spring the sides down.

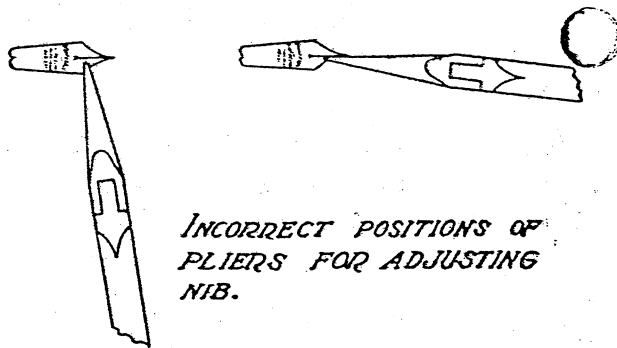
Caution: Keep the plier jaws away from the iridium tip or the iridium will be broken off. (Illustrations No. 21 and 22)

WHEN THE ADJUSTMENT IS COMPLETED THE IRIDIUM TIPS MUST BE EXACTLY EVEN ON THE WRITING SURFACE.



*CORRECT POSITION OF PLIERS FOR ADJUSTING NIB.*

21



*INCORRECT POSITIONS OF PLIERS FOR ADJUSTING NIB.*

22



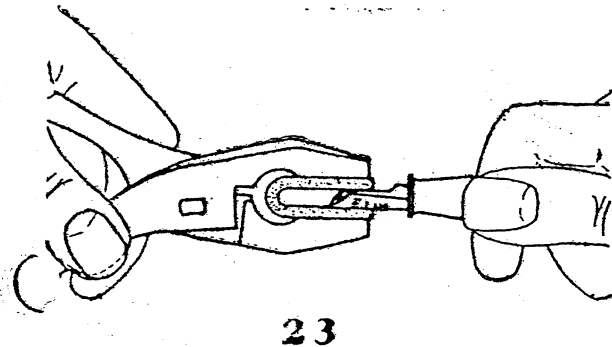
## MOUNTING THE POINT

Make certain that all parts are clean before they are assembled.

The feed should fit snugly in the section so the point will be held tight and also to prevent the writing fluid from leaking out.

The point should be even along the slit and at the tip before it is pushed.

Place the point squarely on the feed. Tip of feed should be about  $\frac{1}{8}$  inch (3mm.) back from end of point.



Start feed and point into section with fingers. Grip feed and point in pushing pliers as illustrated (No. 23) and push or drive section onto feed and point. Make certain that point is pushed far enough by checking on point pushing gauge. This is important for if the point extends out too far, the iridium will be broken off when the cap is screwed on. Push point to the depth indicated on chart supplied with point pushing gauge.

## ATTACHING THE SAC

- (1) Spread shellac around sac end of section.
- (2) Slip sac on section using sac spreader. (Illustration No. 24)

Use care that no shellac gets on end of feed to stop it up.

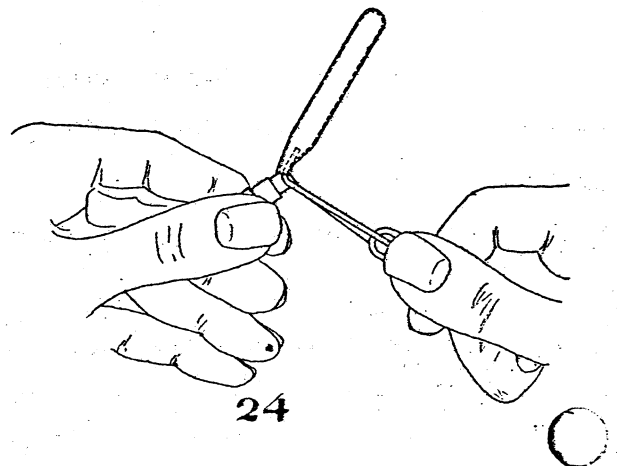
Allow several minutes for shellac to dry before filling pen.

- (3) Sac must fit free in the barrel.

To Test—Slip sac into barrel until section touches and turn section to see if sac will catch and twist.

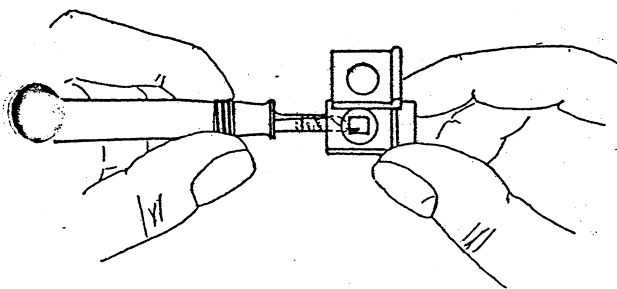
If the sac twists, the bar hangs too far from the barrel wall and must be adjusted. Refer to "Bar Assembly."

- (4) When the adjustment is completed, for uniform appearance, push the section into the barrel with the point in line with the lever.



## MOULDING THE FEED TO THE POINT

It is essential that the feed fit tightly all along the under side of the point to insure a correct flow.



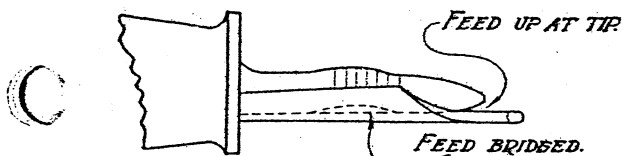
*EXAMINING THE IRIIDIUM POINT WITH THE MAGNIFYING GLASS.*

25

1. The feed is made of hard rubber and by quickly passing it through a flame a number of times, the rubber absorbs the heat and becomes pliable.

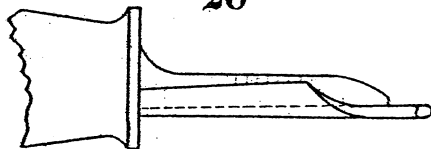
Use care to keep the section from the heat as it will soften if heated and cause the point to become loose.

2. The feed, when pliable, is moulded against the point by pressing it with the forefinger. When the feed has been moulded to the point, dip it in water. This cools the feed and causes it to retain its moulded form.



*INCORRECT - FEED AWAY FROM POINT. LIGHT SHOWS BETWEEN FEED AND POINT.*

26



*CORRECT - FEED AGAINST POINT. SHOULD SEE NO LIGHT BETWEEN FEED AND POINT.*

27

TO INSPECT:

3. Face a light and with the point in a horizontal position (Illustration No. 25) examine it with the magnifying glass to determine if light shows between the feed and the point. (Illustrations No. 26 and 27)

After the feed has been properly moulded, give the point a final inspection to see that it is aligned and "spaced" correctly and the feed is down tight against the point.

## SMOOTHING THE POINT

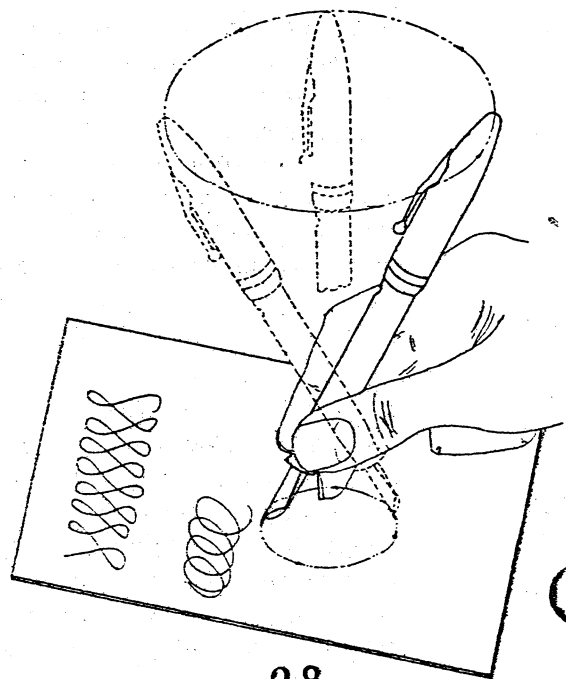
A scratchy point is usually caused by the iridium tips being out of line. Often this is the result of the point having been struck or pushed slightly to one side, causing an uneven pressure of the feed against the point. This can be corrected by pushing the point back in line with the feed, using the fingers.

If the tips are even and the point scratches, the iridium may have a sharp or rough spot. This is removed on a special grade of fine smoothing paper. This paper should be placed on a firm smooth surface and a light coat of rouge rubbed over it to reduce the cutting power and to polish the iridium.

To smooth the point, hold the pen in a writing position and move it in small circles, not too fast, and finish up by writing continuous figure 8's. As the point is moved over the paper, the position of the pen should be changed continuously so a flat face will not be worn on the tip. Use only moderate pressure and finger movement in making small circles and figure 8's. (Illustration No. 28)

Care and skill must be exercised or more harm than good will be done.

Never rub the point on a stone or rough abrasive of any kind. The iridium must have a very smooth, mirror-like finish and any scratch or rough spot will be noticed when the point is used.



28

## FITTING THE CAP

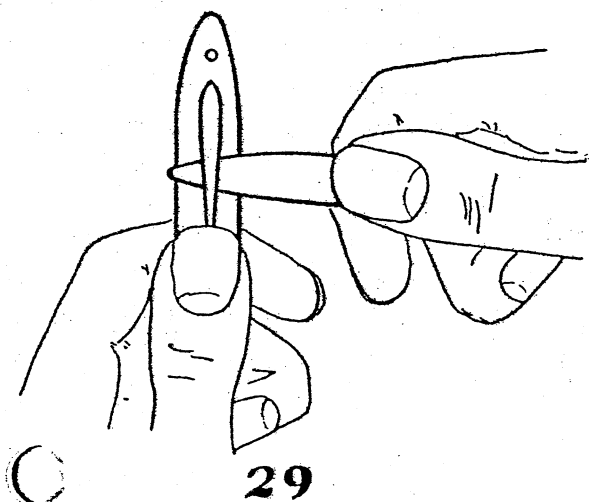
It is important that the cap fit properly on the pen. The cap should screw on smoothly until the innercap meets the section. An extra twist should then be given the cap to make the proper air-tight seal at this joint.

Should the threads in the cap become worn to such an extent that the cap will not tighten but continues to turn, it will be necessary to send the pen to the factory for the cap to be rethreaded and fitted to the barrel.

The cap should fit snugly enough on the back end of the barrel so it will not work off when the pen is in use, nor fall off when the pen is held with the cap down. If the fit is not satisfactory, do not attempt to improve it by roughing up the end of the barrel. This ruins the finish and seldom does any good. Any repair shop equipped with a lathe can quickly shrink the cap bead so it will fit properly.

### TO INCREASE CLIP TENSION:

Hold down ball of clip with thumb and raise back of clip with burnisher or smooth jaw pliers. (Illustration No. 29)



## VISULATED PENS WITH TRANSPARENT SECTIONS

The material from which these sections are made is soluble in alcohol, therefore, never use alcohol to clean or rinse a pen which contains one of these sections.

These sections are cemented into the barrel with shellac.

To remove:

First break the shellac seal between the section and the barrel by striking the barrel threads several quick blows with the wooden handle of the burnisher, a fiber hammer or some such tool—a hard faced tool will damage the threads. Then grasp the barrel firmly in one hand and with the thumb and finger of the other work the section out of the barrel.

The feed is of special design and requires a special feed punch to drive it from the section without breaking the insert extension.

The transparent section is manufactured with a hard rubber sleeve inside it to hold the gold point. To avoid stripping this out of the section when the feed is driven out, hold the section so the edge of this sleeve rests on the bench knock-out block. Should the sleeve come out press it back into place.

The feed has three parts: (Illustration No. 30) the finger or main portion, the sleeve, and the insert.

The insert should fit loosely in the finger with the beveled end toward the point. The sleeve fits over the insert with a light friction and holds it into the finger by fitting snugly into the back of the finger.

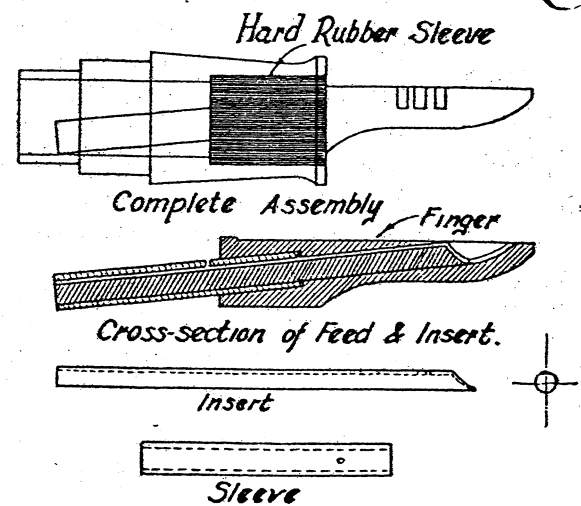
The sleeve should be assembled with the small hole over the channel of the insert and close to the finger portion to permit the last remaining fluid to be used from the transparent section.

To replace the section in the barrel:

After all adjustments of the pen have been completed the transparent section must again be cemented into the barrel to insure a proper fit. Spread a small amount of shellac around that part of the section which fits into the barrel. Do this carefully so no shellac touches the exposed part for the alcohol in the shellac will damage the finished surface.

Push the section into the barrel with the slit of the point in line with the lever.

Wipe off any shellac which might have pushed out at the joint.



## ASSEMBLING SACS IN TWIST-SAC PENS

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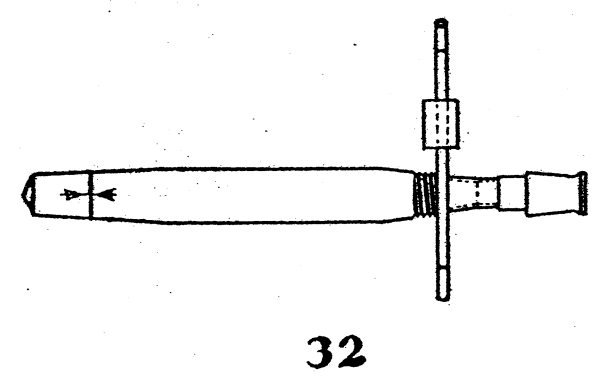
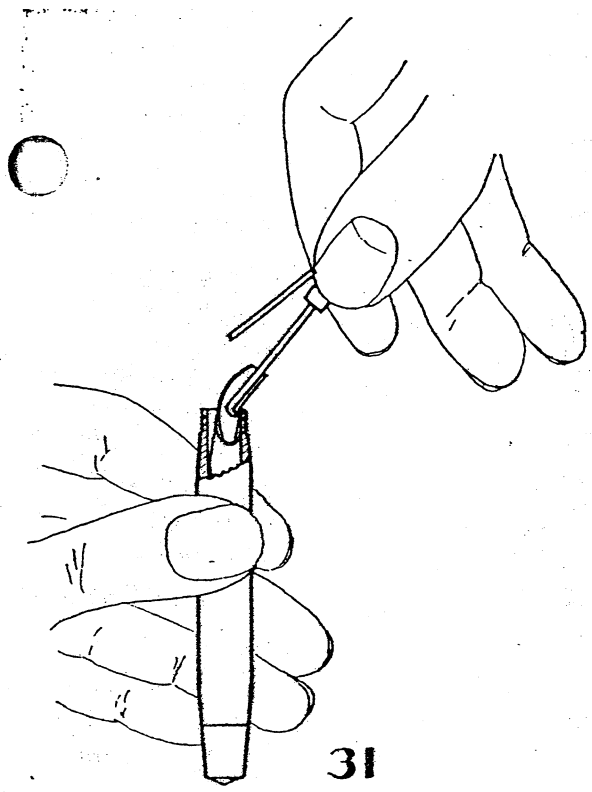
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1. Shellac sac on transparent barrel-end and allow time to dry thoroughly.
2. Assemble sac and transparent barrel-end into barrel. The arrow on the barrel and barrel-end should line up.
3. With the hook end of the clamp pull the sac about one-half inch out of the thread end of the barrel (Illustration No. 30) and hold it with the clamp. (Illustration No. 31)
4. Shellac sac onto section.
5. Allow time for the shellac to thoroughly dry then release the clamp and push section into barrel.
6. Remove feed from section and look through section and sac by holding transparent barrel-end to light to see that the sac is not twisted.

When a new section is supplied see that it fits the barrel before the sac is attached.

7. The section should be shellaced into the barrel when the repair is completed so the user cannot twist the sac by turning the section.

## PENCIL SERVICE

Experience has proven that Sheaffer pencils require very little servicing.

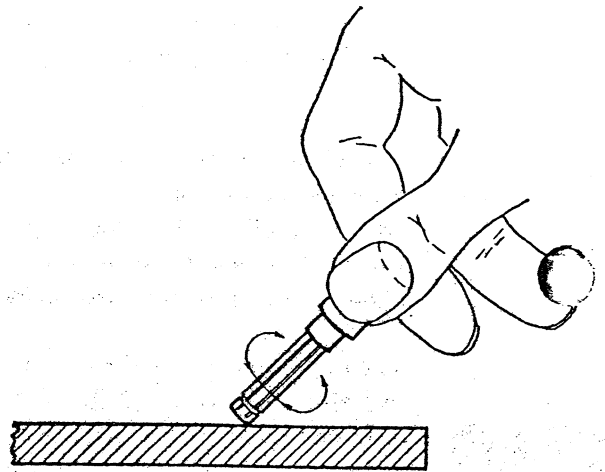
Should for any reason the mechanism fail, the practice is to remove it and supply a new one. This can be done with the proper tools but is not recommended for the average shop.

Many repair shops report that the small number of Sheaffer pencils returned to them for service is not sufficient to make it worth while investing even a small amount in the necessary tools and assortment of mechanisms. However, tools and instructions will be supplied to any who desire them.

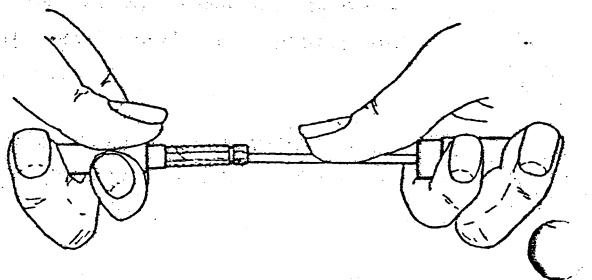
Here are some simple adjustments that can easily be made on Sheaffer pencils:

1. Roll end of lead magazine to tighten eraser fit. (Illustration No. 33)
2. Raise corrugations on magazine to tighten cap fit. (Illustration No. 34)
3. Drill out lead jams. (Illustration No. 35)
4. Tighten tube in Balance cap by tightening screw inside cap with small screwdriver.
5. Increase clip tension—Same as on pen clip.

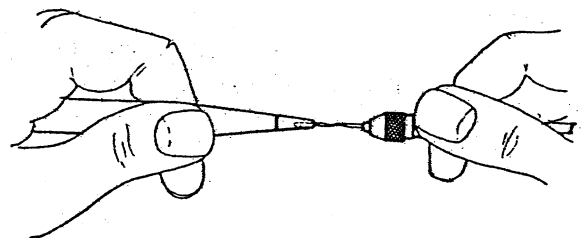
Hold down ball of clip with thumb and raise back of clip with burnisher. (See illustration No. 29)



33



34



35



# W.A. Sheaffer Pen Co.

W. A. SHEAFFER  
Chairman

FORT MADISON, IOWA, U.S.A.  
NEW YORK, 16 E. 34<sup>TH</sup> STREET • CHICAGO, 508 REPUBLIC BLDG. • SAN FRANCISCO, ARCADE 6-7 MONADNOCK BLDG. • TORONTO, 169-173 FLEET ST.

C. R. SHEAFFER  
President

PLEASE ADDRESS REPLY TO THE COMPANY,  
MARKING IT FOR THE ATTENTION OF THE WRITER

## PARTS PRICES ON THE "TRIUMPH" LINE

<u>PENS</u>	<u>Symbol</u>	<u>Point Unit</u>	<u>Complete Cap</u>	<u>Barrel</u>	<u>Plunger</u>	<u>Barrel Cap</u>
Crest Triumph	49WH	\$6.00	\$6.50	\$2.50	\$ .60	\$ .25
Crest " Tuckaway	49WM	6.00	5.50	2.50	.60	.25
Standard Triumph	93WH	6.00	4.75	2.50	.60	.25
Triumph Tuckaway	93WM	6.00	4.75	2.50	.60	.25

<u>PENCILS</u>	<u>Symbol</u>	<u>Complete Cap</u>	<u>Barrel</u>	<u>Mechanism</u>	<u>Tip</u>
Crest Triumph - long	YKTL	\$ 3.85	\$ 1.00	\$1.25	\$ .65
Standard Triumph "	LH11	2.85	1.00	1.00	.65
Triumph Tuckaway	LM11	1.85	1.00	1.00	1.00
Crest Triumph Tuckaway	YKML	3.00	1.00	1.00	1.00