

Removable Appliance with Finger Spring Project

Supervisor

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Removable Appliance with Finger Spring Project

- Space regaining removable appliance
with finger spring
- Diastima closing removable appliance
-with finger spring

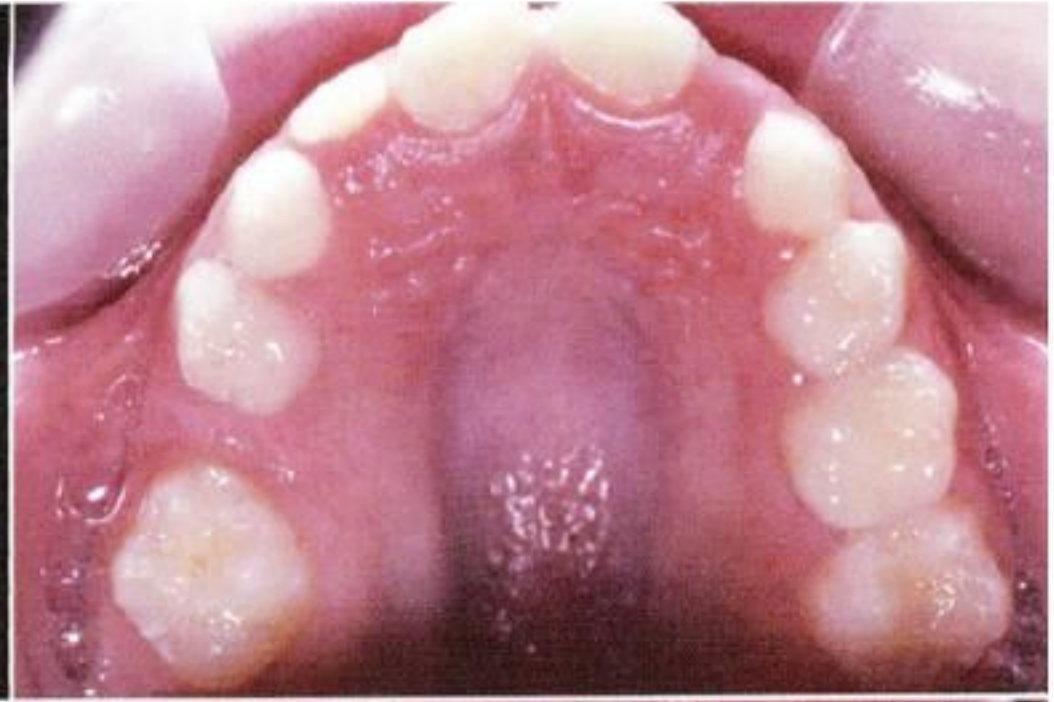
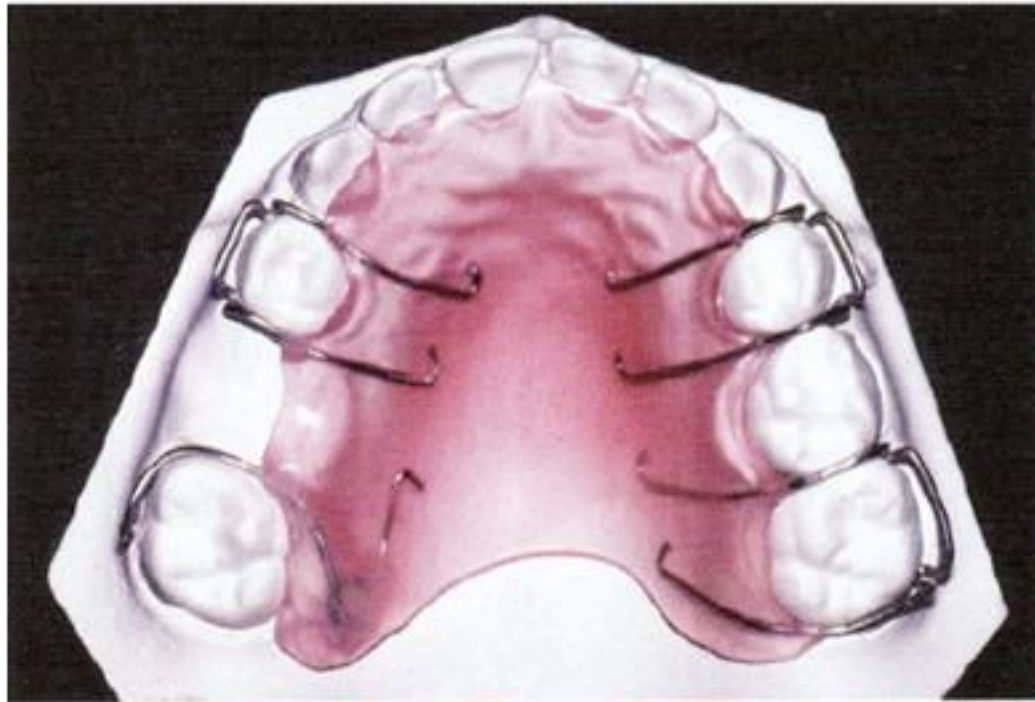
Removable Appliance with Finger Spring Project

- Space regaining removable appliance
with finger spring

Space Regaining Removable Appliance with Finger Spring Project



When can it be used?



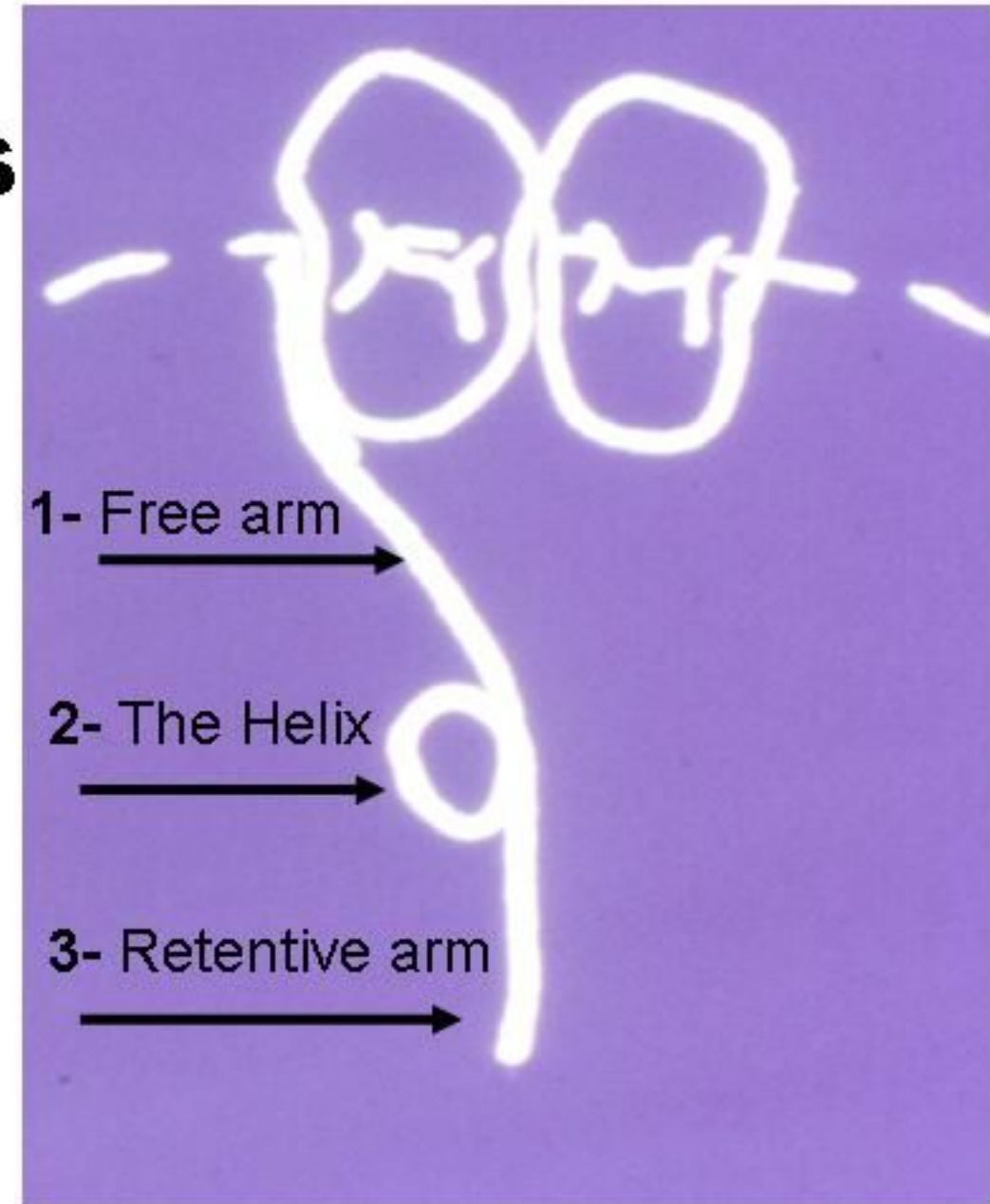
Finger Spring

Finger springs have **3 parts**

1- Free arm

2- The Helix

3- Retentive arm



Free Arm

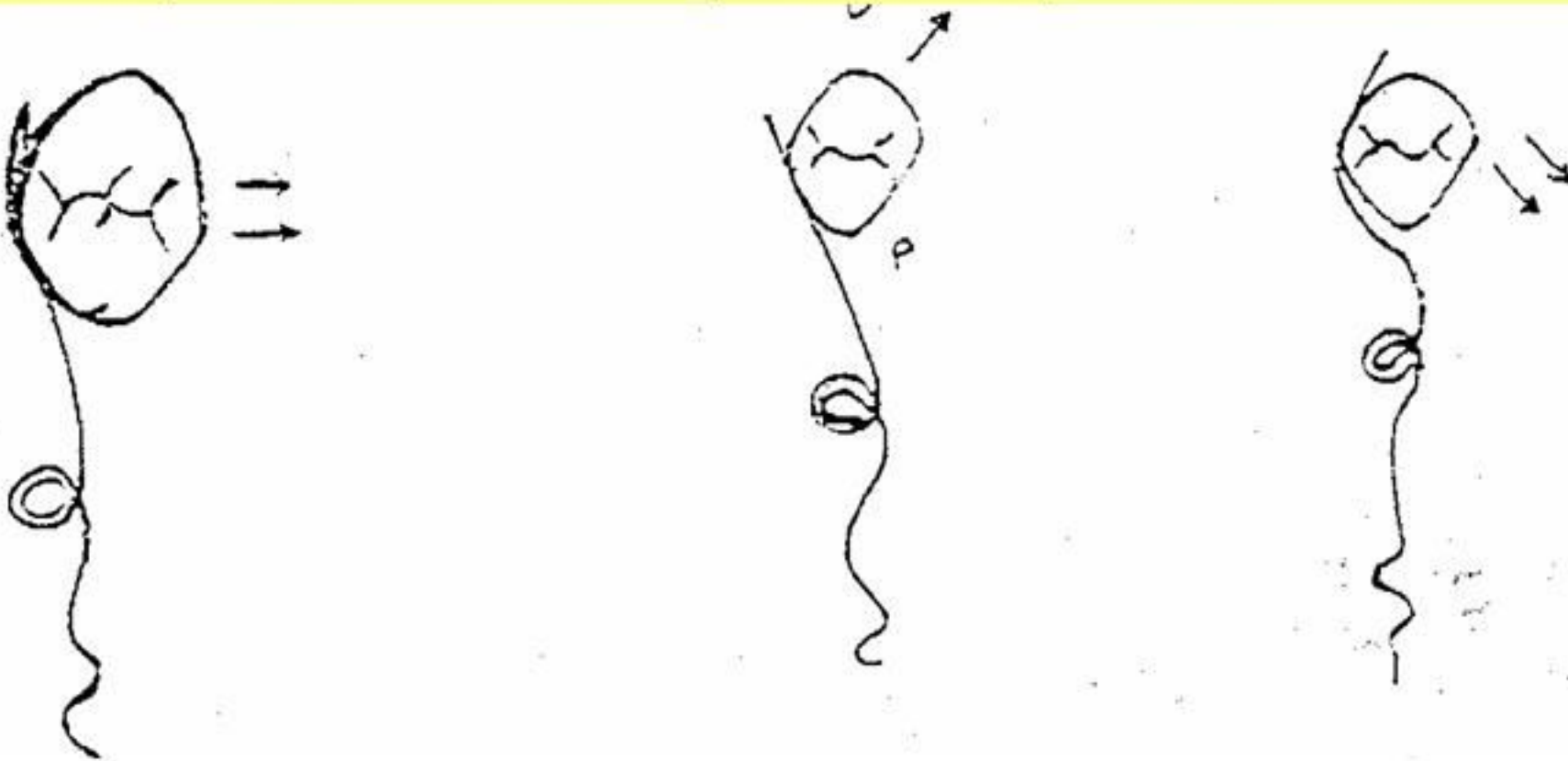
A- (Position of the free arm)



Free Arm

B- (Area of contact)

- The contact of the free arm of the Finger springs has to touch the proximal surface of the tooth in area contact not on point contact.



Free Arm

C- (End of the arm)

- The occlusal end of the free arm of the Finger springs has to bend to avoid cheek or lip injury.



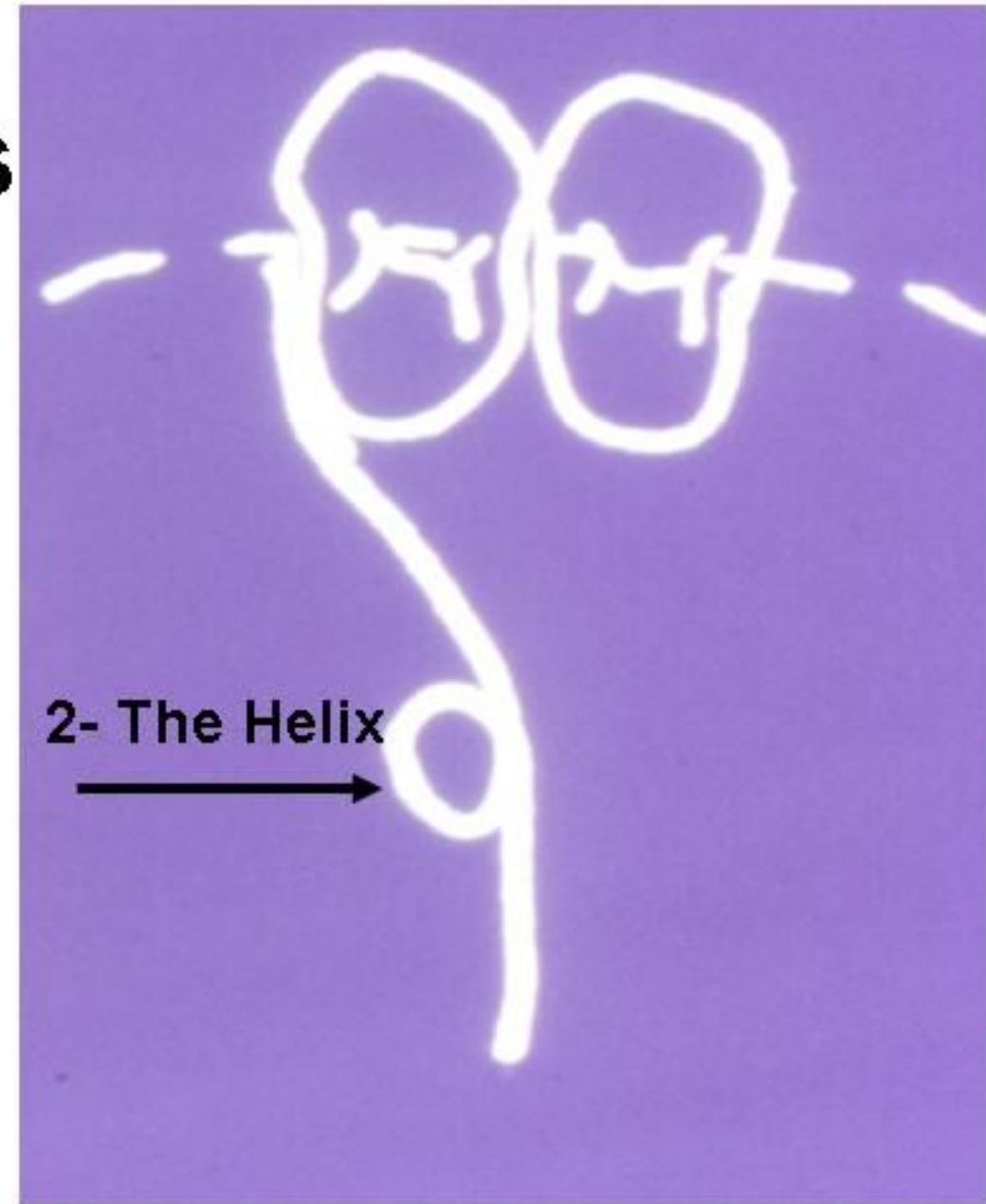
Finger Spring

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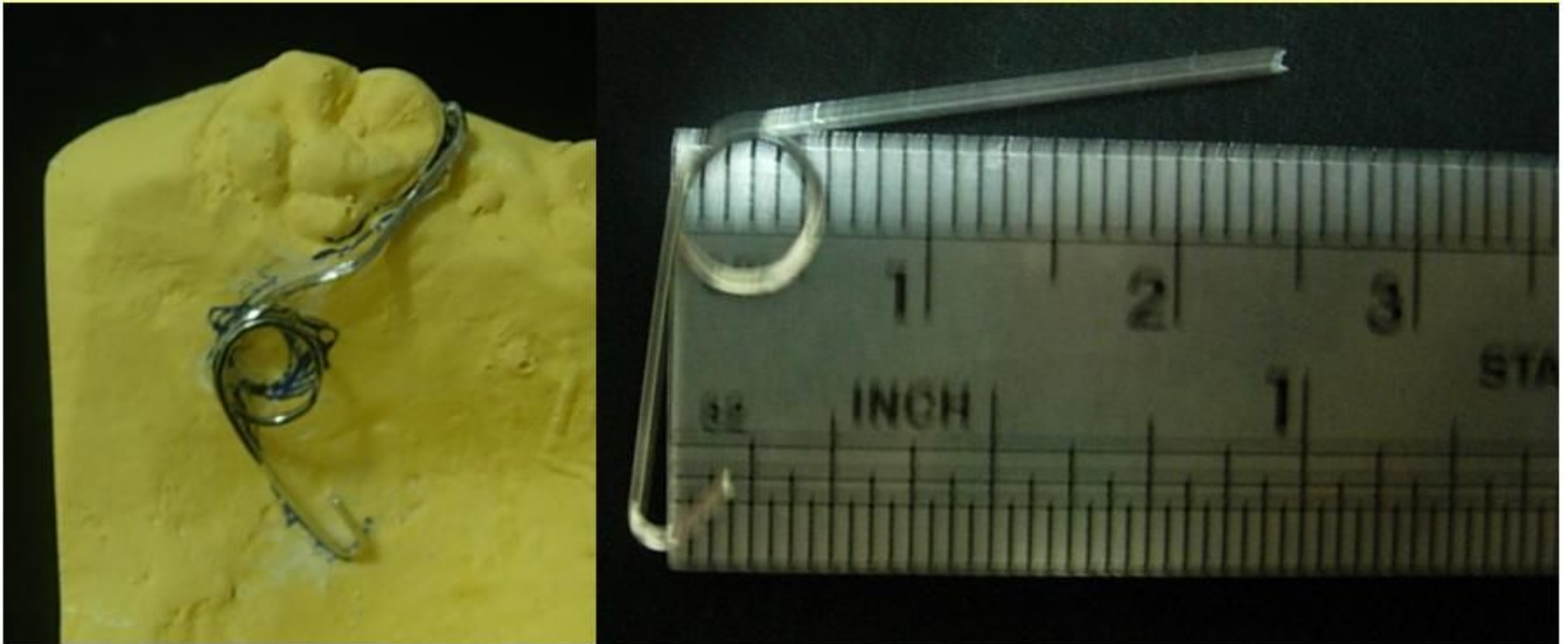
3- Retentive arm



The Helix

A- (Size of the Helix)

- The size of the helix it should be around 5mm in width

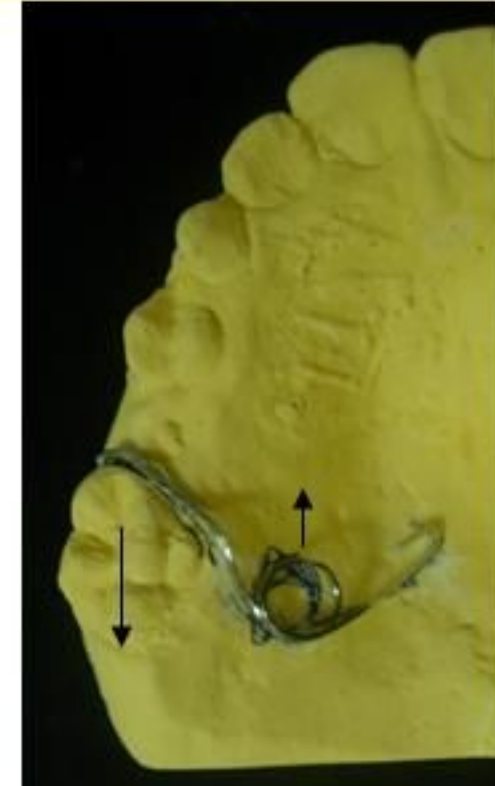


The Helix

B- (Direction of the helix)

- The helix should be facing the opposite direction of the wanted movement

(activation of the spring is by closing of the helix).



The Helix

C- (Position of the Helix in relation the tooth to be moved)

- The helix should be not too far mesial, not too far distal (at the middle of the tooth).

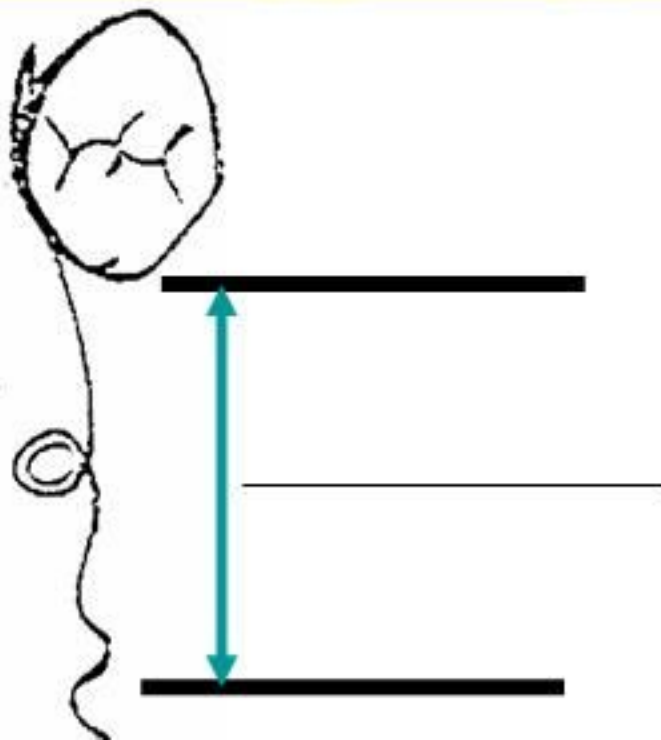


The Helix

C- (Position of the Helix on the palate)

- The helix should be in the middle distance between the palatal free gingiva and mid palatal suture (>4mm away from palatal free gingiva).

(space regaining posterior teeth only)



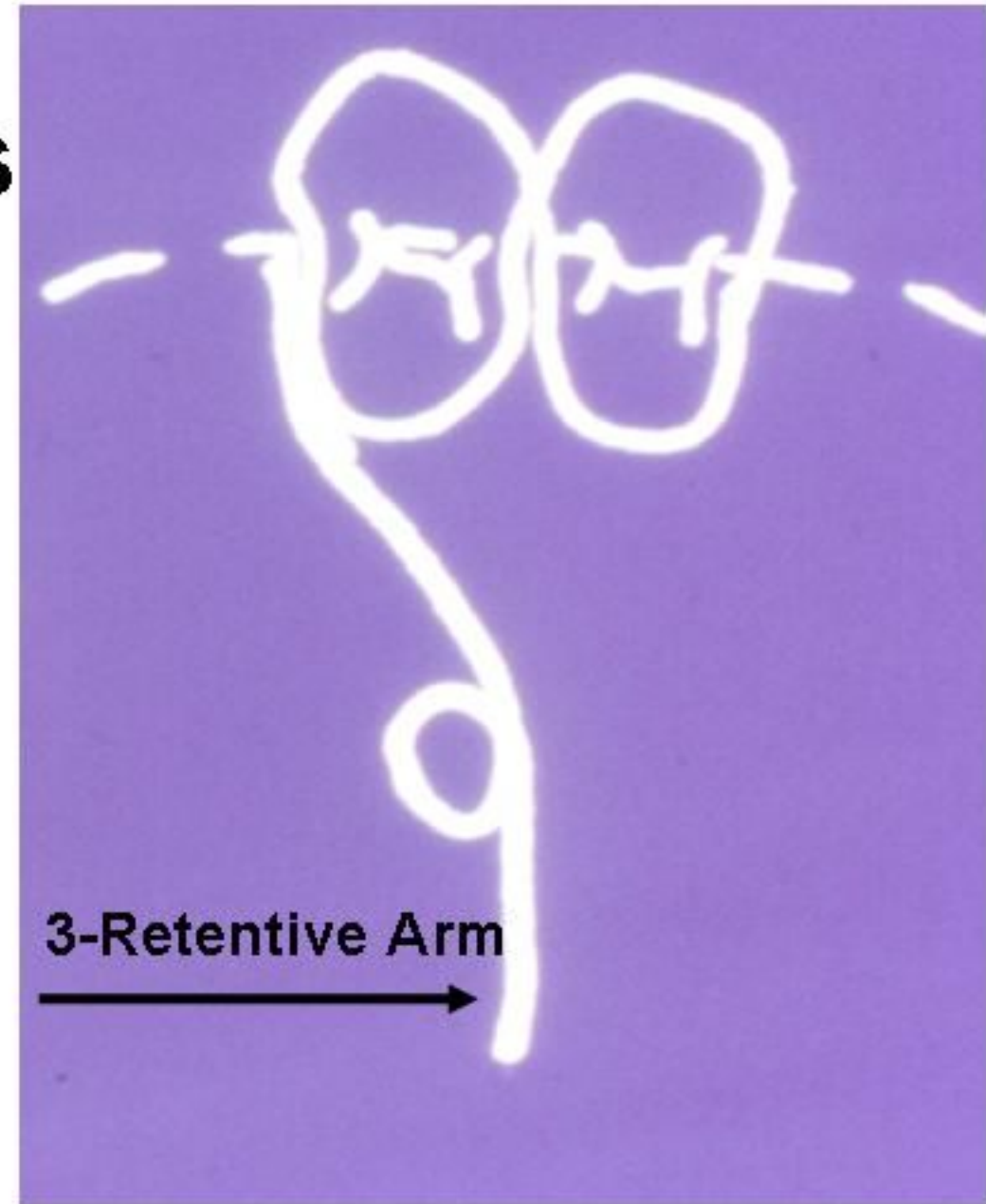
Finger Spring

Finger springs have **3 parts**

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Retentive Arm

- The retentive arm of the Finger Spring (like the rest of the wires of removable appliance), it should be impeded in the acrylic plate about 1 mm away from palatal surface to be covered totally with acrylic.



Finger Spring Construction

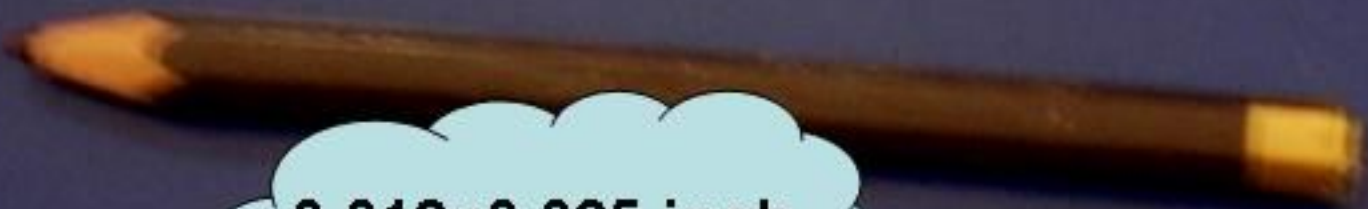


Finger Spring Construction

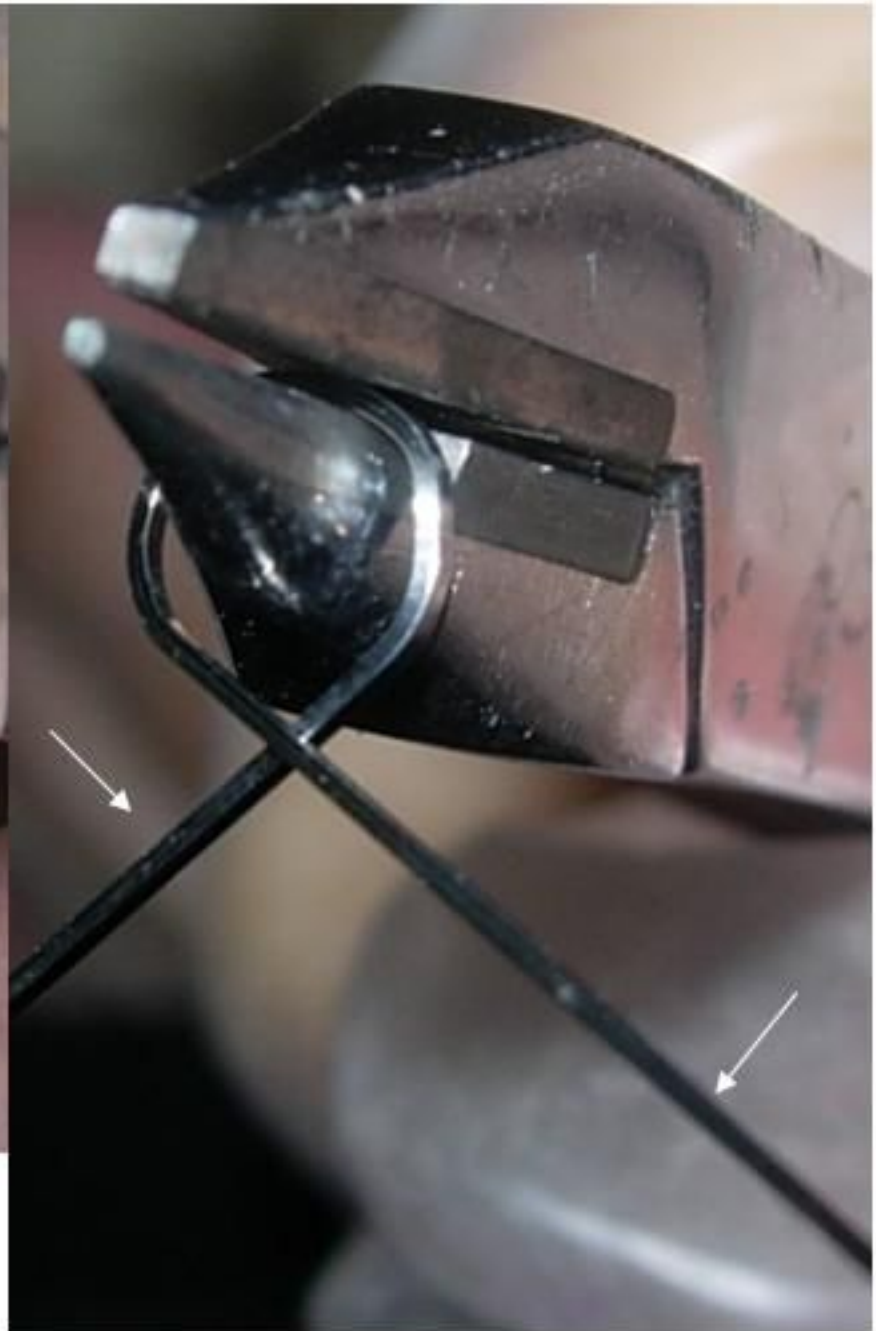
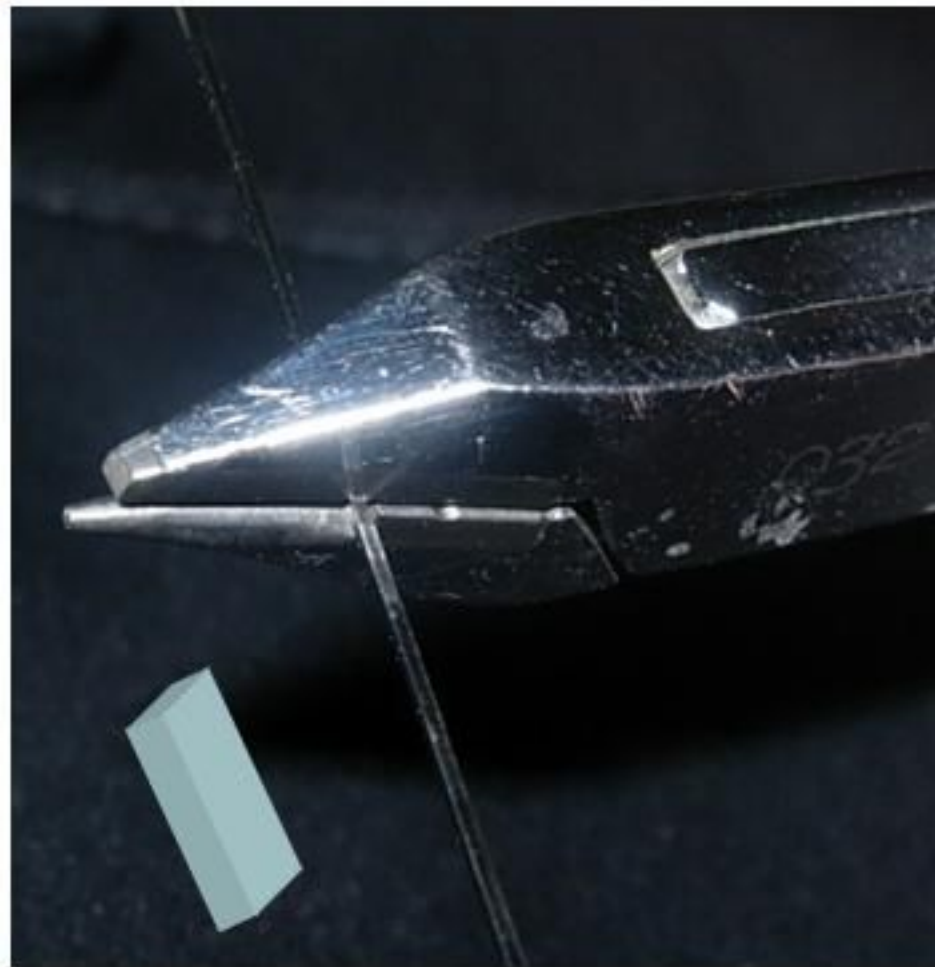


Materials needed

0.018x0.025 inch



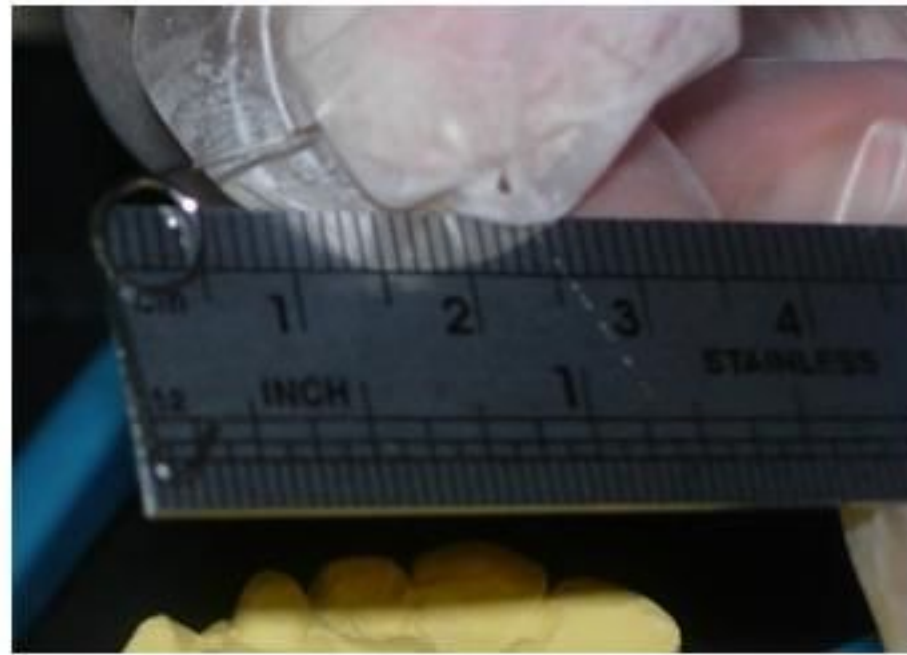
Finger Spring Construction



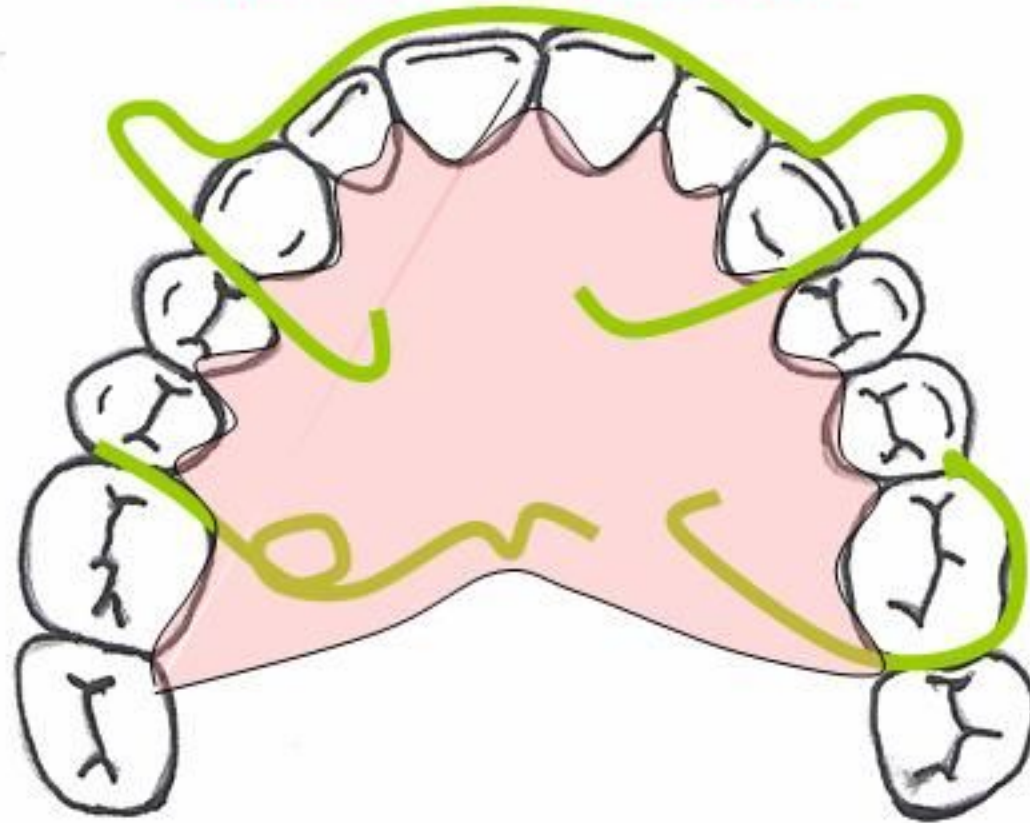
Finger Spring Construction



Finger Spring Construction



How to draw the appliance with finger spring to regain space to the Lab technician

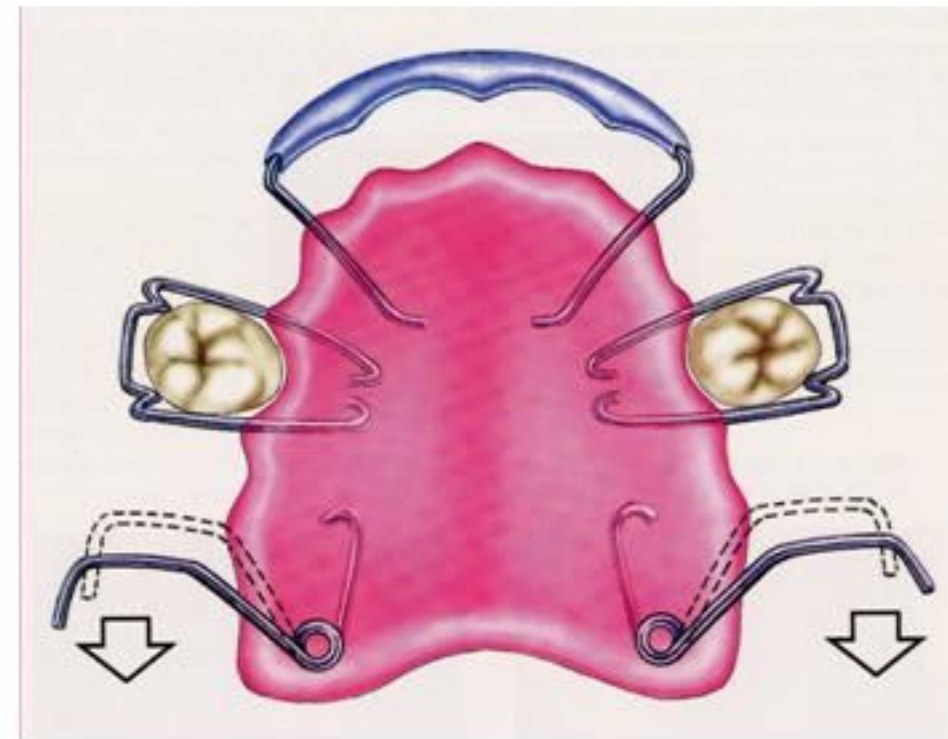


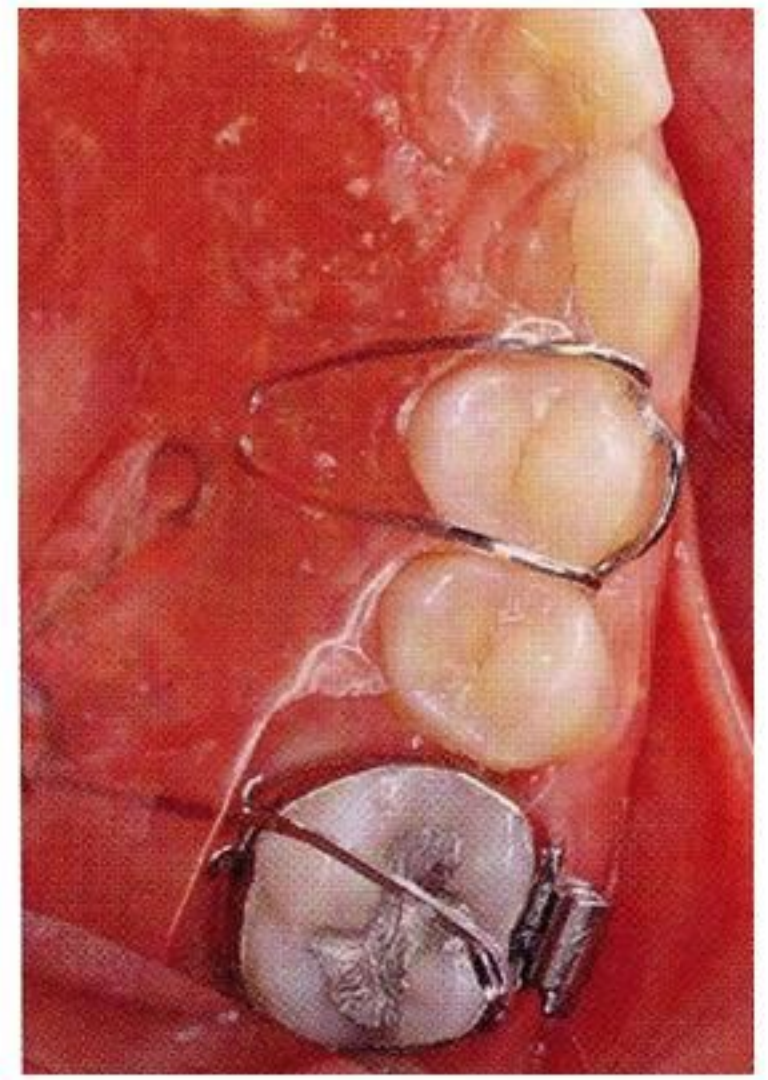
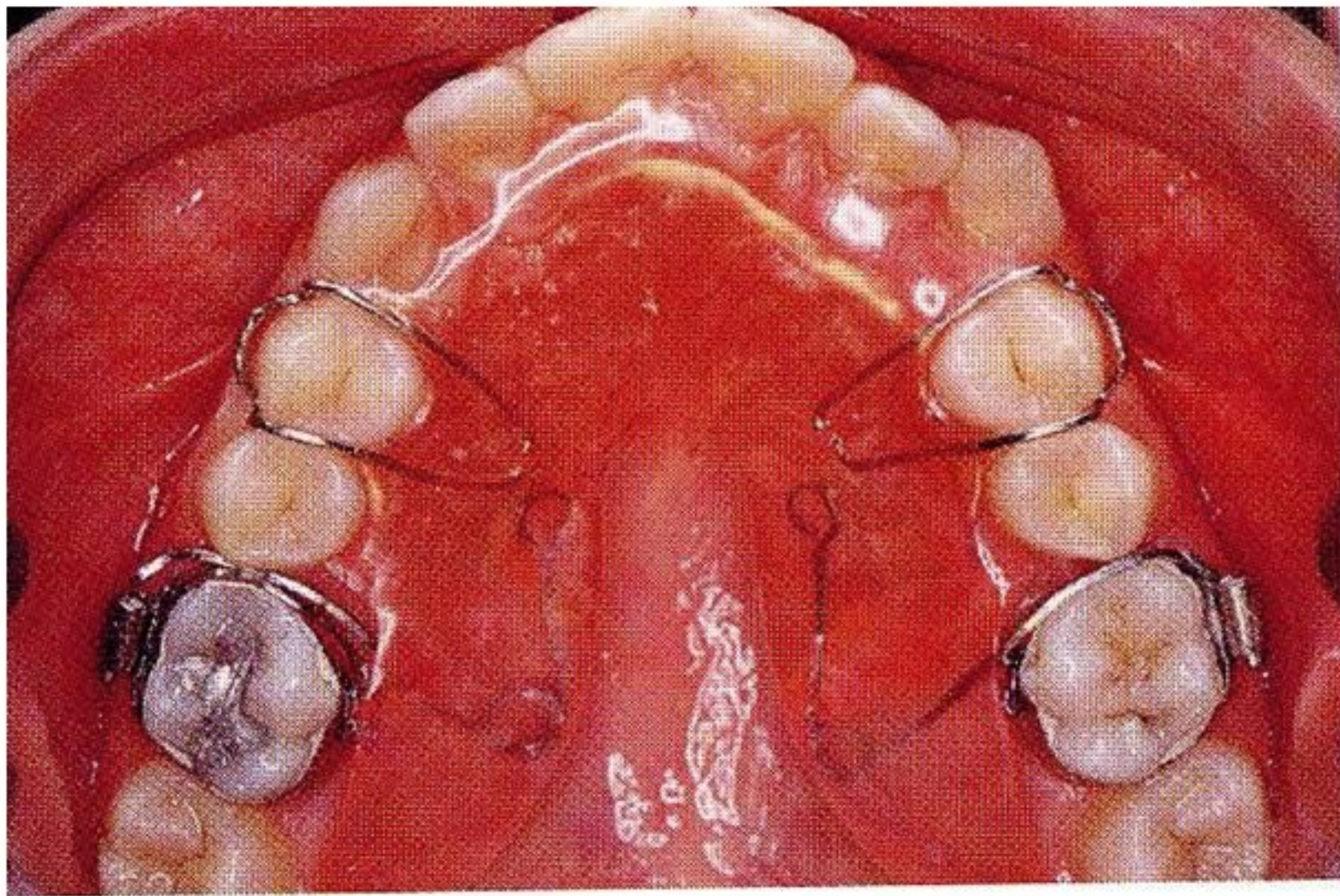
Please construct a removable appliance with

- 1- Finger spring on teeth # 16
- 2- C-Clasps on teeth # 26
- 3- labial bow from # 13 to 23

Regaining removable appliance:

- ♣ Regaining removable appliance consist of **Adam's clasp** for **retention** and **finger-spring** for **distalize** the tooth.
- ♣ **3mm** of distal movement can be done in 3-4 months, by **activating the spring 2mm** to produce **1mm/month**.
- ♣ **Space maintainer** is needed after regaining.



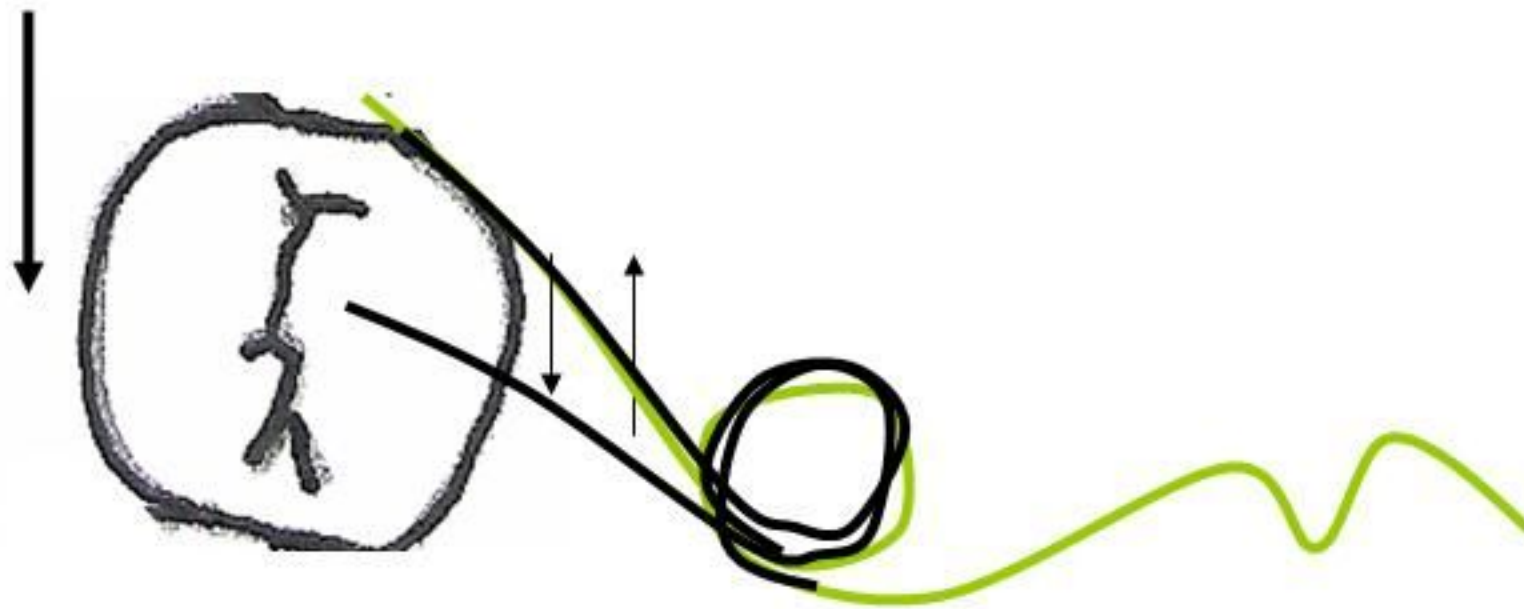


- **Spring made from 0.018x0.025", activated 2mm to produce 1mm of movement per month.**

The finger spring is activated 2mm to produce 1mm of movement per month (full time appliance wear).

- **Fixed space maintainer required after regaining space or use same removable appliance for retention.**

Activation to regain space



Open the helix the free arm is open 2mm and activation of the spring is by closing of the helix so the tooth 1mm each 3-4 weeks