# Prosthetic IV. addition

#### Removable dentures I. and II.

#### **Removable dentures**

• Removable partial dentures

• Complete denture

#### Removable dentures – classes

#### • <u>Class I.</u>

- Dental arch with gaps (interruptions)
- Teeth supported (borne) dentures
- Class II.
- Reduced (shortened) dental arch
- Teeth and tissue supported (borne)

dentures

#### Removable dentures – classes

#### <u>Class III.</u>

Single teeth

Loss of the most important abutment teeth (big gaps – more than 4 teeth)

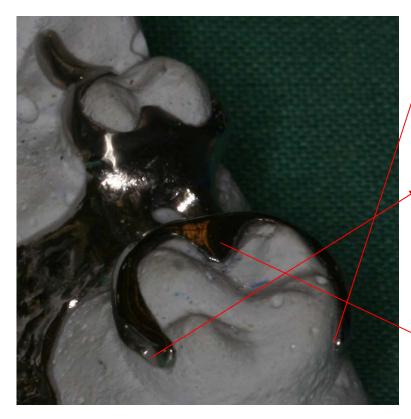
Mostly tissue (borne) dentures, sometimes teeth supported additionally

#### <u>Class IV.</u>

Complete denture

Tissue supported (borne)

#### Clasp – three armed cast



One part for retention (going under the maximal convexity)

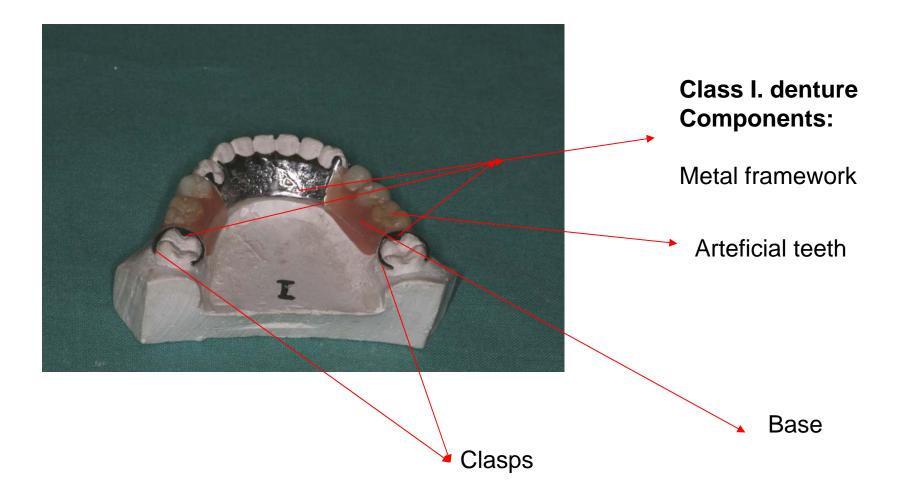
, One part for stabilization against horizontal

forces (upon the maximal convexity)

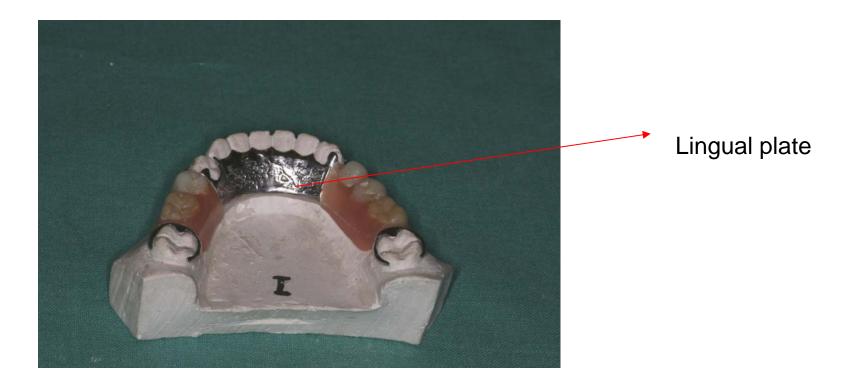
On arm for transmission of occlusal forces

(the rest)

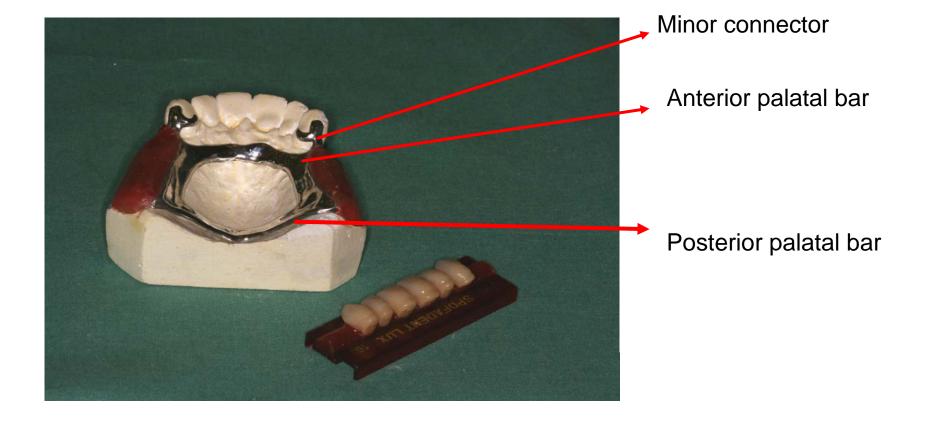
#### Class I and II dentures with the metal framework



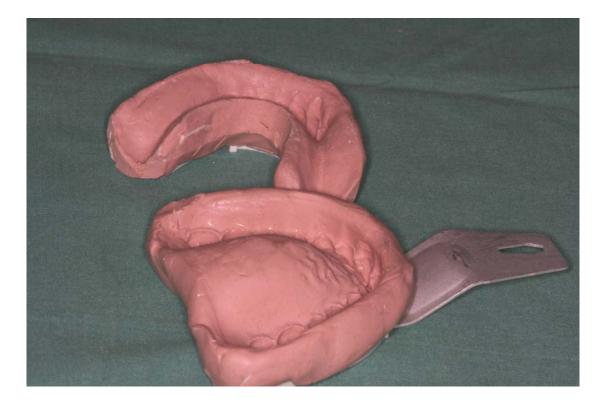
#### Class I and II dentures with the metal framework



#### Class I and II dentures with the metal framework



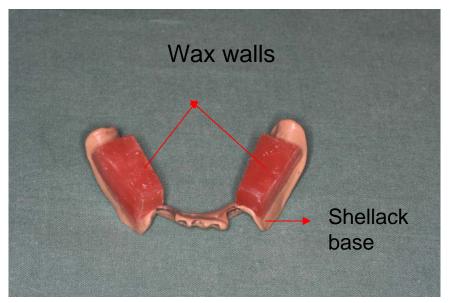
#### Taking impressions (alginate.



Both jaws always !

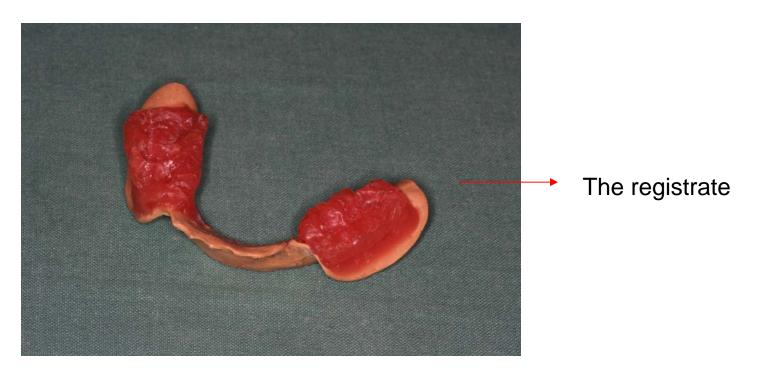
Pouring – gypsum models. Fabrication of the individual impression tray if necessary.

If not, fabrication of the bite template:

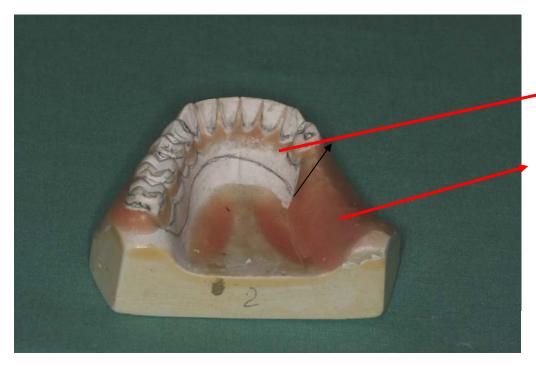


The bite template is necessary for The registration of the intermaxillary Relationship. It consist of the shellack base and the wax walls.

• Registration of the intermaxillary relationship.



• Preparation of the model for backup.



All undercuts are blocked out

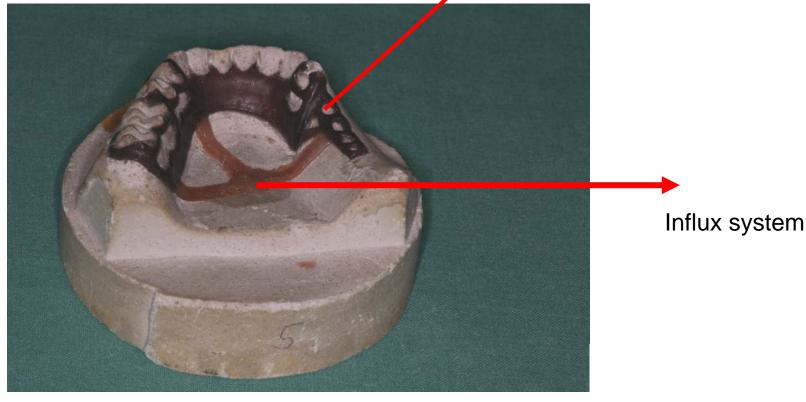
Also the space under the future framework

Using heated wax

- Backup using the reversibile impression agar based material in a special flask
- Pouring of this impression with -the investing material casting model



• Fabrication of the wax pattern of the metal framework.



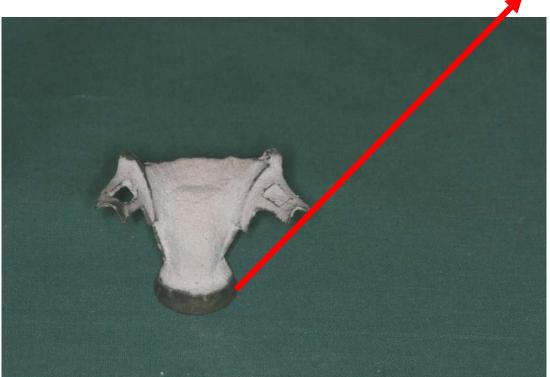
 Investment with the same investing material –a special flask.



The wax is burnt out and the form is heated in a special oven.

After that the casting process is performed using a special casting machine.

 After casting and cooling the framework is taken out, the inflow system must be cut off.



• The cast is grinded, polished and adapted on the former gypsum model



The final framework is tried out

• The arteficial teeth will be applied acc. to intermaxillary registrate in articulator.





Arteficial teeth - acrylic

• After trying out of the denture with wax base and teeth the denture is completed



The framework with the wax pattern of the base and teeth has been put into a flask, the wax has removed and replaced with a resin dought. The resin base is polymerized using heating.

• The denture is finished, polished and tried in.



#### Feedback

 For which classes of removable dentures is necessary to fabricate the metal framework?

• On which model is the wax pattern of the framework made?

• What is the method of "lost wax"?

#### Feedback

- Which parts does the partial removable denture consist of?
- Describe the sequences of operations of these dentures. Explain the main difference between class I. and II. removable dentures.
- What is the purpose of the bite template? Which part does it consist of?
- Explain the term "investment".